Land Information Memorandum

Application

St James + Co	No.	L260601
27C Kahu Drive	Application date	9/10/2026
Mangawhai 0505	Issue date	19/10/2026
	Phone	021 359 425
	Fax	

Please Note: This LIM report contains information for the entire legal description below.

Property

Valuation No.	0122182621
Location	30 Jordan Street, Mangawhai
Legal Description	Lot 22 DP 487158
Owner	30 Jordan Street Limited
Area (hectares)	0.1448

Rates

Government Valuation	
Land	$860,000
Capital Value	$2,150,000
Improvements	$1,290,000
Current Rates Year 2026 to 2027	
Annual Rates	$6,062.85
Current Instalment	$1,515.71
Current Year - Outstanding Rates	$1,515.71
Arrears for Previous Years	$ 0.00
Next Instalment Due	20/11/2026

Note: Rates are charged in four instalments for the period commencing 1 July and ending 30 June each year.

Mangawhai Wastewater Development Contribution paid.

Please refer to the Kaipara District Council Long Term Plan 2024/2027 and in particular to the Wastewater Targeted Rates and to the Kaipara District Council Development Contribution Policy 2025 which can be found at the Council website.

Planning/Resource Management

Zoning:	**Kaipara District Plan 2013: Residential** □ Mangawhai Harbour Overlay. See attached information regarding the District Plan.

Full details of the zone requirements are found in the current District Plan. Relevant zone ordinance can be found at the Council website.

Note: Kaipara District Proposed District Plan was publicly notified Monday 28 April 2025. Submissions on the Proposed District Plan closed Monday June 30, 2025. Please refer to the Kaipara District Plan Review in relation to potential changes that may affect this property.

22/05/25 **RESOURCE CONSENT 250070: MINOR CONSENT**: Proposed Minor Consent to construct a new residence on Lot 22 DP 487158 at 30 Jordan Street, Mangawhai

Heads. Breaching 13.10.1a Excavation and Fill, Height in Relation to Boundary 13.10.06 Vehicle Access and Driveways' 13.10.25 and Parking 13.10.27 Decision Notified 1/05/25: GRANTED BY LOCAL AUTHORITY OFFICER 1/05/25. **Copy of Decision and Plan attached.**

10/03/20 **RESOURCE CONSENT 190256**: Lots 1-40 DP 487158 Proposed vary to clauses 1.4 and 1.5 of consent notice 11283811.3 Decision Notified 18/02/20: GRANTED BY LOCAL AUTHORITY OFFICER 18/02/20. **Copy of Decision attached.**

25/07/18 **RESOURCE CONSENT 160235B**: Proposed variation to RM160235A. **Created DP 487158.** Section 224 Issued 26/09/18: GRANTED UNDER DELEGATED AUTHORITY 4/07/18.

RM160235B Consent Notices for Lots 1- 40 DP 487158 shall draw attention to and require compliance with respect to the following matters: 1.1 of buildings, building foundations and stormwater and wastewater disposal on a Lot specifically designed by a suitably qualified Chartered Professional Engineer having regard to any soil and stability/saturation issues that may exist or arise as a result of development on a LOT ensuring that such design takes into account any of the Completion Report reference 13062 prepared by RS Eng dated 5 June 2018 and held by the Council. 1.2 application prior to the construction of any vehicle crossing from a Lot onto a Council Road. 1.3 In respect to any Lot where there is no stormwater connection to a public stormwater disposal system the Owner shall at its cost at the time of any development of a Lot construct stormwater detention devices specifically designed by an appropriately qualified competent engineer to the approval of the Council to ensure that the peak stormwater runoff from the Lot will be no greater than that which would have occurred prior to development. 1.4 At the time for a building consent on a Lot the Owner shall contact Environs Holdings Limited and arrange cultural monitoring for any earthworks to be carried out on the Lot. 1.5 When undertaking any building works on a Lot the Owner shall comply with the Building and Landscape Design Guidelines in the Assessment of Landscape, Natural Character and Visual Effects dated January 2017 held by the Council. 1.6 When applying for a building consent in respect of a Lot the Owner shall comply with the Revegetation/Enrichment Planting Schedule in the Assessment of Landscape, Natural of Landscape, Natural Character and Visual Effects dated January 2017 held by the Council. 1.7 The Owner of each Lot is advised that telecommunications services provider to each Lot will be wireless. **Copy of Report and Guidelines attached.**

RM160235B Consent Notices for Lots 1-6 (both inclusive) and 21-28 (both inclusive) on the Plan 3.1 The Owner of each Lot shall have regard to the stormwater pond maintenance plan provided in connection with the subdivision consent RM160235B and held by the Council and the Owner of Lot shall, at its cost, ensure ongoing compliance with approved stormwater pond maintenance plan reference WH40955 prepared by Cato Bolan Consultants dated 12 June 2018. **Copy of Report attached.**

RM160235B Consent Notices in respect of Lots 18, **22**, 38, 39 and 40. 4.1 The Owner of each Lot shall provide three on-site car parking spaces on the Lot.

29/11/17 RESOURCE CONSENT 160235A: proposed variation of condition 4(i)(vi) on RM160235 Letter Sent 14/02/18: GRANTED UNDER DELEGATED AUTHORITY 8/11/17 (Found on parent property: 0122182600)

26/06/17 RESOURCE CONSENT 160235: Proposed 40 Lot Subdivision Letter Sent 22/01/21: GRANTED UNDER DELEGATED AUTHORITY 2/06/17 (Found on parent property: 0122182600).

No other information located.

Licences/Environmental Health

No information located.

Network Utility Operators

Information related to the availability of supply, authorisations etc (eg, electricity or gas) can be obtained from the relevant Network Utility Operator.

Other Information

No title search has been done on this property.

Notes

1. Final inspections on buildings were not mandatory prior to 1 January 1993. Should an evaluation of the building be required an independent qualified person should be consulted. In the interests of safety, an inspection of any fireplace within the dwelling may be requested of Council at any time, after paying the appropriate fee.
2. Every care has been taken to ensure that the information supplied by the Council on this form is accurate. The Council relies on information available to it and will not be held responsible for incomplete or inaccurate information provided, or for any errors or omissions made in good faith.
3. Please note that the property was neither inspected nor visited during the preparation of this Land Information Memorandum. Information is based on a search of Council records only and no inspection of the land or any building on it will be undertaken for the purpose of preparing the Report.
4. Other information may be held by other authorities, for example the Northland Regional Council or Heritage New Zealand.
5. This Land Information Memorandum is a disclosure of information (which may be historical) held by the Council at the time of application and is subject to change.
6. Any enquiry not accompanied by a fee will be invoiced separately. (All prices are GST inclusive).
7. No Record of Title was supplied with this application for this Land Information Memorandum. The Council therefore does not warrant that the information supplied is related to the correct property.
8. Any Resource or Building consents run with the land; if the project is incomplete, there may be existing/additional charges to pay for which the new owner will be liable.
9. A Development Contribution and or Financial Contribution may be payable if development is carried out, the effect of which is to require new or additional assets or assets of increased capacity and as a consequence Council incurs capital expenditure to provide appropriately for those assets and that capital expenditure is not otherwise funded or provided for. Future rating policies are outlined in Council's Long Term Plan 2024-2027.

Name: _____ Date: 19/10/2026.

Performance Standards of the Kaipara District Plan 2013

To view the performance standards (rules) for each zone please refer to the relevant chapter of the Kaipara District Plan 2013:

Rural - Chapter 12

Residential - Chapter 13

Business: Commercial and Industrial - Chapter 14

Māori Purposes: Māori Land – Chapter 15A

Māori Purposes: Treaty Settlement Land – Chapter 15B

Estuary Estates – Chapter 16

Estuary Estates - Chapter 16A – Trifecta Development Area

All Zones - Chapter 10 Network Utilities and Chapter 11 Transport Network

How can I view the Kaipara District Plan 2013?

If you have access to the internet and want access to the most up to date information, visit the website **www.kaipara.govt.nz**

If you do not have access to a computer, you can visit one of the following locations to view a hard copy of the Plan:

Venue	Opening Hours	
Kaipara District Council Office – Dargaville 32 Hokianga Road Dargaville Telephone 0800 727 059	Monday – Tuesday Wednesday Thursday - Friday	8.00am to 4.30pm 9.00am to 4.30pm 8.00am to 4.30pm
Kaipara District Council Office – Mangawhai Unit 5, The Hub 6 Molesworth Drive Telephone 0800 727 059	Monday – Friday	9.30am to 3.00pm
Dargaville Library Corner Poto and Normanby Streets Dargaville Telephone 0800 534 542	Monday – Wednesday Thursday Friday Saturday	9.30am to 5.00pm 9.30am to 6.00pm 9.30am to 5.00pm 9.30am to 12.30pm
Mangawhai Library 45 Moir Street Mangawhai Telephone 0800 532 542	Tuesday - Wednesday Thursday Friday Saturday	10.00am to 5.00pm 10.00am to 6.00pm 10.00am to 5.00pm 10.00am to 1.00pm
Kaiwaka Library Corner State Highway 1 and Kaiwaka Mangawhai Road Kaiwaka Telephone (09) 431 2539	Monday Tuesday Wednesday - Saturday	4.00pm to 6.00pm Closed 10.00am to 2.00pm
Maungaturoto Library Centennial Building Hurndall Street Maungaturoto Telephone (09) 431 8811	Monday – Tuesday Wednesday Thursday – Saturday Friday Terms 1 & 4 also	10.30am to 1.00pm 10.30am to 4.00pm 10.30am to 1.00pm 4.00pm to 6.00pm
Paparoa Library Brook House 1980 Paparoa Valley Road State Highway 12 Paparoa Telephone (09) 431 7555	Monday Tuesday Wednesday Thursday Friday Saturday	2.00pm to 4.30pm 10.00am to 1.00pm 2.00pm to 4.30pm 10.00am to 4.00pm 11.00am to 1.30pm 10.00am to 12.00pm

All Maps

- State Highway
- Railway
- Bridge or Causeway
- Unformed Road
- Sea, Lakes and Rivers
- Parcel Boundary

Map Series One - Land Use

- Estuary Estates
- Rural
- 8m Height Restriction
- Business: Commercial
- Business: Industrial
- Residential
- Maori Land
- Treaty Settlement
- Estuary Estates
- East Coast Overlay
- Harbour Overlay
- Kai Iwi Lakes Overlay
- West Coast Overlay

Map Series Two - Sites, Features and Units

- Heritage Resource
- Notable Tree
- Maungaturoto Dairy Factory Wastewater Pipeline
- 110-220 kV Electricity Transmission Line
- 50 kV Electricity Transmission Line
- Designation Areas
- Outstanding Natural Landscape
- Reserve Management Units
- Areas of Significance to Maori
- Maungaturoto Dairy Factory Noise Contour Boundary (45dBA leq)

KAIPARA DISTRICT

KAIPARA DISTRICT PLAN - OPERATIVE NOVEMBER 2013

Map Legend

Date Updated:4/08/2021

Mangawhai River

Refer to Map 56A for further details

NAUTICAL HEIGHTS

QUAIL WAY

DEVON STREET

CHEVIOT STREET

SEABREEZE ROAD

THELMA ROAD SOUTH

MOLESWORTH DRIVE

JOHNSON DRIVE

TI TREE PLACE

CHEVIOT STREET

LINCOLN STREET

GROVE ROAD

ESTUARY DRIVE

MOIR POINT ROAD

JOHNSON STREET

MOLESWORTH DRIVE

BUNLEA LANE

Mangawhai Harbour

KAIPARA DISTRICT
Kaipara ki Oruawaka • Two Oceans Two Harbours

Scale: 1: 7,500 @ A3

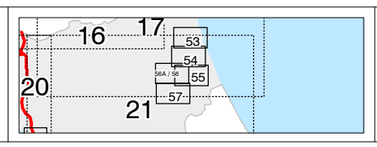
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KAIPARA DISTRICT PLAN - OPERATIVE VERSION - JULY 2013

Map Series One

Land Use : Mangawhai

Map 55 of 60



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Cadastre from 19 March 2021.

KAIPARA DISTRICT

Kaipara te Oranganui • Two Oceans Two Harbours

KAIPARA DISTRICT PLAN - OPERATIVE NOVEMBER 2013

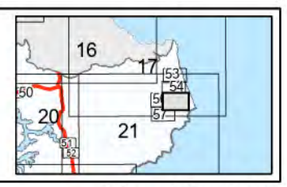
Map Series Two

Sites, Features and Units Mangawhai

N

0 10 20 Km

A3 Scale: 1:7,500



Date Updated:4/08/2021

Rates Information - 2026/27

Valuation ID	0122182621	Old Valuation ID	C:0122182600

Property Description

Location (GIS)	30 Jordan Street, Mangawhai
	View in Google Maps
Legal Description	Lot 22 DP 487158
Certificate of Title	825248

Use	91 Residential: Single Unit (other than bach)	Category	RD202B
TORAS	111000	Category Group	Residential Dwelling fully or semi detached
Tenure	Property is not leased. Owner is also occupier.	Category Condition	Average - Good Economic
Ownership	Private: Individual	Ward	4
Rateability	Rateable	Region	1
Apportionment	Std property - Not Applicable, Not apportionment	Zone	9A

Valuations

	Current		New
Area (Hectares)	0.1448		
Land Value	860,000	Land Value	860,000
Improvements	1,020,000	Improvements	1,290,000
Nature of Improvements	(DWG OI)		
Capital Value	1,880,000	Capital Value	2,150,000
Valuation Date	1/09/23		

Rates for Current Year - 2026/27

Type	Description (Basis)	Factor	Amount $
002	Uniform Annual General Charge - Rating Unit	1.00	725.00
012	Mangawhai Stormwater - (L)	860,000.00	614.04
081	Mangawhai Harbour Restoration (MHR) - Rating Unit	1.00	80.00
233	General Rate Residential & Small Sized Lifestyle - (L)	860,000.00	2,048.78
201	Mangawhai Wastewater Connected - SUIP	1.00	1,435.93
238	Parks and Libraries Targeted Rate - Rating Unit	1.00	367.65
242	Museums Targeted Rate - Rating Unit	1.00	14.00
	** Kaipara District Council Sub-Total		5,285.40
250	NRC Targeted Council Services Rate - Rating Unit	1.00	249.11
253	NRC Pest Management Rate - Rating Unit	1.00	129.34
254	NRC Targeted Flood Infrastructure Rate - Rating Unit	1.00	43.11
255	NRC Targeted Emergency and Hazard Management Rate - Rating Unit	1.00	68.37
256	NRC Targeted Regional Rescue Services Rate - Rating Unit	1.00	11.09
257	NRC Targeted Regional Sporting Facilities Rate - Rating Unit	1.00	7.94
259	NRC Targeted Land and Freshwater Management Rate - (L)	860,000.00	238.48
260	NRC Targeted Regional Economic Development Rate - (L)	860,000.00	30.01
	** Regional Council Sub-Total		777.45
	Total Rates Levied 2026/27		6,062.85
	(GST on Rates Levied)		790.81
	Rates Last Year 2025/26		5,473.67
	Last Year's Final Instalment		1,368.41

Rates Last Year 5,473.67 Instalments YTD 1,515.71 Current Instalment 1,515.71

History

Year	Land Value	Capital Value	Annual Rates
2025/26	860,000	860,000	5,473.67
2024/25	860,000	860,000	5,082.47
2023/24	690,000	690,000	5,260.35
2022/23	690,000	690,000	4,936.47
2021/22	690,000	690,000	4,590.55
2020/21	610,000	610,000	4,604.39
2019/20	610,000	610,000	4,298.73
2018/19	3,950,000	3,950,000	

In the Matter of:	The Resource Management Act 1991
And	
In the Matter of:	An application under Section 88 of the Resource Management Act 1991 made by Matt Munro
File Reference:	250070

Decision on Resource Consent Application

Activity

The undertake up to 86.4m^3 of earthworks, over an area of 155.4m^{2,} in association with the creation of a building platform and access for a residential dwelling. The subject dwelling breaches Height in Relation to Boundary on the southern elevation and the access to the dwelling breaches turning circles as they are less than 8m radius.

Location

Address: 30 Jordan Street, Mangawhai

Legal Description: Lot 22 DP 487158, RT 825248

Reasons for Consent

Kaipara District Plan (Operative 2013) Rule Assessment

The following apply to the subject property:

Zoning:	Residential Zone
Overlays:	Mangawhai Harbour
Rules:	Rule 13.10.6 Height in Relation to Boundary for breaching on the Southern Boundary.
	Rule 13.10.25 Vehicle Access and Driveways for breaching manoeuvring.
	Rule 13.10.27 Parking as the reverse manoeuvring is less than 8 metres in radius thus qualifying this activity as a Restricted Discretionary Activity.
Activity Status:	Restricted Discretionary Activity

Determination/s

Pursuant to Section 104, 104C and 108 of the Resource Management Act 1991 ("the Act"), the Kaipara District Council **grants** RM250070 under the Operative Kaipara District Plan; subject to the following conditions:

General

1. The activity shall be carried out in accordance with the plans and all information submitted with the application formally received by the Kaipara District Council ("Council") on 28/03/2025:
   - Application form, and assessment of environmental effects prepared by Jenna Munro dated April 2025.

Plan title and reference	**Author**	**Rev**	**Dated**
BC-01 Proposed Site Plan	Steadfast Construction Ltd.	H	March 2025
BC-05 North and East Elevations	Steadfast Construction Ltd.	I	March 2025
BC-06 South and West Elevations	Steadfast Construction Ltd.	I	March 2025
BC-08 Long Sections	Steadfast Construction Ltd.	H	March 2025
BC-10 Roof Plan	Steadfast Construction Ltd.	I	March 2025
BC-37 Engineer's Details	Steadfast Construction Ltd.	C	March 2025
BC-38 Engineer's Details	Steadfast Construction Ltd.	C	March 2025
Other additional information	**Author**	**Rev**	**Dated**
250070 Te Uri O Hau Response 20250312			12th March 2025
250070 RFI AEE Response 20250414			14th April 2025
250070 RFI Plans Response 20250411			11th April 2025
250070 S92 Response from Agent 20250411			11th April 2025

Advice Note: Where there is any apparent conflict between the application and the consent conditions, the consent conditions shall prevail.

Charges

2. The Consent Holder shall pay any subsequent further charges imposed under Section 36 of the Act relating to the receiving, processing, granting and monitoring of this resource consent within 20 days of receipt of notification of a requirement to pay the same, provided that, in the case of any additional charges under Section 36(5) of the Act that are subject to challenge, the Consent Holder shall pay such

amount as is determined by that process to be due and owing, within 20 days of receipt of the relevant final invoice.

Section 125 – Consent Lapse Date

3. Under Section 125 of the Act, this consent lapses five years after the date it is granted unless an application under Section 125 of the Act is made to the Council before the consent lapses (five years) to extend the period after which the consent lapses and the Council grants an extension.

Engineering

4. The construction works shall generally be in accordance with the site plan Ref: Proposed Site Plan, Project: Mangawhai Residence, Project: Mangawhai Residence, Project No. 2410, Dated: 03.2025, Rev. H, Sheet No. BC-01, Prepared by Steadfast Construction submitted in support of the RC application RM250070.

Roading

5. The consent holder must provide a flare for the existing vehicle crossing in order to be able to reverse back into the Paper Road in accordance with Condition 1 of this Consent.
6. The consent holder must obtain a vehicle crossing permit and a work access permit from Kaipara District Council's Roading team prior to carrying out any works within the road reserve.
7. The consent holder shall obtain approval from the Kaipara District Council's Roading team for the concrete driveway that has been constructed with the public road reserve to confirm that the driveway meets the KDC engineering standards

Advice Notes

i. Under the Council Engineering Standards 2011, the Consent Holder will be required to ensure the person responsible for carrying out construction work holds public liability insurance to the value of at least $2,000,000.00, and professional indemnity insurance to the value of at least $1,000,000.00.

ii. Prior to the commencement of any work authorised under this consent, the Consent Holder shall provide written verification that the Consent Holder's engineer responsible for design and supervision of the roading works holds professional indemnity insurance to the value of $1,000,000.00

iii. The scope of this resource consent is defined by the application made to Council and all documentation supporting the application.

iv. If you disagree with any of the above conditions, or additional charges relating to the processing of this application, you have a right of objection pursuant to sections 357A or 357B of the Act. Any objection must be made in writing to Council within 15 working days of notification of decision.

v. The Building Consent was formally received to Te Uri O Hau by the Applicant as a Consent Notice Clause requirement. Te Uri O Hau confirmed that they should be contacted 5 working days before the Earthworks begin, so they can arrange a cultural monitor to be on site for the earthworks.

vi. Public access to Jordan street should be available at all times.

vii. The consent holder shall implement, to the satisfaction of the Council's Monitoring officer, suitable measures to prevent depositing of earth on surrounding streets by trucks moving fill and other materials to and from the site. In the event that any material is deposited on the street, the consent holder shall take immediate action, at their expenses, to clean the street. The loading of earth fill and other materials shall be confined to the subject site.

viii. The consent holder shall employ a Suitably Qualified Engineer acceptable to Council to investigate, direct and supervise construction works (Fill), to ensure that an appropriate design and construction methodology is carried out to maintain the short- and long-term stability of the site and surroundings.

Reasons for the Decision

1. In terms of section 104(1)(a) of the Act, subject to compliance with conditions, the effects of the activity on the environment are considered to be acceptable.

2. In terms of section 104(1)(b) of the Act, subject to compliance with conditions, it is considered that the proposal is consistent with the relevant objectives and policies of the Kaipara District Plan 2013 and the Northland Regional Policy Statement 2016.

3. In terms of Section 104(1)(c) of the Act, no other matters, including financial and development contributions and monitoring are relevant to the determination of the application.

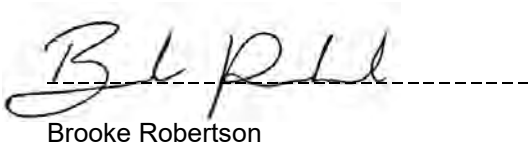
4. Council has taken into account the relevant principles outlined in Sections 6,7 and 8 of the Act and it is considered that granting this resource consent under the Operative Kaipara District Plan achieves the purpose of the Act as set out in the section 5.

5. On 28 April 2025, Council notified the Proposed Kaipara District Plan ("PDP"). The submission period is currently open and closes on 30 May 2025.

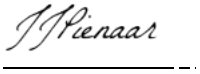
6. As the submission period is still open, only those rules that qualify under section 86B(3) have immediate legal effect from the date of notification of the PDP.

7. There are no rules in the PDP with immediate legal effect in accordance with section 86B(3) of the RMA that are applicable to this proposal

8. The proposal has been assessed against the objectives and policies in the PDP that have immediate legal effect and are relevant to the proposal.

Reporting Planner  1 May 2025

Brooke Robertson

Signed  1 May 2025

JJ Pienaar

Team Manager Resource Consents

Kaipara District Council

Signed under delegated authority pursuant to Section 34A of the Resource Management Act 1991.

RM250070

Combined Section 95 and Section 104 of the Resource Management Act 1991

Assessment Report

Details of Application	
Applicant	Matt Munro
Property to which the consent relates	30 Jordan Street, Lot 22 DP 487158, RT 825248

1. Description of Proposal

1.1 Land Use Consent is sought for the undertaking of earthworks to construct a Building platform for a dwelling legally known as Lot 22 DP 487158, RT 825248. This involved the permitted cumulation excavation and fill 86.4m^3 of earthworks, over an area of 155.4m^2 to create a building and driveway that breaches 13.10.06 Height in Relation to Boundary, 13.10.25 Vehicle Access and Driveways and 13.10.27 Parking.

2. Draft Conditions

2.1 Draft conditions were shared with the agent on 1st May 2025. The conditions have been agreed by the agent on 1st May 2025.

3. Site Description, Surrounding Environment and Consent History

3.1 The subject site was created by RM160235B, a variation to RM160235 a proposed 40 lot subdivision. The subject site is vacant and sloped in topography and has an all-weather surfaced driveway formed that is accessed via Jordan Street.



Figure 1 - Topography of Site

3.2 The subject site is not subject to any flooding hazards or contaminated land.

3.3 The surrounding environment includes dominant residential characteristics, with single or double storey dwellings and medium density of built form prevent to the surrounding Mangawhai Heads neighbourhood.

3.4 The site contains no relevant interests on the Record of Title.

4. Kaipara District Plan (Operative 2013) Rule Assessment

4.1 The following apply to the subject property:

Zoning: Residential Zone

Overlays: Mangawhai Harbour

Rules: Rule 13.10.6 Height in Relation to Boundary for breaching on the Southern Boundary.

Rule 13.10.25 Vehicle Access and Driveways for breaching manoeuvring.

Rule 13.10.27 Parking as the reverse manoeuvring is less than 8 metres in radius thus qualifying this activity as a Restricted Discretionary Activity.

Activity Status: Restrict Discrectionary Activity

4.2 As a restricted discretionary activity, Council's discretion is restricted to the matters listed under the relevant planning rules above.

5. Statutory Acknowledgements

5.1 Relevant to this application, any statutory acknowledgement within the meaning of the Act specified in Schedule 11 would be contained within the Te Uri o Hau Claims Settlement Act 2002. Environs Holdings Limited is a subsidiary of Te Uri o Hau Settlement Trust (caretaker of Te Uri o Hau Claims Settlement Act 2002) authorised to participate in the Resource Management Act 1991 proceedings.

5.2 This Resource Consent was not formally received to Te Uri O Hau.

6. Written Approvals

6.1 No written approvals have been provided in support of this application.

7. Notification Assessment

7.1 The following assessment is restricted to the effects of the proposed activities that are within scope of the matters of discretion under the relevant planning rules identified in section 4 of this report.

Public Notification Assessment (Sections 95A, 95C - 95D)

7.2 Step 1 - public notification is not mandatory as the applicant has not requested it, there are no outstanding or refused requests for further information, and the application does not involve any exchange of recreation reserve land under s15AA of the Reserves Act 1977.

7.3 Step 2 - public notification is not precluded as none of the specific preclusions apply.

7.4 Step 3 - public notification is not required as the potential adverse effects of the proposed activities are less than minor as assessed below:

7.5 The proposed activity involves the construction of a dwelling that does not comply with Rule 13.10.6 height in relation to boundary for exceeding the permitted threshold of 3m in height and a 45-degree angle on the southern boundary. In addition, the driveway for the dwelling breaches 13.10.25 Vehicle Access and Driveways and Rule 13.10.27 Parking, specifically due to the manoeuvring space for the driveways being less than the required 8 metres in radius.

7.6 Proposed mitigation is conditioned to add a flare in the driveway which connects to a paper road, the applicant will obtain a vehicle crossing permit as well as a work access permit to permit for this change to be made. This will allow the applicants more space to reverse to they can exit their driveway in a more forward-facing direction. The effects on ease of access and restrictions on vehicle movements are appropriately mitigated, and any potential adverse effects on the wider environment are considered less than minor, as the applicants will be able to access their site more safely with improved visibility of oncoming traffic on Estuary Drive.

7.7 The site exits onto a paper road, meaning the number of cars is minimal, and with the addition of the flare the applicants can still exit in a forward-facing direction.

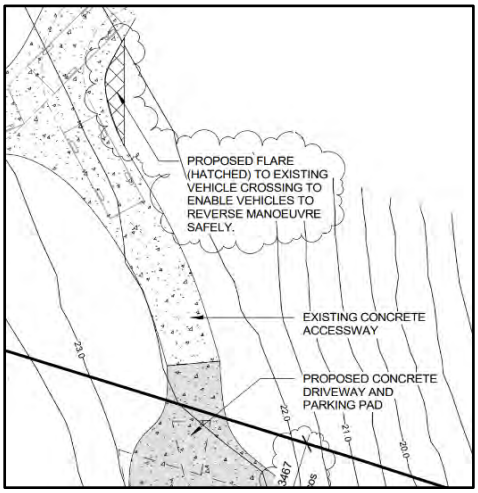


Figure 2 - Illustration of Flare

7.8 The development breaches Rule 13.10.06 – Height in Relation to Boundary, with a breach of 0.625m in width and 0.293m in height on the southern elevation. This infringement is less than minor, with no adverse effects on the wider environment, as it is oriented away from the road frontage and is not visible from public viewpoints.

7.9 Step 4 - there are no special circumstances that warrant public notification of the application.

Limited Notification Assessment (Sections 95B, 95E - 95G)

7.10 Step 1 - limited notification is not mandatory as there are no affected protected customary rights groups or customary marine title groups, and there are no affected persons with respect to statutory acknowledgments.

7.11 Step 2 – the proposed activities are not subject to a rule or national environmental standard that precludes limited notification.

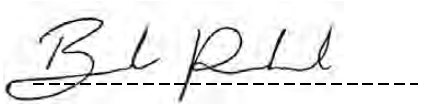
7.12 Step 3 - limited notification is not required as the proposed activities will not result in any adversely affected persons as assessed below:

- As stated above, the proposal has manoeuvring space that's less than an 8m radius, and a breach in height in relation to boundary of 0.625m in width and 0.293m.
- The mitigation of the addition of the flare is adopted in this limited notification assessment, with the addition of the flare the effects on the neighbouring and adjacent properties will be less than minor as the occupants of the subject site will be able to exit their driveway safer and in a forward-facing position.
- Lot 21 DP 487158 is located on the southern boundary of the subject site. It is considered that this neighbour would be the most affected by this breach. However, the subject neighbour faces away to the east towards the road frontage, with the home avoiding the infringement. This means any effects of shading and dominance will be less than minor.
- It is considered that Lots 24 and 38 and 39 DP 487158 are sufficiently separated from the infringement therefore the effects on these properties will be less than minor.
- All other boundary rules, including Rule 13.10.07 regarding setbacks, are complied with for this dwelling.
- Overall, it is deemed that the effects for this proposal will be less than minor on adjoining and adjacent properties.

7.13 Step 4 – there are no special circumstances that warrant limited notification of the application.

Notification Decision

7.14 Under delegated authority, and for the reasons outlined above, the application shall not be subject to either public or limited notification and shall be processed on a non-notified basis.

Reporting Planner  1 May 2025

Brooke Robertson

Signed  1 May 2025

JJ Pienaar

Team Manager Resource Consents

Kaipara District Council

Signed under delegated authority pursuant to Section 34A of the Resource Management Act 1991.

8. Section 104 Assessment

Assessment of Effects – Section 104(1)(a)

Positive Effects

8.1 The proposal provides for the construction of a dwelling on a vacant residential site which will provide for the economic and social wellbeing of the owners and future occupiers of the site.

Adverse Effects

8.2 The adverse effects of the proposed activities are discussed in Section 7 of this report. The assessment and conclusions of the notification assessment are applicable here and are adopted in full for the purposes of the assessment of effects pursuant to Section 104(1)(a).

Conclusion

8.3 In summary having assessed the effects of the proposed activities, subject to compliance with conditions it is considered that the activities will result in less than minor and acceptable, adverse effects on the environment.

Relevant Statutory Provisions – Section 104(1)(b)

8.4 Subject to compliance with conditions, it is considered that the proposal is consistent with the relevant provisions of the Kaipara District Plan 2013, the Northland Regional Policy Statement 2016, and relevant national policy statements.

8.5 As outlined above, land use consent for this proposal is only required under the Operative Kaipara District Plan. While the Proposed Kaipara District Plan has been publicly notified, rules relating to subdivision in the Proposed Kaipara District Plan do not currently have legal effect. However, the objectives and policies of the Proposed Kaipara District Plan (notified version 28 April 2025) have legal effect and are relevant to the assessment of the application for subdivision consent under section104(1)(b) of the RMA.

8.6 Identify objectives and policies in the PDP relevant to the proposal and assess them.

8.7 The proposed dwelling is intended to support residential use associated with a dwelling. The site is proposed to be serviced by existing infrastructure, and the type and scale of the proposed dwelling is consistent with the character of the surrounding community. The house is a detached dwelling, which is compatible with the broader General Residential Zone as outlined in the Proposed District Plan (PDP).

8.8 To conclude, this proposal is consistent with, the proposed objectives and policies of the PDP.

Other Matters – Section 104(1)(c)

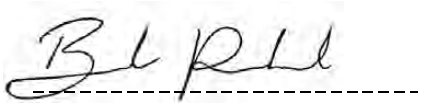
8.9 No other matters, including financial and development contributions, have been considered relevant to the determination of the application.

9. Overall Conclusion and Recommendation

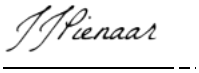
9.1 The actual and potential effects on the environment of granting consent are acceptable and the proposal is consistent with the relevant provisions of the relevant plans and national policy statements and promotes the sustainable management of natural and physical resources. It is recommended that the application be **granted.**

Reasons for the Decision

1. In terms of section 104(1)(a) of the Act, subject to compliance with conditions, the effects of the activity on the environment are considered to be acceptable.
2. In terms of section 104(1)(b) of the Act, subject to compliance with conditions, it is considered that the proposal is consistent with the relevant objectives and policies of the Kaipara District Plan 2013 and the Northland Regional Policy Statement 2016.
3. In terms of Section 104(1)(c) of the Act, no other matters, including financial and development contributions and monitoring are relevant to the determination of the application.
4. Council has taken into account the relevant principles outlined in Sections 6,7 and 8 of the Act and it is considered that granting this resource consent under the Operative Kaipara District Plan achieves the purpose of the Act as set out in the section 5.
5. On 28 April 2025, Council notified the Proposed Kaipara District Plan ("PDP"). The submission period is currently open and closes on 30 May 2025.
6. As the submission period is still open, only those rules that qualify under section 86B(3) have immediate legal effect from the date of notification of the PDP.
7. There are no rules in the PDP with immediate legal effect in accordance with section 86B(3) of the RMA that are applicable to this proposal
8. The proposal has been assessed against the objectives and policies in the PDP that have immediate legal effect and are relevant to the proposal.

Reporting Planner  1 May 2025

Brooke Robertson

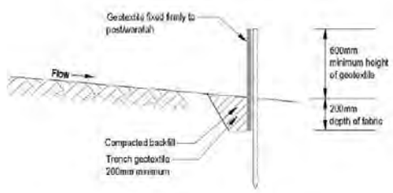
Signed  1 May 2025

JJ Pienaar

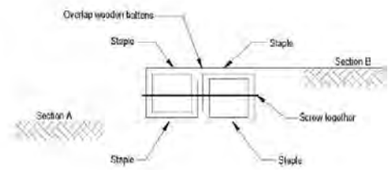
Team Manager Resource Consents

Kaipara District Council

Signed under delegated authority pursuant to Section 34A of the Resource Management Act 1991.



Cross-section



Standard fabric joint

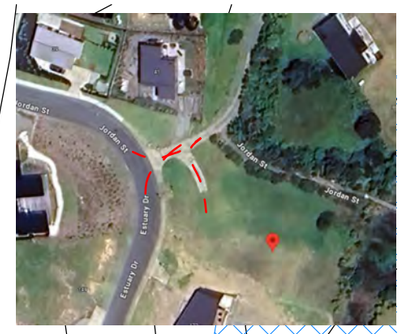
SILT FENCE

NTS



LOCATION PLAN

1:20000



VEHICLE ACCESS

PROPOSED FLARE (HATCHED) TO EXISTING VEHICLE CROSSING TO ENABLE VEHICLES TO REVERSE MANOEUVRE SAFELY.

FLUSHING BOX

BOUNDARY KIT

EXISTING CONCRETE ACCESSWAY

PROPOSED CONCRETE DRIVEWAY AND PARKING PAD

ESTUARY DRIVE

100Ø PE SS LINE

5m SETBACK

3m SETBACK

PROPOSED CUT/FILL (ORANGE HATCHED)

PROPOSED BATTERED ROCK RETAINED GARDEN

PROPOSED DECK

FFL 25000 (UPPER)

PROPOSED RESIDENCE

FFL 22000 (GROUND)

375Ø uPVC SW LINE

SW MH

NEIGHBOURING RESIDENCE

FFL 17.80 (GROUND)
FFL 20.80 (UPPER)

EXISTING 150Ø x 8.9m SW OVERFLOW CONNECTION

PROPOSED TANK CUT/FILL (ORANGE HATCHED)

APD 4.3m³, 1.2mØ STORMLITE UNDERGROUND STORMWATER TANK

DURACRETE UNDERGROUND WATER TANK - 25,000L

SILT FENCE (DASHED)

POND

PROPOSED SITE PLAN

1:200

Notes:

LEGAL DESCRIPTION

LOT 22 DP 487158
AREA: 1448m²

WIND ZONE: HIGH
EXPOSURE ZONE: D
ZONE: RESIDENTIAL ZONE
OVERLAY: HARBOUR

MAX IMPERVIOUS AREA:
40% OF 1448m² = 579.20m²

RESIDENCE	176.25m²
DRIVEWAY	37.75m²
TANKS	15.73m²
TOTAL	229.73m² COMPLIES

BUILDING COVERAGE:
35% OF 1448m² = 506.80m²

RESIDENCE 176.25m² COMPLIES

EARTHWORKS

VOLUME

PERMISSIBLE	<100m³
HOUSE	57.6m³
TANK	28.8m³
TOTAL	86.40m³ COMPLIES

AREA

HOUSE	140.19m²
TANK	15.21m²
TOTAL	155.40m² COMPLIES

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MANGAWHAI HEADS

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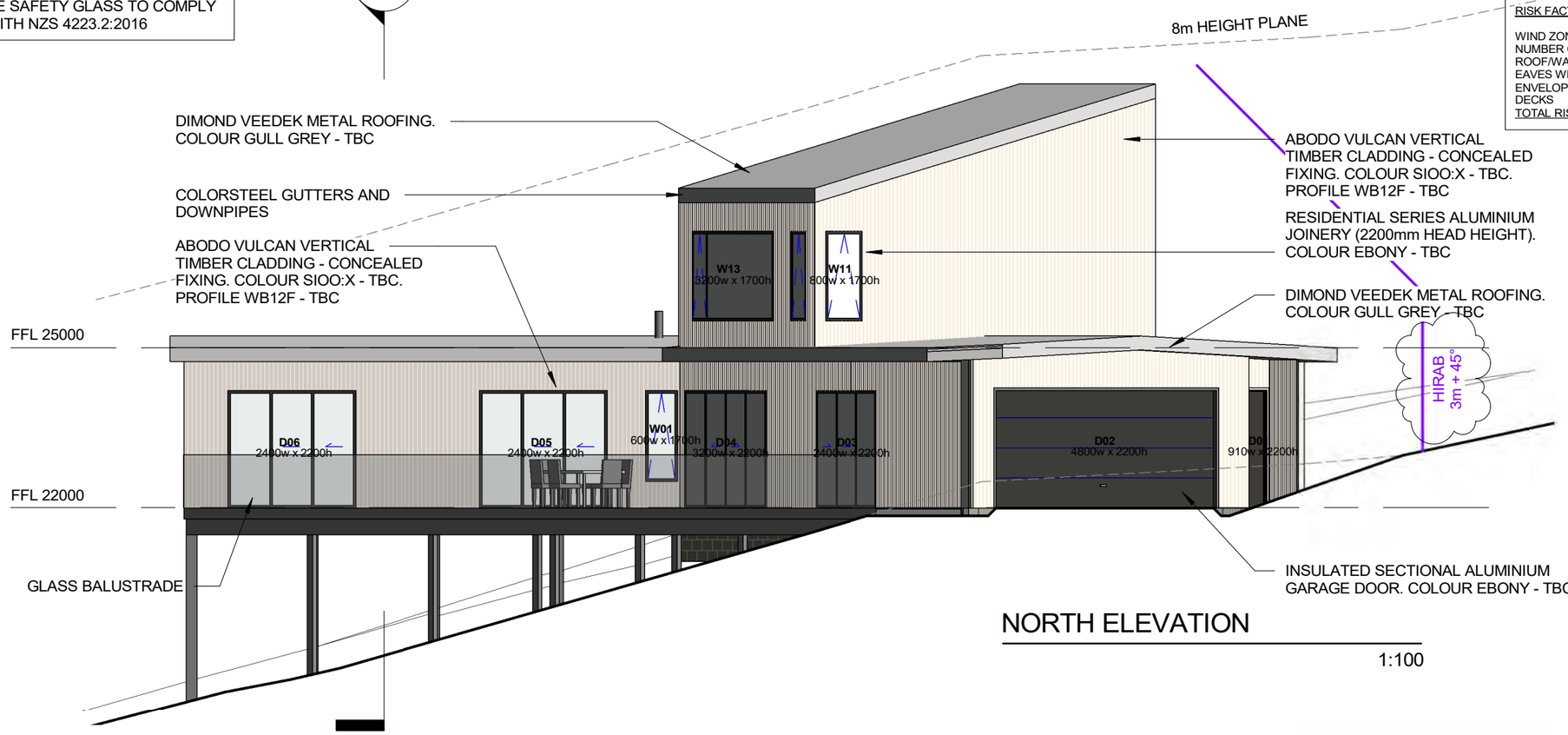
BUILDING CONSENT

Sheet Number:	Revision:
BC-01	H

GLAZING NOTE

ALL WINDOWS AND DOORS TO BE SAFETY GLASS TO COMPLY WITH NZS 4223.2:2016

2 / BC-07



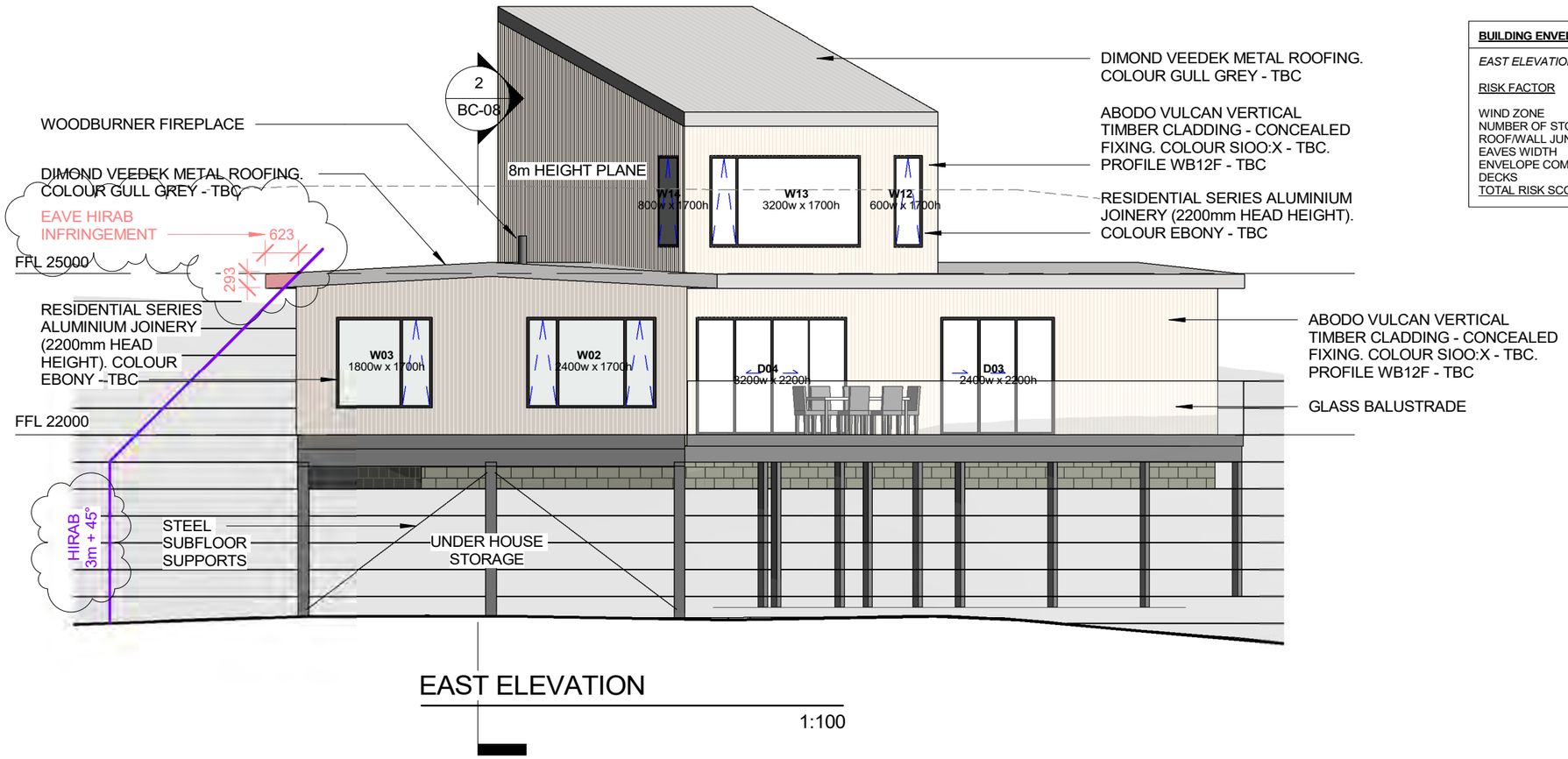
NORTH ELEVATION

1:100

BUILDING ENVELOPE RISK MATRIX

NORTH ELEVATION

RISK FACTOR	RISK SEVERITY	RISK SCORE
WIND ZONE	HIGH RISK	1
NUMBER OF STOREYS	HIGH RISK	2
ROOF/WALL JUNCTIONS	MEDIUM RISK	1
EAVES WIDTH	VERY HIGH RISK	5
ENVELOPE COMPLEXITY	MEDIUM RISK	1
DECKS	LOW RISK	0
TOTAL RISK SCORE		10



EAST ELEVATION

1:100

BUILDING ENVELOPE RISK MATRIX

EAST ELEVATION

RISK FACTOR	RISK SEVERITY	RISK SCORE
WIND ZONE	HIGH RISK	1
NUMBER OF STOREYS	HIGH RISK	2
ROOF/WALL JUNCTIONS	MEDIUM RISK	1
EAVES WIDTH	VERY HIGH RISK	5
ENVELOPE COMPLEXITY	MEDIUM RISK	1
DECKS	LOW RISK	0
TOTAL RISK SCORE		10

Notes:

BUILDING CONSENT
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TIMBER GRADE
ALL STRUCTURAL TIMBER TO BE A MINIMUM OF SG8 OR HIGHER, UNLESS STATED OTHERWISE.

PRODUCTS
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JOINERY NOTE
ALL OPENING SIZES TO BE CONFIRMED ONSITE PRIOR TO JOINERY FABRICATION. ALL JOINERY TO BE INSTALLED TO NZBC:E2 FOR HIGH WIND ZONE

SEA SPRAY ZONE
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JM	JM	03/25

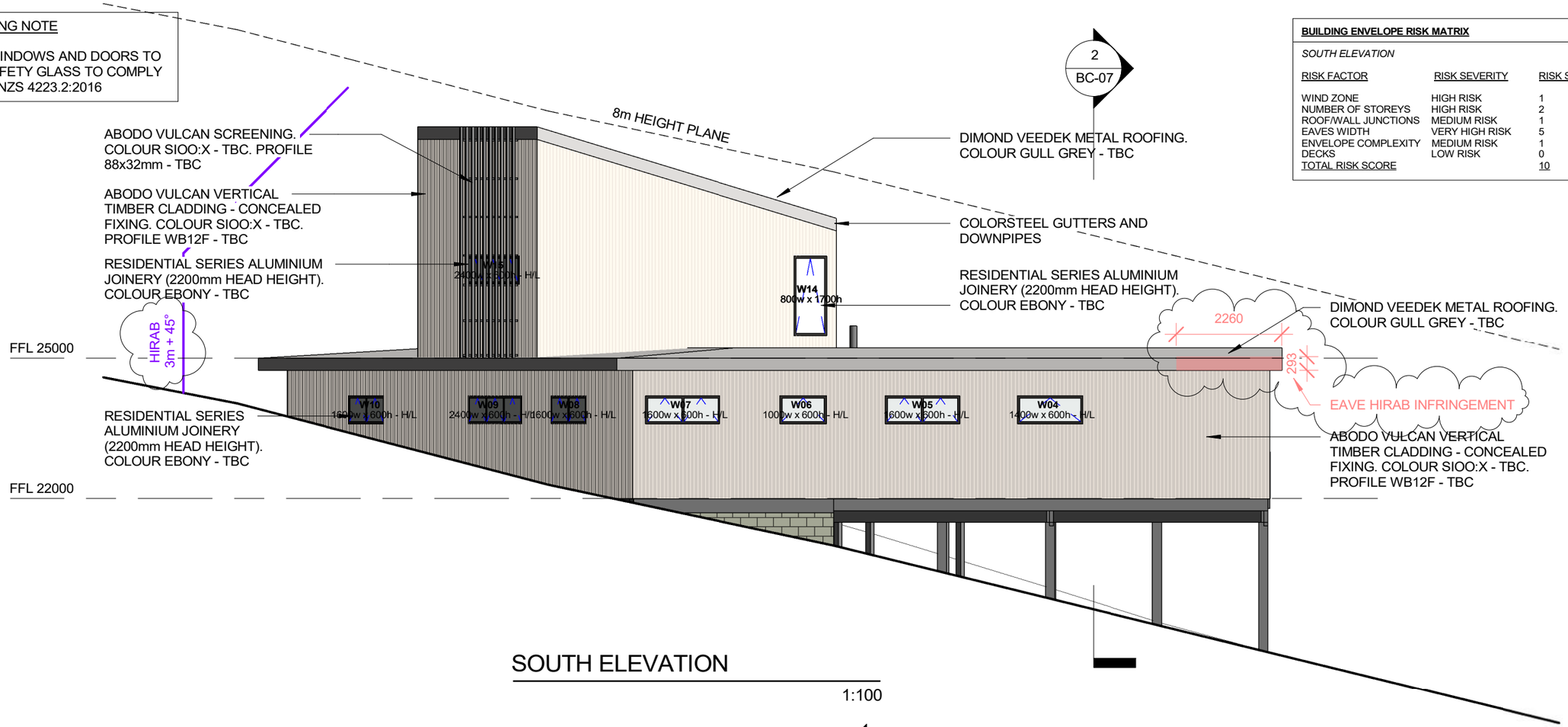
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NTD @ A3	2410

BUILDING CONSENT

Sheet Number:	Revision:
BC-05	I

GLAZING NOTE

ALL WINDOWS AND DOORS TO BE SAFETY GLASS TO COMPLY WITH NZS 4223.2:2016



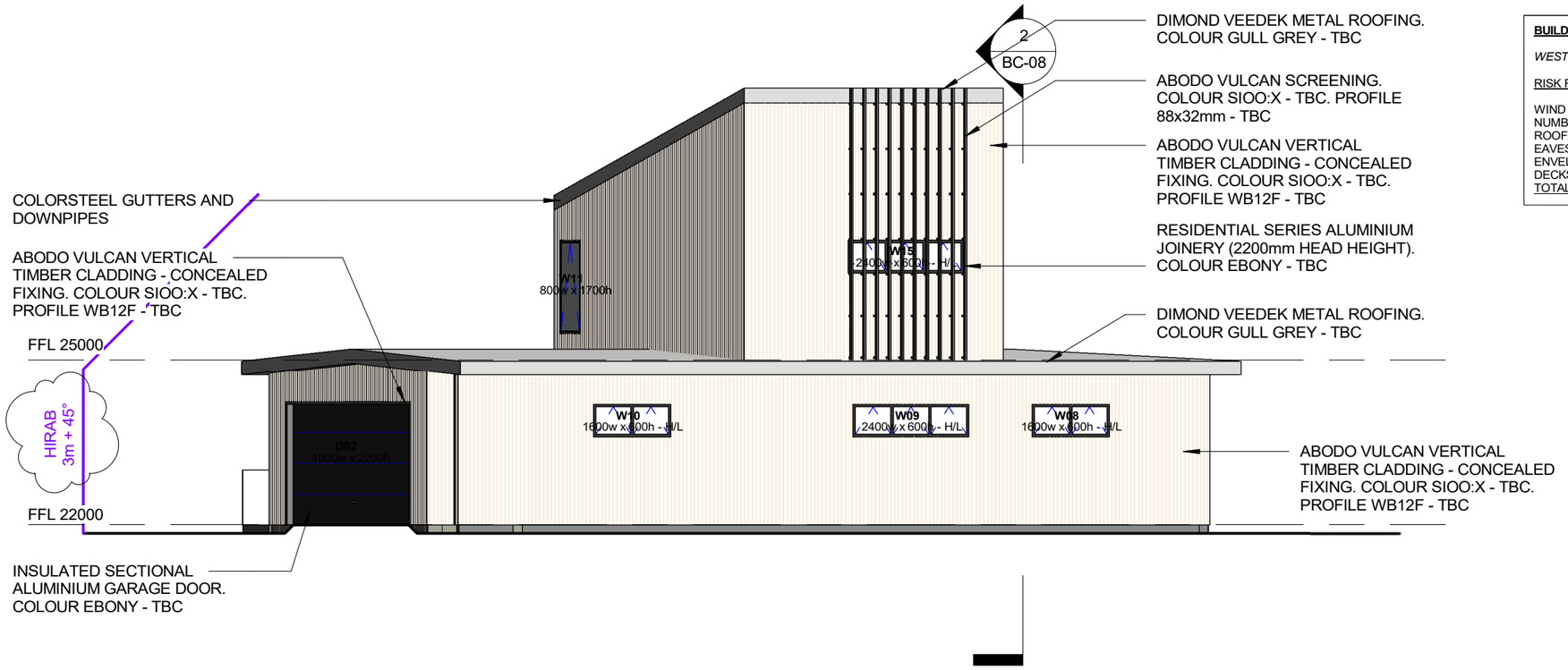
SOUTH ELEVATION

1:100

BUILDING ENVELOPE RISK MATRIX

SOUTH ELEVATION

RISK FACTOR	RISK SEVERITY	RISK SCORE
WIND ZONE	HIGH RISK	1
NUMBER OF STOREYS	HIGH RISK	2
ROOF/WALL JUNCTIONS	MEDIUM RISK	1
EAVES WIDTH	VERY HIGH RISK	5
ENVELOPE COMPLEXITY	MEDIUM RISK	1
DECKS	LOW RISK	0
TOTAL RISK SCORE		10



WEST ELEVATION

1:100

BUILDING ENVELOPE RISK MATRIX

WEST ELEVATION

RISK FACTOR	RISK SEVERITY	RISK SCORE
WIND ZONE	HIGH RISK	1
NUMBER OF STOREYS	HIGH RISK	2
ROOF/WALL JUNCTIONS	MEDIUM RISK	1
EAVES WIDTH	VERY HIGH RISK	5
ENVELOPE COMPLEXITY	MEDIUM RISK	1
DECKS	LOW RISK	0
TOTAL RISK SCORE		10

Notes:

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JM	JM	03/25

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NTD @ A3	2410

BUILDING CONSENT

Sheet Number:	Revision:
BC-06	I

NOTES

FLOOR

F1 CONCRETE FLOOR: 300mm CONCRETE RAFT SLAB DESIGNED BY ENGINEER. REFER TO ENGINEER'S DRAWINGS FOR DETAILS.

F2 TIMBER FLOOR: 20mm TIMBER SHEET FLOORING, ON TIMBER SUB-FLOOR. REFER TO FLOOR FRAMING PLAN FOR LAYOUT AND SIZES.

WALLS

W1 ABODO VULCAN VERTICAL TIMBER WEATHERBOARD CLADDING. CONCEALED FIXINGS. 20mm MIN. CAVITY WITH H3.1 TIMBER BATTENS. THERMAKRAFT WATERGATE PLUS BUILDING WRAP TO SG8 H1.2 TIMBER FRAMED WALLS. NOG TO SUIT HORIZONTALLY FIXED 10mm GIB BOARD INTERNAL LINING.

ROOF

R1 DIMOND VEEDEK LONGRUN ROOFING ON 90 x 45 BATTENS @ 900 CRS. MAX. FIXED WITH 1x 10g SELF-DRILLING SCREW, 80mm LONG OVER THERMAKRAFT COVERTEK 407 ROOF UNDERLAY ON TIMBER TRUSSES @ 900 CRS MAX. DESIGNED BY TRUSS ENGINEER. ENSURE 25mm AIR GAP BETWEEN INSULATION AND BUILDING PAPER.

R2 SELECTED COLORSTEEL BOX GUTTER 125 ON EXTERNAL PROFILE WITH COLORSTEEL DOWNPIPES.

JOINERY

J1 SELECTED POWDER-COATED ALUMINIUM JOINERY - DOUBLE GLAZED.

CEILING

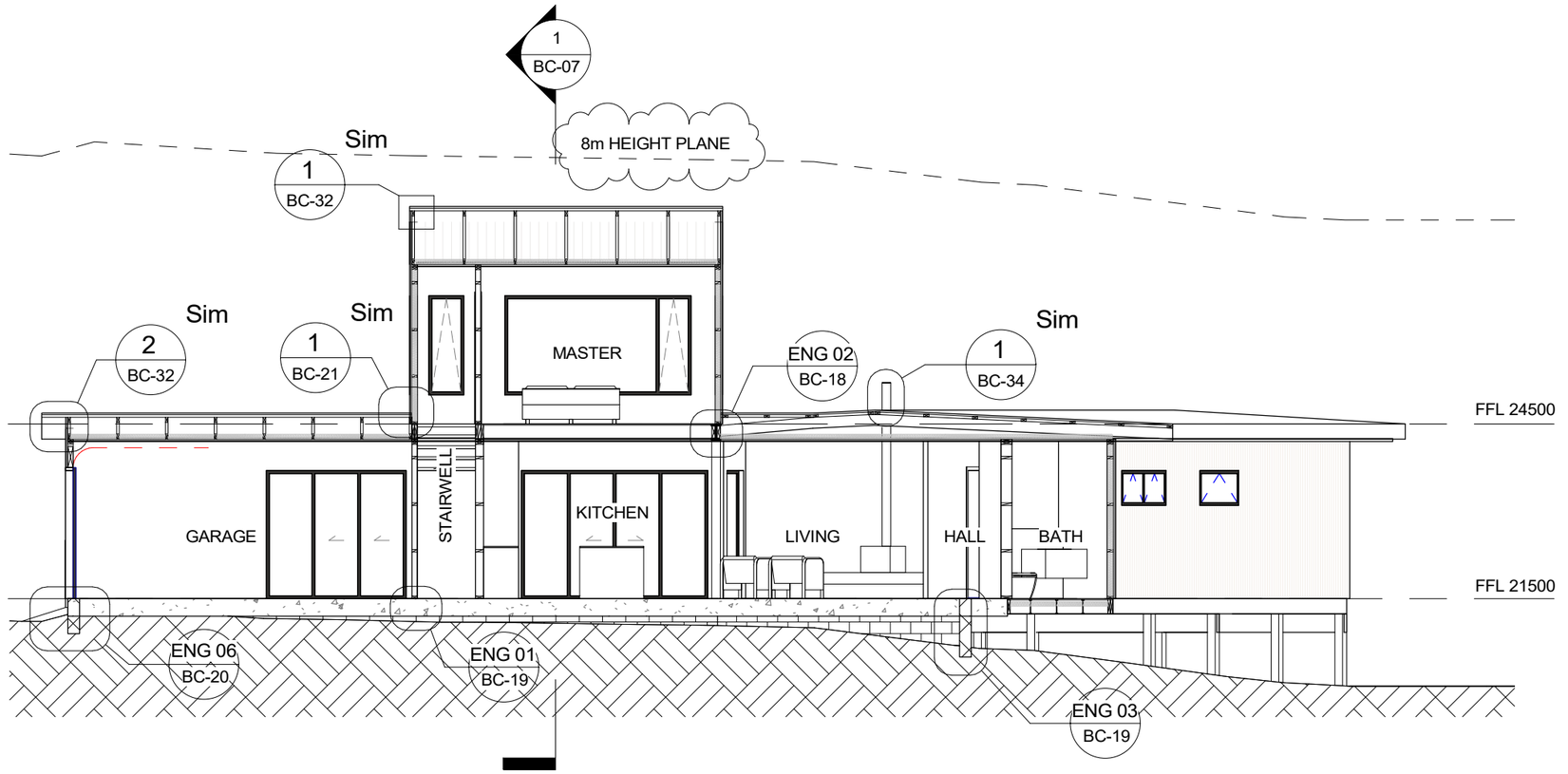
C1 13mm GIB BOARD TO 310 GIB RONDO METAL CEILING BATTENS @ 450 CRS MAX.

SOFFIT LINING

S1 6mm VILLABOARD SOFFIT LINING.

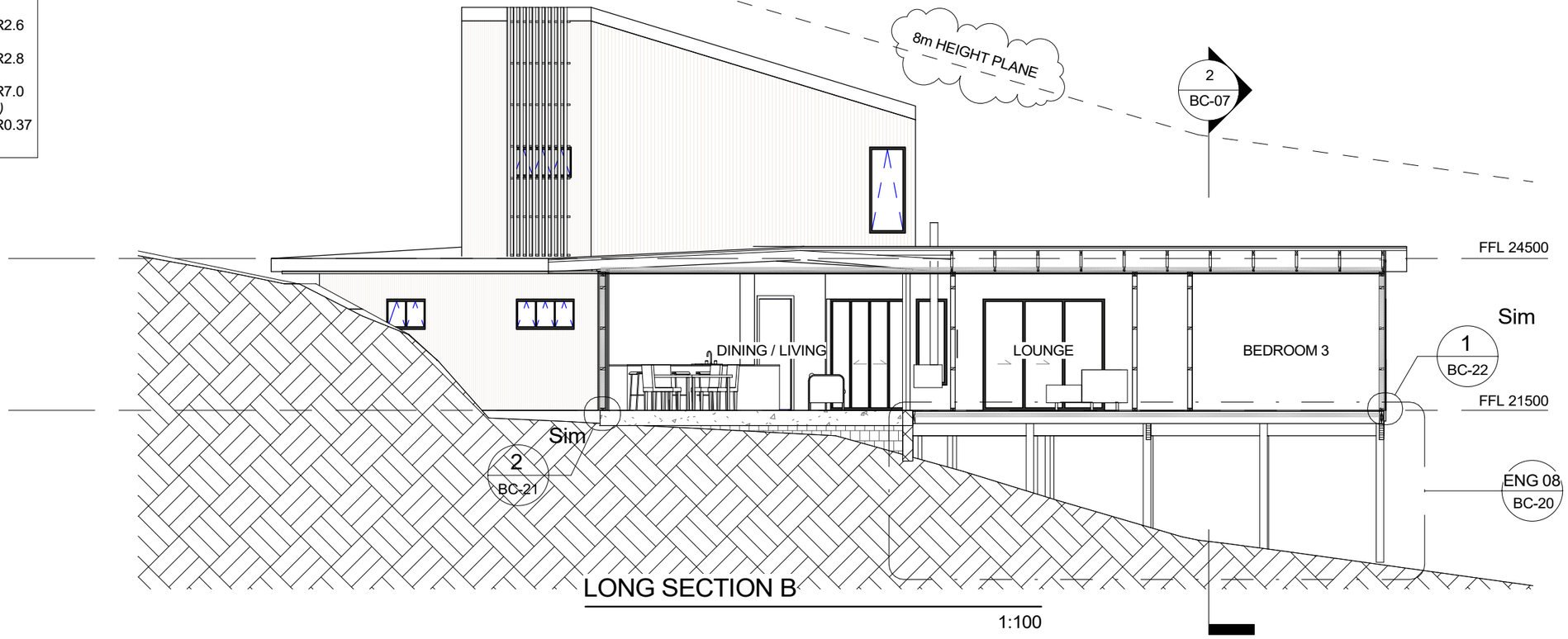
INSULATION

MID-FLOOR / SOFFIT	R2.6
(PINK BATTS - SNUGFLOOR)	
EXTERNAL WALLS - 90mm	R2.8
(PINK BATTS - ULTRA)	
TRUSS CEILING	R7.0
(PINK BATTS - SUPERBATTS)	
GLAZING	R0.37
(LOW E, ARGON)	



LONG SECTION A

1:100



LONG SECTION B

1:100

Notes:

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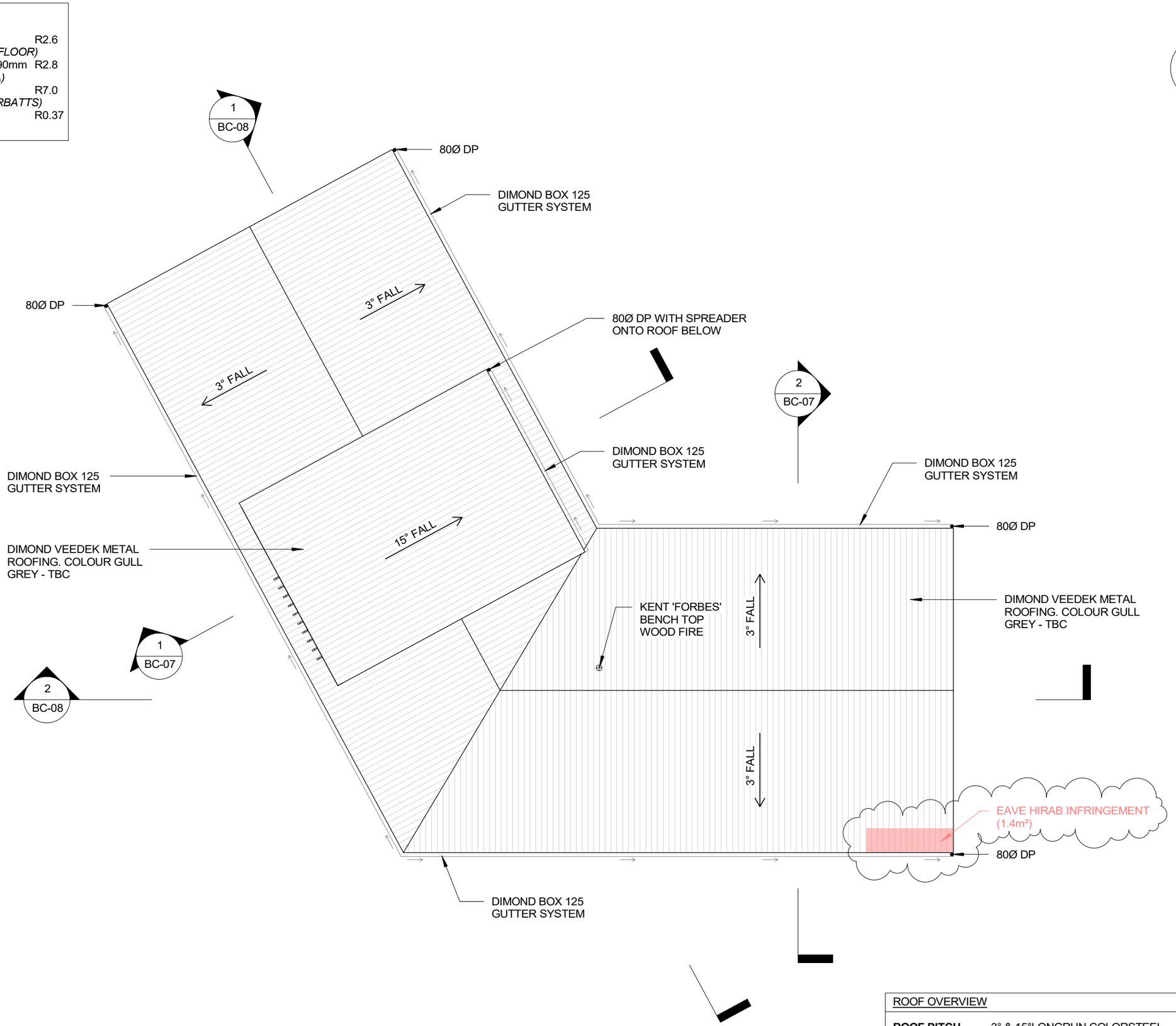
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Scale: NTD @ A3	Project No: 2410	
BUILDING CONSENT		
Sheet Number: BC-08	Revision: A	

INSULATION

MID-FLOOR / SOFFIT	R2.6
(PINK BATTS - SNUGFLOOR)	
EXTERNAL WALLS - 90mm	R2.8
(PINK BATTS - ULTRA)	
TRUSS CEILING	R7.0
(PINK BATTS - SUPERBATTS)	
GLAZING	R0.37
(LOW E, ARGON)	



ROOF PLAN

1:100

ROOF OVERVIEW

ROOF PITCH	3° & 15°LONGRUN COLORSTEEL
STYLE	TIMBER TRUSSES
ROOFING	DIMOND 'VEEDEK' PROFILED METAL ROOFING
FLASHINGS	COLORSTEEL FLASHING TO SUIT PROFILE ENSURE TO FLASH AS PER E2/AS1
ROOF GUTTERS	COLORSTEEL GUTTERS & DOWNPIPES
CEILING	310 GIB RONDO METAL CEILING BATTENS

Notes:

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NTD @ A3	2410

BUILDING CONSENT

Sheet Number:	Revision:
BC-10	I

In the Matter of:	*The Resource Management Act 1991*
And	
In the Matter of:	*An application under Section 88 of the Resource Management Act 1991 made by Jessie Trust Holdings Limited*
File Reference:	*RM190256*

DECISION ON NON NOTIFIED RESOURCE CONSENT APPLICATION

Pursuant to Section 221(3) of the Resource Management Act 1991 ("RMA"), the Kaipara District Council ***approves*** *the application to vary Condition 1.4 and 1.5 of Consent Notice Consent Notice 11283811.3 as they relate to Lots 1- 40 DP 487158 (RT 825227, 825228 – 825261, 825264 – 825266 and 834068), such that they will now read:*

Clause 1.4

In respect of Lots 1, 5, 6, 7, 8, 9, 23, 24, 25, 26, 27, 30, 31, 32, 34, 35, 36 and 37

At the time of applying for a building consent ***for a new dwelling*** ~~*on a Lot*~~ *the owner shall contact Environs Holdings Limited and arrange* ***on-site*** *cultural monitoring for any earthworks to be carried out on the Lot* ***that involve the stripping back of topsoil****.*

1.4a In respect of Lots 1 to 40 of the subdivision

Attention is drawn to the cultural, spiritual and archaeological values of the subdivision as identified in the Cultural Impact Assessment Addendum report prepared by Environs Holdings on behalf of Te Uri O Hau dated August 2019.

Clause 1.5

When undertaking any building works on a Lot the owner shall comply with the Building and Landscape Design Guidelines in the ***Addendum to the*** *Assessment of Landscape, Natural Character and Visual Effects January 2017,* ***dated 28 January 2020****, held by the Council.*

CONDITIONS OF CONSENT

Pursuant to Section 108 of the Act, RM190256 is granted subject to the following conditions:

1. *The activity shall be carried out in accordance with the application formally received by Kaipara District Council ("Council") on 05 November 2019 and the further information received on 26 November 2019 and 28 January 2020.*
2. *This consent (or any part thereof) shall not commence until such time as the following charges, which are owing at the time the Council's decision is notified, have been paid in full:*

    a) *All fixed charges relating to the receiving, processing, granting and monitoring of this resource consent under section 36(1) of the RMA; and*

    b) *All additional charges imposed under section 36(5) of the RMA to enable the Council to recover its actual and reasonable costs in respect of this application, which are beyond challenge.*

3. *The consent holder shall pay any subsequent further charges imposed under section 36 of the RMA relating to the receiving, processing, granting and monitoring of this resource consent within 20 days of receipt of notification of a requirement to pay the same, provided that, in the case of any additional charges under section 36(5) of the RMA that are subject to challenge, the consent holder shall pay such amount as is determined by that process to be due and owing, within 20 days of receipt of the relevant decision.*
4. *A solicitor's undertaking shall be provided to Council confirming that the variation to the consent notice 11283811.3 will be duly registered against the titles of Lots 1- 40 DP 487158 (RT 825227, 825228 – 825261, 825264 – 825266 and 834068). The consent notice variation to be prepared for registration above shall be prepared by a solicitor at the Consent Holder's expense and shall be complied with on a continuing basis by the owners of the lot and subsequent owners.*

ADVICE NOTES

1. *All archaeological sites are protected under the provisions of the Heritage New Zealand Pouhere Taonga Act 2014. It is an offence under that Act to modify, damage or destroy any archaeological site, whether the site is recorded or not. Application must be made to the Heritage New Zealand for an authority to modify, damage or destroy an archaeological site(s) where avoidance of effects cannot be practised.*
2. *If subsurface archaeological evidence (shell, midden, hangi, storage pits, etc) should be unearthed during construction, work should cease in the immediate vicinity of the remains and the Heritage New Zealand should be contacted.*
3. *In the event of koiwi (human remains) being uncovered, work should cease immediately and the tangata whenua of Te Uri O Hau shall be contacted so that appropriate arrangements can be made.*

RM190256 ASSESSMENT REPORT

Processing Details:

Date Formally Received	*05.11.19*	Date of Report	*07.02.20*
Section 92 Request(s)	*15.11.19*	Engineer Comments	*N/A*
Date Information Received	*26.11.19*	Date of Site Inspection	*13.11.20*
S37 Deferral	*Extension of timeframe, 7 working days* *Extension of timeframe to amend proposal, 15 to 28 January 2020* *Extension of timeframe, 20 working days* *Review conditions, 17 to 18 February 2020*		

External Distribution:

	Date Sent	Date Received	Comments
Northland Regional Council.	*05.11.19*	–	
Iwi	*05.11.19*	–	
DOC	*05.11.19*	–	*CIA addendum provided in support of the application*
Heritage New Zealand	*05.11.19*	–	

1. DESCRIPTION OF PROPOSAL

1.1 The Applicant seeks to vary clauses 1.4 and 1.5 of Consent Notice 11283811.3 as they relate to Lots 1-40 DP 487158. The variation to Clause 1.4 would make reference to a Cultural Impact Assessment Addendum report prepared by Environs Holdings Ltd which defines requirements for ongoing cultural monitoring by Te Uri O Hau during earthworks activities associated with individual site development within Lots 1 – 40 of DP 487158.

The variation to Clause 1.5 would allow for changes to building and design guidelines to have increased building heights for Lots 13, 14, 15, 16, 17, 26, 27, 28 and 29, and to make reference to an updated Northland Regional Council document on pest plants.

Clause 1.4 currently states:

In respect of Lots 1 – 40 on the Plan:

At the time of applying for a building consent on a Lot the owner shall contact Environs Holdings Limited and arrange cultural monitoring for any earthworks to be carried out on the Lot.

Clause 1.4 is proposed to read as follows (showing deletions in strikethrough and additions in bold and underlined);

In respect of Lots 1, 5, 6, 7, 8, 9, 23, 24, 25, 26, 27, 30, 31, 32, 34, 35, 36 and 37

At the time of applying for a building consent ***for a new dwelling*** ~~*on a Lot*~~ *the owner shall contact Environs Holdings Limited and arrange* ***on-site*** *cultural monitoring for any earthworks to be carried out on the Lot* ***that involve the stripping back of topsoil****.*

1.4a In respect of Lots 1 to 40 of the subdivision

Attention is drawn to the cultural, spiritual and archaeological values of the subdivision as identified in the Cultural Impact Assessment Addendum report prepared by Environs Holdings on behalf of Te Uri O Hau dated August 2019.

Clause 1.4 currently requires cultural monitoring for all lots within the subdivision/application sites. However the applicant states that *"only sites that require further cultural monitoring are those located near to the recorded archaeological sites, or within the Area of Significance to Maori*". In addition, cultural monitoring and individual CIA reports have already been prepared for Lots 28, 29 and 33 and as such, reference to these lots has been excluded from the proposed wording of clause 1.4.

Proposed Clause 1.4a includes specific reference to a Cultural Impact Assessment (CIA) addendum, prepared by Environs Holdings, which has been submitted in support of the application.

Clause 1.5 currently states;

When undertaking any building works on a Lot the owner shall comply with the Building and Landscape Design Guidelines in the Assessment of Landscape, Natural Character and Visual Effects January 2017 held by the Council.

Clause 1.5 is proposed to read as follows (showing deletions in strikethrough and additions in bold and underlined);

When undertaking any building works on a Lot the owner shall comply with the Building and Landscape Design Guidelines in the ***Addendum to the*** *Assessment of Landscape, Natural Character and Visual Effects January 2017,* ***dated 5 June 2019****, held by the Council.*

The assesment, dated 18 June 2019, was prepared by Mr Simon Cocker of Simon Cocker Landscape Architecture (SCLA) and submitted in support of the application. At time of lodgement, the report initially refered to a single-storey dwelling on Lots 13, 14, 15, 16, 17, 28 and 29 rather than offering a specific height limit. This was queried via a request for further information pursuant to Section 92 of the Act. Subequently, the applicant submitted as amended report from SCLA, which recommended a height limit of 5.5m. The report was dated 26 November 2019.

A comparison of the wording of the original Building and Landscape Design Guidelines from the report '*Assessment of Landscape, Natural Character and Visual Effects dated January 2017'* and the updated assessment is included below;

	'Appendix A:Building and Landscape Design Guidelines', (original version, prepared by SCLA, dated January 2017)	Appendix C: Building and Landscape Design Guidelines' (prepared by SCLA amended 26 November 2019)	Difference
Scale of building and structures	It is recommended that buildings and structures on Lots 13, 14, 15, 16, 17 have a maximum height of 4.5 metres above existing ground level, using the rolling height method for determining cut level and max building height. It is recommended that buildings and structures on Lots 26, 27, 28, and 29 shall have a maximum height of 5.5 metres above existing ground level, using the rolling height method for determining cut level and max building height.	It is recommended that buildings and structures on Lots 13, 14, 15, 16, 17**, 28 and 29 have a maximum height of 5.5 metres above existing ground level, using the rolling height method for determining cut level and max building height.** ~~It is recommended that buildings and structures on Lots 26, 27, 28, and 29 shall have a maximum height of 5.5 metres above existing ground level, using the rolling height method for determining cut level and max building height~~	1.5m increase in maximum building height for Lots 13-17. No change in maximum height for Lot 26, 27, 28 and 29.
Landscape planting	No plants listed in Table A5.2 of the Northland Conservation Management Strategy1 or in the	~~No plants listed in Table A5.2 of the Northland Conservation Management Strategy[1] or in the~~	Removing the reference to a superceded pest

	NRC publication: 'Environmental Weeds - Delightful But Destructive' shall be planted within any of the lots.	~~NRC publication: 'Environmental Weeds - Delightful But Destructive' shall be planted within any of the lots.~~ **No plants listed in Section 6 of the Northland Regional Pest and Marine Pathway Management Plan 2017- 2027 2 are permitted.**	management documents and providing reference to the correct NRC Plan i.e. Northland Regional Pest and Marine Pathway Management Plan 2017- 2027.

Council issued a Notification Decision pursuant on 14 January 2020 that required the proposal to be limited notified to the owners / occupiers of the following lots:

Lot 20 DP 487158 Lot 25 DP 487158

Lot 22 DP 487158 Lot 28 DP 487158

Lot 23 DP 487158 Lot 29 DP 487158

Subsequently, on 28 January 2020 the applicant amended the proposal so that the existing height limit of 5.5 for Lots 26 and 27 would be unchanged by the proposal. The proposal was not amended with respect to the proposed height restriction of 5.5m on Lots 13, 14, 15, 16 and 17 or any other aspect of the proposal. The applicant has submitted a Landscape and Visual Assessment from SCLA dated 28 January 2020 that gives consideration to the landscape and visual effects of the amended proposal.

2 SITE DESCRIPTION AND SURROUNDING ENVIRONMENT

2.1 The application sites (including Lots 1 – 40 DP 487158) are part of a recently completed residential subdivision located on Moir Point, Mangawai (RM160256 and subsequent variations A and B). Five recorded archaeological areas containing archaeological sites being R08/196, R08/197, R08/198, R08/199 and R08/200 are located within the subdivision.

The subdivision and application sites are accessed via Jordan Street to the north and Estuary Drive to the south. The subdivision is zoned 'Residential' and all of the lots within the subdivision are at least 1,000m^2 in area. All lots obtain access via Estuary Drive and Jointly Owned Access Lots (JOALs). The majority of the sites within the subdivision are retained in grass (with exception to the sites where building has been undertaken). A number of lots within the subdivision have already been sold and built upon or are subject to land use resource consent for the construction of residential dwellings. However, a large portion of the sites are yet to be developed.

A large reserve area in the centre of the subdivision is located on the east side of Estuary Drive which contains a recorded Pa site. An esplanade reserve area extends along the coastline to the eastern extent

of the subdivision. Mature Pohutukawa trees have been retained along the esplanade reserve, and a walking track links the reserve with the Mangawhai Harbour.

Larger landholdings including the Christian Camp are located to the west of the subdivision/application sites.



Figure 1. Archaeological areas containing R08/196, R08/197, R08/198, R08/199, R08/200.

A pocket of lower density, residential sites and a holiday park/campground are located to the south-west of the application sites. Immediately to the north-west is Jordan Street, which is characterized by higher-density residential development with smaller lot sizes (typically about 600m^2) and limited vegetation or landscaping. Development to the north of the site adjoining the coastal margin is characterised by existing residential development of similar composition and lot sizes to those included in the Moir Point Road subdivision.

Background

2.2 The application sites were created by subdivision consent RM160235 granted in November 2016 and later varied by RM160235A and RM160235B. Titles were released in November 2018. RM160235 included a range of supporting technical reports including a Landscape Visual Assessment prepared by Simon Cocker Landscape Architecture (SCLA), a Cultural Values Assessment prepared by Environs Holdings Ltd on behalf of Te Uri O Hau, and an Archaeological Assessment prepared by Geometria. These technical documents provided recommendations and mitigation measures with reference to

cultural, archaeological features and landscape values. The original consent RM160235 imposed conditions and Consent Notice 11283811.3 which included a number of development controls on all of the titles within the subdivision i.e., Lots 1 – 40 DP 487158.

The landscape and visual assessment by SCLA submitted in support of RM160235 provided recommendations through the 'Building and Design Guidelines' for the mitigation of the potential landscape, visual and visual amenity effects of the development. The Building and Design Guidelines were referenced within Clause 1.5 of consent notice 11283811.3 and provided building height restrictions and other methods to mitigate potential adverse effects. The Building and Design Guidelines specified a recommended maximum building height of 4.5 metres for Lots 13-17 and a recommended maximum building height of 5.5m for lots 26, 27, 28 and 29.

The Applicant now seeks to vary consent notice 11283811.3 to allow for an increase in building height for a number of lots within the subdivision. As discussed, the proposal includes amendment of the existing Building and Landscape Design Guidelines, including increasing the maximum building height to 5.5m for Lots 13-17. The proposal also includes an amendment to the consent notice to clearly define the ongoing requirement for cultural monitoring by Te Uri O Hau in association with earthworks undertaken on the site as well as to draw attention to the Cultural Impact Assessment Addendum (dated August 2019) prepared by Environs Holdings.

3 KAIPARA DISTRICT PLAN (OPERATIVE 2013) RULE ASSESSMENT

3.1 The following apply to the subject property:

Zoning: Residential
Overlays: Mangawhai Harbour Overlay
Rules: N/A
Status: Discretionary

3.2 District Plan

The applicant has provided an assessment of the current proposal against the relevant Performance Standards of the District Plan and concluded that no additional consents are required. This assessment has been accepted.

Section 221(3) – Variation of a Consent Notice

Section 221(3) of the Act provides for a consent holder to make an application to a territorial authority, at any time after the deposit of the survey plan, to vary or cancel any condition specified in a consent notice. Section 221(3A) requires that any such application is subject to sections 88 to 121 and 127(4) to 132 of the Act. Neither Section 221(3A) nor Section 127(4) address the matter of activity status, therefore the application is being considered as a discretionary activity due to it being an innominate activity under both the RMA and the District Plan.

4 NOTIFICATION ASSESSMENT

4.1 A decision was made under delegated authority to process the consent on a non-notified basis as per the Council's Notification Assessment Report dated 17 February 2020.

5 STATUTORY ACKNOWLEDGEMENTS

5.1 Relevant to this application, any statutory acknowledgement within the meaning of an Act specified in Schedule 11 would be contained within the Te Uri o Hau Claims Settlement Act 2002.There are features within the subject site that have been recognised by the Crown, through a statutory acknowledgment, as significant to Te Uri o Hau.

Environs Holdings Limited is a subsidiary of Te Uri o Hau Settlement Trust (caretaker of Te Uri o Hau Claims Settlement Act 2002) authorised to participate in the Resource Management Act 1991 proceedings. Environs Holdings have provided a Cultural Assessment Addendum in support of the application subject to the following conditions;

Cultural monitoring is required during any earthworks to be conducted on the following lots In respect of Lots 1, 5, 6, 7 , 8, 9, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36 and 37.

At least ten (10) working days prior to the commencement of any earthworks on the site, the Consent Holder shall engage, at their full expense, Te Uri o Hau Kaitiaki to undertake the following:

i. Attend a pre-construction/earthworks meeting with the Contractors/Consent Holder.

ii. Blessing by the monitoring Kaitiaki prior to earthworks commencing.

iii. Cultural monitoring of earthworks in the scraping back of top soil, and holes for the pile foundations and if applicable, earthworks for any drainage, accessory buildings, trenching for utility services and connection to Councils Reticulation scheme.

iv. The Consent Holder shall provide written confirmation of the above matters from Te Uri o Hau to the satisfaction of Council.

The proposed variations to the consent notices do not entirely reflect the conditions required by Te Uri o Hau above. However, correspondence submitted in support of the application along with the CIA between Te Uri o Hau and the applicant confirms that Te Uri o Hau have reviewed the proposed wording and have agreed to this wording.

6 STATUTORY CONSIDERATIONS

Section 104(1)(a) - Actual & Potential Effects on the Environment

6.1 Positive Effects

The proposal would allow for greater flexibility in dwelling design by providing a larger building envelope and would provide greater certainty on when cultural monitoring is required for both Iwi and property owners.

6.2 Adverse Effects

Landscape, visual and amenity

As discussed, the applicant seeks to relax the building and landscape design guidelines to allow for an increase in the maximum building height of various lots within the subdivision. The proposed variation includes Lots 13-17 for which a maximum height of 5.5 metres is proposed (an increase of 1m in height).

Lots 13-17 are located in an elevated position and form a cluster around a JOAL. Lots 15 and 16 are the most elevated of this cluster while Lots 13, 14 and 17 slope down towards Estuary Drive. Lot 17 has resource consent for the construction of a single storey residential dwelling and is currently under construction.

The following assessment associated with the proposed increase in height of these lots is separated into potentially affected parties:

Moir Point Christian Camp

Lots 13, 15 and 16 adjoin Lot 3 DP 502199 which is a large site owned and occupied by Moir Point Christian Camp. The site is predominately pasture or vegetation but contains an existing building in the south-west corner of the site approximately 70 metres from the boundary of the closest application site, being Lot 13. The building on this lot appears to be south facing (with primary views from this site towards the estuary to the south). The Moir Point Christian Camp also owns/occupies Lot 1 DP 60533, which is located to the south west of Lots 13-17.

The potential adverse effects associated with a change in character of the outlook (from open and coastal to residential) from the sites owned/occupied by the Moir Point Christian Camp and the potential loss of the sense of privacy for users of these lots was addressed during the processing of the original subdivision consent application RM160235 and the associated effects were considered less than minor at that point. It is considered that the effects associated with the proposal and the potential 1m height increase for lots 13-17 will result in negligible effects over and above that approved in subdivision RM 160235.

Lots to the south of Lots 13-17

Lots 10, 11 and 12 DP 487158 directly adjoin Lots 13 and 14 to the south. These sites slope away from Lots 13-17 and are currently vacant. Based on observations of the site visit, it is assumed that primary outlooks for future dwellings on these sites would be orientated to the south i.e. towards the Mangawhai Harbour. On the basis that Lots 13-17, would effectively be located to the rear of Lots 10, 11 and 12 and a potential increase of 1m in building height would not create any adverse visual effects for future owners/occupiers of these sites over and above the permitted baseline.

Lots to the north of Lots 13-17

Lots 18, 38 and 39 DP 487158 are located to the north of Lots 13-17. These sites are elevated above Lots 13-17 and it is assumed that future dwellings on these lots would be orientated to the east to take advantage of the outlook towards the Mangawhai Harbour rather than to the south towards Lots 13-17. In the unlikely event that a dwelling were to be oriented to the south, due to the elevation above lots 13-17, it considered that the potential 1m increase in the height would not result in a discernible impact upon the outlook or amenity values for future owners/occupiers of these sites.

Lots located to the east of Lots 13-17

Lots 13-17 are elevated above lots located to the east. Lots located to the east are also separated from lots 13-17 by Estuary Drive. It considered that there is sufficient separation distance and that the 1m height increase will not have a discernible impact upon the outlook of owners and occupiers of these sites.

Conclusion on visual amenity effects associated with Lots 13-17

Overall, it is considered that adverse effects associated with the 1m increase in building height for Lots 13-17 will have a less than minor adverse effect on the owners and occupiers of adjacent and adjoining sites.

Cultural

Relevant to this application, any statutory acknowledgement within the meaning of an Act specified in Schedule 11 would be contained within the Te Uri o Hau Claims Settlement Act 2002.There are features within the subject site that have been recognised by the Crown, through a statutory acknowledgment, as significant to Te Uri o Hau.

Environs Holdings Limited is a subsidiary of Te Uri o Hau Settlement Trust (caretaker of Te Uri o Hau Claims Settlement Act 2002) authorised to participate in the Resource Management Act 1991 proceedings. Environs Holdings have provided a Cultural Assessment Addendum in support of the application subject to the following conditions;

Cultural monitoring is required during any earthworks to be conducted on the following lots In respect of Lots 1, 5, 6, 7 , 8, 9, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36 and 37.

At least ten (10) working days prior to the commencement of any earthworks on the site, the Consent Holder shall engage, at their full expense, Te Uri o Hau Kaitiaki to undertake the following:

i. Attend a pre-construction/earthworks meeting with the Contractors/Consent Holder.

ii. Blessing by the monitoring Kaitiaki prior to earthworks commencing.

iii. Cultural monitoring of earthworks in the scraping back of top soil, and holes for the pile foundations and if applicable, earthworks for any drainage, accessory buildings, trenching for utility services and connection to Councils Reticulation scheme.

iv. The Consent Holder shall provide written confirmation of the above matters from Te Uri o Hau to the satisfaction of Council.

The proposed variations to the consent notices do not entirely reflect the conditions required by Te Uri o Hau above. However, correspondence submitted in support of the application along with the CIA between Te Uri o Hau and the applicant confirms that Te Uri o Hau have reviewed the proposed wording and have agreed to this wording.

Conclusion

6.2 In summary, having assessed the effects of the activity, subject to compliance with conditions, it is considered that the activity would have less than minor adverse effects on the environment.

Section 104(1)(b) - Provisions of Policy Statements and Plans

6.3 RM160235 was assessed and considered to be consistent with the following policy statements and plans;

- New Zealand Coastal Policy Statement
- Northland Regional Policy Statement
- Kaipara District Plan 2013

The proposed changes would result in an increased height limit of 1m on lots 13 – 17 that would have less than minor effects and would result in altered cultural monitoring of earthworks that has the support of relevant Iwi, being Te Uri o Hau.

Consequently, the proposal is considered to remain consistent with the relevant objectives and policies of the above documents.

Section 104(1)(c) - Other Matters

6.4 Conditions of Consent

To ensure the proposal is implemented in a manner consistent with the proposal presented to Council and to ensure any adverse effects arising from the proposal are adequately addressed, relevant conditions of consent have been proposed pursuant to Section 108 of the Act.

7 REASONS FOR THE DECISION

7.1 In terms of Section 104(1)(a) of the Act, the adverse effects of the activity will be appropriately avoided, remedied or mitigated as discussed in Section 6 of this report.

7.2 In terms of Section 104(1)(b) of the Act it is considered that the proposal is consistent with the relevant objectives and policies of the Kaipara District Plan 2013, Northland Regional Policy Statement and New Zealand Coastal Policy Statement as discussed in Section 6 of this report.

7.3 In terms of Section 104(1)(c) of the Act, other relevant matters, including conditions of consent and monitoring have been considered in the determination of the application.

7.4 The application would allow for greater flexibility in dwelling design and greater certainty for Iwi and property owners on the need for cultural monitoring.

7.5 Positive effects include social and economic gains for the owners.

7.6 The Council has taken into account the relevant principles outlined in Sections 6, 7 and 8 of the Act and it is considered that granting this resource consent achieves the purpose of the Act as set out in Section 5

Reporting Planner *7 February 2020*

Dwayne Daly *Date*

Signed:

Vishal Chandra *Date: 18 February 2020*

Planning Manager

Kaipara District Council

Signed under delegated authority pursuant to Section 34A of the Resource Management Act 1991.

Title Plan - DP 487158

Survey Number	DP 487158
Surveyor Reference	40955
Surveyor	Dwayne Simon Reiher
Survey Firm	Cato Bolam Consultants Ltd (Auckland)
Surveyor Declaration	I Dwayne Simon Reiher, being a licensed cadastral surveyor, certify that: (a) this dataset provided by me and its related survey are accurate, correct and in accordance with the Cadastral Survey Act 2002 and the Rules for Cadastral Survey 2010, and (b)the survey was undertaken by me or under my personal direction. Declared on 24 Oct 2018 01:28 PM

Survey Details

Dataset Description	LOTS 1 - 40, 100, 101, 200, 201, 203, & 204 BEING A SUBDIVISION OF SECTIONS 6 & 7 SO 501331 & SECTIONS 1- 3 SO 493330		
Status	Deposited		
Land District	North Auckland	**Survey Class**	Class A
Submitted Date	24/10/2018	**Survey Approval Date**	25/10/2018
		Deposit Date	19/11/2018

Territorial Authorities

Kaipara District

Comprised In

RT 807032

RT 807033 Ltd

Created Parcels

Parcels	Parcel Intent	Area	RT Reference
Lot 1 Deposited Plan 487158	Fee Simple Title	0.2097 Ha	825227
Lot 2 Deposited Plan 487158	Fee Simple Title	0.1173 Ha	825228
Lot 3 Deposited Plan 487158	Fee Simple Title	0.1295 Ha	825229
Lot 4 Deposited Plan 487158	Fee Simple Title	0.1215 Ha	825230
Lot 5 Deposited Plan 487158	Fee Simple Title	0.1214 Ha	825231
Lot 6 Deposited Plan 487158	Fee Simple Title	0.1612 Ha	825232
Lot 7 Deposited Plan 487158	Fee Simple Title	0.1199 Ha	825233
Lot 8 Deposited Plan 487158	Fee Simple Title	0.1220 Ha	825234
Lot 9 Deposited Plan 487158	Fee Simple Title	0.1237 Ha	825235
Lot 10 Deposited Plan 487158	Fee Simple Title	0.1628 Ha	825236
Lot 11 Deposited Plan 487158	Fee Simple Title	0.1445 Ha	825237
Lot 12 Deposited Plan 487158	Fee Simple Title	0.1441 Ha	825238
Lot 13 Deposited Plan 487158	Fee Simple Title	0.1615 Ha	825239
Lot 14 Deposited Plan 487158	Fee Simple Title	0.1982 Ha	825240
Lot 15 Deposited Plan 487158	Fee Simple Title	0.1194 Ha	825241
Lot 16 Deposited Plan 487158	Fee Simple Title	0.1237 Ha	825242
Lot 17 Deposited Plan 487158	Fee Simple Title	0.2006 Ha	825243
Lot 18 Deposited Plan 487158	Fee Simple Title	0.1527 Ha	825244
Lot 19 Deposited Plan 487158	Fee Simple Title	0.1220 Ha	825245

Title Plan - DP 487158

Created Parcels

Parcels	Parcel Intent	Area	RT Reference
Lot 20 Deposited Plan 487158	Fee Simple Title	0.1478 Ha	825246
Lot 22 Deposited Plan 487158	Fee Simple Title	0.1448 Ha	825248
Lot 23 Deposited Plan 487158	Fee Simple Title	0.1321 Ha	825249
Lot 24 Deposited Plan 487158	Fee Simple Title	0.1785 Ha	825250
Lot 25 Deposited Plan 487158	Fee Simple Title	0.1398 Ha	825251
Lot 26 Deposited Plan 487158	Fee Simple Title	0.1381 Ha	825252
Lot 27 Deposited Plan 487158	Fee Simple Title	0.1525 Ha	825253
Lot 28 Deposited Plan 487158	Fee Simple Title	0.1865 Ha	834070
Lot 29 Deposited Plan 487158	Fee Simple Title	0.2063 Ha	834068
Lot 30 Deposited Plan 487158	Fee Simple Title	0.9140 Ha	825254
Lot 31 Deposited Plan 487158	Fee Simple Title	0.1705 Ha	825255
Lot 32 Deposited Plan 487158	Fee Simple Title	0.1369 Ha	825256
Lot 33 Deposited Plan 487158	Fee Simple Title	0.1803 Ha	825257
Lot 34 Deposited Plan 487158	Fee Simple Title	0.1708 Ha	825258
Lot 35 Deposited Plan 487158	Fee Simple Title	0.1277 Ha	825259
Lot 36 Deposited Plan 487158	Fee Simple Title	0.1104 Ha	825260
Lot 37 Deposited Plan 487158	Fee Simple Title	0.1800 Ha	825261
Lot 101 Deposited Plan 487158	Vesting on Deposit for Historic Reserve (Territorial Authority)	0.3353 Ha	825262
Lot 38 Deposited Plan 487158	Fee Simple Title	0.1122 Ha	825264
Lot 39 Deposited Plan 487158	Fee Simple Title	0.1102 Ha	825265
Lot 40 Deposited Plan 487158	Fee Simple Title	0.1073 Ha	825266
Lot 200 Deposited Plan 487158	Fee Simple Title	0.0976 Ha	Multiple
Lot 201 Deposited Plan 487158	Fee Simple Title	0.0913 Ha	Multiple
Lot 203 Deposited Plan 487158	Fee Simple Title	0.0812 Ha	Multiple
Lot 204 Deposited Plan 487158	Fee Simple Title	0.0533 Ha	Multiple
Lot 100 Deposited Plan 487158	Vesting on Deposit for Local Purpose Reserve	1.1170 Ha	825263
Lot 21 Deposited Plan 487158	Fee Simple Title	0.1506 Ha	825247
Area Q Deposited Plan 487158	Easement		
Area P Deposited Plan 487158	Easement		
Area O Deposited Plan 487158	Easement		
Area N Deposited Plan 487158	Easement		
Area M Deposited Plan 487158	Easement		
Area L Deposited Plan 487158	Easement		
Area AH Deposited Plan 487158	Easement		
Area AG Deposited Plan 487158	Easement		
Area AF Deposited Plan 487158	Easement		
Area I Deposited Plan 487158	Easement		
Area E Deposited Plan 487158	Easement		
Area J Deposited Plan 487158	Easement		
Area X Deposited Plan 487158	Easement		
Area AE Deposited Plan 487158	Easement		

Title Plan - DP 487158

Created Parcels

Parcels	Parcel Intent	Area	RT Reference
Area D Deposited Plan 487158	Easement		
Area AD Deposited Plan 487158	Easement		
Area AC Deposited Plan 487158	Easement		
Area AB Deposited Plan 487158	Easement		
Area AA Deposited Plan 487158	Easement		
Area B Deposited Plan 487158	Easement		
Area H Deposited Plan 487158	Easement		
Area Z Deposited Plan 487158	Land Covenant		
Area Y Deposited Plan 487158	Land Covenant		
Area F Deposited Plan 487158	Easement		
Area A Deposited Plan 487158	Easement		
Area V Deposited Plan 487158	Easement		
Area G Deposited Plan 487158	Easement		
Area T Deposited Plan 487158	Easement		
Area S Deposited Plan 487158	Easement		
Area U Deposited Plan 487158	Easement		
Area R Deposited Plan 487158	Easement		
	Hydro		
	Hydro		
	Hydro		
Area AI Deposited Plan 487158	Easement		
Total Area		8.4287 Ha	

Our Ref: 40955 KDC Ref: RM 160235

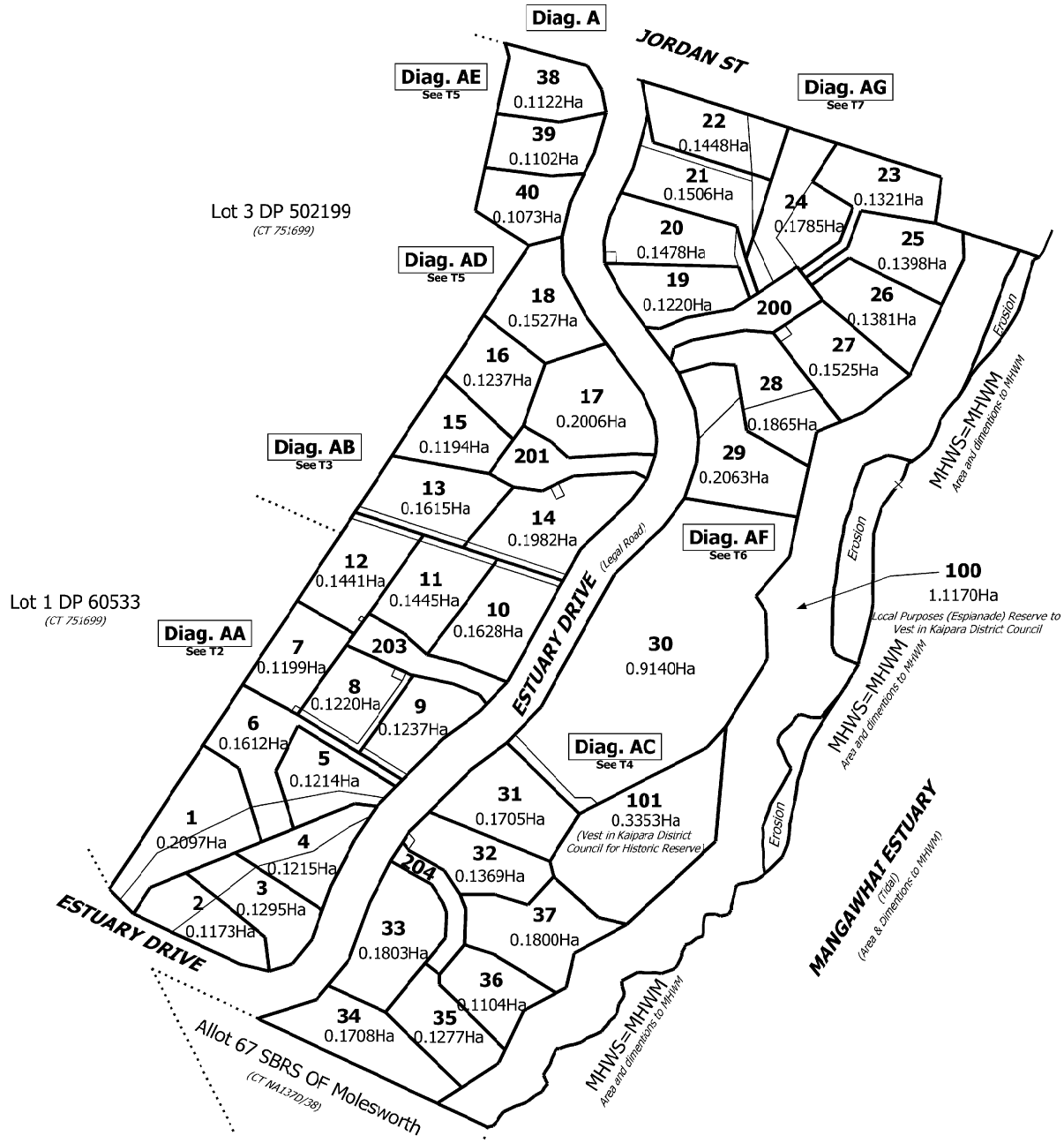
Easement Schedule/Memorandum for DP 487158

Memorandum of Easements			
Purpose	Shown	Servient Tenement	Dominant Tenement
Right of Way Right to convey Electricity Telecommunication & Computer Media Right to drain water	A	Lot 200	Lots 19-28
	B	Lot 201	Lots 13-17
	D	Lot 203	Lot 7s-12
	E	Lot 204	Lots 32, 35-37
	V	Lot 20	Lots 19 & 21
Right to drain water	L	Lot 2	Lot 1, Lots 3-17 & Lots 31-37
	M	Lot 3	Lots 1-2, Lots 4-17 & Lots 31-37
	N	Lot 4	Lots 1-3, Lots 5-17 & Lots 31-37
	O	Lot 5	Lots 1-4, Lots 6-17 & Lots 31-37
	P	Lot 6	Lots 1-5, Lots 7-17 & Lots 31-37
	Q	Lot 1	Lots 2-17 & Lots 31-37
	R	Lot 24	Lots 16-23, Lots 25-29 & Lots 38-40
	S	Lot 22	Lots 16-21, Lots 23-29 & Lots 38-40
	U	Lot 21	Lots 16-20, Lots 22-29 & Lots 38-40
	V	Lot 20	Lots 16-19 & 21-29

Right to Convey Water (Fire Fighting)	F	Lot 27 Hereon	Lots 1–26, Lots 28-40
	G	Lot 20 Hereon	Lots 1–19, Lots 21-40
	H	Lot 14 Hereon	Lots 1–13, Lots 15-40
	I	Lot 8 Hereon	Lots 1–7, Lots 9-40
	J	Lot 32 Hereon	Lots 1–31, Lots 33-40
Schedule of Easements			
Right to drain water	AA	Lot 13	Lot 14
	AB	Lot 14	Lot 13
	AC	Lot 12	Lot 13
	AD	Lot 11	Lot 13 Lot 14
	AI	Lot 10	Lot 14

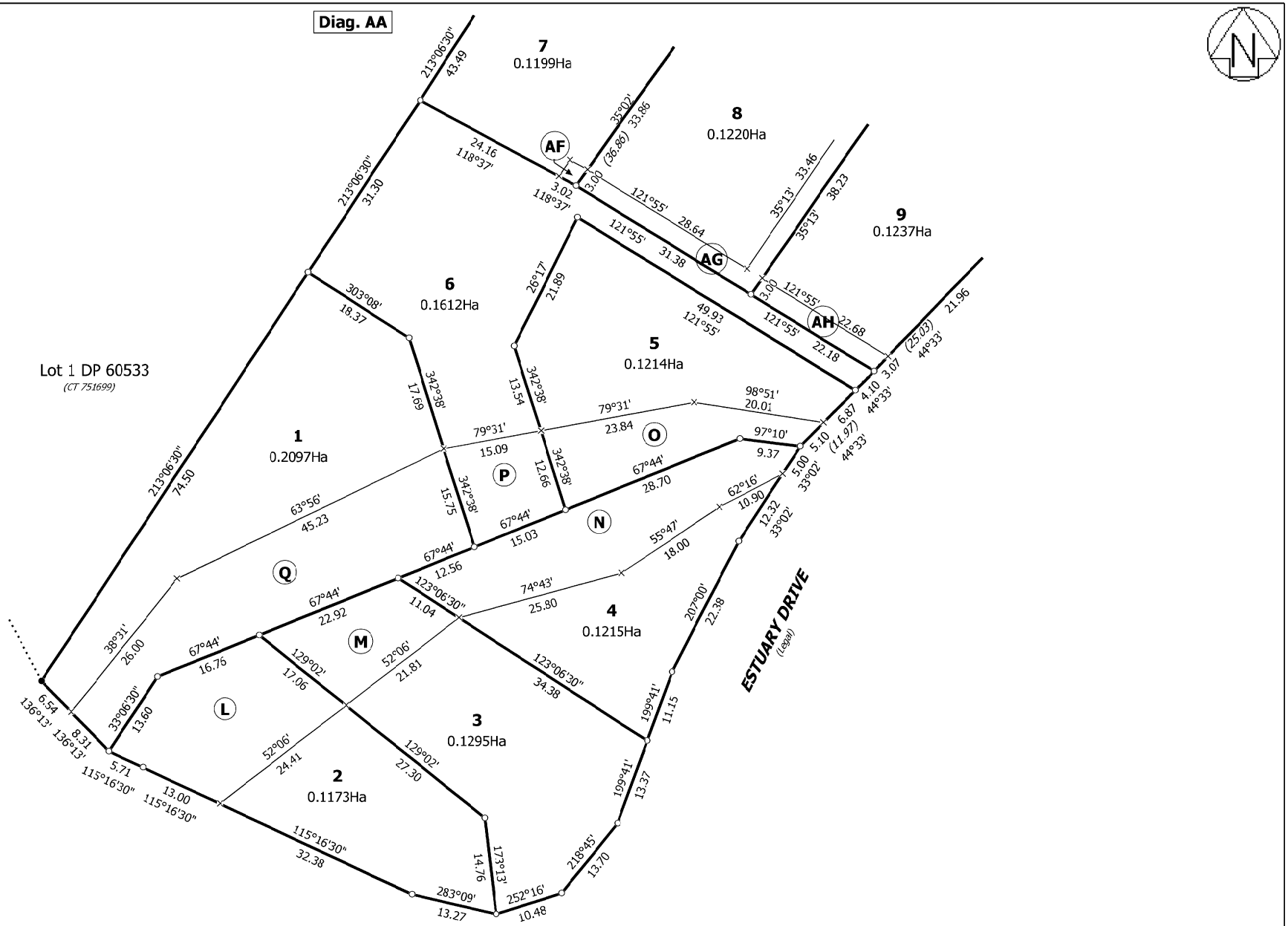
Memorandum of Easements in Gross			
Purpose	Shown	Servient Tenement	Grantee
Right to convey Electricity Telecommunication & Computer Media	A	Lot 200	Northpower Ltd Northpower Fibre Ltd
	B	Lot 201	
	D	Lot 203	
	E	Lot 204	
Pedestrian Right of Way	X	Lot 30	Kaipara District Council
Right to drain water	L	Lot 2	Kaipara District Council
	M	Lot 3	
	N	Lot 4	
	O	Lot 5	
	P	Lot 6	
	AF	Lot 7	
	AG	Lot 8	
	AH	Lot 9	
	AE	Lot 12	
	Q	Lot 1	
	R	Lot 24	
	S	Lot 22	
	T & U	Lot 21	
	V	Lot 20	
	A	Lot 200	
	B	Lot 201	
	D	Lot 203	
	E	Lot 204	
Right to drain sewage	A	Lot 200	Kaipara District Council
	B	Lot 201	
	D	Lot 203	
	E	Lot 204	

AMALGAMATION CONDITIONS (Pursuant to 220(1)(b)(iv) of the RMA 1991)
Lot 200 hereon to be held as to 9 undivided 1/9 shares by the owners of Lots 19-21, 23-28 hereon as tenants in common in the said shares and that individual Computer Freehold Register be issued be issued in accordance therewith Lot 201 hereon to be held as to 5 undivided 1/5 shares by the owners of Lots 13-17 hereon as tenants in common in the said shares and that individual Computer Freehold Register be issued be issued in accordance therewith Lot 203 hereon to be held as to six undivided 1/6 shares by the owners of Lots 7-12 hereon as tenants in common in the said shares and that individual Computer Freehold Register be issued be issued in accordance therewith Lot 204 hereon to be held as to four undivided 1/4 shares by the owners of Lots 32 & 35-37 hereon as tenants in common in the said shares and that individual Computer Freehold Register be issued be issued in accordance therewith See LINZ reference – 1416538
PROPOSED COVENANTS
Areas shown as Y & Z are to be subject to a restrictive covenant (No Build)
EXISTING AMALGAMATION COVENANTS TO BE CANCELLED (Pursuant to 240(4) of the RMA 1991)
Sections 1-3 SO 493330 & Sections 6 & 7 SO 501331 created by 10671217.4



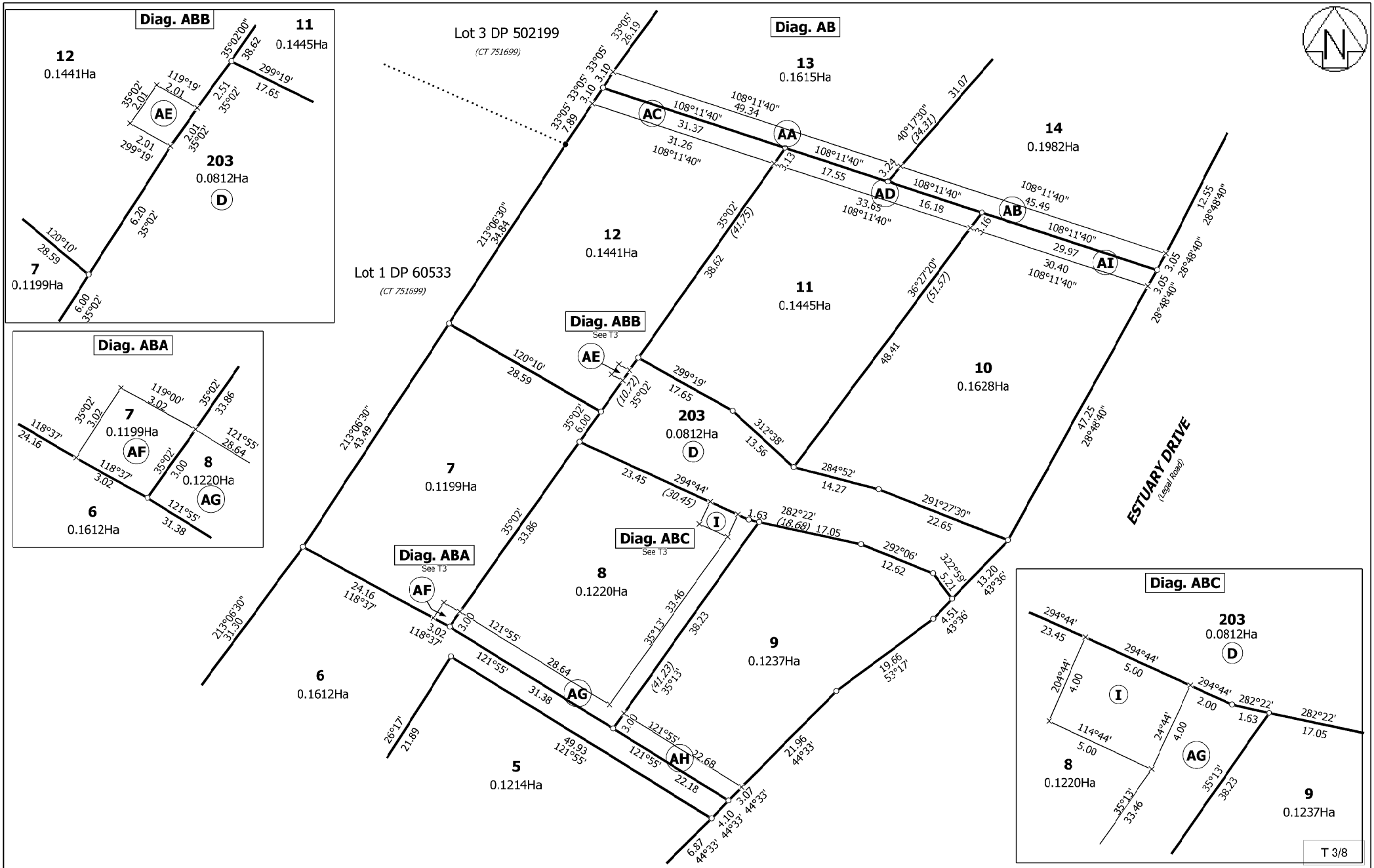
T 1/8

Land District: North Auckland Digitally Generated Plan Generated on: 13/12/2018 1:03pm Page 8 of 15	LOTS 1 - 40, 100, 101, 200, 201, 203, & 204 BEING A SUBDIVISION OF SECTIONS 6 & 7 SO 501331 & SECTIONS 1- 3 SO 493330	Surveyor: Dwayne Simon Reiher Firm: Cato Bolam Consultants Ltd (Auckla	Title Plan DP 487158 Deposited on: 19/11/2018

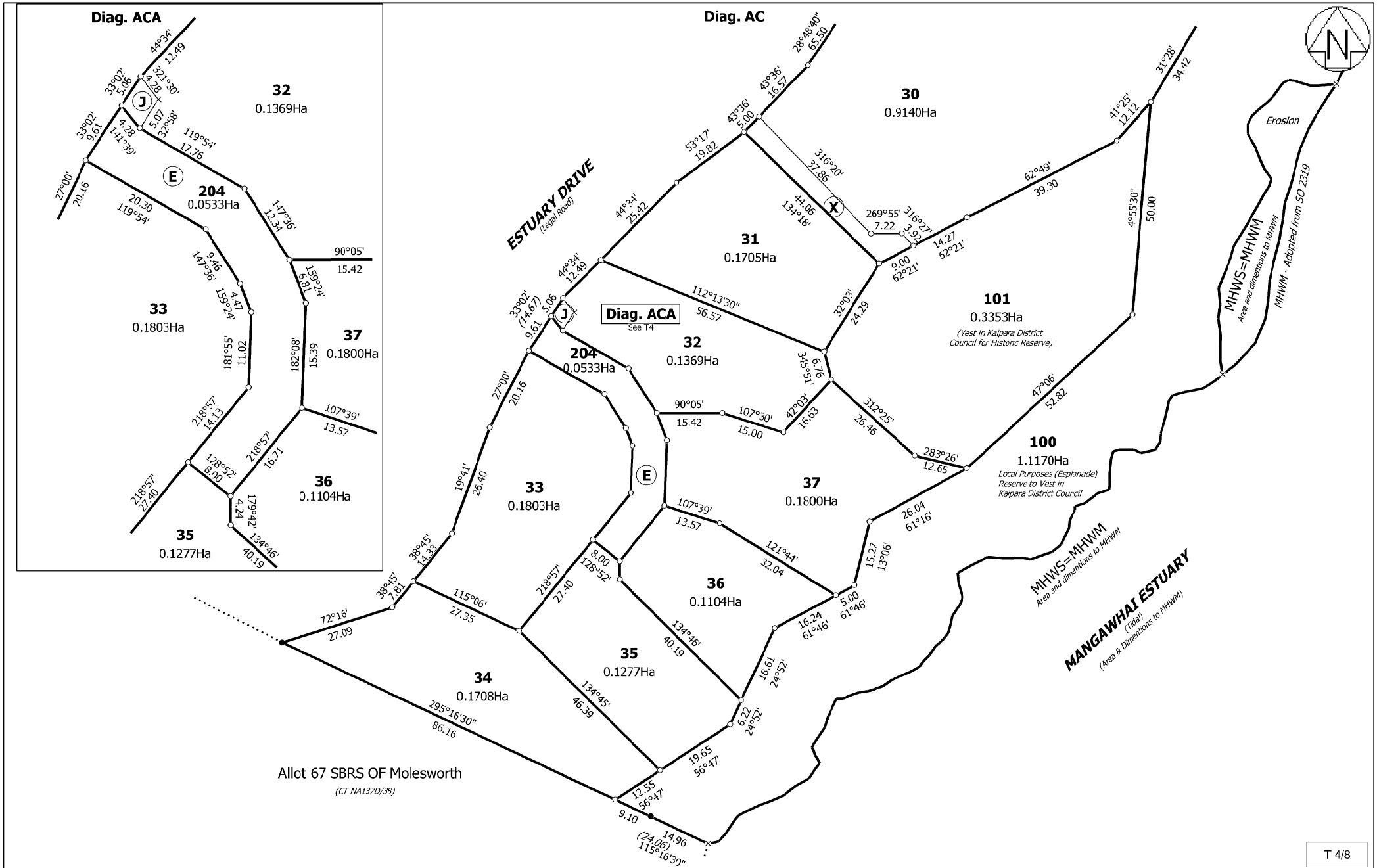


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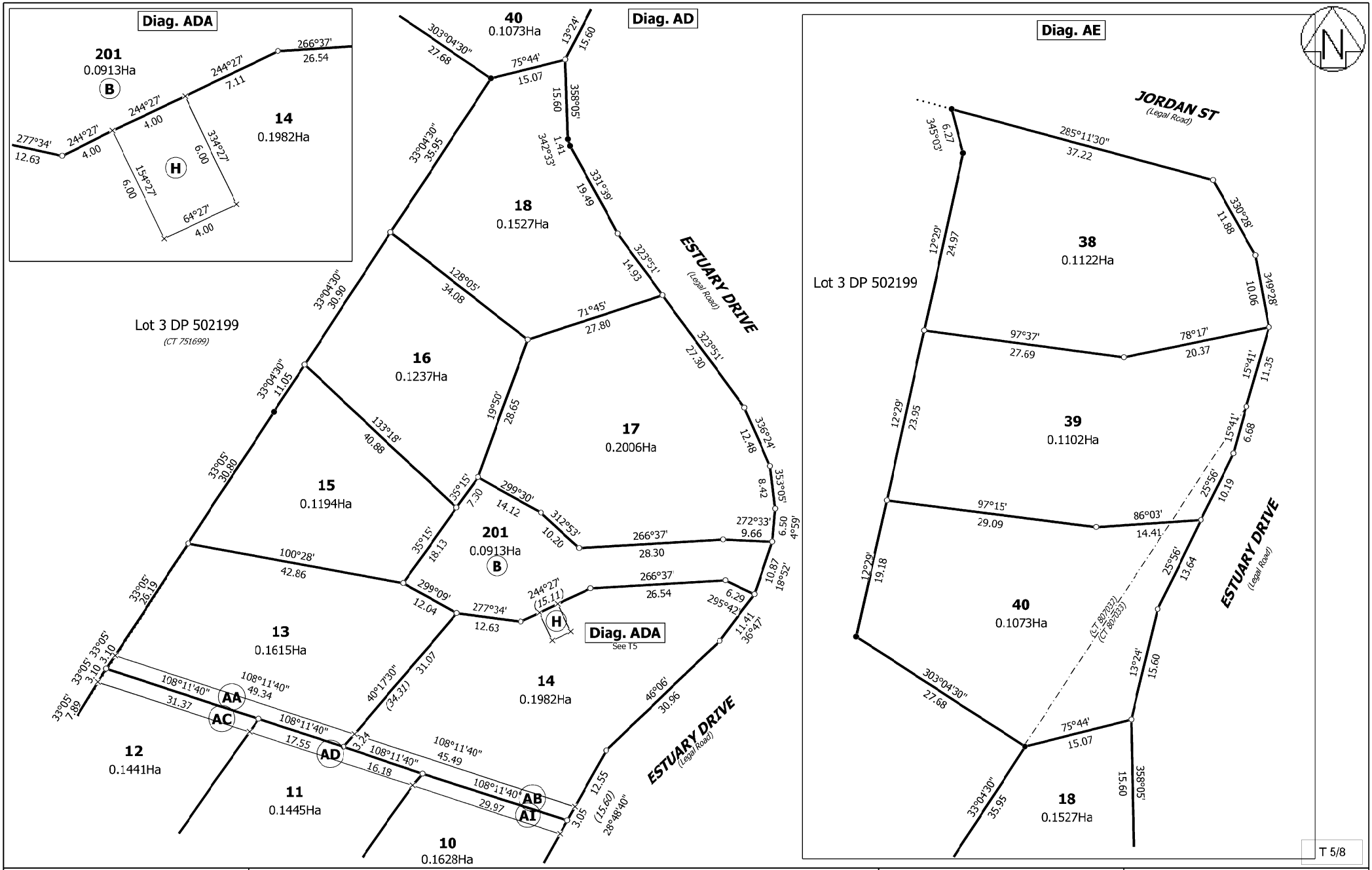
Land District: North Auckland Digitally Generated Plan Generated on: 13/12/2018 1:03pm Page 9 of 15	LOTS 1 - 40, 100, 101, 200, 201, 203, & 204 BEING A SUBDIVISION OF SECTIONS 6 & 7 SO 501331 & SECTIONS 1- 3 SO 493330	Surveyor: Dwayne Simon Reiher Firm: Cato Bolam Consultants Ltd (Auckla	Title Plan DP 487158 Deposited on: 19/11/2018



Land District: North Auckland Digitally Generated Plan Generated on: 13/12/2018 1:03pm Page 10 of 15	LOTS 1 - 40, 100, 101, 200, 201, 203, & 204 BEING A SUBDIVISION OF SECTIONS 6 & 7 SO 501331 & SECTIONS 1- 3 SO 493330	Surveyor: Dwayne Simon Reiher Firm: Cato Bolam Consultants Ltd (Auckla	Title Plan DP 487158 Deposited on: 19/11/2018

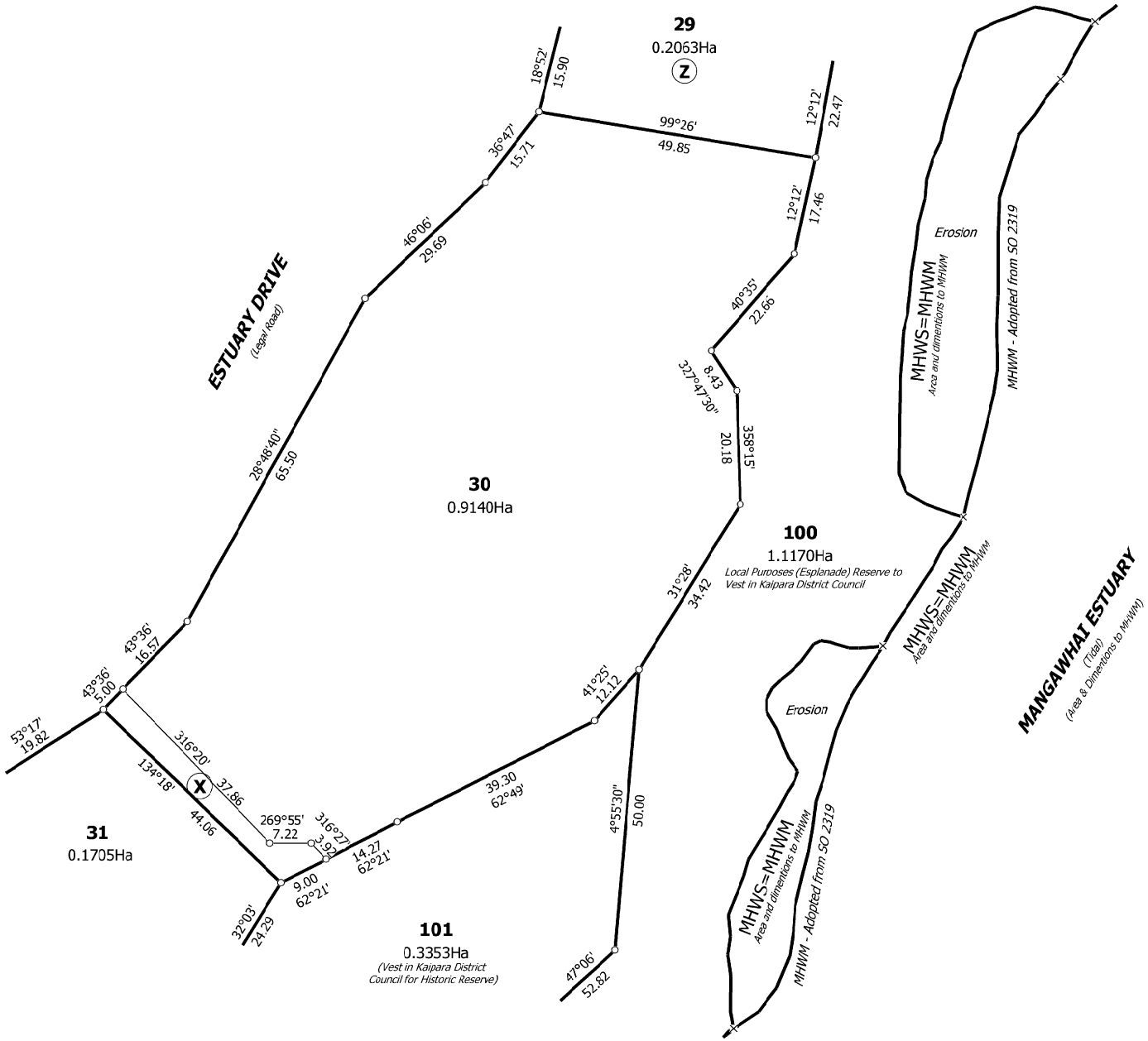


Land District: North Auckland Digitally Generated Plan Generated on: 13/12/2018 1:03pm Page 11 of 15	LOTS 1 - 40, 100, 101, 200, 201, 203, & 204 BEING A SUBDIVISION OF SECTIONS 6 & 7 SO 501331 & SECTIONS 1- 3 SO 493330	Surveyor: Dwayne Simon Reiher Firm: Cato Bolam Consultants Ltd (Auckla	Title Plan DP 487158 Deposited on: 19/11/2018



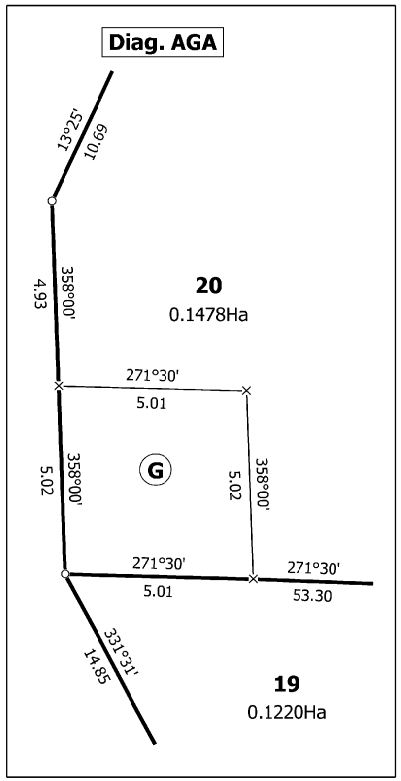
Land District: North Auckland Digitally Generated Plan Generated on: 13/12/2018 1:03pm Page 12 of 15	LOTS 1 - 40, 100, 101, 200, 201, 203, & 204 BEING A SUBDIVISION OF SECTIONS 6 & 7 SO 501331 & SECTIONS 1- 3 SO 493330	Surveyor: Dwayne Simon Reiher Firm: Cato Bolam Consultants Ltd (Auckla	Title Plan DP 487158 Deposited on: 19/11/2018

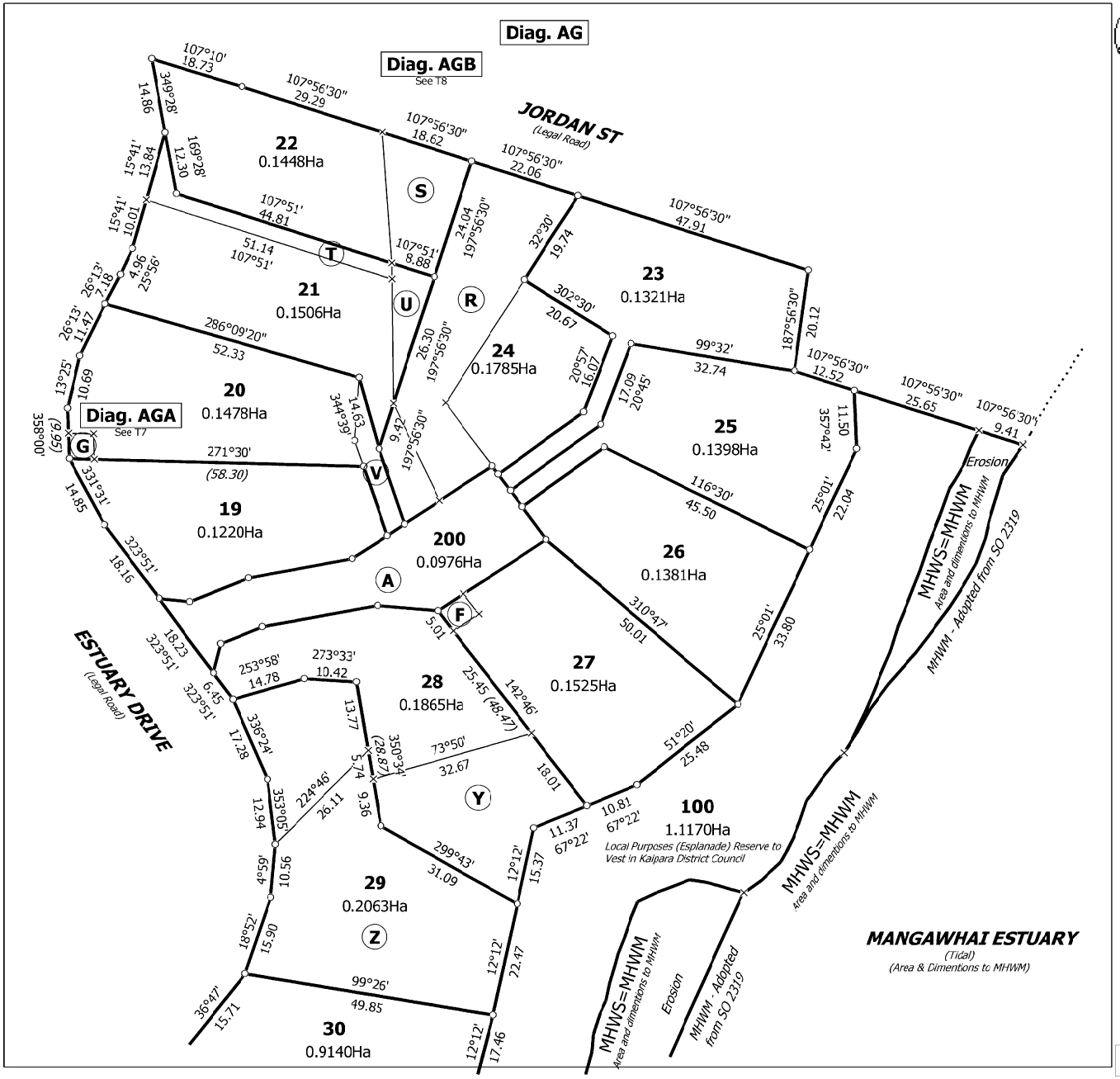
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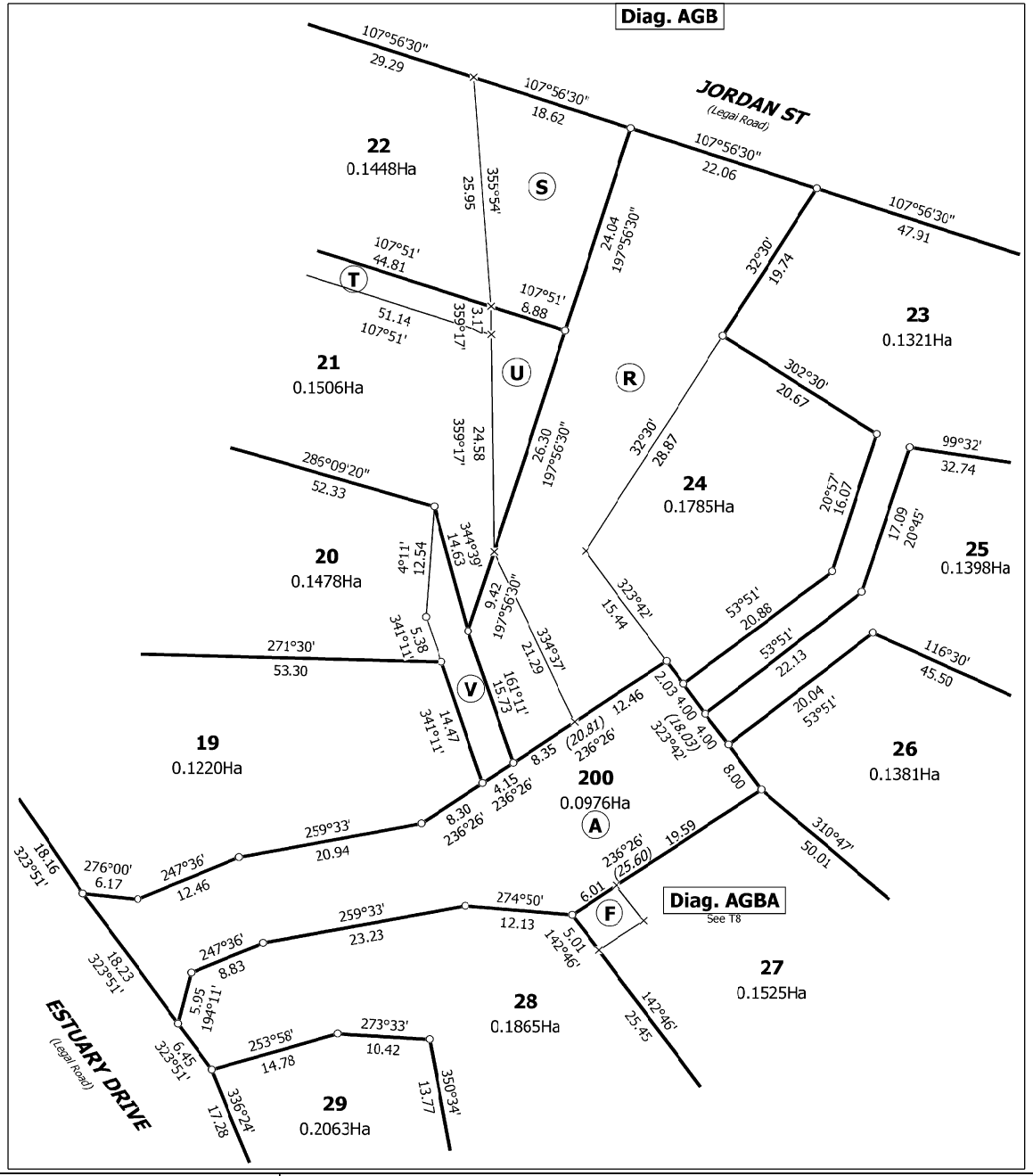
Land District: North Auckland Digitally Generated Plan Generated on: 13/12/2018 1:03pm Page 13 of 15	LOTS 1 - 40, 100, 101, 200, 201, 203, & 204 BEING A SUBDIVISION OF SECTIONS 6 & 7 SO 501331 & SECTIONS 1- 3 SO 493330	Surveyor: Dwayne Simon Reiher Firm: Cato Bolam Consultants Ltd (Auckla	Title Plan DP 487158 Deposited on: 19/11/2018





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Land District: North Auckland Digitally Generated Plan Generated on: 13/12/2018 1:03pm Page 14 of 15	LOTS 1 - 40, 100, 101, 200, 201, 203, & 204 BEING A SUBDIVISION OF SECTIONS 6 & 7 SO 501331 & SECTIONS 1- 3 SO 493330	Surveyor: Dwayne Simon Reiher Firm: Cato Bolam Consultants Ltd (Auckla	Title Plan DP 487158 Deposited on: 19/11/2018



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Land District: North Auckland Digitally Generated Plan Generated on: 13/12/2018 1:03pm Page 15 of 15	LOTS 1 - 40, 100, 101, 200, 201, 203, & 204 BEING A SUBDIVISION OF SECTIONS 6 & 7 SO 501331 & SECTIONS 1- 3 SO 493330	Surveyor: Dwayne Simon Reiher Firm: Cato Bolam Consultants Ltd (Auckla	Title Plan DP 487158 Deposited on: 19/11/2018

IN THE MATTER of the Resource Management Act 1991 ("**Act**")

A N D

IN THE MATTER of the subdivision of land shown in Deposited Plan 487158 (North Auckland Land Registration District) ("**Plan**")

CONSENT NOTICE
(Section 221 of the Act)

KAIPARA DISTRICT COUNCIL ("**Council**") being the territorial authority of the district within which the land described in the First Schedule below ("**Land**") is located has consented to the subdivision of the Land as shown in the Plan subject to the conditions of the Second Schedule below to be complied with on a continuing basis by the Owner (as defined in the Act).

FIRST SCHEDULE
(Land)

ALL that land being sections 6 & 7 SO501331 & sections 1-3 SO493330 described in Computer Freehold Registers 807033 (limited as to parcels) and 807032.

SECOND SCHEDULE
(Conditions)

The Owner (as defined in the Act) must, on a continuing basis, to the satisfaction of the Council, comply with the following conditions of the Council's Subdivision Consent RM160235B, namely:

1. In respect of Lots 1 to 40 on the Plan (each a "Lot")

1.1 The Owner of each Lot shall have earthworks, location of buildings, building foundations and stormwater and wastewater disposal on a Lot specifically designed

by a suitably qualified Chartered Professional Engineer having regard to any soil and stability/saturation issues that may exist or arise as a result of development on a LOT ensuring that such design takes into account any of the recommendations identified in the Subdivision Completion Report reference 13062 prepared by RS Eng dated 5 June 2018 and held by the Council.

1.2 The Owner shall make a vehicle crossing permit application prior to the construction of any vehicle crossing from a Lot onto a Council road.

1.3 In respect of any Lot where there is no stormwater connection to a public stormwater disposal system the Owner shall at its cost at the time of any development of a Lot construct stormwater detention devices specifically designed by an appropriately qualified competent engineer to the approval of the Council to ensure that the peak stormwater runoff from the Lot will be no greater than that which would have occurred prior to development.

1.4 At the time of applying for a building consent on a Lot the Owner shall contact Environs Holdings Limited and arrange cultural monitoring for any earthworks to be carried out on the Lot.

1.5 When undertaking any building works on a Lot the Owner shall comply with the Building and Landscape Design Guidelines in the Assessment of Landscape, Natural Character and Visual Effects dated January 2017 held by the Council.

1.6 When applying for a building consent in respect of a Lot the Owner shall comply with the Revegetation/Enrichment Planting Schedule in the Assessment of Landscape, Natural Character and Visual Effects dated January 2017 held by the Council.

1.7 The Owner of each Lot is advised that telecommunications services provider to each Lot will be wireless.

2. In respect of Lots 36 and 37 on the Plan (each a "Lot")

2.1 The Owner of each Lot is advised that buildings constructed on a Lot have been consented to be constructed within 30 metres of the Coastal Marine Area ("CMA") under Rule 13.10.7 of the Kaipara District Plan 2013 and the minimum distance of a building on a Lot from the CMA is 25 metres.

3. In respect of Lots 1 to 6 (both inclusive) and 21 to 28 (both inclusive) on the Plan (each a "Lot")

3.1 The Owner of each Lot shall have regard to the stormwater pond maintaince plan provided in connection with the subdivision consent RM160235B and held by the Council and the Owner of a Lot shall, at its cost, ensure ongoing compliance with the approved stormwater pond maintenance plan reference WH40955 prepared by Cato Bolam Consultants dated 12 June 2018.

4. In respect of Lots 18, 22, 38, 39 and 40 on the Plan (each a "Lot")

4.1 The Owner of each Lot shall provide three on-site carparking spaces on the Lot.

DATED the 16th day of October 2018

SIGNED by the Council)
by its authorised signatory)

D Tetzner

Our Ref: WH40955

20 August 2018

Kaipara District Council
Private Bag 1001
DARGAVILLE 0340

Email: council@kaipara.govt.nz

CONDITION 4(N) APPROVAL REQUEST
Applicant: The Jessie Trust
Location: ,Estuary Drive Moirs Point, Mangawhai
Council Ref: RM160235B

Please find enclosed Subdivision Completion Report for approval subject to condition 4(n) of the above consent.

We look forward to confirmation the above condition has been met.

If you require further information, please contact me at simonr@catobolam.co.nz or telephone (09) 438 1684.

Yours faithfully
CATO BOLAM CONSULTANTS LTD



Simon Reiher
DIRECTOR
Kdc-request condition 4(r) approval

cc: Prasad Sappa - Email: psappa@kaipara.govt.nz

File: 13062
5 June 2018
Issue: 1

SUBDIVISION COMPLETION REPORT

Moirs Point, Estuary Drive, Mangawhai

(Allot 68 to 71 SBRS of Molesworth)

1.0 Introduction

RS Eng Ltd has been engaged by the client to supervise, test and provide geotechnical review of the 40 lot subdivision at Moirs Point, Estuary Drive, Mangawhai.

A Subdivision Report prepared by this consultancy for titled *"Subdivision Suitability Report, Jessie Trust Holdings, Estuary Drive, Mangawhai"* dated 30 May 2016, has been reviewed.

2.0 Field Investigations

A number of site inspections of the subdivision construction were completed between August 2017 and May 2018. The inspections included supervision of earthworks operations, testing of fill and overall stability supervision of the subdivision.

RS Eng Ltd has previously completed subsoil testing over the development for the subdivision suitability report. The subdivision report outlined recommendations for the subdivision construction. These recommendations outlined the following;

"6.1 Residential Allotments. All filling over 0.5m and cuts over 1.0m on slopes over 14° (1V:4H) should be specifically designed by a Chartered Professional Engineer to prevent stability being compromised.

6.2 Access Roads. To provide stable cut and fill batters we recommend that a maximum slope of 26° (1V:2H) be used. After construction of these batters they should be vegetated as soon as reasonably possible to prevent erosion. If the above slope batters cannot be meet, then retaining walls may be required."

The earthworks for the subdivision has generally been undertaken in accordance with our suitability report. Some areas of the main accessway for the subdivision has slopes over that recommended, however adequate slope protection by means of mass rock walls and erosion protection has been implemented (refer attached plans). Earthfilling has been undertaken to form the main access for the subdivision and to provide levels areas for the new allotments. This filling has generally been undertaken in low lying areas. Overall, the filling over the subdivision presents no stability issues. Some filling on the steeper slopes of Lot 28 and 29 has been undertaken. These areas will need additional stability measures to make them suitable to construct on.

Recommendations outlined in our subdivision report relating to the residential allotments should be included in consent conditions for the development as follows;

- All filling deeper than 0.5m and cuts higher than 1.0m on slopes over 14° (1V:4H) should be specifically designed by a Chartered Professional Engineer to prevent stability being compromised.
- Additional stability measures will need to be implemented for construction to take place on the areas marked Y and Z on Lot 28 and Lot 29.
- RS Eng Ltd concludes that the proposed lots are suitable for residential development subject to specific foundation design by a Chartered Professional Engineer. This design should also include an assessment of proposed earthworks and access for each allotment.

3.0 Conclusions

Based on the site inspections and investigations described and subject to the recommendations in this report it is the conclusion of RS Eng Ltd that there is a suitable building sites on each of the proposed lots.

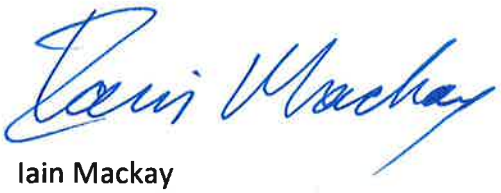
4.0 Limitations

This report has been prepared solely for the benefit of our client and the Whangarei District Council. The reliance by other parties on the information or opinions contained therein shall, without our prior review and agreement in writing, do so at their own risk.

Recommendations and opinions in this report are based on data obtained as previously detailed. The nature and continuity of subsoil conditions away from the test locations are inferred and it should be appreciated that actual conditions could vary from those assumed.

This report does not address matters relating to the National Environmental Standard for Contaminated Sites, and if applicable separate advice should be sought on this matter from a suitably qualified person.

Prepared by:



Iain Mackay
Senior Engineering Technician
NZDE(Civil), NZCE(Mech)

Reviewed by:



Max Haag
Chartered Professional Engineer
BE(Civil), CPEng, IntPE(NZ), CMEngNZ

RS Eng Ltd

Appendix A

Form B, Site Contour Plans and Cut and Fill Plans

Masterspec (1078074) subscribers are licensed to temporarily download this document and may print it but not more than 10% of the documents subscribed to may be held in printed form at any one time.

SCHEDULE 2A

STATEMENT OF PROFESSIONAL OPINION ON SUITABILITY OF LAND FOR BUILDING CONSTRUCTION

Development Moirs Point, Mangawhai

Developer Jessie Trust Ltd

Location Estuary Drive, Mangawhai

I Max Haag (Full name) of RS Eng Ltd (Name and address of firm)

Hereby confirm that:

1. I am a geo-professional as defined in clause 1.2.2 of NZS 4404:2010 and was retained by the developer as the geo-professional on the above development.

2. The extent of my preliminary investigations are described in my Report(s) number 13062, dated 30/5/16, and the conclusions and recommendations of that/those document(s) have been re-evaluated in the preparation of this report. The extent of my inspections during construction, and the results of all tests and/or re-evaluations carried out are as described in my geotechnical completion report dated 5/6/18

3. In my professional opinion, not to be construed as a guarantee, I consider that (delete as appropriate):

~~(a) The earth fills shown on the attached Plan No. ..... have been placed in compliance with the requirements of the ..... Council and my specification.~~

(b) The completed works take into account land slope and foundation stability considerations, subject to the appended foundation recommendations and earthworks restrictions, (which should be read in conjunction with the appended final site contour plan) & completion report.

(c) Subject to 3(a) and 3(b) of this Schedule, the original ground not affected by filling is suitable for the erection of buildings designed according to NZS 3604 provided that:

(i) Foundations are specifically designed by a CPEng

(ii) .....

(d) Subject to 3(a) and 3(b) of this Schedule, the filled ground is suitable for the erection of buildings designed according to NZS 3604 provided that:

(i) Foundations are specifically designed by a CPEng

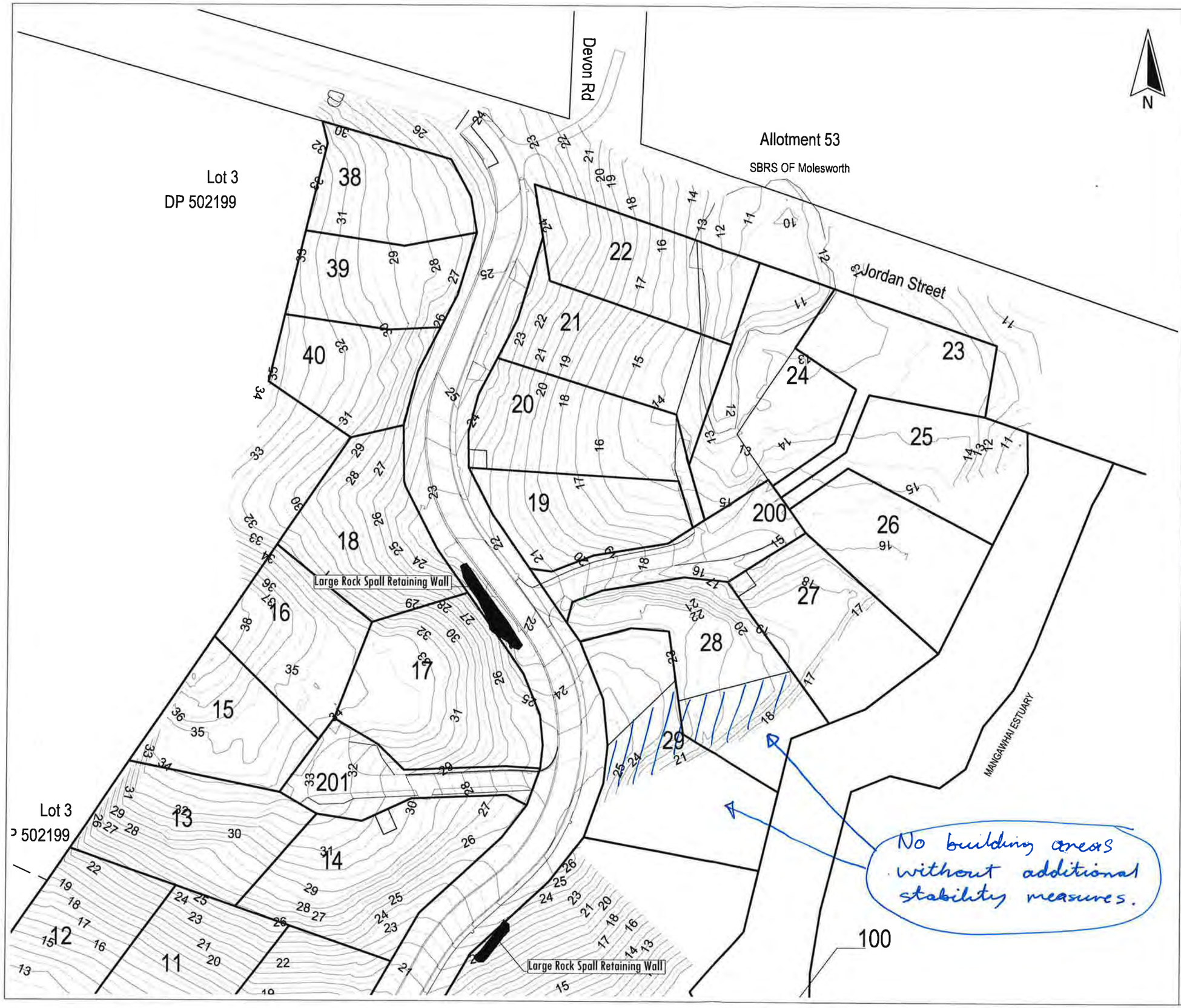
(ii) Specific geotechnical assessment is undertaken

(e) ~~The original ground not affected by filling and the filled ground are not subject to erosion, subsidence, or slippage in accordance with the provisions of section 106 of the Resource Management Act 1991 provided that:~~

(i) —

(ii) —

NOTE – These subclauses may be deleted or added to as appropriate, to include such considerations as expansive soils where excluded from NZS 3604, and site seismic characteristics as covered in clause 3.1.3 of NZS 1170.5.



This drawing and design remains the property of, and may not be reproduced or amended without the written permission of Cato Bolam Consultants Ltd. No liability shall be accepted for unauthorised use of this drawing and design.

I, Dwayne Simon Reiher, Registered Professional Surveyor, hereby certify that these ASBUILT PLANS are an accurate record of the works undertaken and that the coordinates of (X,Y) are in terms of NZTM on NZGD(2000) and are within ± 50mm.
The levels (Z) are in terms of the One Tree Point Datum 1964 (MSL) LINZ datum (DOSLI datum) and are within ±10mm

.....
.....

Dwayne Simon Reiher
Date
Registered Professional Surveyor

Phone: 09 438 1684

Email: simonr@catobolam.co.nz

LEGEND

Minor Contours — 0.5m
Major Contours — 1.0m

CATO BOLAM CONSULTANTS
PLANNERS | SURVEYORS | ENGINEERS | ENVIRONMENTAL

PROJECT

JESSIE TRUST LTD
MOIRS POINT
ESTUARY DRIVE, MANGAWHAI

DRAWING TITLE

ROCK RETAINING WALLS

FOR DISCUSSION

No.	REVISION (DESCRIPTIONS)	NAME	DATE
R1	COVENANTS LOT 28 & 29	WJM	05/2018
	SURVEYED	PS, NH, WJM	03-05/2018
	DESIGNED		
	DRAWN	MM	05/2018

DATE	ORIGINAL SCALE	ORIGINAL SIZE
15/05/2018	1:1000	A3

DRAWING NO.	REVISION
40955-DR-SU-9012	R1

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Lot 1
DP 60533

Large Rock Spall Retaining Wall

Estuary Dr
(Unformed 20.12m wide)

Allotment 67

I, Dwayne Simon Reiher, Registered Professional Surveyor, hereby certify that these ASBUILT PLANS are an accurate record of the works undertaken and that the coordinates of (X,Y) are in terms of NZTM on NZGD(2000) and are within ± 50mm.
The levels (Z) are in terms of the One Tree Point Datum 1964 (MSL) LINZ datum (DOSLI datum) and are within ±10mm

.....

.....

Dwayne Simon Reiher
Date
Registered Professional Surveyor

Phone: 09 438 1684

Email: simonr@catobolam.co.nz

LEGEND

Minor Contours ——0.5m——
Major Contours ——1.0m——

CATO BOLAM CONSULTANTS
PLANNERS | SURVEYORS | ENGINEERS | ENVIRONMENTAL

PROJECT

JESSIE TRUST LTD
MOIRS POINT
ESTUARY DRIVE, MANGAWHAI

DRAWING TITLE

ROCK RETAINING WALLS

FOR DISCUSSION

No.	REVISION (DESCRIPTIONS)	NAME	DATE
SURVEYED		PS, NH, WJM	03-05/2018
DESIGNED			
DRAWN		MM	05/2018

DATE	ORIGINAL SCALE	ORIGINAL SIZE
15/05/2018	1:1000	A3

DRAWING NO.	REVISION
40955-DR-SU-9011	R0



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Cut to Fill Legend

- Cut Contours & Area
- Fill Contours & Area

CATO BOLAM CONSULTANTS

PLANNERS | SURVEYORS | ENGINEERS | ENVIRONMENTAL

PROJECT

JESSIE TRUST LTD
MOIRS POINT
ESTUARY DRIVE, MANGAWHAI

DRAWING TITLE

CUT FILL CONTOURS

FOR INFORMATION

No.	REVISION (DESCRIPTIONS)	NAME	DATE
SURVEYED		PS, NH, WJM	03/2018
DESIGNED			
DRAWN		MM	04/2018

DATE	ORIGINAL SCALE	ORIGINAL SIZE
19/04/2018	1:1000	A3

DRAWING NO.	REVISION
40955-DR-SU-9904	

Jessie Trust Limited.
Moir Point,
Estuary Drive,
Mangawhai.

Proposed subdivision of Allotment 68-71 Molesworth Subs Blk Mangawhai SD (NA1826/30) and Lot 3 DP 105271 (171738)

Assessment of landscape, natural character and visual effects



January 2017

Simon Cocker
Landscape Architecture

1 INTRODUCTION

Simon Cocker Landscape Architecture has been engaged by the applicant, to undertake a landscape, and visual assessment for a proposed subdivision on Moir Point in Mangawhai.

This following assessment will focus upon a description of the site, the characteristics of the proposal and an analysis of the landscape, identification of any affected parties or individuals, an assessment of the landscape and visual effects of the activity and recommendations for mitigation of potential effects.

The assessment has been prepared by a Registered Landscape Architect with reference to the Quality Planning Guidelines Note[1] and its signposts to examples of best practice[2]. An outline of the effects ratings and definitions used are provided in Table 1 in section 6.4 as is a comparison to the Resource Management Act (1991) terminology of 'minor' and 'less than minor' and how these 'translate' with regard to the effects ratings used in this assessment.

In addition, this report has been prepared in accordance with the NZILA (New Zealand Institute of Landscape Architects) Code of Conduct[3].

The subdivision has been designed comprehensively, with a focus on acknowledging and enhancing the features and character of the site. It will create a total of 46 lots, consisting of 40 residential allotments ranging in size from 1107m^2 to 9929m^2, a historic reserve to vest (Lot 101), an esplanade reserve to vest (Lot 100) and four jointly owned access lots (Lots 200 to 203).

The site is zoned Residential, and is subject to the Mangawhai Harbour overlay. The application is considered to be a Discretionary activity.

2 CONTEXT OF THE SITE

The site is located at the southern tip of the Molesworth peninsula overlooking the Mangawhai Harbour. The peninsula extends for some 3 kilometres south from the entrance to the Mangawhai Harbour and is surrounded on three sides by the Mangawhai Harbour. It comprises remnant sand dunes generally rising to a height of some 40 metres, although a lookout has been constructed adjacent to the golf course at a high point of some 53 metres in height. The landform of the peninsula reflects the coastal processes that affected its development, with an undulating landform that is highest in the centre of the peninsula and shelves gently to its eastern and western sides. The coastal margins along its south eastern edge – along the south eastern edge of the site – are more precipitous.

Within the wider context, sand drifts along the eastern coast and alluvium carried by rivers have dammed off valleys leading to the formation of peat basins. The sand deposits range in age from recent drifts of dune sand through to strongly podzolised old dunes and estuarine deposits. This is evident on the southern side of the Mangawhai Harbour where the pastoral land between Black Swamp Road and the Harbour edge is low-lying and open, and on the Harbour margins to the west on the low-lying land occupies by the Mangawhai settlement.

The eastern edge of the Harbour is contained by the Mangawhai sandspit, a landscape feature that dominates views to the east from within the Mangawhai Heads settlement. The sandspit has been identified as an Outstanding Natural Landscape within the Kaipara District Plan and within the draft Regional Policy Statement.

Whilst much of the peninsula's eastern edge, northern end and to some extent, an area to the south of The Causeway of the peninsula has now been developed, the balance is relatively devoid of built structures. Where vegetation has not been cleared for pasture, or recreational uses such as the golf course, the sand dune landform is predominantly vegetated with manuka / kanuka. In confined areas this vegetation type also includes mamaku, kumarahou, sedges, gorse, banksia, tanekaha, hangehange, ti kouka, pohutukawa, pampas, woolly nightshade, prickly hakea, and emergent pine. Elsewhere, weed tree and shrub species including various forms of wattle, hakea, eucalypts and pine.

[1] http://www.qualityplanning.org.nz/index.php/planning-tools/land/landscape
[2] Including Guidelines for Landscape and Visual Assessment ("GLVIA") 3rd Edition. Landscape Institute (UK) and IEMA 2013
[3] Contained in Appendix 1 of: http://www.nzila.co.nz/media/50906/registered_membership_guide_final.pdf

Within the site, the vegetation was, until recently dominated by the weed species identified above. Clearance of the weed species has revealed the complex landform and remnant vegetation, including stands of kanuka, and large pohutukawa and puriri on the coastal margin.

In Mangawhai Harbour, mangroves are the dominant species. Along the southern margin of the harbour, mangroves grade into sea rush, oioi, saltmarsh ribbonwood, Austrostipa stipoides and glasswort, with local exotic iceplant and saltwater paspalum.

As is illustrated in Figure 1, the Mangawhai Heads settlement has established along the eastern edge of the peninsula, fronting onto the Harbour where it runs southwards and parallel to the coast. Historically focused at the southern end of the peninsula, nearest the Harbour mouth the parts of the settlement have retained a 'bach settlement' character, with small and modest sized dwellings of varying eclectic characters have been constructed in relatively close proximity, served by roads with limited kerb and channel. More recent development has been of a larger scale and whilst these are evident within the body of the settlement, they are more frequently found in elevated locations on its margins. Recent residential development has also occurred within subdivisions at the north end of the settlement – off Mangawhai Heads Road, and within its southern portion to the south of The Causeway. The scale of development within these areas has tended to reflect the scale of development within the older settlement. In situations where existing vegetation has not been retained, such as along Jordan Street, Norfolk Drive and Quail Way the 'rawness' of, and lack of contextual vegetation within these recent sections has resulted in a dominance of built development which is mitigated only when vegetation is established within gardens.

As can be seen in Figure 2, some portions of the southern end of the peninsula – such as along Estuary Drive (on its western side) and Moir Point Road retain a rural or rural residential character, with pockets of pasture within a dense structure of native and exotic vegetation. At the southern end of Estuary Drive, this vegetative structure creates an enclosed landscape, which limits views from the road and separates a number of rural residential properties, and a caravan park from the site.

Adjoining much of the north western boundary of the site, the Mangawhai Christian Camp occupies Lot 1 DP 60533 and Lot 3 DP 106271. It comprises a cluster of white painted buildings, which are located close to the northern boundary of Lot 1 DP 60533. These buildings, located some 40 metres from the boundary of the site overlook the southern portion of the site. In addition, two newly constructed white finished single storey residential buildings are located on the high point within Lot 3 DP 106271, orientated to the north west so that they overlook the northern portion of the site. The southern-most of these buildings is situated some 10 metres from the boundary of the site.

Views to the subject site from adjoining residential areas tend to be restricted by landform and vegetation, and are limited to views of the northern portion of the site. Thus, properties at the southern end of Jordan Street (numbers 7, 8, 11, 13, 15 and 19), on Moir Point Road to the north (in the vicinity of number 101), and properties at the southern end of Lincoln Street (numbers 67 and 67a) have the potential to offer views. Refer to Photos 1 and 2.

Settlement on the southern edge of the Mangawhai Harbour is relatively sparse, although to the south east, the Tern Point subdivision occupies low-lying land at the southern end of the sand spit with a number of the dwellings within this development offering views across the Harbour to the site (refer to Photos 3, and 4).

Further to the south, some 2500m from the site, a number of dwellings have been constructed along Coal Hill Road. This road ascends the low hills that form the southern backdrop to the Harbour and the dwellings offer long views to the Harbour, and sandspit (refer to Photo 5).

As mentioned previously, the Mangawhai settlement is situated on the Harbour margins to the south west of the site. Views to the site are possible from the eastern edge of the settlement (refer to Photos 6, and 7) and from elevated locations within the settlement (refer to Photos 8).

The Harbour offers good views of the site from the south east, south, south west and west, either from recreational vessels, or from the Harbour margins and mudflats at low tide. Walks are promoted along both the northern and southern edges of the Harbour. The northern walk traces the edge of the site between Moir Point Road and Lincoln Reserve, whilst the southern walk – called 'estuary to ocean' extends between Raymond Bull Road and the sand spit. Representative views from the southern side of the Harbour are included as Photos 9, 10, 11 and 12.

3 THE SITE AND ITS IMMEDIATE CONTEXT.

The subject site has a total area of 8.062 Ha, and is comprised in Allotment 68-71 Molesworth Subs Blk Mangawhai SD (NA1826/30) and Lot 3 DP 105271 (171738).

Roughly rectangular in shape, it is bounded on its south eastern edge by the Harbour, with steep cliffs defining the southern half of this edge (refer to Figure 3). Reflecting its geological origins as an area of remnant sand dunes, the site displays a complex undulating landform, which promotes a number of distinct character areas. These character areas are illustrated in Figure 4. Although prepared by other consultants associated with the project, the author is in general agreement with the principles that are illustrated in this figure. For the purpose of clarity, the terminology used in the figure is retained in this discussion:

1. Hillside / Dune view zone: The northern portion of the site is contained characterised by a 'bowl' shaped landform, contained by steep slopes, the 'bowl' opens out to the north eastern boundary (refer to Photo 2);
2. Hilltop zone: The high point of the site, immediately to the south west of the previous character area, forms a separate character zone which is exposed and open with expansive views to the north east, east, south east, south and south west;
3. To the south west of the previous character zone, the Harbour / Lake View zone has a south western focus, being contained on its northern and north eastern sides by the rising dune landform and a remnant stand of kanuka and tree ferns. The zone is also contained on its eastern and south eastern sides by landform and existing pohutukawa trees and consequently displays a sheltered and enclosed character. Views are available across the Harbour to the south west, including the distant Mangawhai settlement (refer to Photos 6 and 7).
4. Special Character zone: Occupying the south western corner of the site, this character area displays a varied character, with an undulating landform, predominantly vegetated by scattered mature pohutukawa. The western edge of this zone is visually and physically separated from the eastern edge by landform, and the observer has to ascend the steep remnant dune features to gain views of the precipitous coastal edge and Harbour. This zone also includes a pa site – a flat topped feature with steep sides, vegetated on its coastal edge with dense native vegetation including pohutukawa and puriri.

The Harbour / lake view zone and the Special character zone adjoin each other and retain a strong level of visual connection. These two zones are however both visually and physically separate from the Hillside / dune view zone to the north due to the buffer of vegetation and steep dune landform.

4 THE APPLICATION

The proposal is described in detail in the application report[4]. The applicant seeks to create a total of 46 lots, consisting of 40 residential allotments ranging in size from 1107m^2 to 9929m^2, a historic reserve to vest (Lot 101), an esplanade reserve to vest (Lot 100) and four jointly owned access lots (Lots 200 to 203). The Pa site, identified above, has been defined in consultation with local iwi and will be formally protected by way of a land covenant being located within both the proposed historic reverse to vest with the Council and proposed Lot 30.

The subdivision design has been developed with a focus on urban design considerations and involved preliminary survey and analysis of the site's landform, character, vegetation and cultural values. The design seeks to integrate and retain the site's unique characteristics, whilst providing for a range of residential development sites.

In keeping with best practice urban design principles, the access road will provide strong linkages through the site, running between Estuary Drive and Jordan Street.

Wherever possible, the existing native vegetation has been retained and will be integrated into the structural mitigation planting design. The planting proposal will utilize locally appropriate native coastal species to reflect and strengthen the landscape structure thereby providing a framework of vegetation into which the future dwellings will be integrated. Planting will be undertaken around the proposed stormwater ponds and within the esplanade reserve to enhance the amenity and ecological values of this area, and planting will also be undertaken on and around the margins of the Pa site. The planting of the Pa site has been guided by advice from local iwi representative and NZHPT.

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4 Cato Bolam Consultants Application for resource consent – for Jessie Trust Ltd. at Estuary Drive, Mangawhai Heads. 2016

Built development within the site will be subject to a carefully crafted suite of recommended development controls – including height controls and colour restrictions – set out in Appendix 1 of this assessment.

5 STATUTORY MATTERS

A summary of the relevant national and district landscape planning provisions applicable to the site and proposal has been outlined below. A full outline of the relevant statutory planning provisions are included in the applicant's planning report and Assessment of Environmental Effects.

Resource Management Act 1991
The Fourth Schedule of the RMA specifies the matters that should be considered when preparing an assessment of effects on the environment, including:

2(b) Any physical effect on the locality, including any landscape and visual effects.

Matters relating to landscape and visual effects that are also required to be considered under Part II of the RMA include the following:

5(2) (c) Purpose of the Act

.....Avoiding, remedying, or mitigating any adverse effects of activities on the environment

7 Matters to be given regard to:

7(c) The maintenance and enhancement of amenity values

7(f) Maintenance and enhancement of the quality of the environment

This report addresses matters specified in the Fourth Schedule. With regard to Part II of the Act, it is considered that the proposal will be able to comply with the intent of Section 5(2) (c) and Sections 7(c) and 7(f).

New Zealand Coastal Policy Statement
The New Zealand Coastal Policy Statement (NZCPS) is considered to be relevant to this application. The NZCPS (2010) sets out policies on coastal issues including protection of outstanding natural features and landscapes, planning for subdivision, use, and development, protection of biodiversity and water quality, and management of coastal hazard risks.

The application site has been zoned for residential development under the district plan and the proposed development will not dominate the landscape or diminish its visual values. The proposal includes for the retention of native vegetation particularly around the coastal margin of the site, and proposes additional revegetation to supplement this vegetation and to establish a robust vegetative framework.

Landscape Assessments undertaken by the District and Regional Councils have not identified outstanding natural features or landscapes within the site or immediate surrounding environment.

Kaipara District Plan

The following objectives and policies of the District Plan are within the scope of this report:

Chapter 4: Overlay Area
Objective 4.4.2 To enable subdivision, land use and development in the Overlays, where it recognises and provides for: the protection of natural character; and maintenance or enhancement of the water quality of receiving environments; and maintenance or enhancement of amenity values; and any other specific values identified in an Overlay.

Policy 4.5.2 By managing the location, scale and design of subdivision, use and development to minimise the potential adverse effects on the natural character of the coastal environment.

Policy 4.5.17 By managing the scale, location and design of activities in the Mangawhai Harbour Overlay.

Policy 4.5.20 By protecting those areas identified as valued natural environments from inappropriate use and

Chapter 13: Residential
13.5.1 To maintain and where appropriate enhance the amenity values of the residential environment.

13.5.4 By managing the effects of those activities which have the potential to adversely affect residential amenity (e.g. building location, earthworks and vegetation clearance).

13.6.1 By requiring subdivision and development to avoid adverse effects on the outlook and privacy of adjoining properties, while being compatible with the character and amenity of the surrounding environment.

13.6.2 By requiring activities in residential areas to be sited, designed and operated in such a way that avoids, remedies or mitigates adverse noise and traffic effects on health, safety and amenity values.

13.6.6 By directing residential development to appropriate locations adjacent to existing settlements, rather than allowing sporadic development throughout the rural environment

13.6.7 By requiring subdivision and development to demonstrate how the effects of earthworks and vegetation clearance can be avoided, remedied or mitigated.

Comment: The proposal has been designed and developed following detailed analysis of the site and its landscape and natural values. This has resulted in the retention of existing native vegetation, and the retention of the broad site features, both of which contribute to the character of the site and the area. It is the opinion of the author that the proposal will avoid or mitigate potential effects, taking into account the residential character of the area and that the proposal will result in a more sensitive outcome than is provided for under the provisions of the Residential zone.

It is the opinion of the author that the proposal is consistent with the relevant provisions of the Kaipara District Plan.

5.3 Performance Standards for the Residential zone

The site adjoins an area zoned Residential (with the Mangawhai Harbour overlay). Rule 13.10.3a sets out the Permitted Activity Performance Standards for the Residential zone and provides for a minimum net site area associated with each dwelling of 1,000m^2 for a serviced site, and 3,000m^2 for an unserviced site in an Overlay Area.

Rule 13.10.5 states that the maximum permitted height of a building in an Overlay Area is 8.0 metres.

Rule 13.10.13 states that an activity is permitted if the building coverage is less than 35% of the net site area.

6 ASSESSMENT OF LANDSCAPE, AND VISUAL EFFECTS

6.1 Background

Preceding sections describe the characteristics of the property and site, its setting and the proposal (including mitigation). The purpose of this section is to define the effects of the application upon the site and setting, to consider how the proposal would impact upon the experience of people viewing the development from outside of the site, and to comment upon the level of landscape, and visual effects.

6.2 Landscape effects

Landscape change can, but does not necessarily result in adverse visual effects. Natural and human induced change is a constant within the landscape. The key is to manage this in such a way that any adverse visual effects are avoided,

remedied or mitigated.

Landscape is defined in the NZILA landscape practice note[5] thus:

Landscape is the cumulative expression of natural and cultural features, patterns and processes in a geographical area, including human perceptions and associations

A number of terms are used to refer to various components of landscape in the District Plan. These are both quantitative and qualitative and include rural character, rural amenity values, landscape values. In addition, terms such as visual amenity values, and natural character are used to describe the perceptual value of landscape. The site currently displays a moderate level of rural character and rural amenity, however since the site is zoned Residential it is assumed that it is accepted that these rural character values will be compromised by built development. For this reason, the discussion of landscape character is deemed to exclude rural character as a consideration.

Landscape character is generally considered to comprise a number of components – being

- the elements that make up the landscape. These include:
  - Physical influences – geology, soils, landform, drainage and water bodies;
  - Land cover including different types of vegetation and patterns and types of tree cover;
  - The influence of human activity, including land use and management, the character of settlements and buildings, and patterns and types of fields and enclosures;
- the aesthetic and perceptual aspects of the landscape – such as its scale and complexity, openness, tranquility or wildness;

Landscape effects take into consideration physical effects to the landscape and the potential changes in landscape values, and landscape character, which can affect amenity values, as well as natural character.

Direct (physical) effects of the proposal on the landscape may result from:

- Vegetation removal;
- construction earthworks, and / or;
- modification of water courses

Physical effects on the landscape have the potential to affect the character and quality of the landscape.

Landscape value is a relative value that is attached to different landscapes by the community. A landscape may be valued by different stakeholders for a whole variety of different reasons, and or people's perception of the biophysical environment and includes considerations such as naturalness, vividness, memorability, and rarity. It may also be influenced by patterns of landscape elements and activities, which together make an area distinctive. This includes built and natural elements, landuse and other more intangible qualities

Landscape effects are dependent on the landscape sensitivity of a site and its surrounds and can occur in the absence of potential viewers.

The site occupies a locally prominent location; being elevated and surrounded on three sides by the Mangawhai Harbour and its vegetated margins, with large pohutukawa contributing to the amenity and natural character of the Harbour.

Works undertaken on site to date have included the clearance of weed trees and shrub species including pine, and wattle, gorse and ginger. These works have been undertaken as a permitted activity, but have resulted in a change in the landscape character of the site. Photo 4 was taken from the northern edge of the Tern Point subdivision and illustrates the site in 2014 prior to clearance of the weed tree and shrub species. In this image, the prominence and significance of the high point within the site is exaggerated by a grove of mature pine trees, whilst the coastal margin is densely vegetated

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5 *New Zealand Institute of Landscape Architects.* Best Practice Guide - Landscape Assessment and Sustainable Management 10.1. 02.11.10

with a ribbon of vegetation. This lends the site, and the southern tip of the peninsula a vegetated and apparently natural character – albeit predominantly comprising exotic weed species.

Photo 3 was taken more recently, from south of the Tern Point Estate subdivision and illustrates the appearance of the site following clearance of the exotic vegetation. The prominence of the high point seems diminished, with the landform now visible, but the coastal margin retains its vegetated character. Whilst modified, it is evident that parts of the site present the appearance of being denuded of vegetation and this has resulted in a change in the landscape character. It must be recognised however that the vegetation that has been cleared comprised entirely exotic weed species, and that the native vegetation within the site has been retained.

In addition, earthworks have been carried out within the site (under a separate consent) to enable the formation of accessways and stormwater ponds. These works have sought to respect and 'work with' the existing topography of the site so that they have only resulted in a limited change in its landscape character.

Whilst the site occupies a 'sensitive' location – forming a key backdrop to the Harbour, its natural values have been degraded in the past by historic vegetation clearance, and the subsequent revegetation with weed species. It does however retain an unbuilt character, whilst the remaining native vegetation – on the coastal edge and on the steeper slopes within the site – serve to strengthen the landscape pattern of the site, and 'tie' the landscape of the site into the wider landscape.

Implementation of the subdivision, and the construction of dwellings within 40 residential allotments will result in a further change in the character of the site, both as a result of earthworks for the construction of access ways and building platforms, and as a result of the dwellings themselves. The activity will change the character of the site from one that is open and undeveloped, to one that presents a built, urban appearance.

The proposal has been developed with a view to minimizing change on the topography of the site. Although the direct physical effects of the proposal resulting from construction earthworks will result in a level of modification to the landform of the site, generally the broad character of the site's topography will be retained. The alignment of the accessways and location of building sites has been influenced by an analysis of the topography of the site, the location and extent of existing native vegetation, and by an analysis of the existing character areas – as depicted in Figure 4. This approach seeks to minimize the need for landform modification, retain and enhance the existing vegetation and respond to the existing character zones within the site

In addition, no additional vegetation clearance of any significance will be undertaken, and no further modification to the hydrological pattern will be undertaken.

Turning to the landscape value component of landscape effects. The site is set within a moderately expensive visual catchment, which includes the Harbour. The change in the character of the site from unbuilt and 'natural' in appearance, to a 'built' character will be readily apparent from within this catchment. The existing vegetation, and proposed mitigation planting will, however serve to soften the appearance of the built form, and separate the overall development into a series of clusters, thereby screening of parts of the development when viewed from certain locations, including when viewed from the Harbour or ocean.

Furthermore, the proposal recommends design guidelines which provide recommendations for building heights and methods to mitigate the effect of the height and buildings, structures and associated infrastructure within the site

It is the opinion of the author that the proposal will result in a moderate potential adverse landscape effects. This assessed level of effect must be placed in the context of development that could occur under the permitted baseline. As noted previously however, as a permitted activity up to 78 dwellings could be constructed on the application site (one dwelling per 1000m^2), to a height of 8.0 metres, provided that all other development controls had been met. In addition, a permitted development would not necessarily include the proposed level of planting mitigation. Such a 'permitted' development has the potential to generate at least a similar level of effect, but also a greater level of landscape effects.

6.3 Natural character effects

Section 6(a) of the Resource Management Act (1991) states that the following matter of national importance shall be recognised and provided for:

"The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins and the protection of them from inappropriate subdivision, use and development."

A working definition of natural character is derived from research undertaken for the Ministry of the Environment in relation to Environmental Performance Indicators.[6] This states that:

"Natural character is a term used to describe the naturalness of all coastal environments.
The degree or level of natural character within an area depends on:

- *The extent to which natural elements, patterns and processes occur; and*
- *The nature and extent of modifications to the ecosystems and landscape / seascape.*
- *The highest degree of natural character (greatest naturalness) occurs where there is least modification.*

The effect of different types of modification upon the natural character of an area varies with the context, and may be perceived differently by different parts of the community."

The document also notes that natural character exists on a continuum, from totally modified at one extreme, to entirely natural at the other.

Although displaying some modification, the site retains clear evidence of its natural elements – being the topographical characteristics that evidence its coastal formative process – and, to a lesser degree its natural patterns and natural processes. Historic vegetation clearance, presumably for agricultural purposes, and subsequent revegetation with weed species have degraded the natural patterns and processes however the retention of a 'swathe' of native vegetation around the coastal margin, including large pohutukawa does contribute to natural character values.

The proposal will result in a diminishing of the natural character values since the character of the site will include a greater density and dominance of built development.

The site is zoned Residential and this zoning provides for, and anticipates a loss of natural character values. The proposal will result in, in the opinion of the author, adverse effects on natural character that are, at worst commensurate with the adverse effects that would be anticipated from a permitted land use development. In addition, in the opinion of the author, retention of the native vegetation, and revegetation of areas of the site as proposed will offset the loss of natural character to some degree.

6.4 Visual Effects

This section considers adverse effects on visual amenity values. The RMA defines amenity values as:

a. *"those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes"*

Section 7 of the RMA specifically requires those with functions and powers under the RMA to have particular regard to *"the maintenance and enhancement of amenity values"*. Amenity, as a resource management issue, is comprised of two components. First, amenity *attributes* – these are the tangible and measurable matters such as noise, odour, and density of development, shading, and landscape that together contribute to the amenity character of an area. The second component is *perceptions and expectations* that people hold about amenity. Visual effects are, thus a subset of amenity values.

Visual *impacts* are considered to constitute an intrusion into, or change to an existing view, with the significance of the impacts –the *effects* – measured as the bearing of that impact upon identified viewing audiences.

The assessment of visual effects analyses the perceptual (visual) response that any of the identified changes to the landscape may evoke. Visual sensitivity is influenced by a number of factors including its visibility, the nature and extent of the viewing audience, the visual qualities of the proposal, and the ability to integrate any change within the landscape setting where applicable. Other matters such as the attitude of the individual to an activity can affect the response of that individual to the activity.

[6] *Ministry of the Environment in relation to Environmental Performance Indicators* (2002) Boffa Miskell Ltd.

The nature and extent of visual effects is determined by a systematic analysis of the visual intrusion and qualitative change that a proposal may bring, specifically in relation to aesthetic considerations and visual character and amenity. Visual effects can be positive, negative or benign.

The degree of adverse visual effect generated by the proposal depends upon the character of the surrounding landscape (the context), existing levels of development on the application site, the contour of the land, the presence or absence of screening and/or backdrop vegetation, and the characteristics of the future activities facilitated by the application.

For the purposes of explaining the gradation of effects used in the assessment, a table setting out the classification used is included below.

Note: Shaded cells potentially represent more than minor effects under the RMA.

Report descriptor	*RMA equivalent*	*Explanation*
No Effect	No effects.	*No part of the proposal is discernable.*
Low Effect	Less than minor effect under RMA.	*The proposal constitutes only a minor component of, or change to the wider view. Awareness of the proposal would not have a marked effect on the overall quality of the scene.*
Low – Moderate Effect	Minor effect under RMA	*The proposal may form a visible and recognisable change or new element within the overall scene which may be noticed by the viewer, but which does not detract from the overall quality of the scene.*
Moderate Effect	Effects of some significance.	*The proposal may form a visible and recognisable change or new element within the overall scene and may be readily noticed by the viewer and which detracts from the overall quality of the scene.*
High Effect	Significant effect.	*The proposal forms a significant and immediately apparent part of, or change to the scene that affects and changes its overall character.*
Very High Effect	Very significant effects	*The proposal becomes the dominant feature of the scene to which other elements become subordinate and it significantly affects and changes its character.*

Table 1. Ranking of effects

6.4.1 Visual catchment

Due to location of the site at the southern end of the Molesworth peninsula, the visual catchment of the site is primarily focused within an area to the south west, south, south east, east and north east of the site. With the exception of proximate neighbouring properties to the north, views from further to the north are blocked by landform or vegetation. These neighbouring properties are visible in Photos 1 and 2 and include dwellings located on Jordan Street (numbers 7, 8, 11, 13, 15 and 19), on Moir Point Road to the north (in the vicinity of number 101), and properties at the southern end of Lincoln Street (numbers 67 and 67a).

The Mangawhai Harbour envelops the western, southern and eastern sides of the peninsula, and therefore views of the site are possible from within the Harbour to the south west, south, north east and east – as represented by Photos 6, 7, 9, 10, 11, and 12. Views to the site are also available from the margins of the Harbour from these directions, as illustrated in Photos 3, 4 and 8. To the south, a number of properties located within the Tern Point Estate subdivision offer views to the north and include the site within those views. To the south west, numerous dwellings within the Mangawhai township seek views towards the Harbour. Between the township and Tern Point Estate, settlement on the Harbour margin is sparse.

More distant views are possible from elevated viewpoints such as Coal Hill Road (refer to Photo 5).

6.4.2 Assessment

Three broad viewer groups have been identified in relation to the proposal. These are:

- Visitors to the Mangawhai Christian camp, and occupants of dwellings to the north of the site, accessed off Jordan Street;

- Occupants of water craft on the Mangawhai Harbour, and walkers on the Harbour margins, occupants of dwellings, and users of vehicles close to or on the Harbour margins, to the south west, south, south east and east of the site, and;
- Occupants of dwelling and users of roads to the south east, south and south west of the site.

Visitors to the Mangawhai Christian Camp, and occupants of dwellings to the north of the site, accessed off Jordan Street.

Existing environment
Represented by photos 1, 2, 3 and 4, this group includes dwellings located on the sealed portion of Jordan Street, at numbers 11, 13, 15, and 17, a dwelling at a lower elevation and further to the east at number 19 Jordan Street and a small cluster at numbers 67 and 67A Lincoln Street.

Dwellings within these properties tend to focus their view toward the sand spit and ocean, and place less significance on views to the south in the direction of the site. For most of the individuals associated with this viewer group, where views of the site are possible, these tend to be restricted to glimpses of the northern portion of the site and this outlook comprises a complex mix of vegetation and built development in the foreground. Beyond, glimpses of the Harbour are possible, with the rural landscape and Tern Point Estate in the background. The site is relatively close and appears to be closely associated with the foreground built development.

Number 19 Jordan Street is situated some 120 metres from the northern boundary of the site and is accessed via a long driveway off Jordan Street which runs approximately parallel to the boundary. The dwelling is elevated slightly above the level of the adjoining site, and offers views across manicured gardens towards the site which currently has an unbuilt and rural / coastal character.

The Mangawhai Christian Camp shares the majority of the site's north western boundary. The cluster of buildings within Lot 1 DP 60533, and the area of grassed open space between the buildings and shared boundary offers an elevated outlook across the southern portion of the site through the scattered pohutukawa to the Harbour. The character of this foreground is open and coastal. The newly constructed building within and Lot 3 DP 106271 is to the north of the aforementioned cluster of buildings and is orientated to the north west, benefiting from views to the sand spit and ocean with the northern portion of the site in the foreground and midground (refer to Photo 12).

Potential effects
For the majority of views on Jordan Street, Moir Point Road and Lincoln Street, the proposal will represent a small change in the character of their outlook. They are located within a residential setting, and the addition of a pocket of new housing within an area which is not part of the main focus of their attention, which does not interrupt or obscure views and which will not directly affect the character of their outlook will be of minimal concern to these individuals.

The change in the outlook for occupants of number 19 Jordan Street is of greater importance, since the existing outlook to the south includes the site as the main midground element. The proposal will result in a change in the character of that outlook from open and coastal to one that is strongly influenced by built development, thus reducing the perception of openness.

Viewers situated within the cluster of buildings on within Lot 1 DP 60533 (the christian camp), and the grassed open space between the buildings and the shared boundary of the site will recognise a change in the character of the outlook - from open and coastal to built and residential. Although views to the Harbour will be maintained, the perception of and privacy currently enjoyed by visitors to the camp will be lost. The proposed planting on the shared boundary will, however provide a buffer between the camp and the site, becoming quickly established to screen activities within properties within the site immediately adjoining the boundary. It is noted however, that these individuals will only experience the change on a temporary basis, being visitors to the camp.

The character of the outlook from the two newly constructed buildings within Lot 3 DP 106271 (the christian camp) will also change markedly, with foreground and midground views assuming a built and residential character. Views to the north east from the southern-most of the two buildings may be slightly impeded by the future dwelling within proposed Lot 16, but for the most part, views from these two buildings will be unaffected. Again it is noted however, that these individuals will only experience the change on a temporary basis, being visitors to the camp.

It is the opinion of the author that the potential visual and visual amenity effect for the occupants of number 19 Jordan Street will be moderate, that the potential visual and visual amenity effect experienced by visitors to the cluster of buildings within Lot 1 DP 60533 (the christian camp), and the grassed open space between the buildings and the shared boundary of the site will be moderate, and the potential visual and visual amenity effect experienced by visitors to the two buildings within Lot 3 DP 106271 (the christian camp) will be moderate.

The potential visual and visual amenity effect for all other members of this viewer group will be low.

Whilst acknowledging the moderate potential adverse effect that would be experienced by occupants of number 19 Jordan Street, and visitors to the Christian camp, it must be recognised that the land occupied by the subject site is zoned Residential. As such, the occupants would reasonably be expected to have an expectation that residential development will occur within the site, within the parameters set out for development within the residential zone in the Mangawhai Harbour Overlay.

In the opinion of the author, the development provided for under the provisions of the District Plan would result in, at best a similar change in the character of the landscape, a similar outlook from this neighbouring dwelling and neighbouring activity, and a similar level of effect. It is the opinion of the author therefore, that this negates the level of potential effect identified above.

Occupants of water craft on the Mangawhai Harbour, walkers on the Harbour margins, occupants of dwellings, and users of vehicles close to or on the Harbour margins, to the south west, south, south east and east of the site.

Existing environment

Photos 6, 7, and 9 – 12 show views of the site from varying locations around the Harbour to the west south and east of the site. From more proximate locations it is evident that the site is largely devoid of built development – with the exception of the white building located on the high point, visible in Photo 10 (in actuality, this building is located within the adjoining property to the north of the site). From these proximate locations, such as is represented by Photos 10 and 11, the site contributes both to the perception of naturalness, and amenity values due to its lack of development, and the presence of native vegetation, including pohutukawa particularly along its coastal margins. The site forms a buffer between visible development which – to the north, on the eastern side of the Molesworth peninsula, detracts from the naturalness of the Harbour edge (refer to Photo 12).

From more distant viewpoints, such as those represented by Photos 6 and 7, the site assumes a lesser significance when seen as a component of the wider coastline, although as is demonstrated by Photo 7, when looking at a coastal view the eye tends to be naturally drawn towards the point where the land 'ends' – e.g. the end of a headland or peninsula. As such, the attention is drawn towards the site.

Potential effects

Viewed from distant viewpoints, the development associated with the proposal will be evident, but will not be prominent. The existing vegetation and proposed mitigation planting will ensure that a robust vegetative framework integrates the buildings, providing separation, and filtering of views – particularly where those buildings are located on lower-lying parts of the site. In addition, the recommended design guidelines will assist with reducing the potential prominence of buildings and structures and assist with their integration into the landscape.

It is the opinion of the author that the resulting visual and visual amenity effect experienced by these individuals will be low.

From more proximate locations, the detail of the future built development will be clearer, and although the existing 'belt' of coastal edge vegetation will be retained and supplemented, glimpses of buildings through the vegetation will provide sufficient visual cues to detract from the perception of 'naturalness'. Buildings on the elevated slopes, and elevated locations will be readily visible and the buffer function of the site – separating existing areas of settlement will be lost.

This is not to say that development within the site will be similar in appearance and character to built development as represented by Photo 10. Rather, the built development within the site will be more effectively integrated into its setting and will be less prominent.

It is the opinion of the author that the resulting visual and visual amenity effect experienced by these individuals will be moderate.

As noted above, residential development has occurred on the coastal margin adjoining the site to the north. The appearance and character of this development reflects the character and appearance of development, which is provided for under the Residential zoning, and a similar character of development may also be anticipated within the site given its residential zoning. As such the potential adverse 'moderate' visual and visual amenity effects assessed for this latter group should be seen in the context of what could occur under the District Plan zoning. It is the opinion of the author that the level of potential effects that would occur as a result of the proposal is likely to be lower than the level of effect that could occur from permitted development.

Occupants of dwellings and users of roads to the wider landscape context.

Existing environment

Photographs 3, 4, 5 and 8 provide representative view locations, which demonstrate the visibility of the site from the wider landscape context. From such distant locations, the site forms a small component of the, usually expansive panorama. This said, the observer's eye tends to be drawn to the Harbour, and in doing so, traces the Harbour edge. In this context, the site appears notable doe to its apparent lack of built development, but at the distances involved, it appears to share this attribute with a more extensive length of adjoining coastline.

Potential effects

It is likely that, with scrutiny, the future built development will be visible from these more distant locations, and that a change in the character of the site will be evident, however the change will be slight, and the built development will be well integrated into its setting.

It is the opinion of the author that the resulting visual and visual amenity effect experienced by these individuals will be nil - low.

7 CONCLUSIONS

The application is for the subdivision of a property at the southern tip of the Molesworth Peninsula. The site and its context is zoned Residential in the District Plan and is subject to the Mangawhai Harbour Overlay.

The proposal seeks to create a total of 46 lots, consisting of 40 residential allotments ranging in size from 1107m^2 to 9929m^2, a historic reserve to vest (Lot 101), an esplanade reserve to vest (Lot 100) and four jointly owned access lots (Lots 200 to 203). The subdivision design has been developed with a view to reflecting and enhancing its character, and maintaining its natural and coastal values. It includes substantial areas of planting, and proposes pedestrian connections along the coastal margin, linking with a historic Pa site, for the use of both residents and the public.

Design guidelines provide recommendations for building heights and methods to mitigate the effect of the height and buildings, structures and associated infrastructure within the site.

When considered in the context of its Residential zoning, the proposal will maintain the character of the area and will not detract from landscape character and visual amenity values and is consistent with the policy framework of the Operative District Plan.

The potential adverse landscape effects are assessed as being moderate (more than minor). The visual amenity and visual effects have been assessed as being, for the most part low (less than minor) but moderate for an adjoining residential property, for visitors to the Christian camp, and moderate for viewers in proximate locations on the Harbour.

The level of landscape effect and visual and visual amenity effect must be seen in the context of the potential effects that could rise from the permitted baseline. Since the site is zoned Residential, as a permitted activity up to 78 dwellings could be constructed on the application site (one dwelling per 1000m^2) provided that all other development controls had been met. The dwellings could be constructed to the maximum permitted height of a building in an Overlay Area which is 8.0 metres and with a building coverage of equal to, or less than 35% of the net site area. As noted above, the proposal has endeavoured to create a subdivision that will be integrated with its setting, and development will be guided by design controls which will reduce the prominence of buildings and structures. It is the opinion of the author that the level of

potential adverse landscape, visual and visual amenity effects assessed for the proposal will be lower than those provided for under the Residential zoning.

Simon Cocker

12 January 2017



Appendix 1: Building and landscape design guidelines:

The Design Guidelines are intended to give assurance to the regulatory authorities and future owners that the proposed development is sympathetic to the landscape; the landscape character of the area and that integration between the building and the immediate landscape is achieved in keeping with the landscape. Whilst recognizing that the Residential zoning provides for built development, the guidelines are crafted to allow a degree of flexibility and individuality without compromising the overall character of the development.

Building site	All building construction within residential Lots 1 – 40 shall be contained within the proposed building sites identified on the Scheme Plan (33426_06 S4).
Scale of buildings and structures	It is recommended that buildings and structures on Lots 13, 14, 15, 16, 17 have a maximum height of 4.5 metres above existing ground level, using the rolling height method for determining cut level and max building height. It is recommended that buildings and structures on Lots 26, 27, 28, and 29 shall have a maximum height of 5.5 metres above existing ground level, using the rolling height method for determining cut level and max building height.
Building form and design	It is considered that building forms such as stepped structures, irregular rooflines and modulated front elevations are most appropriate, particularly where buildings are located on or close to the ridge crest. Larger split or multilevel buildings are best articulated into smaller built masses and it is recommended that they incorporate single storey elements or low eaves at the perimeter to reduce their apparent bulk and scale. Advantage will be gained from incorporating details such as pergolas, extended eaves, decks or loggias into tall prominent elevations to break up the verticality of the building face. It is recommended that building materials be natural such as unpainted natural timber, stone, or materials with recessive colours that are appropriate to the setting. Roofs in particular should be non-reflective and painted or coloured in a recessive colour.
Earthworks	It is suggested that the maximum height of exposed batter faces be 2.0m with a finished angle of repose no steeper than 1 in 3. The best outcome with regard to cut and fill batters can be achieved where these are shaped to feather naturally into the natural angle of slope. All cut and fill batters should be grassed or otherwise vegetated to ensure complete coverage of exposed soils. Timber, stained a dark colour and / or screened with vegetation are more appropriate and less intrusive within the coastal environment.
Infrastructure Utilities and water tanks Fencing	 It is recommended that all services and utilities, including tanks are to be either located below ground or screened. External service areas should be integrated within the building area so that rubbish, storage and similar items are not visible from outside the house site. The use of fencing is discouraged, but where fences are necessary, it is preferred if these be constructed from timber and it shall be either left unpainted or stained a recessive colour. Is is recommended that solid timber fences or walls other than within five metres of the dwelling not be constructed.
Exterior lighting	Lighting can detract from the coastal environment and it is suggested that lighting be confined to the built sites. Pole lights and floodlights mounted on any side of any structure are discouraged.
Landscape Planting	No plants listed in Table A5.2 of the Northland Conservation Management Strategy[7] or in the NRC publication: *'Environmental Weeds - Delightful But Destructive'* shall be planted within any of the lots.

[7] Department of Conservation. *Conservation Management Strategy: Northland 2014 – 2024.* September 2014.

Appendix 2: Proposed Mitigation Planting:

Mitigation planting is proposed at two separate stages within the development of the subdivision. The first will be undertaken by the applicant prior to 224(c). This will comprise:

- revegetation planting which will focus of the enhancement of the existing native vegetation within the site and the creation of a preliminary landscape framework / structure, and;
- the planting of specimen trees within the road reserve.

Scope

The scope is as follows:

- preparation of planting areas;
- timing of planting;
- plant material;
- siting of plants in accordance with the planting plan;
- planting;
- watering in newly planted shrubs, and;
- general maintenance, and;
- weed pest and disease control.

Preparation of planting areas

Undertake clearance of any exotic weed species. No native vegetation will be removed.

The initial weed control should be carried out during the autumn months prior to the winter planting, when plants are still active and therefore more susceptible to herbicides.

Blanket spray planting areas three weeks before planting. A follow up spray should be applied if required.

The number of potential weed species may occur, and are present within the wider property. For gorse the following is recommended:

- Spray with 5g metsulfuron-methyl (600g/kg e.g. Escort®) + 10 ml penetrant per 10 litres water; or
- Gun and hose at a rate of 35g metsulfuron-methyl + 100ml penetrant per 100 litres water.

For climbing asparagus fern and jasmine, the following is recommended:

- Pull the plant out of any trees it has climbed and bundle them on the ground and then:
- Weed-wipe 300mls glyphosate per litre water. Total coverage is not required; or
- Spray with 200mls glyphosate (360g/l e.g. Round-up®) per 10 litres water. Do not add penetrant if spraying against tree trunks

For ginger, the following is recommended:

- Cut the stem and paint the stump with 1g metsulfuron-methyl (600g/kg e.g. Escort®) per 1 litre

water; or

- Spray 5g metsulfuron-methyl + 10ml penetrant (e.g. organosilicone) per 10 litres water.

Timing of planting

Planting shall only be undertaking between the months of April to September. If planting is undertaken early or late in the season, plants should be irrigated during dry periods.

Plant material

All species are to be eco-sourced from seeds collected from the Rodney Ecological District. Plants shall be purchased from a reputable local indigenous nursery or otherwise sourced locally.

All plants shall be best nursery stock, being healthy and vigorous. Root systems shall be well developed and in balance with the amount of foliage growth of the plant. Root-bound plants or those with badly spiraling root systems shall not be acceptable. Plants should have a rootball of fine, fresh root growth. This should be sliced through vertically with a sharp knife when removing the planter bag.

Plant size is largely specified by planter bag size. Plants are expected to be of typical size for specimens typically sold in the specified container size, being neither excessively large nor particularly small.

Plants are to be planted as soon as possible after delivery and no later than 3 days after delivery.

All necessary pruning shall be done at time of planting.

Siting of plants

Planting is to be in the areas shown on Figure 6 and to the densities listed below. Planting shall be undertaken within the gaps between existing native vegetation. Layout and spacing is to be confirmed with the owner or his representative.

Planting

Holes for the larger (pb3) plants should be dug approximately 1.5 times wider that the root ball, so that the roots are not cramped. Some loose soil should be left in the bottom of the hole to aid root growth and drainage.

Approximately one tablespoon of good quality eighteen to twenty-four month slow–release fertiliser should be placed in the bottom of the plant hole, and mixed in with the loose soil, ensuring that the fertiliser is not sitting directly on the roots (as it may burn them). This will help to kick start the plants for a couple of years.

Soil returned around the roots should be firmed with the foot, with a small amount of loose soil left at the top of the hole.

Plants should be well watered in their containers prior to planting.

Holes for large plants may exceed the depth of topsoil. In these cases the subsoil is to be thoroughly broken and well mixed with compost, which has been added as a 100mm layer to the bottom of the planting hole. Any compacted soil pan is to be thoroughly broken by relevant measures ensuring good root penetration and drainage.

The base of the planting hole is to be filled and firmed with backfilling material to a level where the top of the plant root ball is level with surrounding ground

All care shall be taken to keep the root ball of the plant intact during placement.

Watering in

Immediately after planting all plants are to be thoroughly watered until the planting hole is saturated. The foliage of plants is also to be thoroughly wetted. This is to be done even if soil conditions are already wet.

General maintenance

Maintenance weed control should commence within three months following the planting, and then twice annually (Spring and Autumn). Maintenance shall be undertaken for a minimum period of 36 calendar months following practical completion in accordance with this specification and the accompanying plan.

Care should be taken to identify and control any weeds that may have been introduced to the property in potting mix associated with the new plants.

All weeds should be cleared from the site by appropriate physical and chemical control. The majority of weeds growing close to the plant can be pulled by hand (taking care not to damage the roots of the plant) or, if appropriate, sprayed with herbicide by an experienced operator.

During this three-year maintenance programme, any dead plants will need to be replaced.

Weed, pest and disease control

Maintenance shall include such watering, weed control, cultivating, and the control of insects, fungus and other diseases by means of spraying of an approved herbicide, insecticide or fungicide, as is required to maintain plants in optimal health.

All spraying (including site preparation work) shall be carried out in cool, still, dry conditions in accordance with recognised trade practice, as documented by the User Safety and Application sections of the New Zealand Agrichemical Manual. Particular care shall be taken to avoid drift onto desirable plants, waterways and adjacent properties.

Revegetation planting

Common name	Species	Grade	% mix	Comments
karamu	*Coprosma macrocarpa*	0.5l	10	Plant throughout at 1200mm centres
Cabbage tree	*Cordyline australis*	0.5l	10	Plant throughout at 1200mm centres in groups of 5 – 7
koromiko	*Hebe stricta*	0.5l	10	Plant on margins at 1200mm centres
kanuka	*Kunzea ericoides*	0.5l	50	Plant throughout at 1200mm centres
manuka	*Leptospermum scoparium*	0.5l	15	Plant throughout at 1200mm centres
totara	*Podocarpus totara*	1l	5	Plant throughout at minimum 5.0m centres

Supplementary planting associated with existing vegetation (within site)

Common name	Species	Grade	% mix	Comments
karamu	*Coprosma macrocarpa*	0.5l	15	Plant throughout at 1200mm centres
Cabbage tree	*Cordyline australis*	0.5l	10	Plant throughout at 1200mm centres in groups of 5 – 7
koromiko	*Hebe stricta*	0.5l	10	Plant on margins at 1200mm centres
hangehange	*Geniostoma ligustrifolium*	0.5l	10	Plant throughout at 1200mm centres
kanuka	*Kunzea ericoides*	0.5l	30	Plant on margins and in gaps at 1200mm centres
kawakawa	*Macropiper excelsor*	0.5l	10	Plant throughout at 1200mm centres
Mahoe	*Melicytus ramiflorus*	0.5l	10	
pohutukawa	*Metrosideros excelsa*	1l	5	Plant throughout in light wells at minimum 5.0m centres

Supplementary planting associated with existing vegetation (coastal edge)

Common name	Species	Grade	% mix	Comments
oioi	*Apodasmia similis*	0.5l	5	Plant at 1200mm centres in wet seeps and gullies
kowharawhara	*Astelia banksii*	0.5l	5	Plant throughout at 1200mm centres
karamu	*Coprosma macrocarpa*	0.5l	10	Plant throughout at 1200mm centres
Cabbage tree	*Cordyline australis*	0.5l	10	Plant throughout at 1200mm centres in groups of 5 – 7

kanuka	*Kunzea ericoides*	0.5l	20	Plant on margins and in gaps at 1200mm centres
Mahoe	*Melicytus ramiflorus*	0.5l	10	Plant in light wells and gaps at 1200mm centres
pohutukawa	*Metrosideros excelsa*	1l	10	Plant throughout in light wells at minimum 5.0m centres
pohuehue	*Muehlenbeckia complexa*	0.5l	10	Plant at 1200mm centres on steep banks
whaririki	*Phormium cookianum*	0.5l	10	Plant at 600mm centres around rocky outcrops
harakeke	*Phormium tenax*	0.5l	5	Plant at 1200mm centres in wet seeps and gullies
houpara	*Pseudopanax lessonii*	0.5l	5	Plant in light wells and gaps at 1200mm centres

Wetland / pond planting

Common name	Species	Grade	% mix	Comments
giant umbrella sedge	*Cyperus ustulatus*	rt	10	Plant on pond margins at 500mm centres
Jointed twig rush	*Baumea articulata*	rt	10	Plant on pond margins 500mm centres
kukaraho	*Bolboschoenus fluviatilis*	rt	10	Plant on pond margins 500mm centres
Purei	*Carex virgata*	0.5l	10	Plant on moist margins at 1000mm centres
Ti kouka	*Cordyline australis*	0.5l	10	Plant on dry margins at 1000mm centres
	Juncus gregiflorus	rt	10	Plant on moist margins at 500mm centres
manuka	*Leptospermum scoparium*	0.5l	20	Plant on margins and in gaps at 1200mm centres
harakeke	*Phormium tenax*	0.5l	10	Plant on moist margins at 1000mm centres
raupo	*Typha orientalis*	rt	5	Plant in standing water at 1000mm centres
kowhai	*Sophora microphylla*	1l	5	Plant on dry margins at 5000mm min centres

North western boundary planting

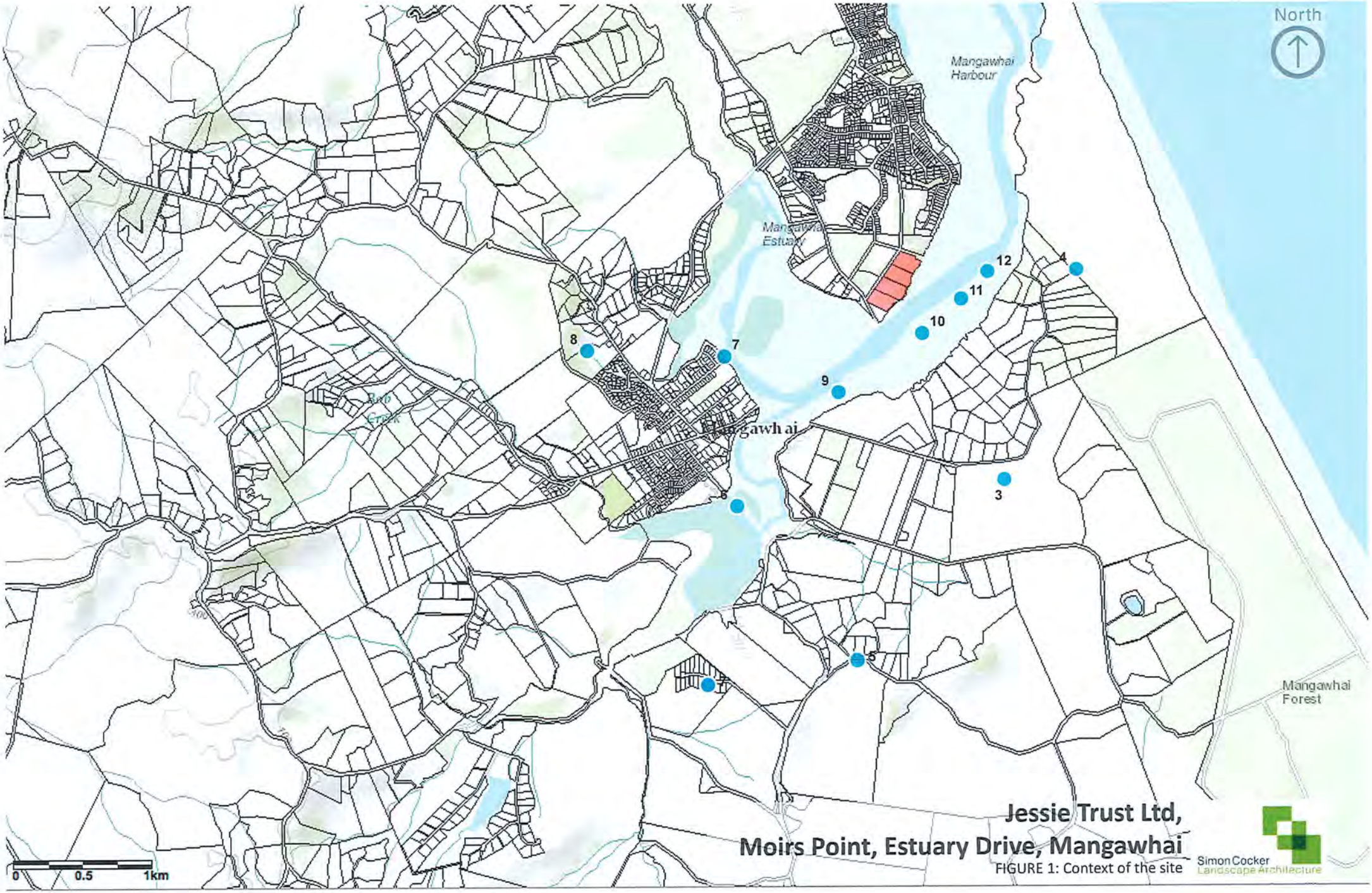
Common name	Species	Grade	% mix	Comments
kapuka	*Griselinia littoralis*	0.5l	20	Plant as mixed screen, 2.0 metres wide along boundary
manuka	*Leptospermum scoparium*	0.5l	20	Plant as mixed screen, 2.0 metres wide along boundary
	Olearia solandri	0.5l	20	Plant as mixed screen, 2.0 metres wide along boundary
harakeke	*Phormium tenax*	0.5l	20	Plant as mixed screen, 2.0 metres wide along boundary

Jessie Trust Limited
Moir Point
Estuary Drive, Mangawhai

Appendix 3 - Figures

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FIGURE 1: Context of the site

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Aerial of site showing situation pre-vegetation clearance

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FIGURE 2: The site

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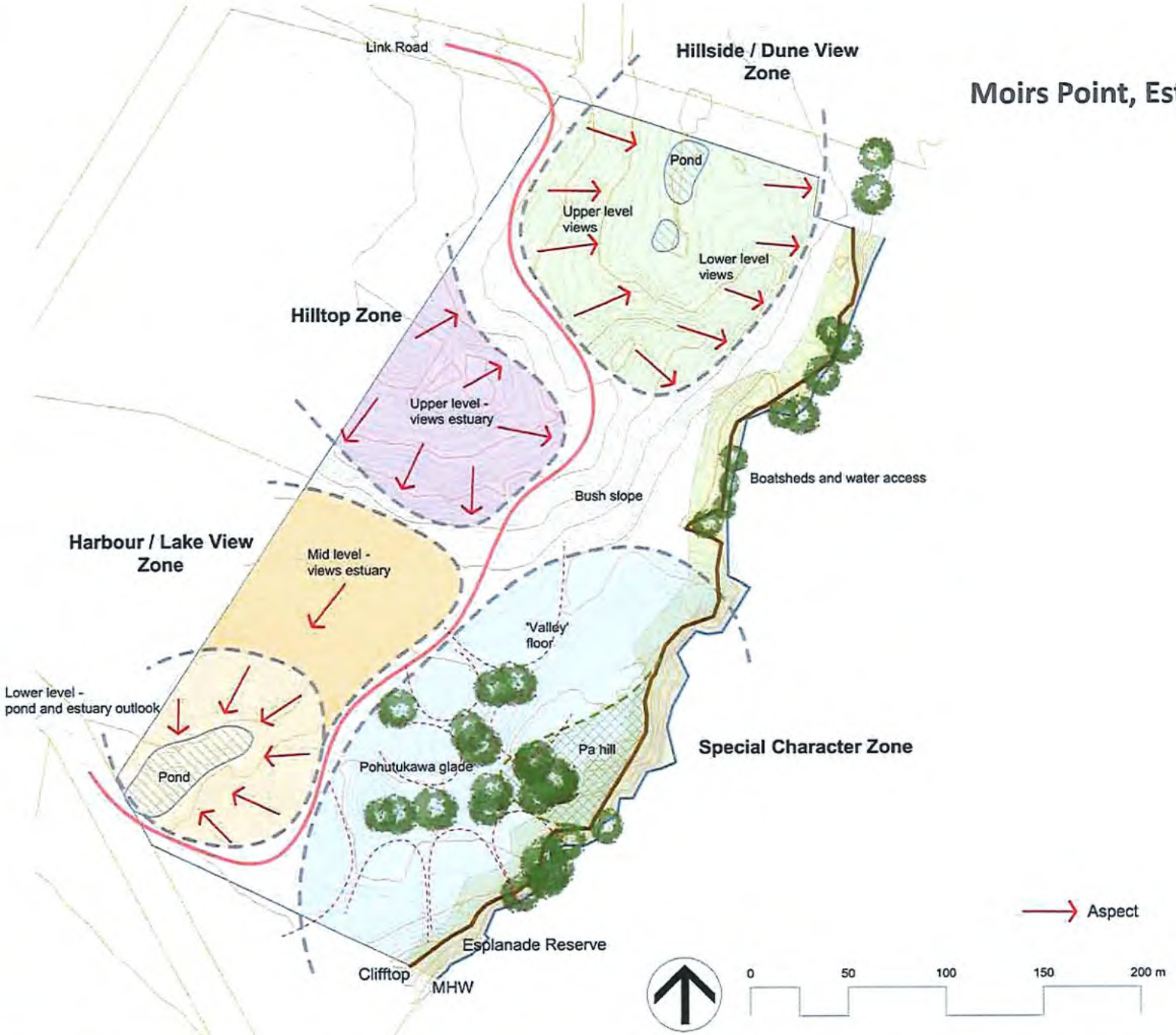


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FIGURE 3: The proposal

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FIGURE 4: The proposal



commonground studio

Jessie Trust Holdings

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project Harbour Point

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FIGURE 5: The proposal

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Photo 1:



Photo 2:

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Moirs Point, Estuary Drive, Mangawhai
Photographs 2 (taken with digital equivelant of 50mm focal length unless otherwise specified)

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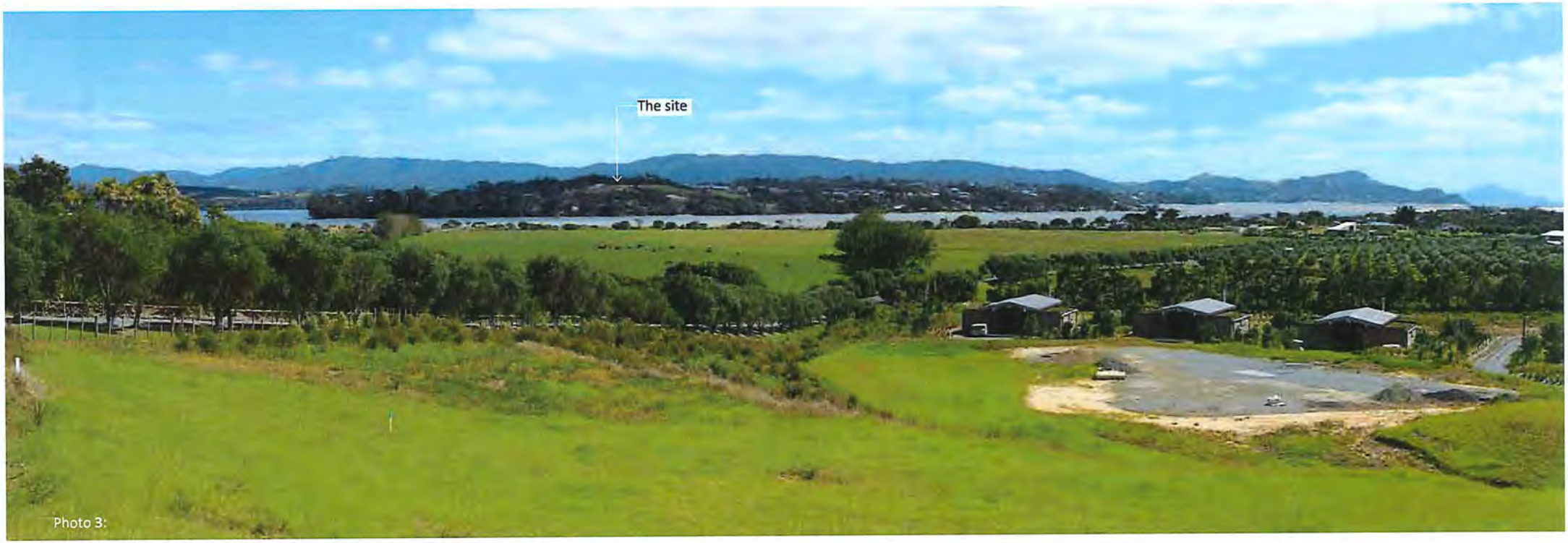


Photo 3:

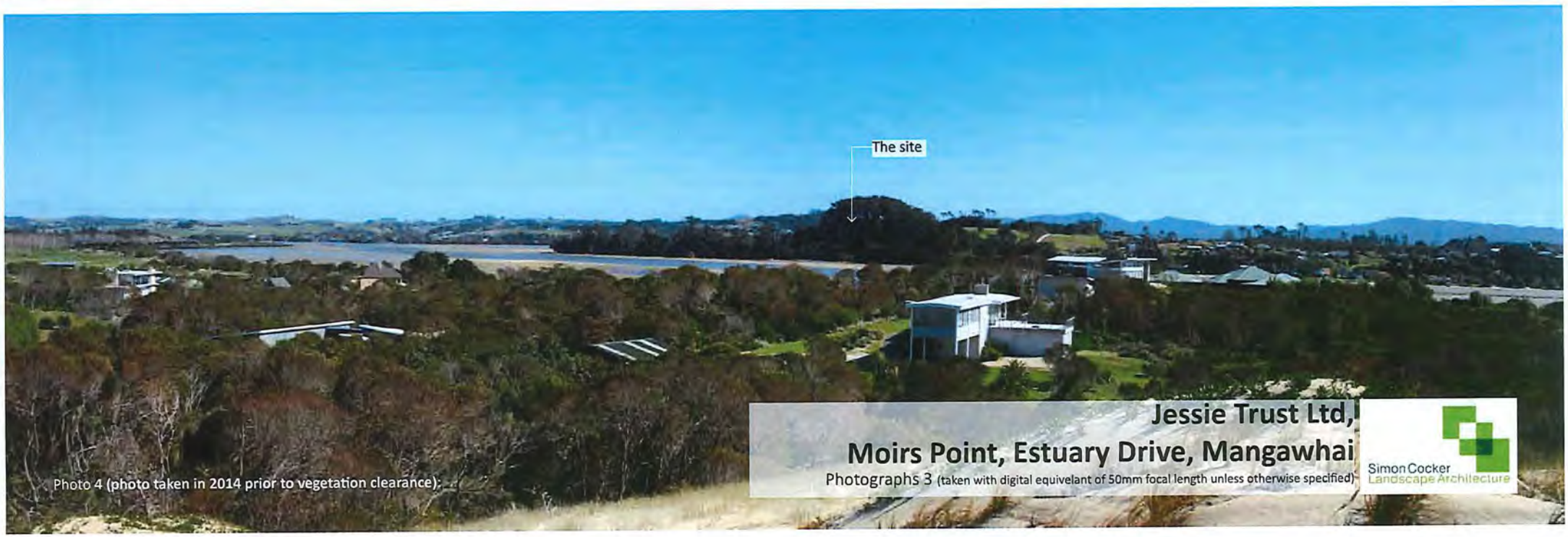


Photo 4 (photo taken in 2014 prior to vegetation clearance):

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Photographs 3 (taken with digital equivelant of 50mm focal length unless otherwise specified)

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Photo 5:

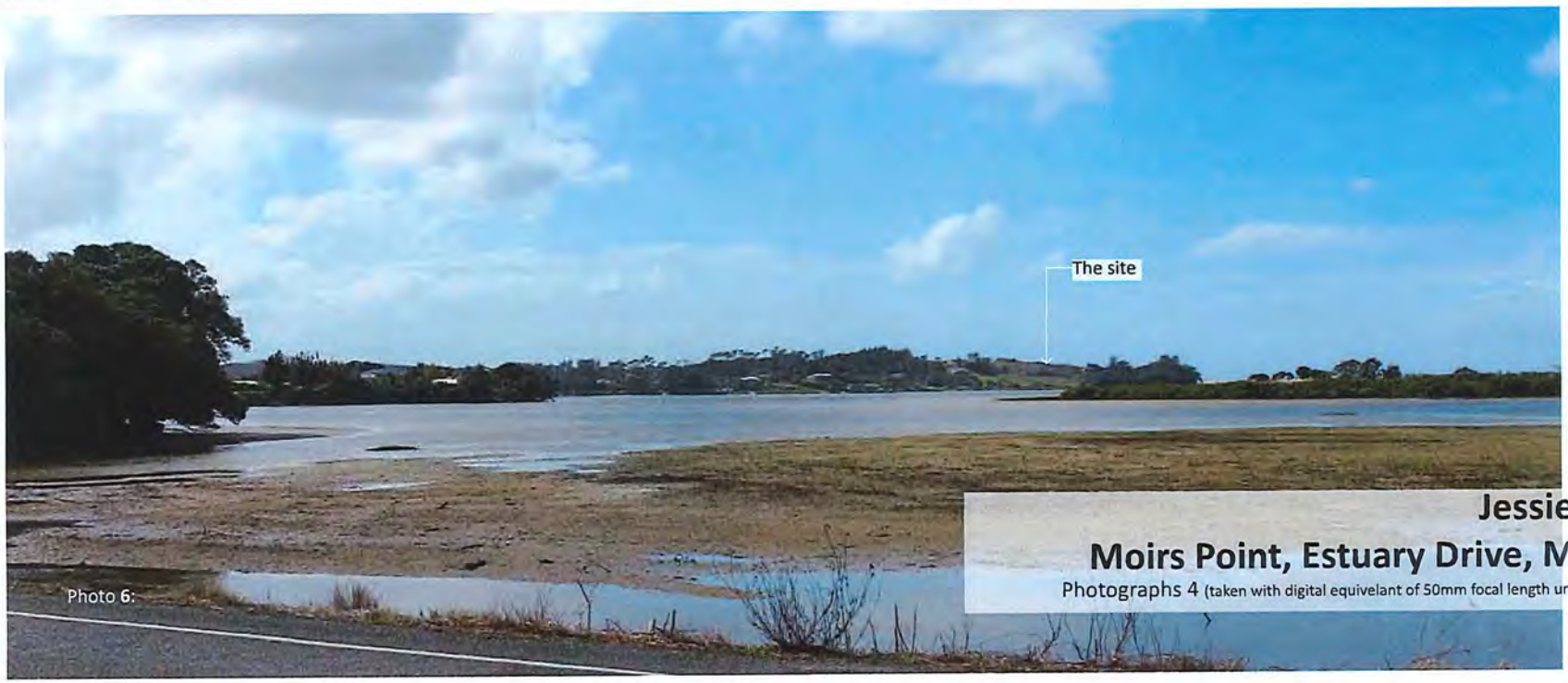


Photo 6:

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Photographs 4 (taken with digital equivelant of 50mm focal length unless otherwise specified)

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Photo 7:

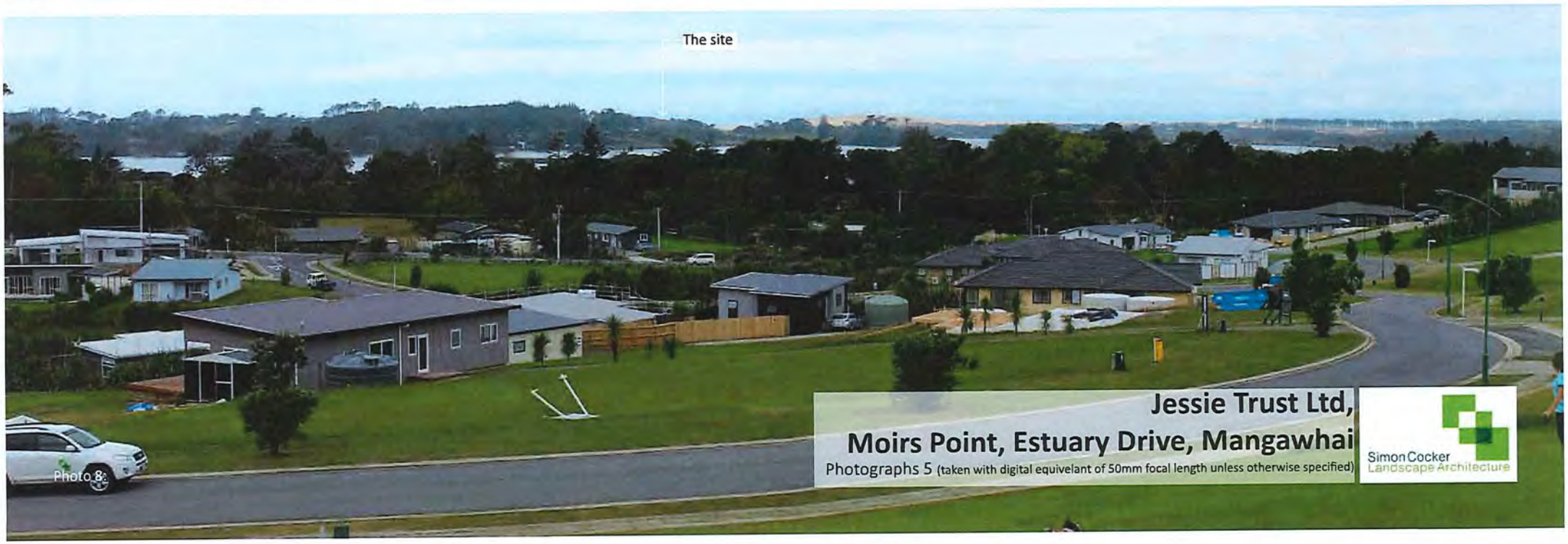


Photo 8:

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Photographs 5 (taken with digital equivelant of 50mm focal length unless otherwise specified)

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Photo 9:

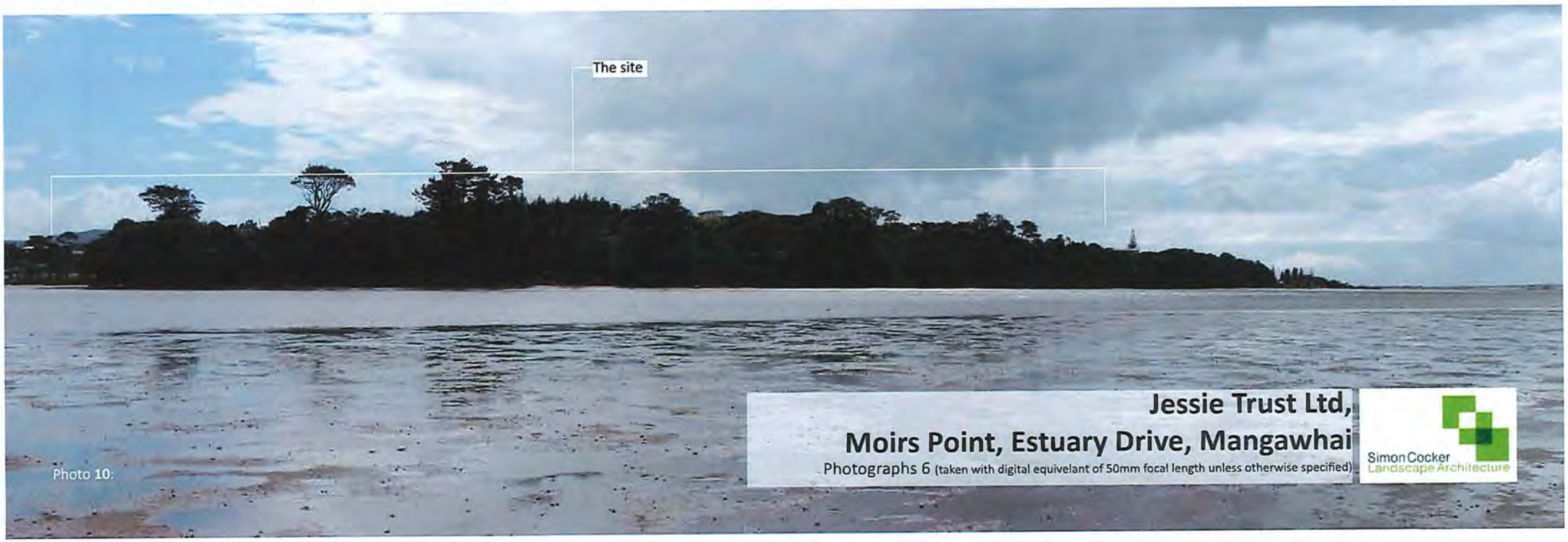


Photo 10:

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Photographs 6 (taken with digital equivelant of 50mm focal length unless otherwise specified)

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Photo 11:

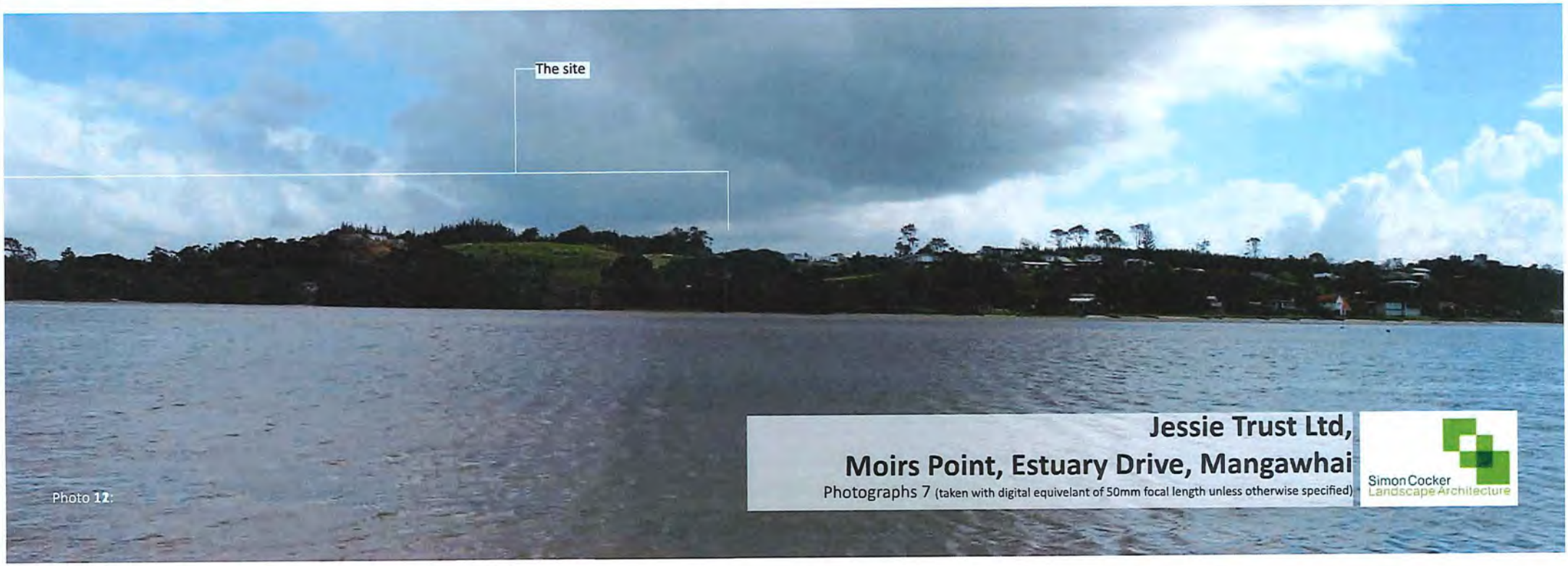


Photo 12:

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Photographs 7 (taken with digital equivelant of 50mm focal length unless otherwise specified)

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PROJECT

JESSIE TRUST LTD
MOIRS POINT
ESTUARY DRIVE, MANGAWHAI

DRAWING TITLE

CUT FILL CONTOURS

FOR INFORMATION

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DESIGNED			
DRAWN		MM	04/2018

DATE	ORIGINAL SCALE	ORIGINAL SIZE
19/04/2018	1:1000	A3

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40955-DR-SU-9905	

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The Jessie Trust
Moirs Point, Estuary Drive
Mangawhai

MAINTENANCE MANUAL

12 June 2018

Our ref: WH40955

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Director	Simon Reiher
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Name of project	Moirs Point, Estuary Drive
Name of document	Maintenance Manual
Document Revision	B
Job number	WH40955

Signed Author	
Signed Director	

EXECUTIVE SUMMARY

The development consists of a 40 lot development with overall coastal urban layout.

This development has access supplied by a main public spline road being the extension of Estuary Drive linking through to Jordan Road. From here individual access and jointly owned access ways provide each building site access. See Appendix B2.

Wastewater is disposed by each lot through a private pressure pump in the lot that connects to a public low pressure main in the access ways and road berm (see as built plans in Appendix B2).

Firefighting water supply is provided by buried tanks within Lots 11, 17, 27 and 32. These tanks supply suitable fire coverage to all lots within 90m of each tank. Individual lot owners are responsible for maintaining the water level in these tanks and have covenants for other lots to access.

Portable water is supplied by on site tanks. These tanks are private for each lot owner. Lots discharge overflow from these tanks to onsite dispersion devices that crate sheet flow discharge.

Stormwater will be discharged from lots by two methods either piped reticulation to stormwater ponds or by on site soak hole and dispersion to mimic original sheet flow. There are two ponds for the site, both of which provide stormwater treatment through wetland planting areas and stormwater attenuation up to the 10yr ARI storm event. The pond to the south takes a catchment from lots 1-15, 31 and 32 and the northern pond takes flow from 16-29, 38, 39 and 40. Both ponds also take stormwater flow from roads and Jointly Owned Access Way's.

Lots 14-16, 25-30, 33-36 and 37 will discharge of their own stormwater through on site soak holes to provide attenuation and treatment of the low flow storm events, with higher flow storms being discharged by overflow dispersion devices such as distribution trenches or pipes to mimic pre-development sheet flow discharge flow pattern. We confirm that the ponds on site provide compensational attenuation for these areas.

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1.0 INTRODUCTION

The purpose of this report is to provide detail on the maintenance of individual assets for water catchment, stormwater disposal, fire fighting water, stormwater treatment, stormwater attenuation, access, public walkway, planting. This Seeks to confirm who is responsible for this maintenance and when it is to be done.

2.0 MANAGEMENT DEVICES

2.1 On site Soakage and Disbursement Trench Outlet Structure

2.1.1 Legal Status of Disbursement Trench and Responsibilities

Lots 14-16, 25-30, 33-36 and 37 will discharge of their own stormwater through on site soak holes to provide attenuation and treatment of the low flow storm events, with higher flow storms being discharged by overflow dispersion devices such as distribution trenches or pipes to mimic pre-development sheet flow discharge flow pattern prior to exiting the lot boundaries. This discharge is specified on each lot title by covenant.

These devices shall be constructed by the lot owner at the time of building consent to fit with their proposed building size and shape. These structures shall be designed by an engineer experienced in hydrology and familiar with the hydrology of the total subdivision. Therefore, these devices shall be the sole responsibility of the lot owner and the consequences of the devices failure leading to concentrated stormwater discharge on the downstream environment shall as such be handled under the Land Drainage Act 1908.

2.1.2 Details of Proposed Maintenance Methods

2.1.2.1 Litter

Following storms and at no less than monthly intervals, an inspection of the outlet and the surroundings of the pond will be conducted. Any litter or debris should be removed and disposed of. Disposal of litter and debris must comply with all local and regional control programs. Only suitable disposal and recycling sites may be used.

2.1.2.2 Erosion Inspection

Inspections to identify areas of erosion in the soak hole or outlet dispersion device should be carried out annually by as suitably qualified inspector. A specialist stormwater engineer should be consulted if deemed necessary by the inspector.

Any areas that are eroded should be reinstated promptly will topsoil and grass or in more serious situations rock and concrete may be used to rapidly stabilise the area.

2.1.2.3 Structural Inspection

The outlet structure design registered as part of the building consent for the lot shall be consulted prior to any structural inspection.

Visual inspections of these structures should be carried out with litter maintenance. If these inspections should identify any repair or maintenance required to the pond, a qualified engineer should be appointed to advise of remedial works required.

Repairs of the pond should be made promptly.

2.2 North Pond

2.2.1 Legal Status of North Pond Maintenance and Responsibilities

Lots 16-29 and 38-40 will discharge all or part of their stormwater to the public reticulation which will lead to the northern pond in a controlled manner. This pond is a privately-owned structure with appropriate easements over Lots 21-24 to allow for this discharge.

This pond is a wetland formation with plants and check dams to dissipate water flow and allow for water to be treated during low flow events and then stored during storm events up to the 10yr ARI and released in a controlled manner to the costal environment via the 600mm pipe discharge into Allotment 53 Suburb of Molesworth. The pond is designed to overtop through the neighbouring property to the north follow existing flowpath in storm events greater than the 10yr ARI. This overtopping is a continuation of the existing overland flow; therefore this neighbouring landowner has responsibility under the Land Drainage Act 1908 to maintain this flow path and not affect the ponding levels within the subject sites.

Lots 21, 22 and 24 each own part of the pond, and it is proposed that each lot will maintain their part of the pond to allow for the benefit of all other lot owners. This includes structural components such as inlets and outlets. How each lot owner chooses to implement this maintenance will be up to them, i.e. they may organise communal working bee for the total pond, do the works themselves for their section or organise contractors to undertake all works.

The section of the pond within the Paper Road is owned by the Council however this maintenance of planting and outlet structure shall fall within the responsibility of the lot owner of lot 22 who will have the best view of this area.

For the avoidance of confusion the boardwalk over the pond and walking track the outlet pipe and all pipe inlets over 200mmø are owned by the Kaipara District Council and in their asset maintenance.

2.2.2 Details of Proposed Maintenance Methods

2.2.2.1 Litter

Following storms and at no less than monthly intervals, an inspection of the outlet and the surroundings of the pond will be conducted. Any litter or debris should be removed and disposed of. Disposal of litter and

debris must comply with all local and regional control programs. Only suitable disposal and recycling sites may be used.

2.2.2.2 Erosion Inspection

Inspections to identify areas of erosion in the pond should be carried out annually by a suitably qualified inspector. A specialist stormwater engineer should be consulted if deemed necessary by the inspector.

Any areas that are eroded should be reinstated promptly with topsoil and mulched with planting if required, or in more serious situations rock and concrete may be used to rapidly stabilise the area.

2.2.2.3 Planting Inspections/Weeds

The pond shall have planting throughout its base in wetland species and stream edge planting on its banks. This planting shall be inspected on an annual basis by a suitably qualified person to check for replacement plants and weed growth. Dead or poor performing plants shall be replaced by similar species. Weeds shall be sprayed or removed.

2.2.2.4 Structural Inspection

The outlet structure for the pond consists of a pipe with concrete surround.

Visual inspections of these structures should be carried out with litter maintenance. If these inspections should identify any repair or maintenance required to the pond, a qualified engineer should be appointed to advise of remedial works required.

Repairs of the pond should be made promptly.

2.3 South Pond

2.3.1 Legal Status of South Pond Maintenance and Responsibilities

Lots 1-15 and 31-32 will discharge its stormwater to the public reticulation which will lead to the southern pond in a controlled manner. This pond is a privately owned structure with appropriate easements over Lots 1-5 to allow for discharge.

This pond has a wetland formation prior to discharging into the main wet pond area. This wetland area has plants and a check dam to dissipate water flow and allow for water to be treated during low flow events. Larger storm events overtop the check dam into the main pond, in which volume is stored during the storm events and released in a controlled manner to the costal environment via the manhole outlet structure and 675mm pipe discharge.

Lots 1-5 each own part of the pond or wetland, and it is proposed that each lot will maintain their part of the pond to allow for the benefit of all other lot owners. This includes structural components such as inlets and outlets. How each lot owner chooses to implement this maintenance will be up to them, i.e. they may organise communal working bee for the total pond, do the works themselves for their section or organise contractors to undertake all works.

The section of the pond batter planting within the Road reserve is owned by the Council however the maintenance of planting shall fall within the responsibility of the Lot 2 owner who will have the most vested interest in this area. For avoidance of confusion, the outlet 675ø pipe and all inlet pipes over 200mmø are owned by Kaipara District Council and in their asset maintenance. However all intlet and outlet structures within the pond are private.

2.3.2 Details of Proposed Maintenance Methods

2.3.2.1 Litter

For clarity we confirm that litter includes manmade and natural debris that have ability to pollute the pond or block the pond structures.

Following storms and at no less than monthly intervals, an inspection of the outlet and the surroundings of the pond will be conducted. Any litter or debris should be removed and disposed of. Disposal of litter and debris must comply with all local and regional control programs. Only suitable disposal and recycling sites may be used.

Attention should be made to the outlet structure of the grated manhole cover to ensure that this does not build up over time with debris – this being within Lot 2 area of responsibility. This outlet has a dual stage out letting system with the primary discharge being the lip of the concrete lid. If this first stage is blocked around its full perimeter then water will build up 50mm and discharge into the grated steal cover. Both stages should be cleared of litter. Access to the outlet of the pond can be made by stepping over the road safety platform to the concrete lid.

2.3.2.2 Erosion Inspection

Inspections to identify areas of erosion in the pond should be carried out annually by a suitably qualified inspector. A specialist stormwater engineer should be consulted if deemed necessary by the inspector.

Any areas that are eroded should be reinstated promptly will topsoil and mulched with planting if required. or in more serious situations rock and concrete may be used to rapidly stabilise the area.

The pond may require dewatering to carry out this work. To dewater the pond, you must open the dewatering valve within the outlet manhole. This may only be opened when the pond is settled and there is no forecasted rain within 24hrs.

The dewatering valve shall be opened by first obtaining the valve tool (being an AVK 1.5m long key with square drive head to fit the valve tap). This tool will be located within an easily accessible point on lot 2 and

the owner of lot 2 shall be responsible for its availability always, (replacements may be purchased from AVK Ltd).

With the valve tool you must access the outlet structure by stepping over the rock safety platform and then remove the steal grated cover. Then lower the valve tool over the valve tap and turn counter clockwise until water is flowing freely. This will take approx. 2hr to empty the pond.

2.3.2.3 Planting Inspection/Weeding

The pond shall have planting throughout its base in wetland species and stream edge planting on its banks. This planting shall be inspected on an annual basis by a suitably qualified person to check for replacement plants and weed growth. Dead or poor performing plants shall be replaced by similar species. Weeds shall be sprayed or removed.

2.3.2.4 Structural Inspection

The outlet structure for the pond consists of a manhole structure with a 600mm inlet at its top pipe with a debris screen and stabilised spillway with outlets to the stream discharging over rock rip rap protection.

Visual inspections of these structures should be carried out with litter maintenance. If these inspections should identify any repair or maintenance required to the pond, a qualified engineer should be appointed to advise of remedial works required.

Repairs of the pond should be made promptly.

The pond may require dewatering to carry out this work. To dewater the pond, you must open the dewatering valve within the outlet manhole. This may only be opened when the pond is settled and there is no forecasted rain within 24hrs.

The dewatering valve shall be opened by first obtaining the valve tool (being an AVK 1.5m long key with square drive head to fit the valve tap). This tool will be located within an easily accessible point on lot 2 and the owner of lot 2 shall be responsible for its availability always, (replacements may be purchased from AVK Ltd).
With the valve tool you must access the outlet structure by stepping over the rock safety platform and then remove the steal grated cover. Then lower the valve tool over the valve tap and turn counter clockwise until water is flowing freely. This will take approx. 2hr to empty the pond.

2.4 Walkway

2.4.1 Legal Status of Walkway and Responsibilities

The walkway shall traverse through paper road esplanade reserve and historic reserve areas owned by Kaipara District Council. It also extends over Lot 30 and is covered by an easement in gross in favour of Kaipara District Council. A private development agreement between the Developer, Jessie Trust and the

Kaipara District Council has been entered into. AS part of this Jessie Trust has taken maintenance for this area of reserve for 10 years. Following this Kaipara District Council shall take over maintenance.

2.4.2 Details of Proposed Maintenance Methods

2.4.2.1 Litter

Following storms and or at monthly intervals, an inspection of the culvert and the surroundings of the path will be conducted. Any litter or debris should be removed and disposed of. Disposal of litter and debris must comply with all local and regional control programs. Only suitable disposal and recycling sites may be used.

2.4.2.2 Erosion Inspection

Inspections to identify areas of erosion in the walkway should be carried out annually by as suitably qualified specialist stormwater engineer should be consulted if deemed necessary by the inspector.

Any areas that are eroded should be reinstated promptly will topsoil and grass.

2.4.2.3 Weed Maintenance

Inspection to identify weed growth within the walkway shall be carried out six monthly if required. Weeds shall be sprayed by a suitably qualified operator. Follow up inspections shall be carried out at one month after spraying.

2.5 Reserve Planting

2.5.1 Legal Status of Reserve Planting and Responsibilities

Lots 100 and 101 are to be reserves vesting Kaipara District Council ownership.

Planting and walkway construction has been undertaken as per the Landscape Plan approved between Kaipara District Council and Jessie Trust and in line with Landscape Report by Simon Cocker dated January 2017.

The planting and walkways shall be maintained by Jessie Trust for a period of 10years. The Kaipara District Council hold a $60,000 bond for this Maintenance Works. Following this period the maintenance will fall to the Kaipara District Council Parks Department.

Te Uri o Hau (Sheree Worthington – reenie@xtra.co.nz) shall be given the opportunity to attend the monitoring inspections for the walkway and reserve planting on historic Pa reserve Lot 101.

2.5.2 Details of Proposed Maintenance Methods

2.5.2.1 Litter

Following storms and at no less than six monthly intervals, an inspection of the surroundings of the planting will be conducted. Any litter or debris should be removed and disposed of. Disposal of litter and debris must comply with all local and regional control programs. Only suitable disposal and recycling sites may be used.

2.5.2.2 Replacement Plants

Plants shall be inspected by a suitably qualified person on an annually basis. Any dead or poor performing plants should be removed and replaced with the same or similar planting.

Plant losses shall be quantified weed inspections and planting of replacements arranged in Spring or Autumn planting periods. Plants shall be in line with Landscape Plan by Simon Cocker Landscape Architects approved by Kaipara District Council.

2.5.2.3 Weed Control

Inspection to identify weed growth within the reserve area shall be carried out six monthly. Weeds shall be sprayed or pulled by a suitably qualified operator. Follow up inspections shall be carried out at one month after spraying.

2.6 Swales and Rock Lined Channels

2.6.1 Legal Status of Swales and Rock Lined Channels Maintenance and Responsibilities

The site contains grass swales located within the road berms. These devices are required for treatment and conveyance of stormwater and are owned by Kaipara District Council. However maintenance responsibility shall rest with the adjacent lot owner who is responsible for the ongoing maintenance of these devices.

2.6.2 Details of Proposed Maintenance Methods

2.6.2.1 Litter

Following storms and at no less than monthly intervals, an inspection of the outlet and the surroundings of the swale will be conducted. Any litter or debris should be removed and disposed of. Disposal of litter and debris must comply with all local and regional control programs. Only suitable disposal and recycling sites may be used.

2.6.2.2 Erosion Inspection

Inspections to identify areas of erosion in the swale should be carried out annually by as suitably qualified inspector. A specialist stormwater engineer should be consulted if deemed necessary by the inspector. The efficiency and erosion potential is also affected by rutting caused by traffic driving on the swale. If any wheel marks are evident these should be filled and regressed immediately.

Any areas that are eroded should be reinstated promptly will topsoil and grass.

2.6.2.3 Grass Mowing

The grass in the swales should be mowed regularly and maintained at a length of approximately 150mm.

It is recommended that a regular mowing contract be entered into and that this contract be included as part of this maintenance manual.

2.6.2.4 Weed Control

Planting and Vegetation in wetland swales should be checked annually to insure growth is not blocking channel and area is free of weeds that could affect water flow.

2.6.2.5 Structural Inspection

The outlet structure for the swale consists of catch pit overflow to piped reticulation or rock rip rap discharges to the existing stream channel at the low point in the swales. The catch pit should maintain at least a 50mm proud of the swale to allow minor ponding of storm flows.

For clarity the structural components such as catch pits, man holes and pipes within the swales shall be maintained as public assets of Kaipara District Council.

Repairs to any structural component of the cess pit should be reported to Kaipara District Council

2.7 Right of Way JOAW

Lots shown as 200-204 on the Survey Plan are Jointly Owned Access Ways (JOAW). This mans that they are held in amalgamation with all lots that obtain access over them.

The JOAW have a formation of concrete for the main drive line and a permeable pavement of reinforced shall for passing and parking areas.

Maintenance of these private areas shall be undertaken by all joint owners as specified by the easement schedule within their title.

2.8 Maintenance Frequency

The following is a Summary table of the above legal and operational maintenance requirements.

Item	Frequency	Completed by Whom	
		Within 10 years of issue of Title	Follow 10 years of issue of Title
Lots Soak Hole and Dispersement Trench 14-16, 25-30, 33-36 & 37			
Litter	Monthly and following storm	Lot Owner	Lot Owner
Erosion Inspection	Monthly and following storm	Lot Owner	Lot Owner
Structural Inspection	Monthly and as required	Lot Owner	Lot Owner
North Pond			
Litter	Monthly and following storm	Lot Owner	Lot Owner
Structural Inlet 1 Inlet 2 Outlet	Monthly and following storm	Lot Owner Lot 24 Owner Lot 21 Owner Lot 22 Owner	Lot Owner Lot 24 Owner Lot 21 Owner Lot 22 Owner
Erosion	Annually and as required	Lot Owner	Lot Owner
Plants/Weeding	Annually and as required	Lot Owner	Lot Owner
South Pond			
Litter	Monthly and following storm	Lot Owner	Lot Owner
Erosion control	Annually and following storm	Lot Owner	Lot Owner
Structural Inlet	Monthly and as required	Lot Owner Lot 4 Owner	Lot Owner Lot 4 Owner

Outlet Plants/Weeding	 Annually and as required	Lot 2 Owner Lot Owner	Lot 2 Owner Lot Owner
<u>Walkway</u> Litter Erosion control Weed Control/Plant Replacement	 Monthly and following storm Annually Monthly	 The Jessie Trust The Jessie Trust The Jessie Trust	 Kaipara District Council Kaipara District Council Kaipara District Council
<u>Reserve Planting</u> Litter Replacement Plants Weed Control/Plant Replacements	 6 Monthly Annually 6 Monthly (annual after 10 years)	 The Jessie Trust The Jessie Trust The Jessie Trust	 Kaipara District Council Kaipara District Council Kaipara District Council
<u>Swales & Rock Lined Channels</u> Litter Erosion Grass Mowing Weed Control Structural Inspection Structural Repairs	 6 Monthly Annually 6 Monthly Monthly and as required 	 Adjacent Lot Owner Adjacent Lot Owner Adjacent Lot Owner Adjacent Lot Owner Kaipara District Council Kaipara District Council	 Adjacent Lot Owner Adjacent Lot Owner Adjacent Lot Owner Adjacent Lot Owner Kaipara District Council Kaipara District Council

APPENDIX A

A1 – CONSTRUCTION MAINTENANCE LOG

The Jessie Trust
Moirs Point, Estuary Drive

North Pond

Maintenance and Monitoring Log

Date of Inspection:

Inspection Type:

Item	**Checked Yes** **No**	Satisfactory	Unsatisfactory	Comments/Work undertaken
Litter Erosion Inspection Structural Inspection				

Action to be taken ☐Yes ☐No

Details of action required/inspector's comments:

_____

_____

_____

Inspectors Signature _____ Date: _____

Reinspection Follow up

Reinspection Date: _____

☐ Site reinspection was satisfactory
Next routine inspection is scheduled for Date: _____

☐ Site reinspection was unsatisfactory

Comments:

_____

_____

_____

_____

_____

_____

Inspector's Signature: _____ Date: _____

The Jessie Trust
Moirs Point, Estuary Drive

South Pond

Maintenance and Monitoring Log

Date of Inspection:

Inspection Type:

Item	**Checked Yes** **No**	Satisfactory	Unsatisfactory	Comments/Work undertaken
Litter Erosion Inspection Structural Inspection				

Action to be taken ☐Yes ☐No

Details of action required/inspector's comments:

_____

_____

_____

Inspectors Signature _____ Date: _____

Reinspection Follow up

Reinspection Date: _____

☐ Site reinspection was satisfactory
Next routine inspection is scheduled for Date: _____

☐ Site reinspection was unsatisfactory

Comments:

_____

_____

_____

_____

_____

_____

Inspector's Signature: _____ Date: _____

The Jessie Trust
Moirs Point, Estuary Drive

Walkway

Maintenance and Monitoring Log

Date of Inspection:

Inspection Type:

Item	**Checked Yes** **No**	Satisfactory	Unsatisfactory	Comments/Work undertaken
Litter Erosion Inspection Weed Maintenance				

Action to be taken ☐Yes ☐No

Details of action required/inspector's comments:

_____

_____

_____

Inspectors Signature _____ Date: _____

Reinspection Follow up

Reinspection Date: _____

☐ Site reinspection was satisfactory
Next routine inspection is scheduled for Date: _____

☐ Site reinspection was unsatisfactory

Comments:

_____

_____

_____

_____

_____

_____

Inspector's Signature: _____ Date: _____

The Jessie Trust
Moirs Point, Estuary Drive

Reserve Planting

Maintenance and Monitoring Log

Date of Inspection:

Inspection Type:

Item	**Checked Yes No**	Satisfactory	Unsatisfactory	Comments/Work undertaken
Litter Replacement Plants Weed Control				

Action to be taken ☐Yes ☐No

Details of action required/inspector's comments:

_____

_____

_____

Inspectors Signature _____ Date: _____

Reinspection Follow up

Reinspection Date: _____

☐ Site reinspection was satisfactory
Next routine inspection is scheduled for Date: _____

☐ Site reinspection was unsatisfactory

Comments:

_____

_____

_____

_____

_____

_____

Inspector's Signature: _____ Date: _____

The Jessie Trust
Moirs Point, Estuary Drive

Swales and Rock Lined Channels

Maintenance and Monitoring Log

Date of Inspection:

Inspection Type:

Item	**Checked Yes** **No**	Satisfactory	Unsatisfactory	Comments/Work undertaken
Litter Erosion Inspection Weed Control Structural Inspection				

Action to be taken ☐Yes ☐No

Details of action required/inspector's comments:

_____

_____

_____

Inspectors Signature _____ Date: _____

Reinspection Follow up

Reinspection Date: _____

☐ Site reinspection was satisfactory
Next routine inspection is scheduled for Date: _____

☐ Site reinspection was unsatisfactory

Comments:

_____

_____

_____

_____

_____

_____

Inspector's Signature: _____ Date: _____

APPENDIX B

B1 – LEGAL TITLE PLANS

B2 – AS BUILT

B1 – LEGAL TITLE PLAN

Form 7
Code compliance certificate

Section 95, Building Act 2004

The building

Street address of building:	30 Jordan Street, Mangawhai Heads, Mangawhai
Legal description of land where building is located:	LOT 22 DP 487158
Building name:	Main building
Location of building within site/block number:	30 Jordan Street Mangawhai Heads Mangawhai
Level/unit number:	0
Current, lawfully established, use:	2.0 Housing: 2.0.2 Detached Dwelling
Year first constructed:	2025

The owner

Name of owner:	30 Jordan Street Limited
Contact person:	Matthew Munro
Mailing address:	74 Wake Road, Coatesville
Street address/registered office:	74 Wake Road, Coatesville
Phone number:	Landline: N/A Mobile: 021973041
Daytime:	Landline: N/A Mobile: 021973041
After hours:	Landline: N/A Mobile: 021973041
Facsimile number:	No information provided
Email address:	matt.munro@steadfastconstruction.co.nz
Website:	No information provided

First point of contact for communications with the council/building consent authority:
Jenna Munro; Mailing Address: 74 Wake Road
Coatesville 0793; Mobile: 0211928333; Email: jenna@formspace.co.nz

Building work

Building consent number:	BC250084
Description:	New 2 Storey 3 Bedroom Dwelling with Office, Kent Forbes Woodburner with Internal Double Garage. Council WW Amendment 1: E1 Roof Calculations, remove swimming pool, processing midfloor deck and deck to house junction detail
Issued by:	Kaipara District Council

Code compliance

The building consent authority named below is satisfied, on reasonable grounds, that -
the building work complies with the building consent.



Signature: John Dowden
Position: Building Services Officer
On behalf of: Kaipara District Council
Date: 17 December 2025

KDC - Approved Building Consent Document - BC250084 PL Issued - Pg 2 of 60 - 14/04/2025 - khewson

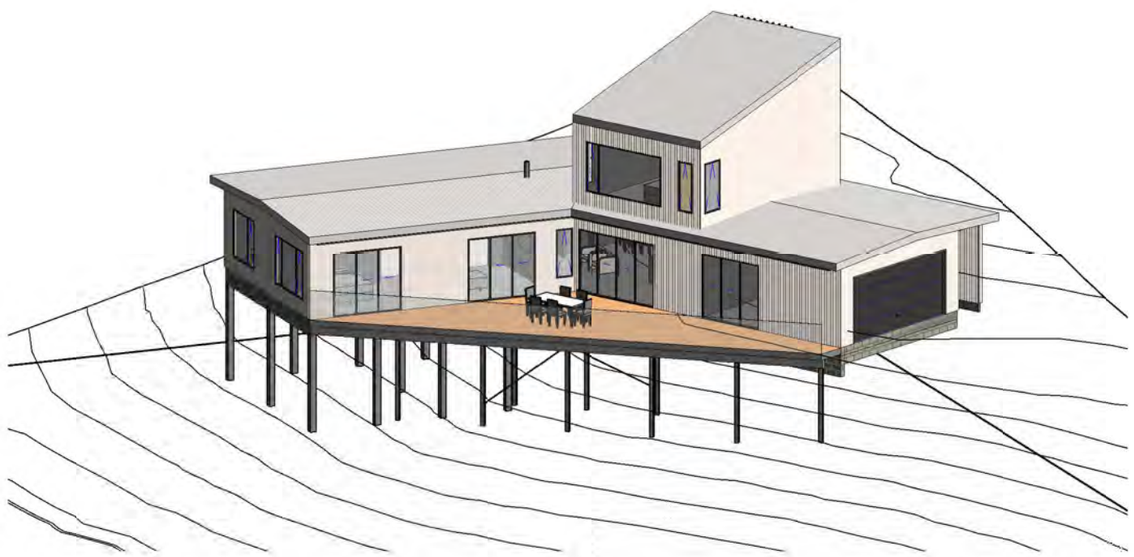
DRAWING LIST

Sheet Number	Sheet Name	Current Revision	Current Revision Date
BC-00	COVER SHEET		
BC-01	PROPOSED SITE PLAN	F	08.04.2025
BC-02	FOUNDATION PLAN	F	08.04.2025
BC-03	GROUND LEVEL FLOOR PLAN	F	08.04.2025
BC-04	UPPER LEVEL FLOOR PLAN	F	08.04.2025
BC-05	NORTH AND EAST ELEVATIONS	F	08.04.2025
BC-06	SOUTH AND WEST ELEVATIONS	F	08.04.2025
BC-07	CROSS SECTIONS	G	10.04.2025
BC-08	LONG SECTIONS	G	10.04.2025
BC-09	MID-FLOOR FRAMING PLAN	G	10.04.2025
BC-10	ROOF PLAN	D	31.03.2025
BC-11	ROOF FRAMING PLAN	F	08.04.2025
BC-12	TRUSS PLAN		
BC-13	PLUMBING AND DRAINAGE PLAN	D	31.03.2025
BC-14	OPENING SCHEDULE	E	03.04.2025
BC-15	ENGINEER'S DETAILS	G	10.04.2025
BC-16	ENGINEER'S DETAILS	G	10.04.2025
BC-17	ENGINEER'S DETAILS	G	10.04.2025
BC-18	ENGINEER'S DETAILS	G	10.04.2025
BC-19	ENGINEER'S DETAILS	G	10.04.2025
BC-20	ENGINEER'S DETAILS	G	10.04.2025
BC-21	ABODO DETAILS		
BC-22	ABODO DETAILS		
BC-23	ABODO DETAILS		
BC-24	ABODO DETAILS		
BC-25	ABODO DETAILS		
BC-26	ABODO DETAILS		
BC-27	ABODO DETAILS		
BC-28	ABODO DETAILS		
BC-29	ABODO DETAILS		
BC-30	ABODO DETAILS		
BC-31	ABODO DETAILS		
BC-32	VEEDEK DETAILS	G	10.04.2025
BC-33	VEEDEK DETAILS		
BC-34	DETAILS		
BC-35	WET AREA DETAILS		
BC-36	TIMBER SCREEN DETAILS		
BC-37	ENGINEER'S DETAILS	C	24.03.2025
BC-38	ENGINEER'S DETAILS	C	24.03.2025

PROPOSED NEW RESIDENCE

FOR STEADFAST CONSTRUCTION AT 30 JORDAN STREET, MANGAWHAI HEADS

LOT 22, DP 487158



IMPRESSION ONLY. DETAILS MAY VARY

Notes:

steadfast
pure Design Build

www.steadfastconstruction.co.nz
m: 0211928333
e: jenna@steadfastconstruction.co.nz
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Project:
MANGAWHAI RESIDENCE

Address:
30 JORDAN STREET
MANGAWHAI HEADS

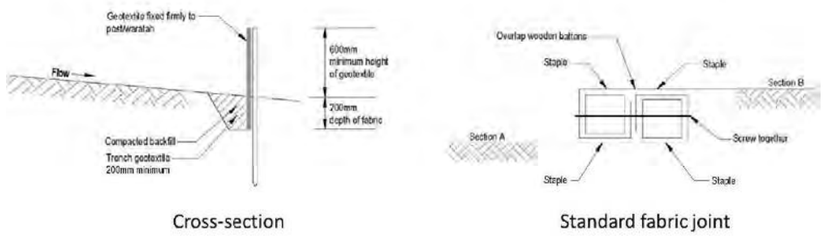
Drawn:	Checked:	Date:
JM	JM	03/25

Scale:	Project No:
NTD @ A3	2410

BUILDING CONSENT

Sheet Number: BC-00
Revision:

KDC - Approved Building Consent Document - BC250084 Plissued - Pg 3 of 30 - 14/04/2025 - kthewson



Cross-section

Standard fabric joint

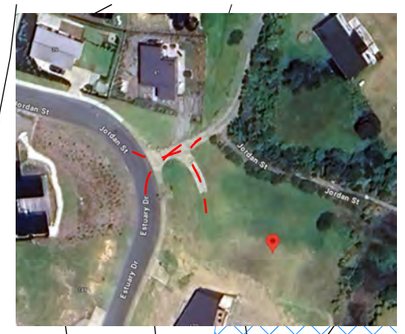
SILT FENCE

NTS



LOCATION PLAN

1:20000



VEHICLE ACCESS

PROPOSED SITE PLAN

1:200

Notes:

LEGAL DESCRIPTION

LOT 22 DP 487158
AREA: 1448m²

WIND ZONE: HIGH
EXPOSURE ZONE: D
ZONE: RESIDENTIAL ZONE
OVERLAY: HARBOUR

MAX IMPERVIOUS AREA:
40% OF 1448m² = 579.20m²

RESIDENCE	176.25m²
DRIVEWAY	37.75m²
TOTAL	214.00m² COMPLIES

BUILDING COVERAGE:
35% OF 1448m² = 506.80m²

RESIDENCE 176.25m² COMPLIES

EARTHWORKS

VOLUME

PERMISSIBLE	<100m³
HOUSE	57.6m³
TANK	28.8m³
TOTAL	86.40m³ COMPLIES

AREA

HOUSE	140.19m²
TANK	15.21m²
TOTAL	155.40m² COMPLIES

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MANGAWHAI HEADS

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JM	JM	03/25
Scale: NTD @ A3	Project No: 2410	

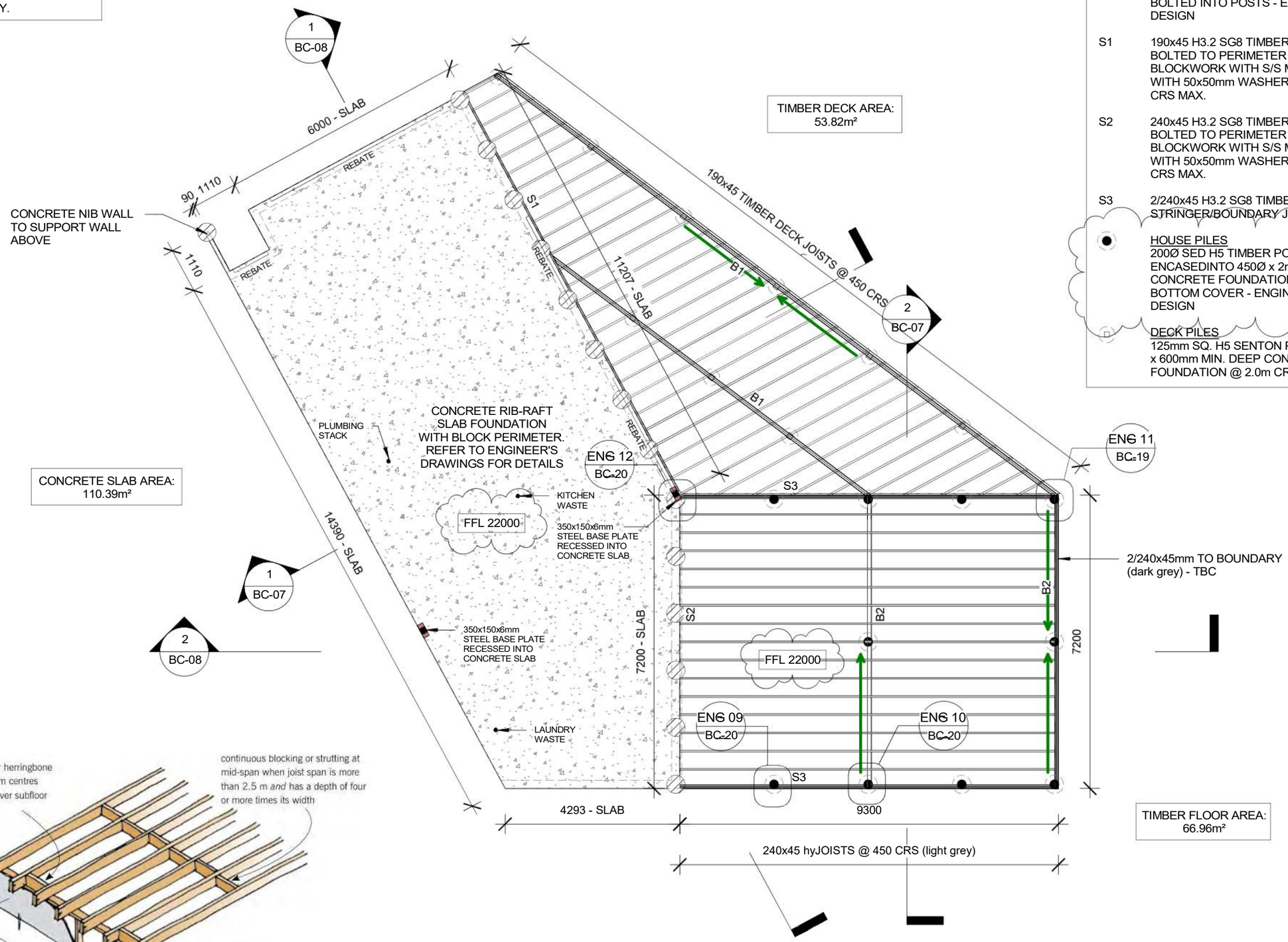
BUILDING CONSENT

Sheet Number:	Revision:
BC-01	F

KDC - Approved Building Consent Document - BC250084 PL Issued - Pg 4 of 60 - 14/04/2025 - khewson

CONCRETE STRENGTH

CONCRETE & GROUT STRENGTH TO BE **25MPa** IN ACCORDANCE WITH THE REQUIREMENTS OF NZS 3604:2011 CLAUSE 4.5 FOR DURABILITY.



FOUNDATION PLAN

1:100

SUBFLOOR PLAN KEY

B1	2/290x45 H3.2 SG8 TIMBER BEARER
B2	315x88mm PL12 PROLAM BEAM. CONNECTION: NOTCHED AND BOLTED INTO POSTS - ENGINEERED DESIGN
S1	190x45 H3.2 SG8 TIMBER STRINGER. BOLTED TO PERIMETER BLOCKWORK WITH S/S M12 BOLTS WITH 50x50mm WASHERS @ 900mm CRS MAX.
S2	240x45 H3.2 SG8 TIMBER STRINGER. BOLTED TO PERIMETER BLOCKWORK WITH S/S M12 BOLTS WITH 50x50mm WASHERS @ 900mm CRS MAX.
S3	2/240x45 H3.2 SG8 TIMBER STRINGER/BOUNDARY JOIST

HOUSE PILES
200Ø SED H5 TIMBER POLE ENCASEDINTO 450Ø x 2m MIN. DEEP CONCRETE FOUNDATION, 100mm BOTTOM COVER - ENGINEERED DESIGN

DECK PILES
125mm SQ. H5 SENTON PILE IN 450Ø x 600mm MIN. DEEP CONCRETE FOUNDATION @ 2.0m CRS MAX.

Notes:

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TIMBER GRADE
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PRODUCTS
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SEA SPRAY ZONE
ENSURE TO INSTALL, FINISH AND MAINTAIN ALL PRODUCTS TO MANUFACTURERS SPECIFICATIONS AND COMPLY WITH SEA SPRAY ZONE. ALL SUB-FLOOR FIXINGS TO BE TYPE 304 STAINLESS STEEL.

BLOCKING LOCATION

N.T.S

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BUILDING CONSENT

Sheet Number:	Revision:
BC-02	F

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NAILING SCHEDULE

BOTTOM PLATE (CONCRETE)
OVER DPC, FIXED WITH GALV. M12 BOLTS WITH 50mm SQ. WASHERS. FIXINGS @ 900mm CRS. MAX. WITHIN 150mm FROM CORNERS.

TOP PLATE
2/90 x 3.15 END NAILS + TWO WIRE DOGS

STAIR WELL NOTE: FLOOR TO FLOOR : 3000mm
STAIRS AND HANDRAIL TO BE CONSTRUCTED TO NZBC.

CLOSED STAIR RISER = 187.5mm (16 TOTAL)
STAIR TREAD = 270mm
50mm DIA TIMBER HANDRAIL ON STAND-OFF BRACKETS TO STUDS.

FLOOR COVERINGS TO COMPLY WITH NZBC D1

INSULATION

MID-FLOOR / SOFFIT	R2.6
(PINK BATTS - SNUGFLOOR)	
EXTERNAL WALLS - 90mm	R2.8
(PINK BATTS - ULTRA)	
TRUSS CEILING	R7.0
(PINK BATTS - SUPERBATTS)	
GLAZING	R0.37
(LOW E, ARGON)	

NZBC:G4 VENTILATION NOTE

NEW MECHANICAL VENTILATION (MV) TO ENSUITE, BATHROOM AND KITCHEN.
ENSURE EXTRACT FANS HAVE A FLOWRATE NOT LESS THAN:
a) 25L/s FOR SHOWERS AND BATHS, AND
b) 50 L/s FOR COOKTOPS

WALL STUDS

WALL HEIGHT (max.)	STUD SIZE	SPACING
2400	90 x 45 SG8	600 CRS
2700	90 x 45 SG8	400 CRS
3600	90 x 90 SG8	300 CRS
4200	90 x 90 SG8	300 CRS

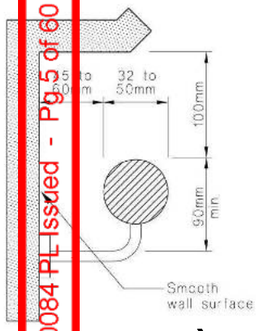
FLOOR PLAN KEY

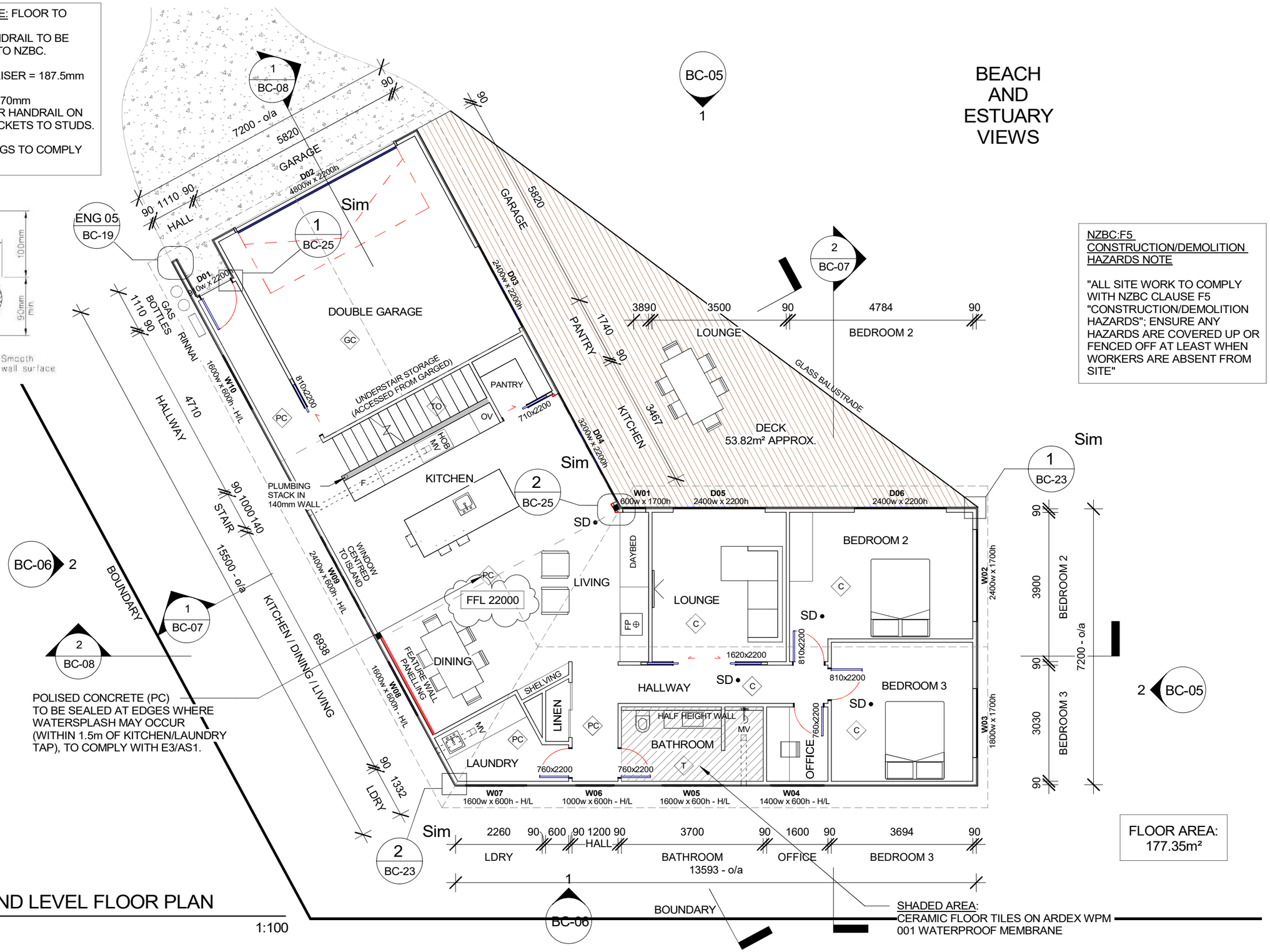
NEW 90x45 H1.2 SG8 TIMBER FRAMING @ 600mm CRS. STUD SPACING. NOGS @ 800mm CRS. LINED WITH 10mm GIB BOARD. PLASTER & PAINT FINISH.

N

BOUNDARY

BEACH AND ESTUARY VIEWS





NZBC:F5 CONSTRUCTION/DEMOLITION HAZARDS NOTE

"ALL SITE WORK TO COMPLY WITH NZBC CLAUSE F5 "CONSTRUCTION/DEMOLITION HAZARDS"; ENSURE ANY HAZARDS ARE COVERED UP OR FENCED OFF AT LEAST WHEN WORKERS ARE ABSENT FROM SITE"

SHADED AREA:
CERAMIC FLOOR TILES ON ARDEX WPM 001 WATERPROOF MEMBRANE

FLOOR AREA: 177.35m²

GROUND LEVEL FLOOR PLAN

1:100

Notes:

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SMOKE DETECTORS
NEW INTERCONNECTED SMOKE DETECTOR POSITIONED TO SATISFY NZBC REQUIREMENTS IF NOT ALREADY EXISTING *
THESE ARE ONLY A GUIDE. ADDITIONAL SMOKE DETECTORS MAY BE INSTALLED.

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BUILDING CONSENT

Sheet Number:	Revision:
BC-03	F

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NAILING SCHEDULE

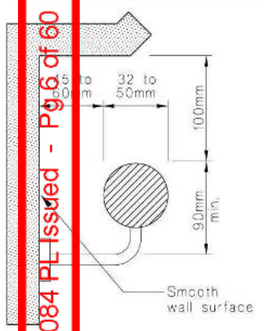
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50mm DIA TIMBER HANDRAIL ON STAND-OFF BRACKETS TO STUDS.

FLOOR COVERINGS TO COMPLY WITH NZBC D1



INSULATION

MID-FLOOR / SOFFIT	R2.6
(PINK BATTS - SNUGFLOOR)	
EXTERNAL WALLS - 90mm	R2.8
(PINK BATTS - ULTRA)	
TRUSS CEILING	R7.0
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GLAZING	R0.37
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NZBC:G4 VENTILATION NOTE

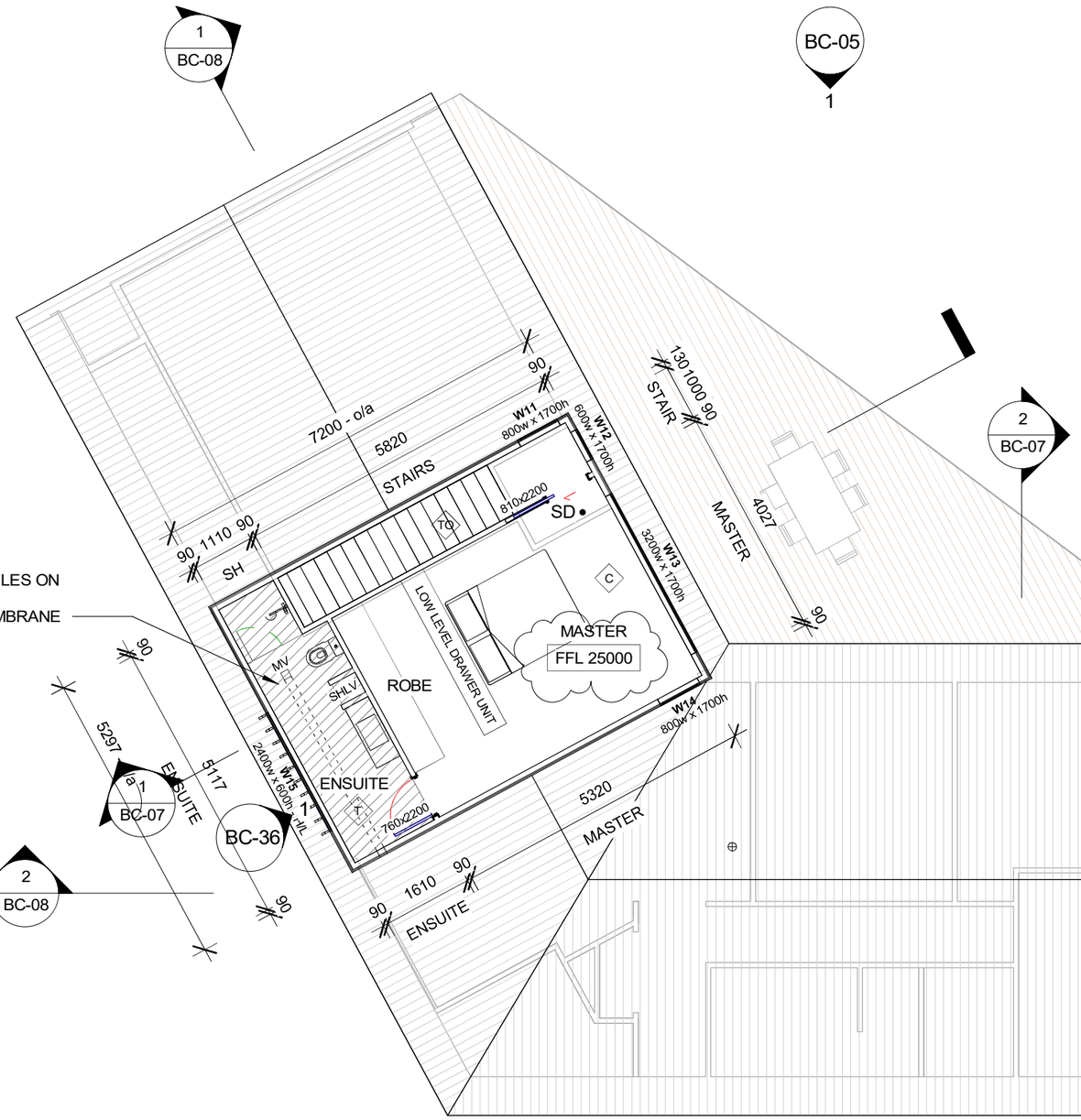
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WALL HEIGHT (max.)	STUD SIZE	SPACING
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FLOOR PLAN KEY

NEW 90x45 H1.2 SG8 TIMBER FRAMING @ 600mm CRS. STUD SPACING. NOGS @ 800mm CRS. LINED WITH 10mm GIB BOARD. PLASTER & PAINT FINISH.



NZBC:F5 CONSTRUCTION/DEMOLITION HAZARDS NOTE

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FLOOR AREA:
33.91m²

UPPER LEVEL FLOOR PLAN

1:100

N

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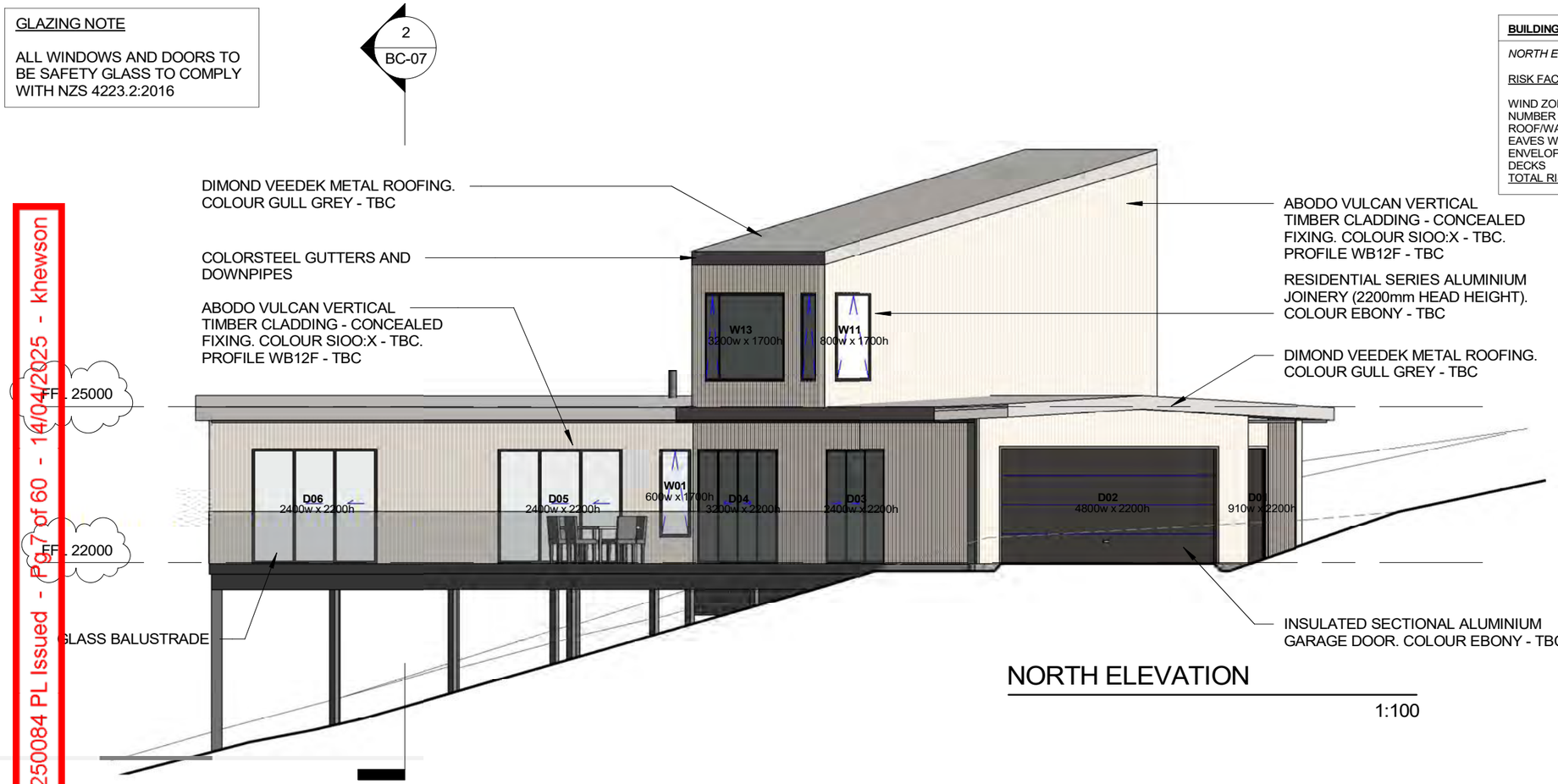
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BUILDING CONSENT		
Sheet Number: BC-04	Revision: F	

GLAZING NOTE

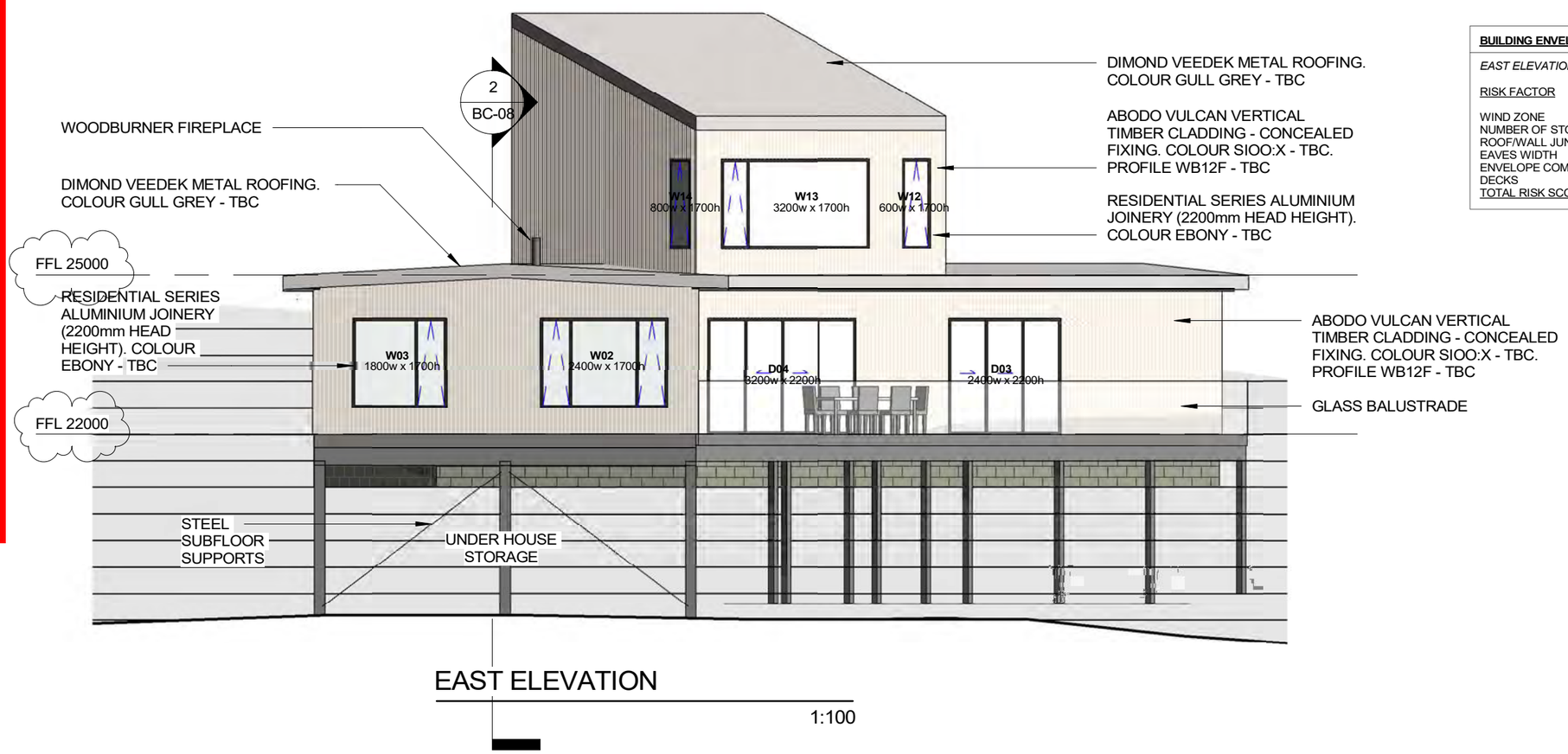
ALL WINDOWS AND DOORS TO BE SAFETY GLASS TO COMPLY WITH NZS 4223.2:2016

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NORTH ELEVATION

1:100



EAST ELEVATION

1:100

BUILDING ENVELOPE RISK MATRIX

NORTH ELEVATION

RISK FACTOR	RISK SEVERITY	RISK SCORE
WIND ZONE	HIGH RISK	1
NUMBER OF STOREYS	HIGH RISK	2
ROOF/WALL JUNCTIONS	MEDIUM RISK	1
EAVES WIDTH	VERY HIGH RISK	5
ENVELOPE COMPLEXITY	MEDIUM RISK	1
DECKS	LOW RISK	0
TOTAL RISK SCORE		10

BUILDING ENVELOPE RISK MATRIX

EAST ELEVATION

RISK FACTOR	RISK SEVERITY	RISK SCORE
WIND ZONE	HIGH RISK	1
NUMBER OF STOREYS	HIGH RISK	2
ROOF/WALL JUNCTIONS	MEDIUM RISK	1
EAVES WIDTH	VERY HIGH RISK	5
ENVELOPE COMPLEXITY	MEDIUM RISK	1
DECKS	LOW RISK	0
TOTAL RISK SCORE		10

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Scale:	Project No:
NTD @ A3	2410

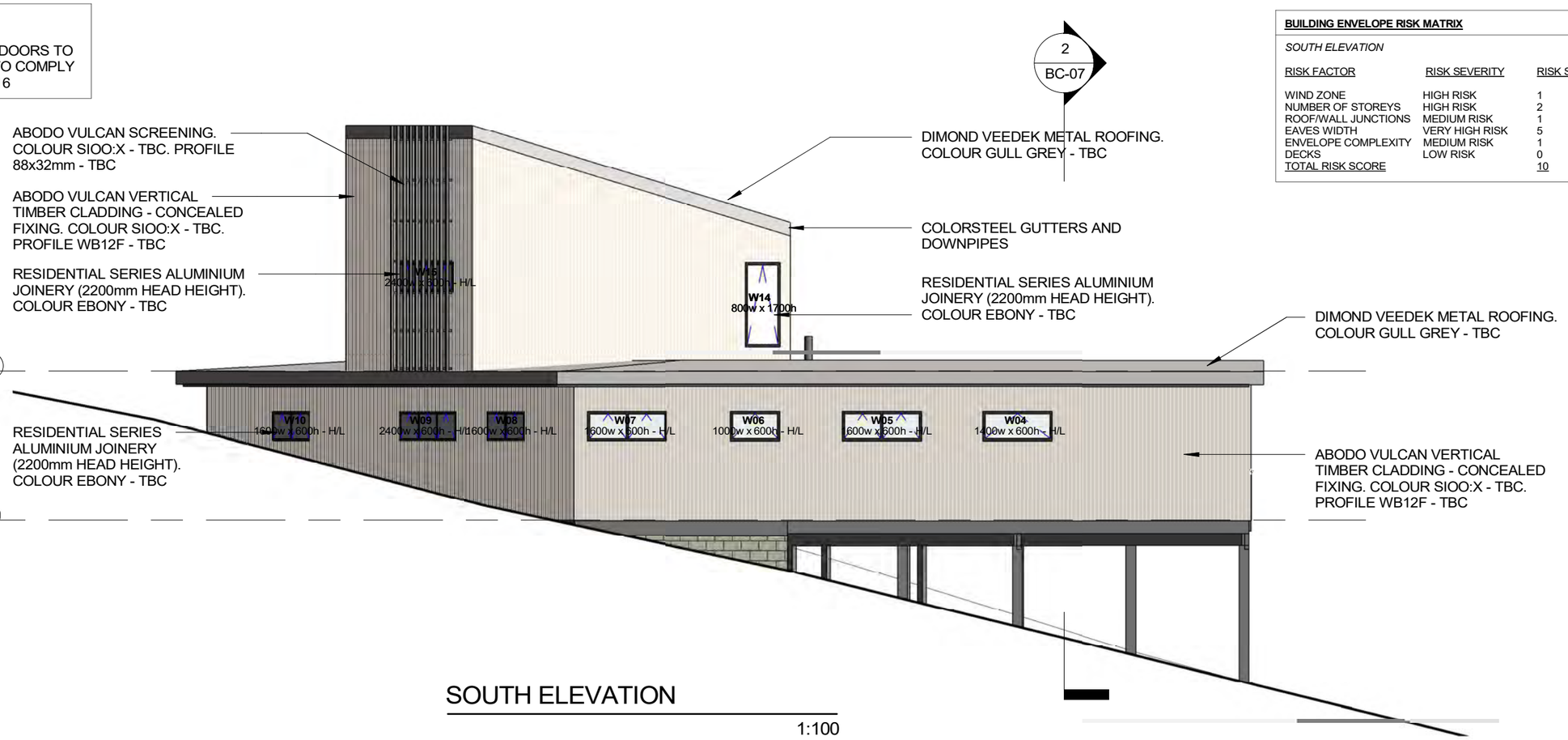
BUILDING CONSENT

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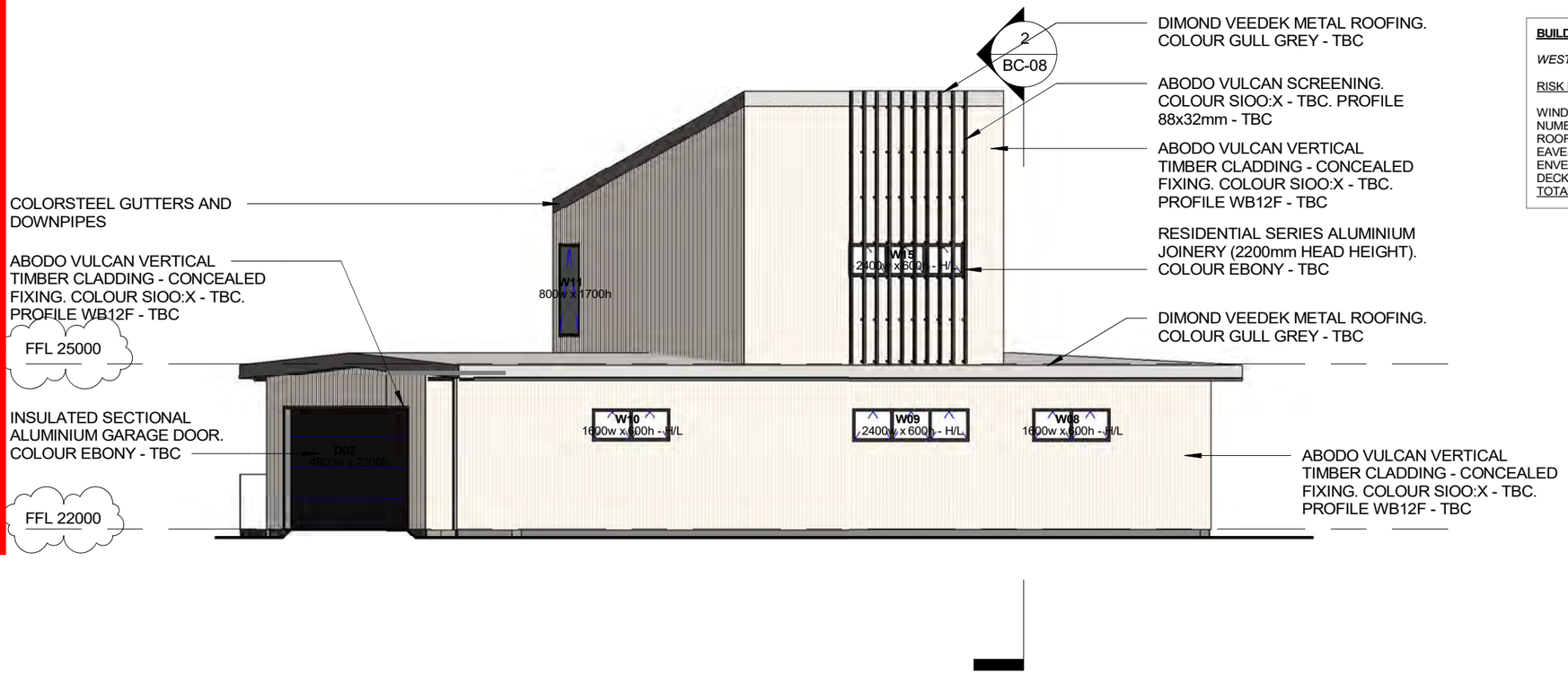
GLAZING NOTE

ALL WINDOWS AND DOORS TO BE SAFETY GLASS TO COMPLY WITH NZS 4223.2:2016



SOUTH ELEVATION

1:100



WEST ELEVATION

1:100

BUILDING ENVELOPE RISK MATRIX

SOUTH ELEVATION

RISK FACTOR	RISK SEVERITY	RISK SCORE
WIND ZONE	HIGH RISK	1
NUMBER OF STOREYS	HIGH RISK	2
ROOF/WALL JUNCTIONS	MEDIUM RISK	1
EAVES WIDTH	VERY HIGH RISK	5
ENVELOPE COMPLEXITY	MEDIUM RISK	1
DECKS	LOW RISK	0
TOTAL RISK SCORE		10

BUILDING ENVELOPE RISK MATRIX

WEST ELEVATION

RISK FACTOR	RISK SEVERITY	RISK SCORE
WIND ZONE	HIGH RISK	1
NUMBER OF STOREYS	HIGH RISK	2
ROOF/WALL JUNCTIONS	MEDIUM RISK	1
EAVES WIDTH	VERY HIGH RISK	5
ENVELOPE COMPLEXITY	MEDIUM RISK	1
DECKS	LOW RISK	0
TOTAL RISK SCORE		10

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Scale: NTD @ A3	Project No: 2410	
BUILDING CONSENT		
Sheet Number: BC-06	Revision: F	

NOTES

FLOOR

F1 CONCRETE FLOOR: 300mm CONCRETE RAFT SLAB DESIGNED BY ENGINEER. REFER TO ENGINEER'S DRAWINGS FOR DETAILS.

F2 TIMBER FLOOR: 20mm TIMBER SHEET FLOORING, ON TIMBER SUB-FLOOR. REFER TO FLOOR FRAMING PLAN FOR LAYOUT AND SIZES. 20mm H3.2 PLY SHEET FLOORING TO SHOWER AREAS.

WALLS

W1 ABODO VULCAN VERTICAL TIMBER WEATHERBOARD CLADDING. CONCEALED FIXINGS. 20mm MIN. CAVITY WITH H3.1 TIMBER BATTENS. THERMAKRAFT WATERGATE PLUS BUILDING WRAP TO SG8 H1.2 TIMBER FRAMED WALLS. NOG TO SUIT HORIZONTALLY FIXED 10mm GIB BOARD INTERNAL LINING.

ROOF

R1 DIMOND VEEDEK LONGRUN ROOFING ON 90 x 45 BATTENS @ 900 CRS. MAX. FIXED WITH 1x 14g SELF-DRILLING SCREW, 100mm LONG OVER THERMAKRAFT COVERTEK 407 ROOF UNDERLAY ON TIMBER TRUSSES @ 900 CRS MAX. DESIGNED BY TRUSS ENGINEER. ENSURE 25mm AIR GAP BETWEEN INSULATION AND BUILDING PAPER.

R2 SELECTED COLORSTEEL BOX GUTTER 125 ON EXTERNAL PROFILE WITH COLORSTEEL DOWNPIPES.

JOINERY

J1 SELECTED POWDER-COATED ALUMINIUM JOINERY - DOUBLE GLAZED.

CEILING

C1 13mm GIB BOARD TO 310 GIB RONDO METAL CEILING BATTENS @ 450 CRS MAX.

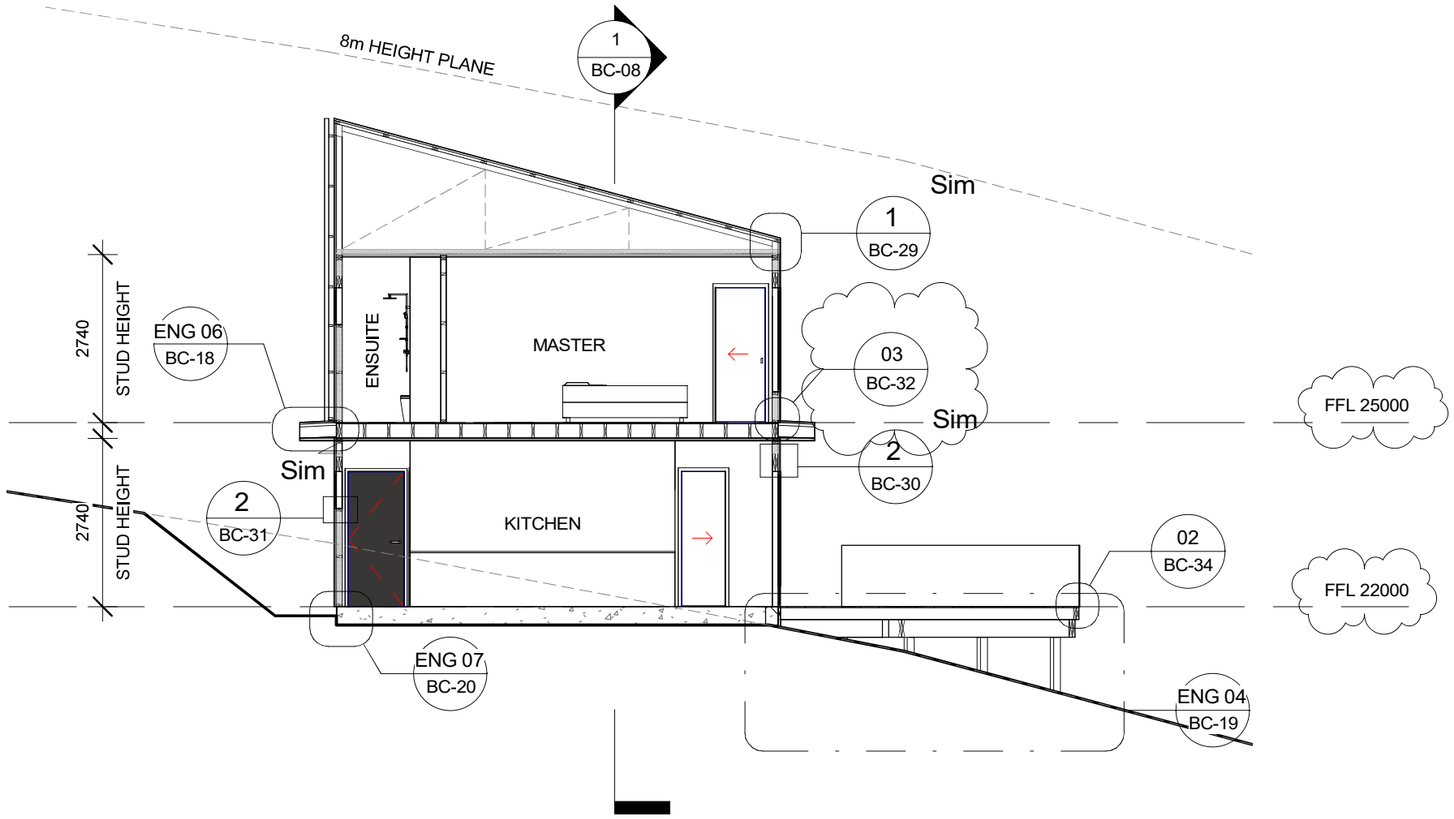
SOFFIT LINING

S1 6mm VILLABOARD SOFFIT LINING.

INSULATION

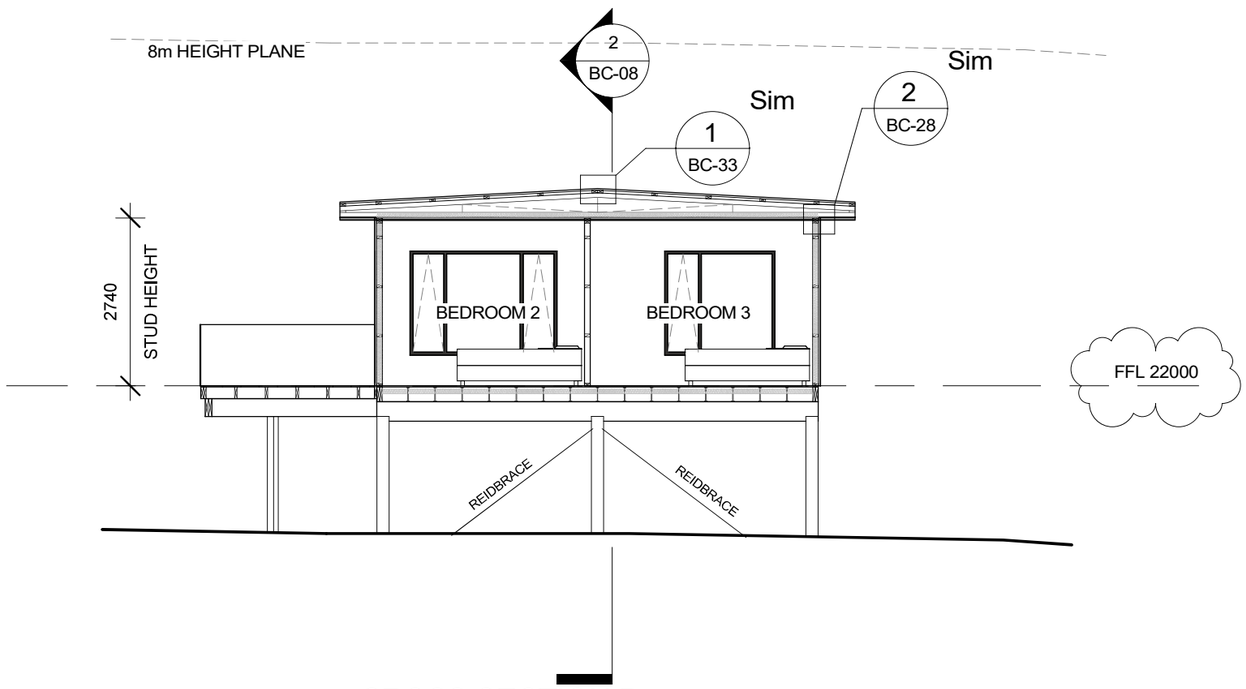
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TRUSS CEILING	R7.0
(PINK BATTS - SUPERBATTS)	
GLAZING	R0.37
(LOW E, ARGON)	

KDC - Approved Building Consent Drawing - BC-2500021
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CROSS SECTION A

1:100



CROSS SECTION B

1:100

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BUILDING CONSENT

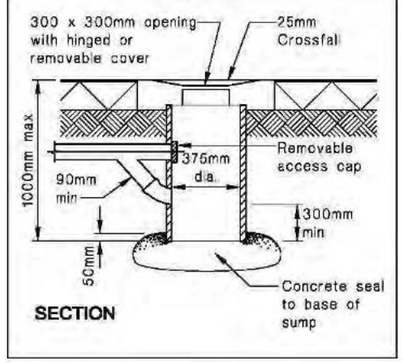
Sheet Number:	Revision:
BC-07	G

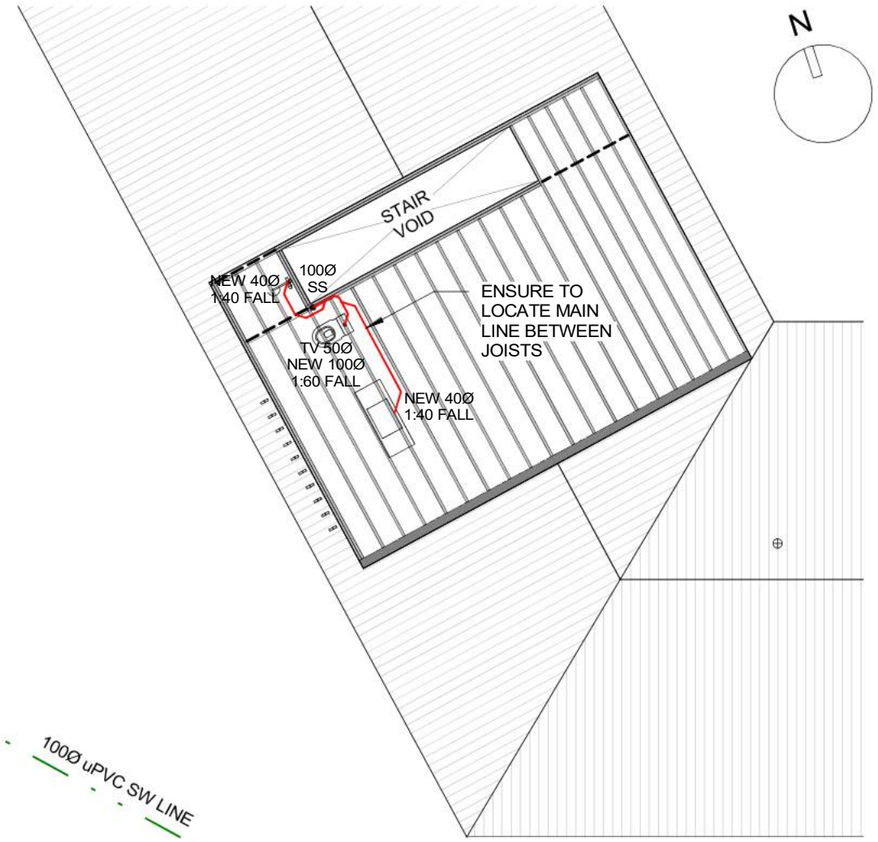
NOTE:
OVERFLOW RELIEF GULLY (ORG) HEIGHT ABOVE SURROUNDING GROUND.
THE MINIMUM HEIGHT BETWEEN THE TOP OF THE OVERFLOW GULLY RISER, OR THE INVERT OF THE OVERFLOW PIPE, AND THE SURROUNDING GROUND SURFACE LEVEL SHALL BE **75mm**. *AS PER AS/NZS 3500.2 SECTION 4.6.6.7.*

Table 2: Minimum Gradients
Paragraph 3.4.1

Drain internal diameter	Minimum gradient
86 mm	1 in 90
100 mm	1 in 120
150 mm	1 in 200
225 mm	1 in 350

Figure 8: Type-one Surface Water Sump
Paragraph 3.6.2





UPPER LEVEL PLAN

PLUMBING & DRAINAGE 1:100

GROUND LEVEL PLAN

PLUMBING & DRAINAGE 1:100

Notes:

BUILDING CONSENT
THESE DRAWINGS HAVE BEEN PRODUCED FOR BUILDING CONSENT PURPOSES ONLY.

TIMBER GRADE
ALL STRUCTURAL TIMBER TO BE A MINIMUM OF SG8 OR HIGHER, UNLESS STATED OTHERWISE.

PRODUCTS
ENSURE TO INSTALL, FINISH AND MAINTAIN ALL PRODUCTS TO MANUFACTURERS SPECIFICATIONS. REFER TO TECHNICAL SPECIFICATIONS INCLUDED IN THIS BUILDING CONSENT. IF IN DOUBT CONSULT MANUFACTURERS DIRECTLY.

JOINERY NOTE
ALL OPENING SIZES TO BE CONFIRMED ONSITE PRIOR TO JOINERY FABRICATION. ALL JOINERY TO BE INSTALLED TO NZBC:E2 FOR HIGH WIND ZONE

SEA SPRAY ZONE
ENSURE TO INSTALL, FINISH AND MAINTAIN ALL PRODUCTS TO MANUFACTURERS SPECIFICATIONS AND COMPLY WITH SEA SPRAY ZONE. ALL SUB-FLOOR FIXINGS TO BE TYPE 304 STAINLESS STEEL.

steadfast
Nurture. Design. Build.
www.steadfastconstruction.co.nz
m: 0211928333
e: jenna@steadfastconstruction.co.nz
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Project:
MANGAWHAI RESIDENCE

Address:
30 JORDAN STREET
MANGAWHAI HEADS

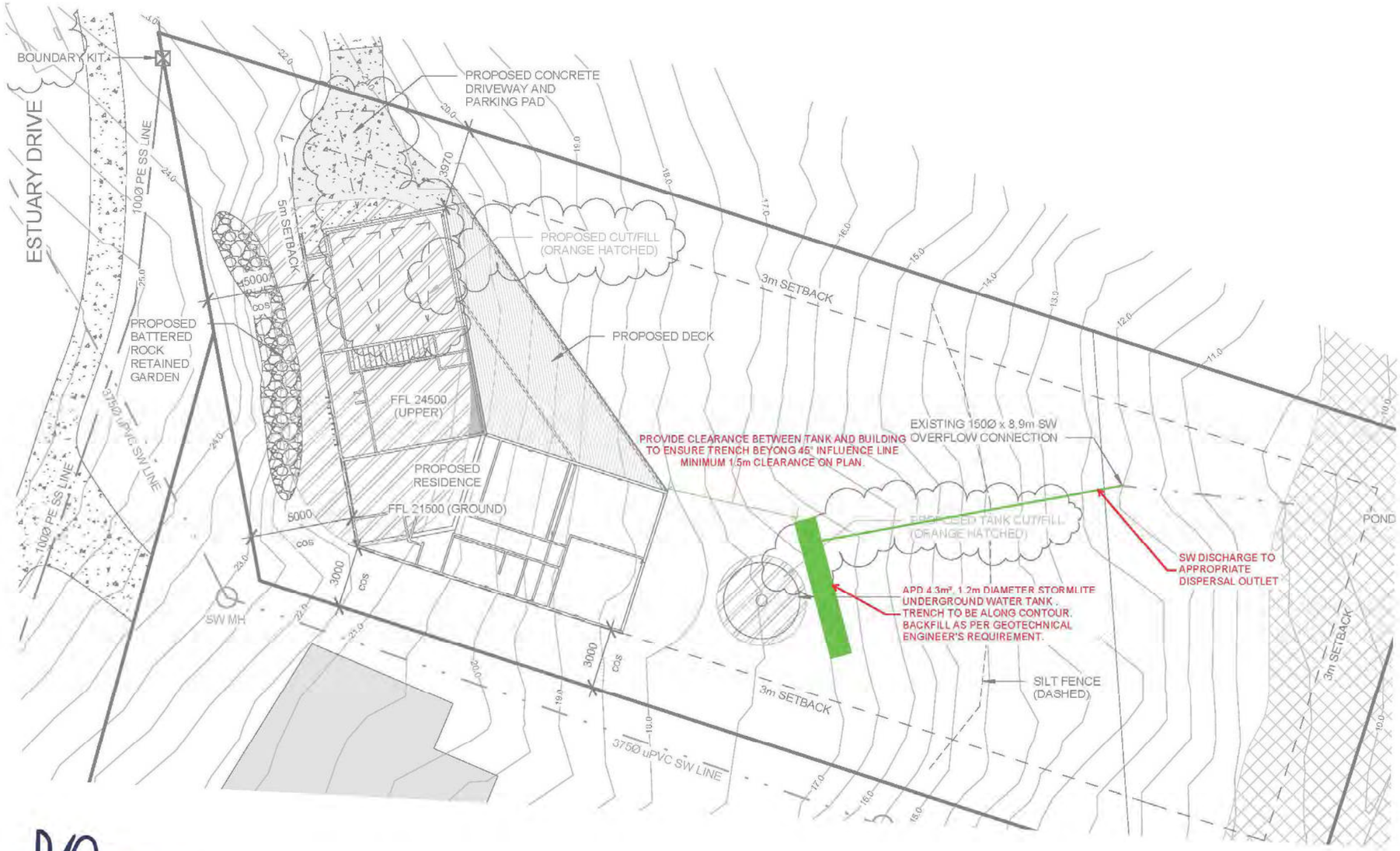
Drawn:	Checked:	Date:
Author	JM	03/25
Scale: NTD @ A3	Project No: 2410	

BUILDING CONSENT

Sheet Number: BC-13 Revision: D

KDC - Approved Building Consent Document - BC250084 PL Issued - Pg 15 of 60 - 14/04/2025 - khewson

KDC - Approved Building Consent Document - BC250084 PL Issued - Pg 39 of 60 - 14/04/2025 - khewson



DEANE CONSULTANCY LTD
E: peter@deanecl.nz

Revision	Description	Date
1	RFI Response	13.03.25

Project: PROPOSED STORMWATER TANK 30 JORDAN STREET

Drawing: PLAN

Client: MATT MUNRO

Issued:	BUILDING CONSENT		
Designed:	DH	Unit:	mm
Checked:	PD	Sheet No:	S100
Date:	13 / 03 / 2025		
Size:	A3	Scale:	NOT-TO-SCALE

ENGINEER'S DETAILS

BY ENGINEER N.T.S

Notes:

BUILDING CONSENT
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TIMBER GRADE
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JOINERY NOTE
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ENSURE TO INSTALL, FINISH AND MAINTAIN ALL PRODUCTS TO MANUFACTURERS SPECIFICATIONS AND COMPLY WITH SEA SPRAY ZONE. ALL SUB-FLOOR FIXINGS TO BE TYPE 304 STAINLESS STEEL.

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m: 0211928333
e: jenna@steadfastconstruction.co.nz
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Project:
MANGAWHAI RESIDENCE

Address:
30 JORDAN STREET
MANGAWHAI HEADS

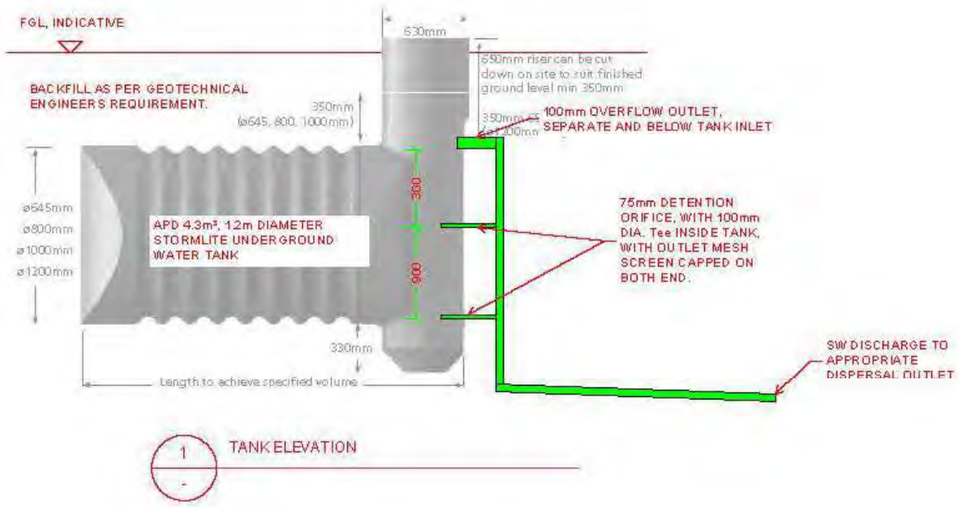
Drawn:	Checked:	Date:
JM	JM	03/25

Scale:	Project No:
NTD @ A3	2410

BUILDING CONSENT

Sheet Number:	Revision:
BC-37	C

KDC – Approved Building Consent Document – BC250084 PL Issued – Pg 40 of 60 – 14/04/2025 – khewson



Notes:

BUILDING CONSENT
THESE DRAWINGS HAVE BEEN PRODUCED FOR BUILDING CONSENT PURPOSES ONLY.

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steadfast
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m: 0211928333
e: jenna@steadfastconstruction.co.nz
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Project:
MANGAWHAI RESIDENCE

Address:
30 JORDAN STREET
MANGAWHAI HEADS

Drawn:	Checked:	Date:
JM	JM	03/25

Scale:	Project No:
NTD @ A3	2410

BUILDING CONSENT

Sheet Number:	Revision:
BC-38	C

DEANE CONSULTANCY LTD
E: peter@deanecl.nz

Revision	Description	Date
1	RFI Response	13.03.25

Project: PROPOSED STORMWATER TANK 30 JORDAN STREET

Drawing: DETAILS

Client: MATT MUNRO

Issued:	BUILDING CONSENT		
Designed:	DH	Unit:	mm
Checked:	PD	Sheet No:	S101
Date:	13 / 03 / 2025		
Size:	A3	Scale:	NOT-TO-SCALE

ENGINEER'S DETAILS

BY ENGINEER N.T.S

CONCRETE STRENGTH

CONCRETE & GROUT STRENGTH TO BE 25MPa IN ACCORDANCE WITH THE REQUIREMENTS OF NZS 3604 2011 CLAUSE 4.3 FOR DURABILITY.

SUBFLOOR PLAN KEY

B1 2/290x45 H3.2 SG8 TIMBER BEARER

B2 315x65mm PLY2 PROLAM BEAM CONNECTION. NOTCHED AND BOLTED INTO POSTS - ENGINEERED DESIGN

B1 190x45 (H3.2 SG8 TIMBER STRINGER. BOLTED TO PERIMETER BLOCKWORK WITH 2/S M12 BOLTS. WITH 50x50mm WASHERS @ 900mm CRS MAX.

B2 240x45 H3.2 SG8 TIMBER STRINGER. BOLTED TO PERIMETER BLOCKWORK WITH 2/S M12 BOLTS. WITH 50x50mm WASHERS @ 900mm CRS MAX.

S3 2/240x45 H3.2 SG8 TIMBER STRINGER/BOUNDARY JOIST

HOUSE PILES
200Ø SED H5 TIMBER POLE ENCASED INTO 450Ø x 2m MIN. DEEP CONCRETE FOUNDATION. 150mm BOTTOM COVER - ENGINEERED DESIGN

DECK PILES
125mm SQ. H5 SENTON PILE IN 450Ø x 600mm MIN. DEEP CONCRETE FOUNDATION @ 2.0m CRS MAX.

Notes

BUILDING CONSENT
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PRODUCTS
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SEA SPRAY ZONE
ENSURE TO INSTALL, FINISH AND MAINTAIN ALL PRODUCTS TO MANUFACTURERS SPECIFICATIONS AND COMPLY WITH SEA SPRAY ZONE. ALL SUB-FLOOR FIXINGS TO BE TYPE 304 STAINLESS STEEL

TIMBER DECK AREA
51.92m²

CONCRETE SLAB AREA
110.39m²

TIMBER FLOOR AREA
66.96m²

CONCRETE NIB WALL TO SUPPORT WALL ABOVE

CONCRETE RIBRAFT SLAB FOUNDATION WITH BLOCK PERIMETER REFER TO ENGINEER'S DRAWINGS FOR DETAILS

FFL 21400

2/240x45mm TO BOUNDARY (dark grey) - TBC

KAIPARA DISTRICT COUNCIL
BC # 250084
MINOR VARIATION APPROVED
Date: 18.6.26
Inspector: G Bellan



BLOCKING LOCATION

N.T.S

FOUNDATION PLAN

1:100

steadfast

www.steadfastconstruction.co.nz
m: 0211928133
e: jamie@steadfastconstruction.co.nz

Project
MANGAWHAI RESIDENCE

Address
30 JORDAN STREET
MANGAWHAI HEADS

Drawn: JM	Checked: JM	Date: 03/26
Scale: NTS @ A3	Project No: 2410	

BUILDING CONSENT

Sheet Number: BC-02	Revision: J

DEANE
CONSULTANCY LTD

SITE NOTICE

Building Consent Number: BC 250084.3

Site Address: 30 Jordan Street, Mangawhai

Legal Description: Lot 22 DP 487158

Client: 30 Jordan Street Ltd. (24 Wake Rd Coatesville 0793)

Stage of Work: Portal Frame to first floor.

Inspection Time: 10.00 am Date: 06/Aug

Acc Address: Steadfast construction

Findings: Structural steel portal frame constructed in accordace with plan HD bolts and general fixings as per design.
Suggest shear fixings between ribbon plate & rafter between webs

Work is: ~~completed as specified~~ completed subject to item(s) listed below
(cross one out)

1) M12 2/17 g7 screws/rafter to portal/ribbon plate.

2)

3)

Signed: [signature] Print Name: K. Canton

Date: 6/8/2025 for Deane Consultancy Ltd

PRODUCER STATEMENT – PS4
CONSTRUCTION REVIEW

BUILDING CODE CLAUSE(S): B1 **JOB NUMBER:** 25002

ISSUED BY: Deane Consultancy Ltd
(Construction Monitoring Firm)
TO: Steadfast Construction Ltd
(Owner/Developer)
TO BE SUPPLIED TO: Kaipara District Council
(Building Consent Authority)
IN RESPECT OF: Foundations; Blockwork, pre-pour pod floor. Steel portal frame (structural).
(Description of Building Work)
AT: 30 Jordan Street, Mangawhai
(Address, Town/City)
LEGAL DESCRIPTION: Lot 22, DP 487158 **N/A** ☐

We have been engaged by the owner/developer referred to above to provide CM 2 **level of construction monitoring relating to** the Clause(s) named above of the Building Code for the building work which is covered by PS1(s) issued by Deane Consultancy Ltd (*Engineering Design Firm*) and which is described in the documents relating to the Building Consent No. 250084 and those relating to Building Consent Amendment(s) No. n/a issued during the course of the works, .

We have sighted these Building Consents and the conditions attached to them.
If any of the fields above are too small, please write "refer the Schedule".

Authorised instructions/variation(s) detailed/listed in the Schedule have been issued during the course of the works.

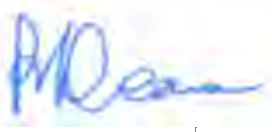
On the basis of these review(s) and information supplied by the contractor during the course of the works and **on behalf of the engineering firm** undertaking this Construction Monitoring, **I believe on reasonable grounds** that the building works covered by the above-mentioned PS1(s) have been completed in accordance with the relevant requirements of the Building Consent and Building Consent Amendments identified above or in the Schedule on page 2, with respect to Clause(s) B1 of the Building Code. I also believe on reasonable grounds that the persons who have undertaken this construction review have the necessary competency to do so.

I, *(Name of Construction Monitoring Professional)* Peter Allan Deane , am:

- CPEng number 64619
- I hold the following qualifications CMEngNZ, CPEng ,

The Construction Monitoring Firm holds a current policy of Professional Indemnity Insurance no less than $200,000 The Construction Monitoring Firm Is not a member of ACE New Zealand.

SIGNED BY *(Name of Construction Monitoring Professional)*: Peter Allan Deane
(Signature below):



ON BEHALF OF *(Construction Monitoring Firm)*: Deane Consultancy Ltd Date: 15/09/25

Note: This statement has been prepared solely for the Building Consent Authority named above and shall not be relied upon by any other person or entity. Any liability in relation to this statement accrues to the Construction Monitoring Firm only. As a condition of reliance on this statement, the Building Consent Authority accepts that the total maximum amount of liability of any kind arising from this statement and all other statements provided to the Building Consent Authority in relation to this building work, whether in tort or otherwise, is limited to the sum of $200,000.

This form is to accompany **Forms 6 or 8 of the Building (Forms) Regulations 2004** for the issue of a Code Compliance Certificate.

THIS FORM AND ITS CONDITIONS ARE COPYRIGHT TO ACE NEW ZEALAND AND ENGINEERING NEW ZEALAND

SCHEDULE to PS4

Please include an itemised list of all referenced documents, drawings, or other supporting materials in relation to this producer statement below:

Attachments: Pg-3 to Pg-14

Site inspection carried out on 10/06/2025 by Ken Canton to observe block work pre-pour structural)
Site inspection carried out on 25/06/2025 by Ken Canton to observe pod floor pre-pour (structural)
Site inspection carried out on 09/09/2025 by Paul Barnard observe steel portal framer (structural)

Work complies approved design.

DEANE CONSULTANCY LTD
17 Kotare Place , RD2, Warkworth
09 4222 408 deanecl@xtra.co.nz

Site Inspection Report

Author: K Canton
Client: Matthew Munro (Steadfast Construction Ltd)
Legal Descript: LOT 22 **DP**487158
Address: 30 Jordan Street Mangawhai
Consent Number: 250084
TLA: KDC
ACCOUNT ADDRESS: matt.munro@steadfastconstruction.co.nz

PREAMBLE:

This statement relates to the construction of a foundation structure.
Part pole platform, part blockwork base walls with a concrete pod floor.
The Geotech report and structural design is by DCL.

OBSERVATIONS:

T Stevens inspected the site strip with a separate report that is not attached.
K Canton inspected foundation pre-pour and pile holes 3/06/2025 @ 2.30pm.
K Canton inspected blockwork pre-pour 10/06/2025 @ 5.00pm
A Canton checked hardfill compaction 17/06/2025 @ 11.00am
K Canton inspected pod-floor pre-pour 25/06/2025 2.00pm & 7.00pm

FINDINGS:

The site was inspected and approved when stripped by TS, note not attached.
The foundations were generally as per plans with two extra poles below living area.
Blockwork and pod floor as per plans.

RESULTS:

The PS4 may be issued for the above works

ATTACHMENTS:

1- Site Notes
2- Photos



Signed.....**Date**: 30/06/2025

DEANE
CONSULTANCY LTD
deanecl@xtra.co.nz
09 422 2408 0272526121

SITE NOTICE

Building Consent Number: 250084 (KDC)

Site Address: 30 Jordan Street, Maungakiekie

Legal Description: Lot: 22 DP: 487158

Client: Matthew Munro (matt.muro@steadfastconstruction.co.nz)

Stage of Work Foundation prepour

Inspection Time: 2.30 Date: 3/06/2025

Findings: Foundations as per approved plans
Max height <1.6m All H12 @400c/c vert
footings 450 wide 4 H12 @ R6 Spec 100c
cover 600 " 6/H12 "
Piles as per plan + 2 additional piles to long axis

Work is: ~~completed as specified/~~ completed subject to item(s) listed below
(cross one out)

1) MX regd for additional piles

2)

3)

Signed: Print Name: K. Canton





DEANE
CONSULTANCY LTD
deanecl@xtra.co.nz
09 422 2408 0272526121

SITE NOTICE

Building Consent Number: 2500844 (KDC)

Site Address: 30 Jordan St, Mangawhai

Legal Description: Lot: 22 DP: 487158

Client: Matthew Munro (matt.munro@steadfast.co.nz 10.00

Stage of Work Blockwork pepers

Inspection Time: 5.00 Date: 10/6/2025

Findings: All blocks reinforced as design
clean cores ok to pour
Max ht 1.5m forty to floor level

Work is: completed as specified/ ~~completed subject to item~~(s) listed below
(cross one out)

1) _____

2) _____

3) _____

Signed: _____ Print Name: K Canton



DEANE
CONSULTANCY LTD
deanecl@xtra.co.nz

SITE NOTICE

Building Consent Number: 250064 (KDC)
Site Address: 30 Jordan St, Mangawhai
Legal Description: Lot 22 DP 467156
Client: Matthew Munro (matt.munro@[illegible])
Stage of Work: Hardfill Compaction
Inspection Time: 11:00 Date: 17/06/2025
Findings: BR 17 to 27 Soaking plate used
all ok to continue

checked compaction on deep edge halfway up all to 24 RL

Work is: completed as specified/ completed subject to item(s) listed below
(cross one out)

1)
2)
3)



Signed: Print Name: [illegible]
for Deane Consultancy Ltd
Date: 19/6/25

DEANE
CONSULTANCY LTD
deanecl@xtra.co.nz
09 422 2408 0272526121

SITE NOTICE

Building Consent Number: 250084 (KDC)

Site Address: 30 Jordan St, Mangawhai

Legal Description: Lot: 22 DP: 487158

Client: Matthew Munro (matt.munro@steadfastconstruction.co.nz)

Stage of Work Pod floor prepour

Inspection Time: 2.00 + 7.00 pm Date: 25/06/2025

Findings: All reinforcing as per plans.
ok to pour.
(Initial insp rcvd. in place, still placing mesh - follow up visit @ 7.00 pm.)

Work is: completed as specified/ ~~completed subject to item~~(s) listed below
(cross one out)

1) _____

2) _____

3) _____

Signed: _____ Print Name: K. Carlton

DEANE CONSULTANCY LTD

SITE INSPECTION REPORT

Client Name:	**30 Jordan Street Limited**	**Job #**	**25002**
Site Address:	**30 Jordan Street, Mangawhai Heads 0505**		
Building Consent #:	**BC 205584**		

Inspection Type:	Steel Portal Frame (remote)		
Inspection Date:	Tue, 9 September 2025	**Time:**	10:25am
In Attendance:	Paul Barnard, Andy Kang (DCL)		

Site Conditions: Dry and fine

Findings: Rectification works completed, Steel Portal frame built to approved design requirements.

Inspection Result: PASS




WAIPAPA PINE LTD SCA ASNZS
MYCHORDH1 - 2


AS/NZS 1748
WAIPAPA PINE LTD SGS AS/NZS 1748

GUIDANCE ON USE OF PRODUCER STATEMENTS

Information on the use of Producer Statements and Construction Monitoring Guidelines can be found on the Engineering New Zealand website
https://www.engineeringnz.org/engineer-tools/engineering-documents/producer-statements/

Producer statements were first introduced with the Building Act 1991. The producer statements were developed by a combined task committee consisting of members of the New Zealand Institute of Architects (NZIA), Institution of Professional Engineers New Zealand (now Engineering New Zealand), Association of Consulting and Engineering New Zealand (ACE NZ) in consultation with the Building Officials Institute of New Zealand (BOINZ). The original suite of producer statements has been revised at the date of this form to ensure standard use within the industry.

The producer statement system is intended to provide Building Consent Authorities (BCAs) with part of the reasonable grounds necessary for the issue of a Building Consent or a Code Compliance Certificate, without necessarily having to duplicate review of design or construction monitoring undertaken by others.

PS1 DESIGN Intended for use by a suitably qualified independent engineering design professional in circumstances where the BCA accepts a producer statement for establishing reasonable grounds to issue a Building Consent;

PS2 DESIGN REVIEW Intended for use by a suitably qualified independent engineering design review professional where the BCA accepts an independent design professional's review as the basis for establishing reasonable grounds to issue a Building Consent;

PS3 CONSTRUCTION Forms commonly used as a certificate of completion of building work are Schedule 6 of NZS 3910:2013 or Schedules E1/E2 of NZIA's SCC 2011[2]

PS4 CONSTRUCTION REVIEW Intended for use by a suitably qualified independent engineering construction monitoring professional who either undertakes or supervises construction monitoring of the building works where the BCA requests a producer statement prior to issuing a Code Compliance Certificate.

This must be accompanied by a statement of completion of building work (Schedule 6).

The following guidelines are provided by ACE New Zealand and Engineering New Zealand to interpret the Producer Statement.

Competence of Engineering Professional
This statement is made by an engineering firm that has undertaken a contract of services for the services named, and is signed by a person authorised by that firm to verify the processes within the firm and competence of its personnel.

The person signing the Producer Statement on behalf of the engineering firm will have a professional qualification and proven current competence through registration on a national competence-based register such as a Chartered Professional Engineer (CPEng).

Membership of a professional body, such as Engineering New Zealand provides additional assurance of the designer's standing within the profession. If the engineering firm is a member of ACE New Zealand, this provides additional assurance about the standing of the firm.

Persons or firms meeting these criteria satisfy the term "suitably qualified independent engineering professional".

Professional Indemnity Insurance
As part of membership requirements, ACE New Zealand requires all member firms to hold Professional Indemnity Insurance to a minimum level.

The PI Insurance minimum stated on the front of this form reflects standard practice for the relationship between the BCA and the engineering firm.

Professional Services during Construction Phase
There are several levels of service that an engineering firm may provide during the construction phase of a project (CM1-CM5 for engineers[3]). The building Consent Authority is encouraged to require that the service to be provided by the engineering firm is appropriate for the project concerned.

Requirement to provide Producer Statement PS4
Building Consent Authorities should ensure that the applicant is aware of any requirement for producer statements for the construction phase of building work at the time the building consent is issued as no design professional should be expected to provide a producer statement unless such a requirement forms part of the Design Firm's engagement.

Refer Also:

1 Conditions of Contract for Building & Civil Engineering Construction NZS 3910: 2013
2 NZIA Standard Conditions of Contract SCC 2011
3 Guideline on the Briefing & Engagement for Consulting Engineering Services (ACE New Zealand/Engineering New Zealand 2004)
4 PN01 Guidelines on Producer Statements

www.acenz.org.nz
www.engineeringnz.org

PRODUCER STATEMENT – PS4
CONSTRUCTION REVIEW

BUILDING CODE CLAUSE(S): B1 **JOB NUMBER:** 25002

ISSUED BY: Deane Consultancy Ltd
(Construction Monitoring Firm)
TO: Steadfast Construction Ltd
(Owner/Developer)
TO BE SUPPLIED TO: Kaipara District Council
(Building Consent Authority)
IN RESPECT OF: Foundations; Blockwork, pre-pour pod floor. Steel portal frame (structural).
(Description of Building Work)
AT: 30 Jordan Street, Mangawhai
(Address, Town/City)
LEGAL DESCRIPTION: Lot 22, DP 487158 **N/A** ☐

We have been engaged by the owner/developer referred to above to provide CM 2 **level of construction monitoring relating to** the Clause(s) named above of the Building Code for the building work which is covered by PS1(s) issued by Deane Consultancy Ltd (*Engineering Design Firm*) and which is described in the documents relating to the Building Consent No. 250084 and those relating to Building Consent Amendment(s) No. n/a issued during the course of the works, .

We have sighted these Building Consents and the conditions attached to them.
If any of the fields above are too small, please write "refer the Schedule".

Authorised instructions/variation(s) detailed/listed in the Schedule have been issued during the course of the works.

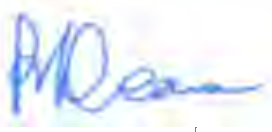
On the basis of these review(s) and information supplied by the contractor during the course of the works and **on behalf of the engineering firm** undertaking this Construction Monitoring, **I believe on reasonable grounds** that the building works covered by the above-mentioned PS1(s) have been completed in accordance with the relevant requirements of the Building Consent and Building Consent Amendments identified above or in the Schedule on page 2, with respect to Clause(s) B1 of the Building Code. I also believe on reasonable grounds that the persons who have undertaken this construction review have the necessary competency to do so.

I, *(Name of Construction Monitoring Professional)* Peter Allan Deane , am:

- CPEng number 64619
- I hold the following qualifications CMEngNZ, CPEng ,

The Construction Monitoring Firm holds a current policy of Professional Indemnity Insurance no less than $200,000 The Construction Monitoring Firm Is not a member of ACE New Zealand.

SIGNED BY *(Name of Construction Monitoring Professional)*: Peter Allan Deane
(Signature below):



ON BEHALF OF *(Construction Monitoring Firm)*: Deane Consultancy Ltd Date: 15/09/25

Note: This statement has been prepared solely for the Building Consent Authority named above and shall not be relied upon by any other person or entity. Any liability in relation to this statement accrues to the Construction Monitoring Firm only. As a condition of reliance on this statement, the Building Consent Authority accepts that the total maximum amount of liability of any kind arising from this statement and all other statements provided to the Building Consent Authority in relation to this building work, whether in tort or otherwise, is limited to the sum of $200,000.

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SCHEDULE to PS4

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Site inspection carried out on 25/06/2025 by Ken Canton to observe pod floor pre-pour (structural)
Site inspection carried out on 09/09/2025 by Paul Barnard observe steel portal framer (structural)

Work complies approved design.

DEANE CONSULTANCY LTD
17 Kotare Place , RD2, Warkworth
09 4222 408 deanecl@xtra.co.nz

Site Inspection Report

Author: K Canton
Client: Matthew Munro (Steadfast Construction Ltd)
Legal Descript: LOT 22 **DP**487158
Address: 30 Jordan Street Mangawhai
Consent Number: 250084
TLA: KDC
ACCOUNT ADDRESS: matt.munro@steadfastconstruction.co.nz

PREAMBLE:

This statement relates to the construction of a foundation structure.
Part pole platform, part blockwork base walls with a concrete pod floor.
The Geotech report and structural design is by DCL.

OBSERVATIONS:

T Stevens inspected the site strip with a separate report that is not attached.
K Canton inspected foundation pre-pour and pile holes 3/06/2025 @ 2.30pm.
K Canton inspected blockwork pre-pour 10/06/2025 @ 5.00pm
A Canton checked hardfill compaction 17/06/2025 @ 11.00am
K Canton inspected pod-floor pre-pour 25/06/2025 2.00pm & 7.00pm

FINDINGS:

The site was inspected and approved when stripped by TS, note not attached.
The foundations were generally as per plans with two extra poles below living area.
Blockwork and pod floor as per plans.

RESULTS:

The PS4 may be issued for the above works

ATTACHMENTS:

1- Site Notes
2- Photos



Signed.....**Date**: 30/06/2025

DEANE
CONSULTANCY LTD
deanecl@xtra.co.nz
09 422 2408 0272526121

SITE NOTICE

Building Consent Number: 250064 (KDC)

Site Address: 30 Jordan St, Mangawhai

Legal Description: Lot: 22 DP: 487158

Client: Matthew Munro (matt.munro@steadfastconstruction.co.nz

Stage of Work ~~Pod floor~~ prepour

Inspection Time: 2.00 + 7.00 pm Date: 25/06/2025

Findings: All reinforcing as per plans.
ok to pour.
(Initial insp rcvd. in place, still placing mesh. - follow up visit @ 7.00 pm.)

Work is: completed as specified/ ~~completed subject to item~~(s) listed below
(cross one out)

1) _____

2) _____

3) _____



Signed: _____ Print Name: K. Canton

Date: 25/6/2025 for Deane Consultancy Ltd

PRODUCER STATEMENT – PS4
CONSTRUCTION REVIEW

BUILDING CODE CLAUSE(S): B1 **JOB NUMBER:** 25002

ISSUED BY: Deane Consultancy Ltd
(Construction Monitoring Firm)
TO: Steadfast Construction Ltd
(Owner/Developer)
TO BE SUPPLIED TO: Kaipara District Council
(Building Consent Authority)
IN RESPECT OF: Site Strip, foundation pre-pour, pile holes & hardfill compaction (Geotechnical).
(Description of Building Work)
AT: 30 Jordan Street, Mangawhai
(Address, Town/City)
LEGAL DESCRIPTION: Lot 22, DP487158 **N/A** ☐

We have been engaged by the owner/developer referred to above to provide CM 2 **level of construction monitoring relating to** the Clause(s) named above of the Building Code for the building work which is covered by PS1(s) issued by Deane Consultancy Ltd (*Engineering Design Firm*) and which is described in the documents relating to the Building Consent No. 250084 and those relating to Building Consent Amendment(s) No. n/a issued during the course of the works, .

We have sighted these Building Consents and the conditions attached to them.
If any of the fields above are too small, please write "refer the Schedule".

Authorised instructions/variation(s) detailed/listed in the Schedule have been issued during the course of the works.

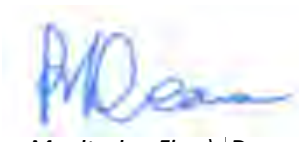
On the basis of these review(s) and information supplied by the contractor during the course of the works and **on behalf of the engineering firm** undertaking this Construction Monitoring, **I believe on reasonable grounds** that the building works covered by the above-mentioned PS1(s) have been completed in accordance with the relevant requirements of the Building Consent and Building Consent Amendments identified above or in the Schedule on page 2, with respect to Clause(s) B1 of the Building Code. I also believe on reasonable grounds that the persons who have undertaken this construction review have the necessary competency to do so.

I, *(Name of Construction Monitoring Professional)* Peter Allan Deane , am:

- CPEng number 64619
- I hold the following qualifications CMEngNZ, CPEng ,

The Construction Monitoring Firm holds a current policy of Professional Indemnity Insurance no less than $200,000 The Construction Monitoring Firm Is not a member of ACE New Zealand.

SIGNED BY *(Name of Construction Monitoring Professional)*: Peter Allan Deane
(Signature below):



ON BEHALF OF *(Construction Monitoring Firm)*: Deane Consultancy Ltd Date: 08/08/25

Note: This statement has been prepared solely for the Building Consent Authority named above and shall not be relied upon by any other person or entity. Any liability in relation to this statement accrues to the Construction Monitoring Firm only. As a condition of reliance on this statement, the Building Consent Authority accepts that the total maximum amount of liability of any kind arising from this statement and all other statements provided to the Building Consent Authority in relation to this building work, whether in tort or otherwise, is limited to the sum of $200,000.

This form is to accompany **Forms 6 or 8 of the Building (Forms) Regulations 2004** for the issue of a Code Compliance Certificate.

THIS FORM AND ITS CONDITIONS ARE COPYRIGHT TO ACE NEW ZEALAND AND ENGINEERING NEW ZEALAND

SCHEDULE to PS4

Please include an itemised list of all referenced documents, drawings, or other supporting materials in relation to this producer statement below:

Attachments: Pg-3 to Pg-10 attached.

Schedule of inspections carried out on following page.

Work complies approved design.

DEANE CONSULTANCY LTD

SITE INSPECTION REPORT

Client Name:	30 Jordan Street Limited	**Ref #**	1690SM
Site Address:	30 Jordan Street, Mangawhai Heads 0505		
Building Consent #:	BC 250 084		

Inspection Type:	Subgrade for garage pod floor for new dwelling.		
Inspection Date:	20/05/2025	**Time:**	12:28pm
In Attendance:	Josh (Builder), Digger Operator ; Tim Stevens (DCL).		
Site Conditions:	Dry and fine		
Findings:	The garage floor platform is all on original cut ground. Shallow hardfill < 200 mm deep will be used to level up when the blockwork is completed. Maximum cut is approximately 1.2 metres below existing contour with a 500mm vertical cut at the toe which will be retained with 600 - 800mm boulders. The subgrade is original silty sandy clay with bands of loose white sand. The undrained shear strength of the material is 84 - 168kPa. Some existing fill was noted outside the building line adjacent to the driveway cut in the cut batter.		





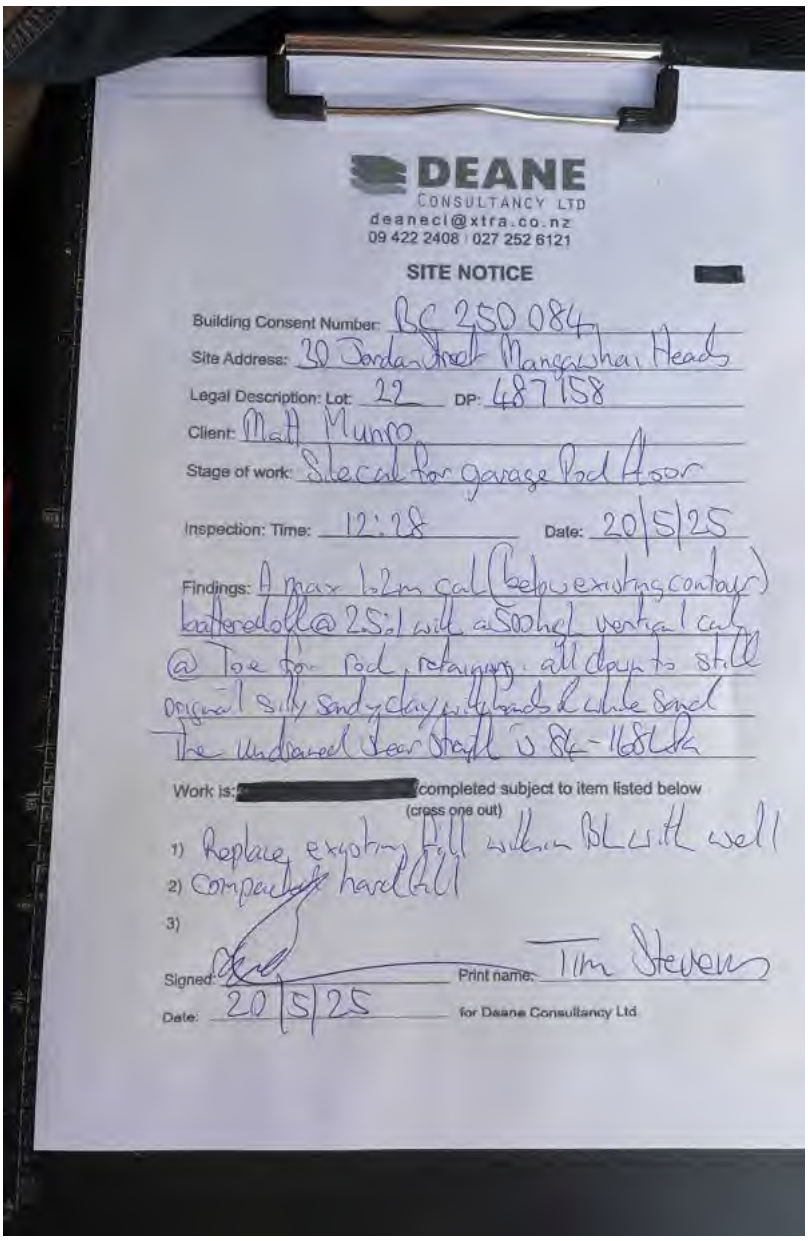


Inspection Result:	The above inspection is a PASS Trim to waste any shallow fill under the pod floor and replace with well compacted hardfill.

Additional Photos / Supporting Commentary:







DEANE
CONSULTANCY LTD
deaneci@xtra.co.nz
09 422 2408 | 027 252 6121

SITE NOTICE [redacted]

Building Consent Number: BC 250 084
Site Address: 30 Jordan Street Mangawhai Heads
Legal Description: Lot: 22 DP: 487158
Client: Matt Munro
Stage of work: Site cut for garage Pad floor
Inspection: Time: 12:28 Date: 20/5/25

Findings: A max 1.2m cut (below existing contour) battered off @ 2.5:1 with a 500mm vertical cut @ Toe for pad retaining. all days to still original silty sandy clay with bands & lense of The Undated Dear Draft is 84-168Ka

Work is: [redacted] completed subject to item listed below
(cross one out)

1) Replace existing fill with GAP with well
2) Compact hard fill
3)

Signed: [signature] Print name: Tim Stevens
Date: 20/5/25 for Deane Consultancy Ltd



DEANE CONSULTANCY LTD
17 Kotare Place , RD2, Warkworth
09 4222 408 deanecl@xtra.co.nz

Site Inspection Report

Author: K Canton
Client: Matthew Munro (Steadfast Construction Ltd)
Legal Descript: LOT 22 **DP**487158
Address: 30 Jordan Street Mangawhai
Consent Number: 250084
TLA: KDC
ACCOUNT ADDRESS: matt.munro@steadfastconstruction.co.nz

PREAMBLE:

This statement relates to the construction of a foundation structure.
Part pole platform, part blockwork base walls with a concrete pod floor.
The Geotech report and structural design is by DCL.

OBSERVATIONS:

T Stevens inspected the site strip with a separate report that is not attached.
K Canton inspected foundation pre-pour and pile holes 3/06/2025 @ 2.30pm.
K Canton inspected blockwork pre-pour 10/06/2025 @ 5.00pm
A Canton checked hardfill compaction 17/06/2025 @ 11.00am
K Canton inspected pod-floor pre-pour 25/06/2025 2.00pm & 7.00pm

FINDINGS:

The site was inspected and approved when stripped by TS, note not attached.
The foundations were generally as per plans with two extra poles below living area.
Blockwork and pod floor as per plans.

RESULTS:

The PS4 may be issued for the above works

ATTACHMENTS:

1- Site Notes
2- Photos



Signed.....**Date**: 30/06/2025

DEANE
CONSULTANCY LTD
deanecl@xtra.co.nz
09 422 2408 0272526121

SITE NOTICE

Building Consent Number: 250084 (KDC)

Site Address: 30 Jordan Street, Maungakiekie

Legal Description: Lot: 22 DP: 487158

Client: Matthew Munro (matt.muro@steadfastconstruction.co.nz)

Stage of Work Foundation prepour

Inspection Time: 2.30 Date: 3/06/2025

Findings: Foundations as per approved plans
Max height <1.6m All H12 c400 c/c vert
footings 450 wide 4 H12 c RL Spec 400 c/c
and 600 " 6/H12 "
Piles as per plan + 2 additional piles to long axis

Work is: ~~completed as specified/~~ completed subject to item(s) listed below
(cross one out)

1) MX regd for additional piles

2)

3)

Signed: Print Name: K. Carton





DEANE
CONSULTANCY LTD
deanecl@xtra.co.nz
09 422 2408 0272526121

SITE NOTICE

Building Consent Number: 2500844 (KDC)

Site Address: 30 Jordan St, Mangawhai

Legal Description: Lot: 22 DP: 487158

Client: Matthew Munro (matt.munro steadfast carbuster 1.co.nz

Stage of Work Blockwork pepers

Inspection Time: 5.00 Date: 10/6/2025

Findings: All blocks reinforced as design
clean cores ok to pour
Max ht 1.5m forty to floor level

Work is: completed as specified/ ~~completed subject to item~~(s) listed below
(cross one out)

1) _____

2) _____

3) _____

Signed: _____ Print Name: K Canton



DEANE
CONSULTANCY LTD
deaned@xtra.co.nz
[illegible]

SITE NOTICE

Building Consent Number: 250984 (KDC)

Site Address: 30 Jordan St, Mangaweka

Legal Description: Lot 22 DP 467158

Client: Matthew Muna (matthew@[illegible])

Stage of Work: Foundation Compaction

Inspection Time: 11:00 Date: 17/06/2025

Findings: BR 17 to 27 Sloping platform and all ok to continue

Checked compaction on deep edge beam up all to 24 MPa

Work is completed as specified/ completed subject to item(s) listed below (cross one out)

1) _____

2) _____

3) _____



Signed: _____ Print Name: [illegible]

Date: 18/6/25 for Deane Consultancy Ltd

DEANE
CONSULTANCY LTD
deanecl@xtra.co.nz
09 422 2408 0272526121

SITE NOTICE

Building Consent Number: 250064 (KDC)

Site Address: 30 Jordan St, Mangawhai

Legal Description: Lot: 22 DP: 487158

Client: Matthew Munro (matt.munro@steadfastconstruction.co.nz)

Stage of Work Pod floor prepour

Inspection Time: 2.00 + 7.00 pm Date: 25/06/2025

Findings: All reinforcing as per plans.
ok to pour.
(Initial insp rcvd. in place, still placing mesh - follow up visit @ 7.00 pm.)

Work is: completed as specified/ ~~completed subject to item~~(s) listed below
(cross one out)

1) _____

2) _____

3) _____

Signed: _____ Print Name: K. Carlton

GUIDANCE ON USE OF PRODUCER STATEMENTS

Information on the use of Producer Statements and Construction Monitoring Guidelines can be found on the Engineering New Zealand website
https://www.engineeringnz.org/engineer-tools/engineering-documents/producer-statements/

Producer statements were first introduced with the Building Act 1991. The producer statements were developed by a combined task committee consisting of members of the New Zealand Institute of Architects (NZIA), Institution of Professional Engineers New Zealand (now Engineering New Zealand), Association of Consulting and Engineering New Zealand (ACE NZ) in consultation with the Building Officials Institute of New Zealand (BOINZ). The original suite of producer statements has been revised at the date of this form to ensure standard use within the industry.

The producer statement system is intended to provide Building Consent Authorities (BCAs) with part of the reasonable grounds necessary for the issue of a Building Consent or a Code Compliance Certificate, without necessarily having to duplicate review of design or construction monitoring undertaken by others.

PS1 DESIGN Intended for use by a suitably qualified independent engineering design professional in circumstances where the BCA accepts a producer statement for establishing reasonable grounds to issue a Building Consent;

PS2 DESIGN REVIEW Intended for use by a suitably qualified independent engineering design review professional where the BCA accepts an independent design professional's review as the basis for establishing reasonable grounds to issue a Building Consent;

PS3 CONSTRUCTION Forms commonly used as a certificate of completion of building work are Schedule 6 of NZS 3910:2013 or Schedules E1/E2 of NZIA's SCC 2011[2]

PS4 CONSTRUCTION REVIEW Intended for use by a suitably qualified independent engineering construction monitoring professional who either undertakes or supervises construction monitoring of the building works where the BCA requests a producer statement prior to issuing a Code Compliance Certificate.

This must be accompanied by a statement of completion of building work (Schedule 6).

The following guidelines are provided by ACE New Zealand and Engineering New Zealand to interpret the Producer Statement.

Competence of Engineering Professional
This statement is made by an engineering firm that has undertaken a contract of services for the services named, and is signed by a person authorised by that firm to verify the processes within the firm and competence of its personnel.

The person signing the Producer Statement on behalf of the engineering firm will have a professional qualification and proven current competence through registration on a national competence-based register such as a Chartered Professional Engineer (CPEng).

Membership of a professional body, such as Engineering New Zealand provides additional assurance of the designer's standing within the profession. If the engineering firm is a member of ACE New Zealand, this provides additional assurance about the standing of the firm.

Persons or firms meeting these criteria satisfy the term "suitably qualified independent engineering professional".

Professional Indemnity Insurance
As part of membership requirements, ACE New Zealand requires all member firms to hold Professional Indemnity Insurance to a minimum level.

The PI Insurance minimum stated on the front of this form reflects standard practice for the relationship between the BCA and the engineering firm.

Professional Services during Construction Phase
There are several levels of service that an engineering firm may provide during the construction phase of a project (CM1-CM5 for engineers[3]). The building Consent Authority is encouraged to require that the service to be provided by the engineering firm is appropriate for the project concerned.

Requirement to provide Producer Statement PS4
Building Consent Authorities should ensure that the applicant is aware of any requirement for producer statements for the construction phase of building work at the time the building consent is issued as no design professional should be expected to provide a producer statement unless such a requirement forms part of the Design Firm's engagement.

Refer Also:

1 Conditions of Contract for Building & Civil Engineering Construction NZS 3910: 2013
2 NZIA Standard Conditions of Contract SCC 2011
3 Guideline on the Briefing & Engagement for Consulting Engineering Services (ACE New Zealand/Engineering New Zealand 2004)
4 PN01 Guidelines on Producer Statements

www.acenz.org.nz
www.engineeringnz.org

Date **1/08/2025**

PlaceMakers Auckland Frame and Truss
PO Box 97824
Wiri
Manukau, 2240

Tel. (09) 279 5787
Email: production.aft@placemakers.co.nz

Client: Staedfast Construction

Timber Treatments

Our Reference: 25-488-01495

Job Name: 30 Jordan Street, Mangawhai Heads

Site Address: 30 Jordan Street, Mangawhai Heads
30 Jordan Street
Mangawhai Heads

This statement is to confirm the frames supplied to the above job have been supplied as follows:

Timber Frames:

External Walls	- Kiln Dried and Gauged Radiata Pine, H1.2 Boron treated.
Internal Walls	- Kiln Dried and Gauged Radiata Pine, H1.2 Boron treated.
"H" Walls	- Kiln Dried and Gauged Radiata Pine, H3.2 CCA treated.
Trusses	- Kiln Dried and Gauged Radiata Pine, H1.2 Boron treated.

Note: All timber used in frames and trusses is a minimum grade SG8 unless the architectural plan states SG10/12 and then the higher grade is used.

Yours faithfully,



Brad Almond, Site Manager

MiTek New Zealand Limited

Correspondence from : **AUCKLAND**
40 Neales Road, East Tamaki 2013
PO Box 58-014, Botany 2163
Phone: 09 274 7109
Fax: 09 274 7100

CHRISTCHURCH
14 Pilkington Way, Wigram 8042
PO Box 8387, Riccarton 8440
Phone: 03 348 8691
Fax: 03 348 0314

www.miteknz.co.nz

PRODUCER STATEMENT for MiTek 20/20® TRUSS DESIGN - Version 4.7

ISSUED BY: **MiTek New Zealand Limited**

TO: **PlaceMakers Frame & Truss**

IN RESPECT OF: **MiTek® Truss Designs**

This producer statement covers the MiTek 20/20® truss design and the structural performance of the GANG-NAIL® connector plate for the job reference **01495T2F** and may be used by a Building Consent Authority to assist in determining compliance with the New Zealand Building Code.

The MiTek 20/20® truss design program has been developed by MiTek New Zealand Limited for the design of MiTek® timber roof, floor and attic trusses in New Zealand. The truss designs computed by MiTek 20/20 ® are prepared using sound and widely accepted engineering principles, and in accordance with compliance documents of the New Zealand Building Code and Verification Method B1/VM1; and internationally accepted standard ANSI/TPI 1 - 2002 as an alternative solution, to satisfy the requirements of Clause B1 of the New Zealand Building Code.

On behalf of MiTek New Zealand Limited, and subject to:

i) All proprietary products meeting their performance specification requirements
ii) The provision of adequate roof bracing and overall building stability
iii) Correct selection and placement of GANG-NAIL connector plates
iv) Correct input of Truss Design Data as shown in the Fabricator Design Statement for this job
v) The design being undertaken by the accredited fabricator under the terms of the software licence
vi) Timber is graded to the requirements of NZS 3603:1993
vii) Minimum timber treatment for these MiTek® trusses shall be in accordance with B2/AS1 Table 1A and the relevant sections of NZS 3602:2003

I believe on reasonable grounds that the trusses, if constructed in accordance with the MiTek 20/20® truss design and shop drawings, will comply with the relevant provisions of the New Zealand Building Code.

MiTek New Zealand Limited holds a current policy of Professional Indemnity Insurance no less than $500,000.

On behalf of MiTek New Zealand Limited, **Date: Wednesday, 18 June 2025**



In Ling Ng, BE (Hons), CPEng, IntPE, MIPENZ (ID: 146585)
TECHNICAL SERVICES MANAGER, MiTek New Zealand Limited

Job: 01495T2F
Client: PlaceMakers Warkworth
Phone:
Site: Steadfast Construction
30 Jordan Street
Mangawhai Heads
Description:
Building Consent No.:
Phone:

MITEK FABRICATOR DESIGN STATEMENT

This statement is issued by MiTek accredited fabricator **PlaceMakers Frame & Truss**, being licensed to use the MiTek 20/20® software, to the client listed above and may be used by the Building Consent Authority to assist in determining compliance with the New Zealand Building Code.

MiTek 20/20® TRUSS DESIGN DATA

The MiTek 20/20® computer design for this job is based on the following design parameters entered into the program. The Fabricator shall ensure that these job details are current and relevant to the project for the design of the MiTek ® trusses.

Job Details

Importance Level : 2

Design Working Life : 50 years

Roof Truss

Timber Group:	AFT Truss_H1.2	Pitch:	3.000 deg	Nominal Overhang:	600 mm
Roof		**Ceiling**		**Wind**	
Material:	Longrun Iron	Material:	Rondo on clips	Area:	High (44.0 m/s)
Dead Load:	0.210 kPa	Dead Load:	0.200 kPa	Pressure Coeff:	Cpe = varies; Cpi = -0.30, 0.20
Restraints:	900 mm centres	Restraints:	1800 mm centres		
Live Load:	Qur = 0.250 kPa Qc = 1.100 kN	Live Load:	Qc = 1.400 kN		

The minimum timber treatment for these MiTek® trusses shall be in accordance with B2/AS1 Table 1A and the relevant sections of NZS 3602:2003. The timber for these MiTek® trusses shall be graded to the requirements of NZS 3603:1993. Proprietary fixings and timber connectors shall be selected in accordance with NZS3604:2011 Section 4 - Durability.

MiTek® Truss List

Legend: * = detail only, ? = input only, ~~Txx~~ = failed design, Ø = non certified, Unmarked trusses = designed successfully, LB = lateral bracing required
GB = gable brace required, CF = Chemical Free Treatment

Roof Truss

Treatment: Top Chords - H1.2 Bottom Chords - H1.2 Webs - H1.2

Truss	Qty	Span (mm)	Pitch (deg)	Spacing (mm)	Truss	Qty	Span (mm)	Pitch (deg)	Spacing (mm)	Truss	Qty	Span (mm)	Pitch (deg)	Spacing (mm)
ET1	1D	1290	3.000	900	T10	1	1622	3.000	900	T6	1	6149	3.000	900
GT1	1	8383	2.577	900	T11	5	7200	-15.000	900	T7	1	6149	3.000	900
J1	1	941	3.000	900	T1A	1	7200	3.000	900	T8	1	4639	3.000	900
J2	1	942	3.000	900	T2	5	7200	3.000	900	T9	1	3130	3.000	900
*R1	3	3900	3.000	900	T2A	1	7200	3.000	900					
*R1B	1	3556	3.000	900	T3	1	1622	3.000	900					
*SCAB1	1	1939	-2.577	900	T4	1	3131	3.000	900					
T1	9	7200	3.000	900	T5	1	4640	3.000	900					

Roof Truss quantity : 38

Total quantity : 38

The computer design input has been carried out by:

Signed:

Date: Wednesday, 18 June 2025

Name of Detailer: Standard

Qualifications and Title:

On behalf of: PlaceMakers Frame & Truss | 53 McLaughlins Rd, Auckland | 092500300

Job: 01495T2F
Client: PlaceMakers Warkworth
Phone:
Site: Steadfast Construction
30 Jordan Street
Mangawhai Heads
Description:
Building Consent No.:
Phone:

MANUFACTURER STATEMENT

This statement is issued by **PlaceMakers Frame & Truss** to the client listed above, and may be used by the Building Consent Authority to assist in determining compliance with the New Zealand Building Code.
The MiTek® trusses for the job reference **01495T2F** have been fabricated in accordance with the MiTek 20/20® truss design, truss layout and shop drawing output and the specifications for timber defined therein, and are covered by the Producer Statement issued by MiTek New Zealand Limited and the MiTek Fabricator Design Statement.

Summary of fabricated MiTek® trusses in accordance with MiTek 20/20® output

These MiTek® trusses must be erected in accordance with the Truss Layout. Proper erection bracing must be installed to hold the trusses true and plumb and in a safe condition until permanent bracing is fixed. All permanent bracing and fixing must be installed before any loads are applied.

Job Details

Importance Level : 2

Design Working Life : 50 years

Roof

Material:	Longrun Iron
Dead Load:	0.210 kPa
Restraints:	900 mm centres
Live Load:	Qur = 0.250 kPa Qc = 1.100 kN

Ceiling

Material:	Rondo on clips
Dead Load:	0.200 kPa
Restraints:	1800 mm centres
Live Load:	Qc = 1.400 kN

Wind

Area:	High (44.0 m/s)
Pressure Coeff:	Cpe = varies; Cpi = -0.30, 0.20

MiTek® Truss List

Legend: * = detail only, ? = input only, ~~Txx~~ = failed design, Ø = non certified, Unmarked trusses = designed successfully, LB = lateral bracing required
GB = gable brace required, CF = Chemical Free Treatment

Roof Truss

Treatment: Top Chords - H1.2 Bottom Chords - H1.2 Webs - H1.2

Truss	Qty	Span (mm)	Pitch (deg)	Spacing (mm)	Truss	Qty	Span (mm)	Pitch (deg)	Spacing (mm)	Truss	Qty	Span (mm)	Pitch (deg)	Spacing (mm)
ET1	1D	1290	3.000	900	T10	1	1622	3.000	900	T6	1	6149	3.000	900
GT1	1	8383	2.577	900	T11	5	7200	-15.000	900	T7	1	6149	3.000	900
J1	1	941	3.000	900	T1A	1	7200	3.000	900	T8	1	4639	3.000	900
J2	1	942	3.000	900	T2	5	7200	3.000	900	T9	1	3130	3.000	900
*R1	3	3900	3.000	900	T2A	1	7200	3.000	900					
*R1B	1	3556	3.000	900	T3	1	1622	3.000	900					
*SCAB1	1	1939	-2.577	900	T4	1	3131	3.000	900					
T1	9	7200	3.000	900	T5	1	4640	3.000	900					

Roof Truss quantity : 38

Total quantity : 38

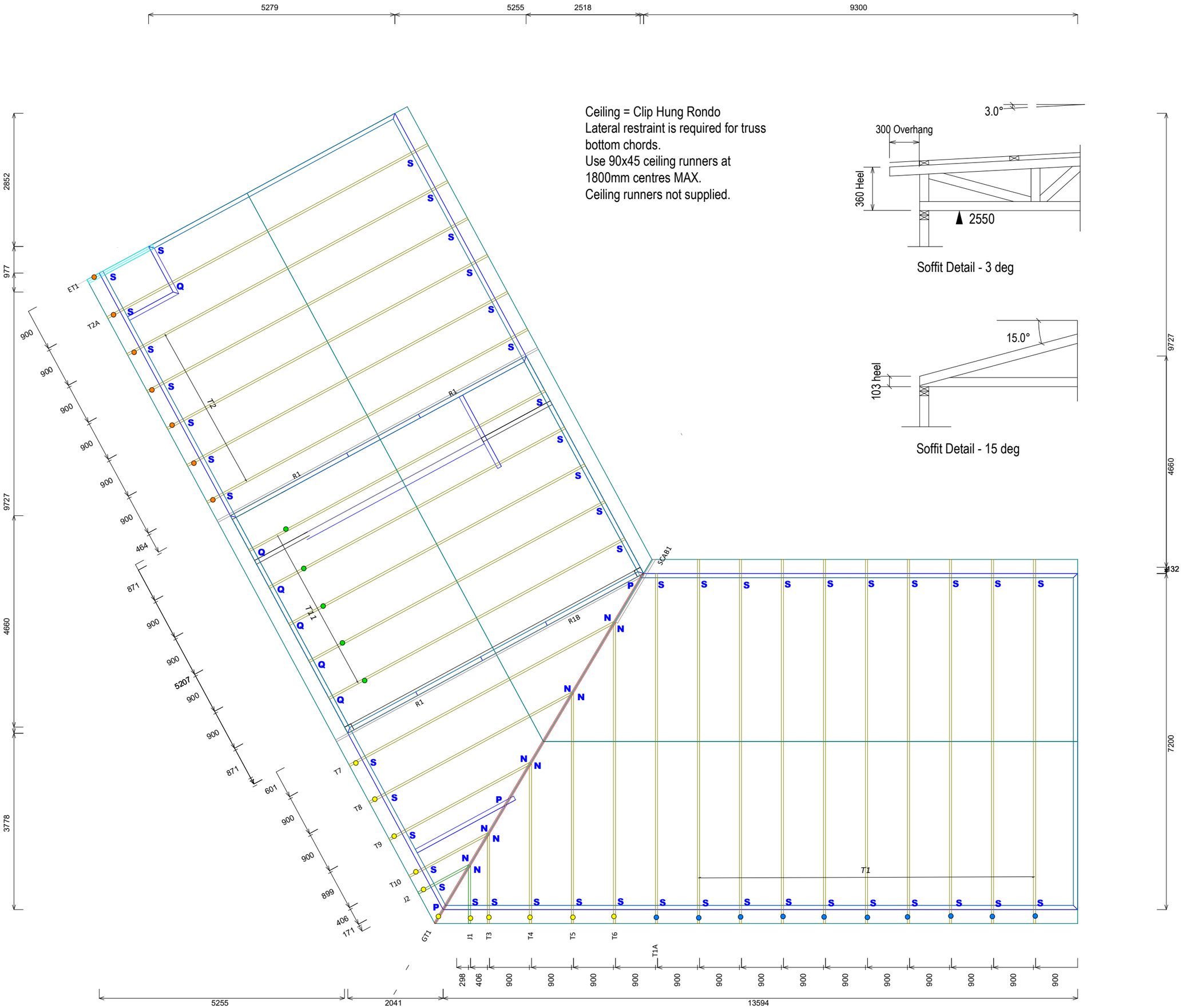
The MiTek® trusses are fabricated under the supervision of:

Signed: 

Date: Wednesday, 18 June 2025

Name of Supervisor: Brad Almond

On behalf of: PlaceMakers Frame & Truss | 53 McLaughlins Rd, Auckland | 092500300



Ceiling = Clip Hung Rondo
Lateral restraint is required for truss bottom chords.
Use 90x45 ceiling runners at 1800mm centres MAX.
Ceiling runners not supplied.

Soffit Detail - 3 deg

Soffit Detail - 15 deg

ROOF DETAILS

Roof Pitch :	3 and 15
Roof Type :	Longrun Iron
Wind Zone :	High
Soffit Overhang :	300
Verge Overhang :	0
Fascia Type :	Timber
Trusses & Rafters At	900 Centres Unless Stated

Builder To Confirm All Soffit Details With Fascia Manufacturer

FIXINGS:

- Wire Dogs supplied for all truss to plate fixing Unless Specified Otherwise

A = 90x47 joist hanger
B = 120x47 joist hanger
C = CT200 ceiling ties (pair)
D = 190x47 joist hanger
E = 165x95 joist hanger
F = SH-140 Split Hanger
G = SH-180 Split Hanger
H = SH-220 Split Hanger
J = 2x6kN Straps (12kN Total)
K = 6kN Strap (single)
L = Multigrip (single)
M = Multigrips (pair)
N = Nailon Plate (240x110x1mm)
P = 16kN Pack
Q = 9kN Pack
S = CPC40 Single Cleat
T = CPC40s - Short Cleat (pair)
U = CPC80 Single Cleat
W = 24kN Uplift (by Branch)
Y = 35kN Uplift (by Branch)
Z = 45kN Uplift (by Branch)

-- ALL THE ABOVE UNITS MUST BE FULLY NAILED
-- COLOUR CODING OF TRUSSES IS FOR AREA LOCATION ONLY - REFER TO TRUSS NUMBERS FOR SPECIFIC LOCATION
-- ALL ROOF AND CEILING BRACING TO BE FIXED TO COUNCIL REQUIREMENTS AS DETAILED ON PERMIT PLANS OTHERWISE TO NZ 3604 REQUIRMENTS

Please Note :

Builder Should Ensure That ALL WorkSafeNZ Approved Safety Practices Are Carried Out When Erecting Framing.

Builder To Read Pre-Cut Plans In Conjunction With Architectural Plans. Builder To Check All Opening Trim Sizes And Braces On Site Before Enclosing.

PlaceMakers Will Not Accept Any Charges For Remedial Work Unless A Written Order Is Issued Before Any Work Is Commenced. A Copy Of The Order Is To Accompany Any Invoice To PlaceMakers Frame & Truss.

If Experiencing Problems, Contact :

Frame and Truss
Phone (09) 279-5786
email : remedial.AFT@PlaceMakers.co.nz

PlaceMakers®

PlaceMakers Frame & Truss

53 McLaughlins Rd
Wiri
P O Box 97-824
South Auckland Mail Centre

Ph 09- 250-0300
Fax 09- 279-5780

Client: **PlaceMakers Warkworth**
Job Name: **Steadfast Construction**
Address: **30 Jordan Street**
Mangawhai Heads

Job:
01495T2F

Scale: 1:NTS	Date: 18 June,2025	Drawn By: Wendy Jung

TRUSSES | B.O.R. | SITE | FILE

SITE INSPECTION REPORT

Client Name:	30 Jordan Street Limited	**Ref #**	1690SM
Site Address:	30 Jordan Street, Mangawhai Heads 0505		
Building Consent #:	BC 250 084		

Inspection Type:	Subgrade for garage pod floor for new dwelling.
Inspection Date:	20/05/2025 **Time:** 12:28pm
In Attendance:	Josh (Builder), Digger Operator ; Tim Stevens (DCL).
Site Conditions:	Dry and fine
Findings:	The garage floor platform is all on original cut ground. Shallow hardfill < 200 mm deep will be used to level up when the blockwork is completed. Maximum cut is approximately 1.2 metres below existing contour with a 500mm vertical cut at the toe which will be retained with 600 - 800mm boulders. The subgrade is original silty sandy clay with bands of loose white sand. The undrained shear strength of the material is 84 - 168kPa. Some existing fill was noted outside the building line adjacent to the driveway cut in the cut batter.





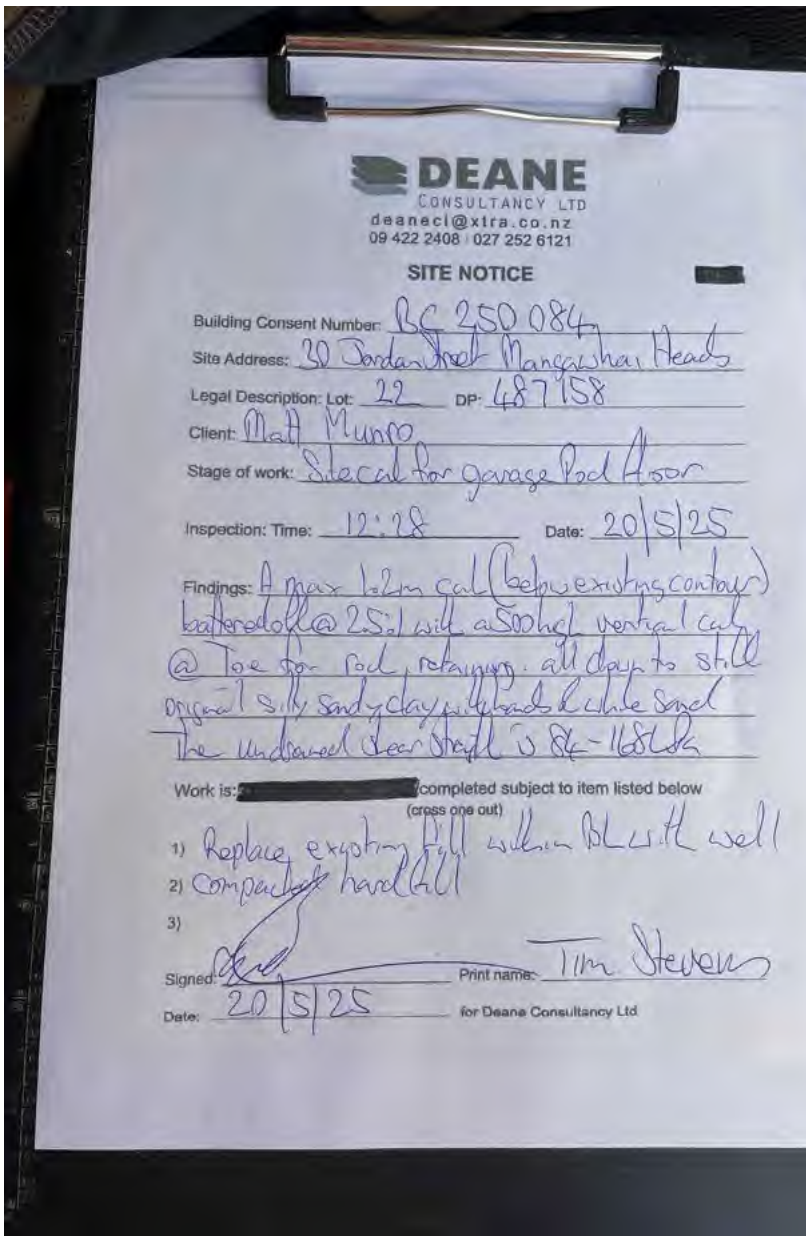


Inspection Result:	The above inspection is a **PASS** Trim to waste any shallow fill under the pod floor and replace with well compacted hardfill.

Additional Photos / Supporting Commentary:







DEANE
CONSULTANCY LTD
deaneci@xtra.co.nz
09 422 2408 | 027 252 6121

SITE NOTICE [redacted]

Building Consent Number: BC 250 084
Site Address: 30 Jordan Street Mangawhai Heads
Legal Description: Lot: 22 DP: 487158
Client: Matt Munro
Stage of work: Site cut for garage Pad floor
Inspection: Time: 12:28 Date: 20/5/25
Findings: A max 1.2m cut (below existing contour) batter to fill @ 2.5:1 with a 500mm vertical cut @ Toe for pad retaining. all days to still original silty sandy clay with bands of white sand. The undisturbed bearing depth is 84-168kPa

Work is: [redacted] completed subject to item listed below
(cross one out)

1) Replace existing fill with GAP with well
2) Compacted hardfill
3)

Signed: [signature] Print name: Tim Stevens
Date: 20/5/25 for Deane Consultancy Ltd



DEANE
CONSULTANCY LTD
deanecl@xtra.co.nz
09 422 2408 0272526121

SITE NOTICE

Building Consent Number: 250084 (KDC)

Site Address: 30 Jordan St, Mangawhai

Legal Description: Lot: 22 DP: 487158

Client: Matthew Munro (matt.munro@steadlaf.co.nz)

Stage of Work Hardfill Compaction

Inspection Time: 11.00 Date: 17/06/2025

Findings: CBR 17 to 27. 500kg plate used.
all ok to continue.

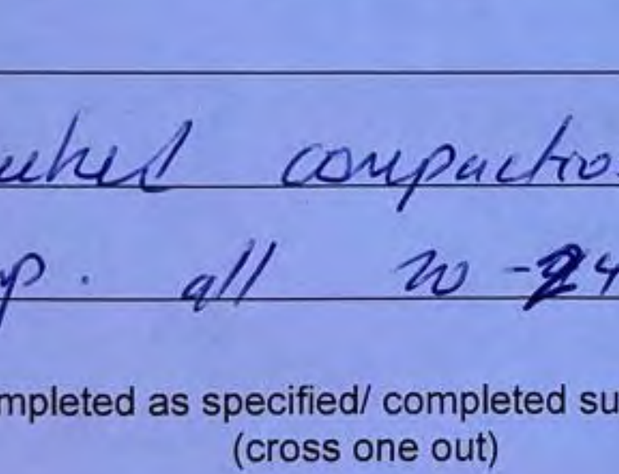
checked compaction on Deep edge halfway up. all to ~~27~~ 24 CBR

Work is: completed as specified/ completed subject to item(s) listed below
(cross one out)

1)

2)

3)



Signed: _____ Print Name: Ash CANTON

Date: 18/6/25 for Deane Consultancy Ltd

DEANE
CONSULTANCY LTD
deanecl@xtra.co.nz
09 422 2408 0272526121

SITE NOTICE

Building Consent Number: 250084 (KDC)

Site Address: 30 Jordan Street, Mangawhai

Legal Description: Lot: 22 DP 487158

Client: Matthew Munro (matt.muro@steadfastconstruction.co.nz)

Stage of Work: Foundation prepour

Inspection Time: 2.30 Date: 3/06/2025

Findings: Foundations as per approved plans
Max height <1.6m All H12 @400c/c vert
footings 450 wide 4 H12 c/c RL Shpe 400c/c
an Grd " 6/H12 "
Piles as per plan + 2 additional piles to long axis

Work is: ~~completed as specified~~/ completed subject to item(s) listed below
(cross one out)

1) MX reqd for additional piles

2)

3)

Signed [signature] Print Name K. Carlton

Date 4/06/2025 for Deane Consultancy Ltd

Was	Reason for changes: altered, removed, replaced, deleted	Now:
incorrect existing contours	altered	correct surveyed heights
blockwork to 1m	altered	blockwork to 1.5m
blockwork perimeter	replaced	Perimeter beam detail
2x bracer lines	added	4x bracer lines

☐ Reduced scope of work (if ticked, please describe items that will not be constructed)

Council use only:

The variation is minor and does not materially affect compliance ☑ Yes ☐ No

Work may proceed ☐ Yes ☐ No

Variation: ☑ Approved ☐ Declined

Inspector's signature: _____ Date: 18-6-25

Inspector's name: Derek Bellam

Note: If the scope of work has been reduced, please check the computer to see whether an update is required to the description of work.

3120.18

KAIPARA DISTRICT

Onsite application for minor variations to approved plans

This application is to advise Kaipara District Council that the following minor variation is proposed to be undertaken on the building situated at the address listed below. Please refer to the government's website for guidance information about what constitutes a minor variation (https://www.building.govt.nz) It is the owners (or their authorised agents) responsibility to notify Council of any changes to the approved plans; this variation must be provided to, **and** be approved by the Building Inspector on site. All changes must be approved before work proceeds.

Building consent Nº:	BC 250086	Reference Nº:		Plan Nº:	
Site Address:	30 Jordan Street, Mangawhai Heads				
~~Owner~~/agents name:	Joshua Dickson				
Postal address	93 Solen Drive, Waimauku Postcode 0812				
Email address	josh.dickson@steadfastconstruction.co.nz				
Applicants role in project	LBP				
Contact telephone	021 025? 0808				

Record of variation: *(please identify location and provide a detailed description of the variation)*

☑ Two copies of plans must accompany application *(must be handed to inspector for inspection to proceed)*

☑ A certificate of design work is required for minor variations where Restricted Building Work is involved

☑ Product Variations must be agreed to by the owner in writing (insulation, plasterboard changes etc.)

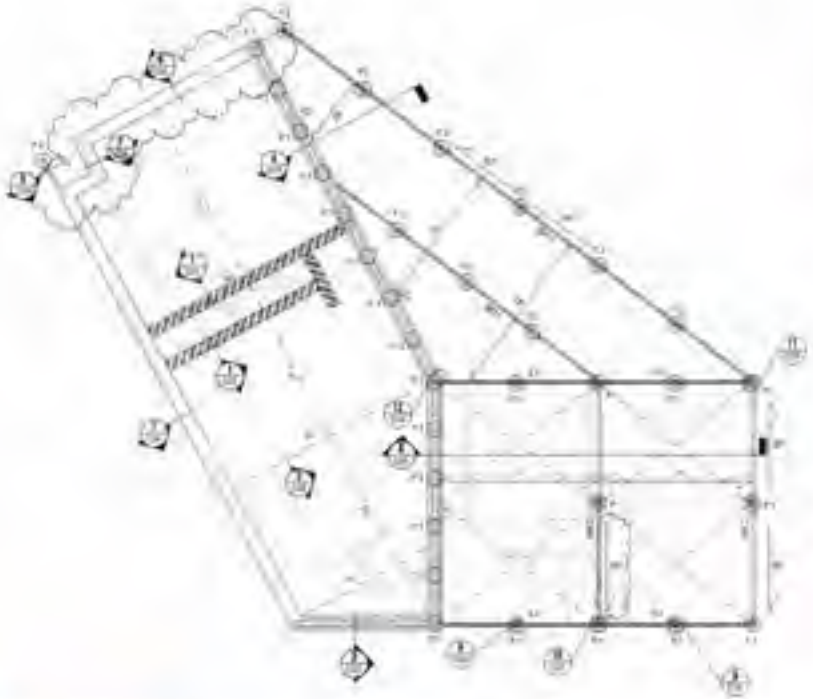
Note *Owners need to be made aware of product variations and the BCA requires written evidence of this.*

Significant change is not a minor variation but a formal amendment. No work may proceed for formal amendments until processed, stamped approved plans are on site. If work has been completed, no consent can be issued as this is a breach of the Building Act. In this case, Infringement & C.O.A requirements may apply.

Description of change:			
1) FFL correction, building dropped beams to suit actual surveyed driveway and contours onsite			
2) Engineering revised to include blockwall to 1.5m from blockwork to perimeter beam along Garage edge			
3) Change			
4) Revised timber subfloor to include 2x additional piles and bearers			
Owner signature:			
Agents signature:		Date:	16-06-2025

Please use this table for describing changes to bracing elements, window sizes, etc.

3120.18



LEGEND LIST				
SYMBOL	NO. OF FLUES	MATERIAL	SIZE	DETAIL
GF1	2	TILE FINISH	2100x900	
GF2	2	TILE FINISH	2100x900	
F1	2	TILE	1200x900	
F2	2	TILE	2400x900	
GF3	2	TILE	2400x900	
F3	2	TILE	1200x900	
F4	2	TILE	2400x900	

KAIPARA DISTRICT COUNCIL
BC # 250216
BUILDING CONSENT APPROVED
Date: 19-6-25
Issued by: G Bellan

Notes:

BUILDING CONSENT
THESE DRAWINGS HAVE BEEN PRODUCED FOR BUILDING CONSENT PURPOSES ONLY.

TIMBER GRADE
ALL STRUCTURAL TIMBER TO BE A MINIMUM OF SG8 OR HIGHER, UNLESS STATED OTHERWISE.

PRODUCTS
ENSURE TO INSTALL, FINISH AND MAINTAIN ALL PRODUCTS TO MANUFACTURERS SPECIFICATIONS. REFER TO TECHNICAL SPECIFICATIONS INCLUDED IN THIS BUILDING CONSENT. IF IN DOUBT CONSULT MANUFACTURERS DIRECTLY.

JOINERY NOTE
ALL OPENING SIZES TO BE CONFIRMED ONSITE PRIOR TO JOINERY FABRICATION. ALL JOINERY TO BE INSTALLED TO NZBC E2 FOR H2/H ENG ZONE

SEA SPRAY ZONE
ENSURE TO INSTALL, FINISH AND MAINTAIN ALL PRODUCTS TO MANUFACTURERS SPECIFICATIONS AND COMPLY WITH SEA SPRAY ZONE. ALL SUB FLOOR FIXINGS TO BE TYPE 304 STAINLESS STEEL.

steadfast

DEANE CONSULTANCY LTD

Rev	Description	Date
1		
2		
3		
4		

30 JORDAN STREET MANGAWHAI HEADS

Drawing	Drawing No.	Rev
SITE EQUATTION PLAN	S01	
30 JORDAN STREET LAYOUT		

Project
MANGAWHAI RESIDENCE

Address
30 JORDAN STREET MANGAWHAI HEADS

Drawn	Checked	Date
Author	JM	03/25

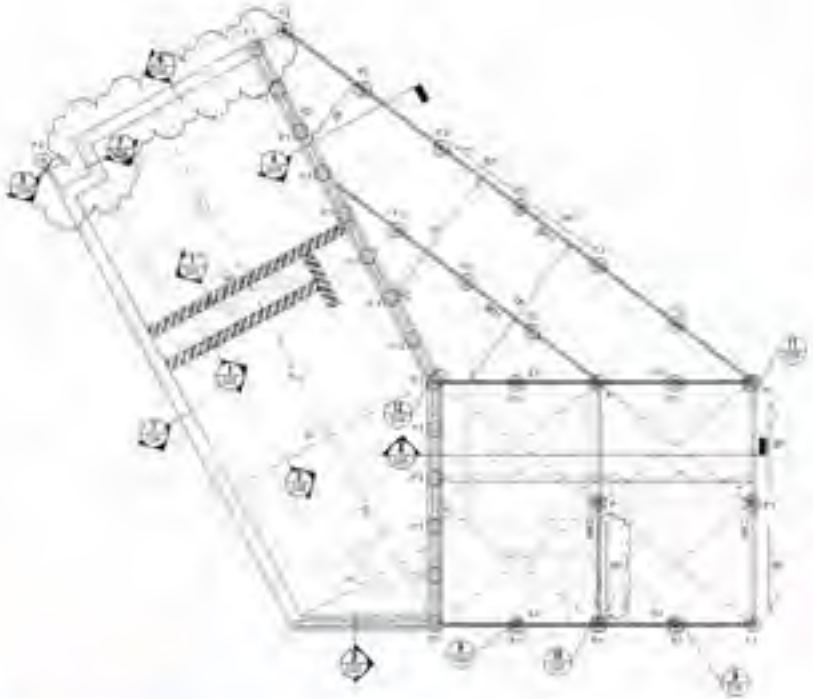
Scale	Project No.
NTS @ A3	2410

BUILDING CONSENT

Sheet Number	Revision
BC-15	1

ENGINEER'S DETAILS

BY ENGINEER NTS



LEGEND LIST				
SYMBOL	NO. OF FLUES	MATERIAL	SIZE	DETAIL
GF1	2	TILE FINISH	2100x900	
GF2	2	TILE FINISH	2100x900	
F1	2	TILE	1200x900	
F2	2	TILE	2400x900	
GF3	2	TILE	2400x900	
F3	2	TILE	1200x900	
F4	2	TILE	2400x900	

KAIPARA DISTRICT COUNCIL
BC # 250216
BUILDING CONSENT APPROVED
Date: 19-6-25
Issued by: G Bellan

Notes:

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JOINERY NOTE
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SEA SPRAY ZONE
ENSURE TO INSTALL, FINISH AND MAINTAIN ALL PRODUCTS TO MANUFACTURERS SPECIFICATIONS AND COMPLY WITH SEA SPRAY ZONE. ALL SUB FLOOR FIXINGS TO BE TYPE 304 STAINLESS STEEL.

steadfast

DEANE CONSULTANCY LTD

Rev	Description	Date
1		
2		
3		
4		

30 JORDAN STREET MANGAWHAI HEADS

Drawing	Drawing No.	Rev
SITE EQUATTION PLAN	S01	
30 JORDAN STREET LAYOUT		

Project
MANGAWHAI RESIDENCE

Address
30 JORDAN STREET MANGAWHAI HEADS

Drawn	Checked	Date
Author	JM	03/25

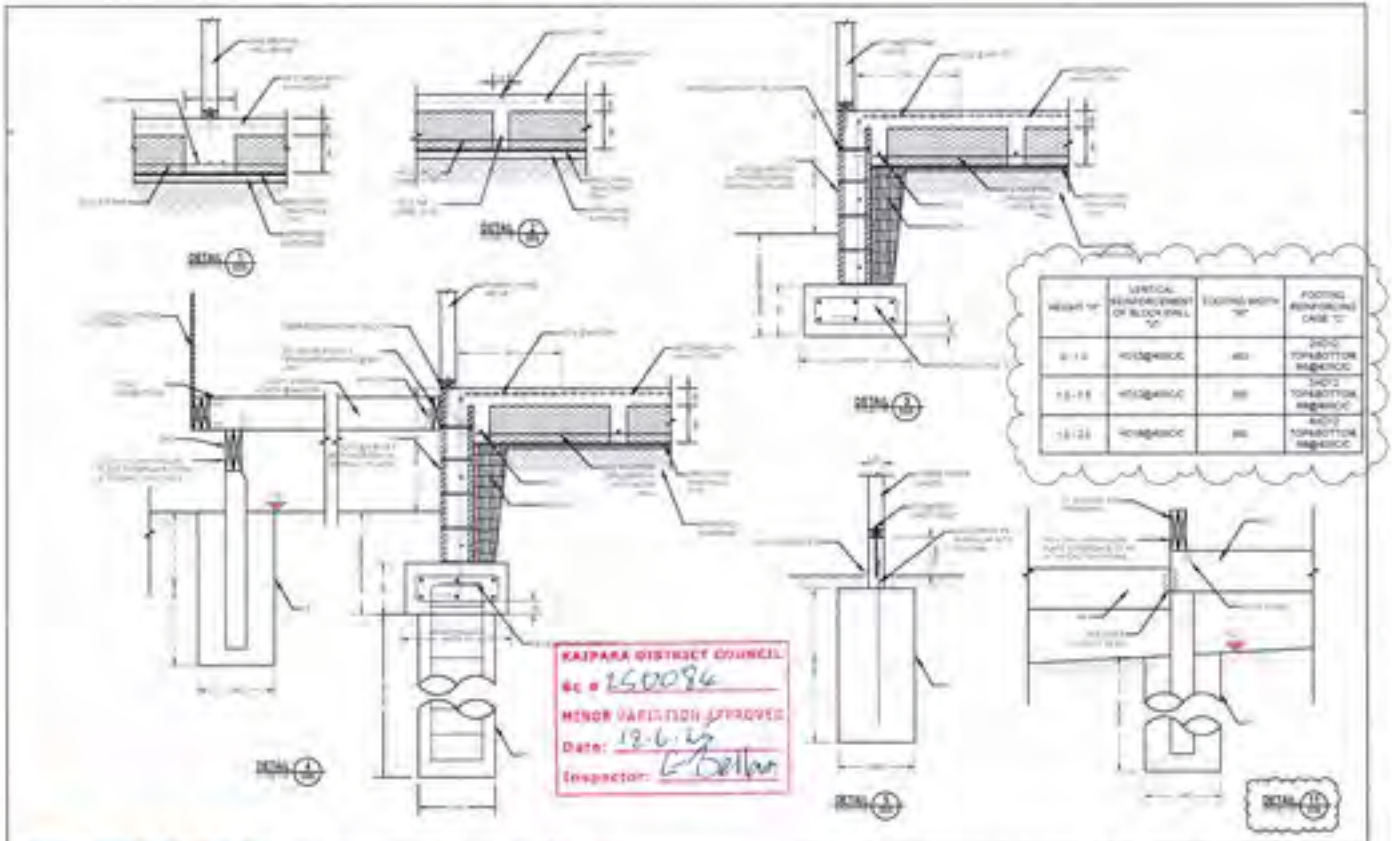
Scale	Project No.
NTS @ A3	2410

BUILDING CONSENT

Sheet Number	Revision
BC-15	1

ENGINEER'S DETAILS

BY ENGINEER NTS



HEIGHT "H"	VERTICAL REINFORCEMENT OF BLOCK WALL "V"	FOOTING WIDTH "W"	FOOTING REINFORCING CASE "C"
0 - 1.5	HY12@400OC	450	2HY12 TOP&BOTTOM #N@400OC
1.5 - 1.8	HY12@400OC	500	2HY12 TOP&BOTTOM #N@400OC
1.8 - 2.2	HY12@400OC	600	3HY12 TOP&BOTTOM #N@400OC

Notes

BUILDING CONSENT
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PRODUCTS
ENSURE TO INSTALL, FINISH AND MAINTAIN ALL PRODUCTS TO MANUFACTURERS SPECIFICATIONS. REFER TO TECHNICAL SPECIFICATIONS INCLUDED IN THIS BUILDING CONSENT. IF IN DOUBT CONSULT MANUFACTURERS DIRECTLY.

JOINERY NOTE
ALL OPENING SIZES TO BE CONFIRMED ONSITE PRIOR TO JOINERY FABRICATION. ALL JOINERY TO BE INSTALLED TO NZBC E2 FOR HIGH WIND ZONE

SEA SPRAY ZONE
ENSURE TO INSTALL, FINISH AND MAINTAIN ALL PRODUCTS TO MANUFACTURERS SPECIFICATIONS AND COMPLY WITH SEA SPRAY ZONE. ALL SUB-FLOOR FIXINGS TO BE TYPE 304 STAINLESS STEEL

steadfast
www.steadfastconstruction.co.nz
m: 0211926233
e: jamie@steadfastconstruction.co.nz

Project
MANGAWHAI RESIDENCE

Address
30 JORDAN STREET MANGAWHAI HEADS

Drawn	Checked	Date
Author	JM	03/25

Scale	Project No
NTD @ A3	2410

BUILDING CONSENT

Sheet Number	Revision
BC-19	J

DEANE CONSULTANCY LTD
E: jane@deane.co.nz

Revision	Description	Date
1	CONSENT DRAWINGS	04/03/2025
2	RFI	13/05/2025
3	RFI EXPANSION	14/05/2025

Project
30 JORDAN STREET MANGAWHAI HEADS

Drawing: FOUNDATION DETAIL
Client: 30 JORDAN STREET LIMITED

Issued	For Building Consent		
Designed	-	Unit	mm
Checked	PD	Sheet No	S05
Date	13/04/2025		
Size	A1	Scale	1 : 20

ENGINEER'S DETAILS

BY ENGINEER N.T.S

Was	Reason for changes: altered, removed, replaced, deleted	Now:
incorrect existing contours	altered	correct surveyed heights
blockwork to 1m	altered	blockwork to 1.5m
blockwork perimeter	replaced	Perimeter beam detail
2x bracer lines	added	4x bracer lines

☐ Reduced scope of work (if ticked, please describe items that will not be constructed)

Council use only:

The variation is minor and does not materially affect compliance ☑ Yes ☐ No

Work may proceed ☐ Yes ☐ No

Variation: ☑ Approved ☐ Declined

Inspector's signature: _____ Date: 18-6-25

Inspector's name: Derek Bellam

Note: If the scope of work has been reduced, please check the computer to see whether an update is required to the description of work.

3120.18

KAIPARA DISTRICT

Onsite application for minor variations to approved plans

This application is to advise Kaipara District Council that the following minor variation is proposed to be undertaken on the building situated at the address listed below. Please refer to the government's website for guidance information about what constitutes a minor variation (https://www.building.govt.nz) It is the owners (or their authorised agents) responsibility to notify Council of any changes to the approved plans; this variation must be provided to, **and** be approved by the Building Inspector on site. All changes must be approved before work proceeds.

Building consent Nº:	BC 250086	Reference Nº:		Plan Nº:	
Site Address:	30 Jordan Street, Mangawhai Heads				
~~Owner~~/agents name:	Joshua Dickson				
Postal address	93 Solen Drive, Waimauku Postcode 0812				
Email address	josh.dickson@steadfastconstruction.co.nz				
Applicants role in project	LBP				
Contact telephone	021 025? 0808				

Record of variation: *(please identify location and provide a detailed description of the variation)*

☑ Two copies of plans must accompany application *(must be handed to inspector for inspection to proceed)*

☑ A certificate of design work is required for minor variations where Restricted Building Work is involved

☑ Product Variations must be agreed to by the owner in writing (insulation, plasterboard changes etc.)

Note *Owners need to be made aware of product variations and the BCA requires written evidence of this.*

Significant change is not a minor variation but a formal amendment. No work may proceed for formal amendments until processed, stamped approved plans are on site. If work has been completed, no consent can be issued as this is a breach of the Building Act. In this case, Infringement & C.O.A requirements may apply.

Description of change:			
1) FFL correction, building dropped beams to suit actual surveyed driveway and contours onsite			
2) Engineering revised to include blockwall to 1.5m from blockwork to perimeter beam along Garage edge			
3) Change			
4) Revised timber subfloor to include 2x additional piles and bearers			
Owner signature:			
Agents signature:		Date:	16-06-2025

Please use this table for describing changes to bracing elements, window sizes, etc.

3120.18

KAIPARA DISTRICT

Kaipara te Oranganui • Two Oceans Two Harbours

KAIPARA DISTRICT COUNCIL

Producer Statement Construction (PS3) - Plumbing

Issued by: PipeRite Plumbing Ltd being a Registered Certifying Plumber.

In respect of the testing of water pipework prior to concealment for:

(Owner) _____

At (Address) 30 Jordan Street, Mangawhai Heads, Northland

30 Jordan Street, Mangawhai Heads, Northland

Legal Description: Lot _____ DP_____ Valuation _____

I have sighted the issued building consent (BC 250084) and have constructed the plumbing pipes and fitting in accordance with the approved building consent, the New Zealand Building Code, and the manufacturers specifications and requirements.

I have tested the water supply system as follows:

☑ By pressurising the water supply system by subjecting the hot and cold system to a pressure of 1500kPa for a period of not less that 15 minutes and inspecting the system to ensure that there are no leaks, in accordance with NZBC G12/AS1 Clause 7.5.1

☐ By pressurising the UPVC water piping systems to 1.5 times the working pressure for a period not less than 15 minutes and checking that there are no leaks, as given in section 9 of NZS 7643, in accordance with NZBC G12/AS1 clause 7.5.2

I believe on reasonable grounds that the pipework has passed that test.

I also understand that Kaipara District Council in accepting this producer statement construction (PS3), will be relying on it to establish compliance at the completion of the building work.

☑ I understand and accept that Council may rely on this document, for the purposes of establishing compliance with the above building consent and that the content including the signature, whether electronic or not, is truly representative and authoritative of the information contained.

Signature of Registered Certifying Plumber: _____

Registration Number: 23093 Reg Expiry Date: 31/03/2026

Date: 09/10/2025

File: 3117.03

Compliance and Electrical Safety Certificate
Unique ID: 1081.3/E247640

This form has been designed to be used by licensed electrical workers to certify that installations or Part installations under Part 1 or Part 2 of AS/NZS 3000 are safe to be connected to the specified system of electrical supply.

(1) Location of Installation or Part Installation

Address: 30 Jordan Street, Mangawhai Heads, Mangawhai 0505

(2) Customer / Occupier / Owner Information

Name: Steadfast

Address: 40 Albert Street, Riverhead, Riverhead 0820

Email: accounts@steadfastconstruction.co.nz Phone:

(3) Electrical Worker Information

Name: Matthew Holdsworth Registration/Practising Licence No.: E247640

Organisation: Electriwhai

Phone: 022 548 6897 Email: info@electriwhai.nz

Name of person(s) being supervised: Joben Hicks(E85523), Kerry May(E254048)

(4) Work Details

This work is: ☑ Is New Work ☐ Is Addition ☐ Is Alteration ☐ Is Maintenance

The prescribed electrical work is: ☐ Home Owner ☐ Low Risk ☑ General ☑ High Risk

High Risk Specified: New mains work and main earthing system, single phase men system

Reference Standards: ☐ Part 1 of AS/NZS 3000 ☑ Part 2 of AS/NZS 3000 ☐ AS/NZS 3012

☐ Additional Standards

Indicate the number of each item installed or altered:

Lighting Outlets: 66 Socket Outlets: 76 Ranges: 1 Water Heaters: 0

Work Done: New electrical fit out of a residential home consisting of a double garage, kitchen, laundry, lounge, office, two bathrooms and three bedrooms.
Manrose 150mm contour fans installed for extraction in the bathrooms and laundry.
UFH heating done by others.

The work was done within the period: Date Commenced: 10/09/2025 Date Completed: 12/12/2025

(5) Certification of Work

I certify that the completed prescribed electrical work to which this certificate applies, has been done lawfully and safely and the information in the certificate is correct in that the installation, or part of the installation:

☑ Relies on manufacturer's instructions ☐ Attached/Ref

☑ Relies on Declaration of Conformity ☐ Attached/Ref

☐ Accordance with certified design ☐ Attached/Ref

Reference:

☑ Tested in accordance with ESR2010

☑ Earthing system that is correctly rated

☑ Fittings safe to connect

☑ Safe to connect to a power supply

Test Results	
Continuity of Earthing System:	0.01
Insulation Resistance:	>499
Polarity – Correct Circuit Connections:	Pass
Verification of Impedance:	0.24
Bonding:	0.01
Other:	

Signature: M Holdsworth Date: 14/12/2025

(6) Electrical Safety Certificate

(to be completed by the person who connects the installation, or part installation to the power supply)

I certify that the installation, or part of the installation as described above, to which this Electrical Safety Certificate applies is connected to a power supply and is safe to use. If maintenance, alteration or addition, has not adversely affected any other part of the installation.

Name: Matthew Holdsworth Registration/Practising Licence No: E247640

Signature: M Holdsworth Issue Date: 12/12/2025 Connection Date: 19/11/2025

CUSTOMER – THIS IS AN IMPORTANT DOCUMENT AND SHOULD BE RETAINED

Ceiling Extraction Fans – Centrifugal

Manrese CONTOUR fans deliver simple compliance with current New Zealand Building Code G4/AS1 mandatory mechanical extract ventilation system requirements. As well as providing application room specific performance, Contour ***Toilet***, ***Bathroom*** and ***Kitchen & Laundry*** fans have a comprehensive range of stylish, interchangeable fascia to choose from.

CONTOUR Toilet Fan	Duct (mm)	Fan Type	Max. Fan Watts (W)	Max. Fan Pressure (Pa)	Free Air Fan Performance l/s	Free Air Fan Performance (m³/hr)	Specific Fan Power (W/l/s)	Sound dB(A)	Fascia	Switching	Order Code
	100	Centrifugal	30	93	49	175	0.61	38	Range Selection	Standard	FAN7030
CONTOUR Bathroom Fan	**Duct (mm)**	**Fan Type**	**Max. Fan Watts (W)**	**Max. Fan Pressure (Pa)**	**Free Air Fan Performance l/s**	**Free Air Fan Performance (m³/hr)**	**Specific Fan Power (W/l/s)**	**Sound dB(A)**	**Fascia**	**Switching**	**Order Code**
	150	Centrifugal	45	147	77	276	0.58	40	Range Selection	Standard	FAN7031
CONTOUR Kitchen and Laundry Fan	**Duct (mm)**	**Fan Type**	**Max. Fan Watts (W)**	**Max. Fan Pressure (Pa)**	**Free Air Fan Performance l/s**	**Free Air Fan Performance (m³/hr)**	**Specific Fan Power (W/l/s)**	**Sound dB(A)**	**Fascia**	**Switching**	**Order Code**
	150	Centrifugal	50	210	105	378	0.48	42	Range Selection	Standard	FAN7032
CONTOUR High Steam Area Fan	**Duct (mm)**	**Fan Type**	**Max. Fan Watts (W)**	**Max. Fan Pressure (Pa)**	**Free Air Fan Performance l/s**	**Free Air Fan Performance (m³/hr)**	**Specific Fan Power (W/l/s)**	**Sound dB(A)**	**Fascia**	**Switching**	**Order Code**
	150	Centrifugal	106	220	153	550	0.69	42	Round White	Standard	FAN7033
									Square White	Standard	FAN7034

- Fitted lead and plug
- Integrated backdraught shutter
- Deep spigot for easy duct connection
- Swing-out arms for easy installation

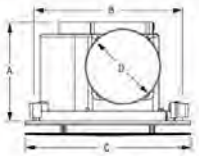
Fascia Selections

Fan	Round White	Round Black	Round LED White	Round LED Black	Square White	Square Black	Square LED White	Square LED Black
Toilet	DCT4502	DCT4503	DCT4506	DCT4507	DCT4504	DCT4505	DCT4508	DCT4509
Bathroom Kitchen and Laundry	DCT4710	DCT4511	DCT4714	DCT4515	DCT4712	DCT4513	DCT4516	DCT4517

Ceiling Extraction Fans – Centrifugal

Dimensions (mm)

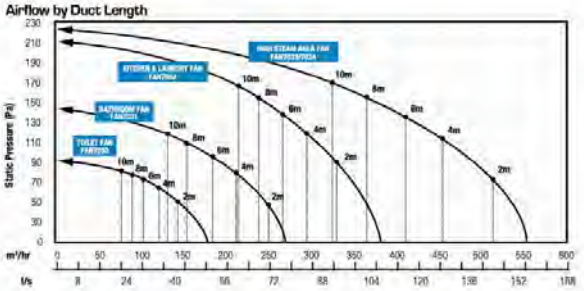
Model	A	B (cut-out size)	C (fascia size)	D
Toilet	170	240	272	100
Bathroom	197	296	328	150
Kitchen and Laundry	197	296	328	150
High Steam Area	197	296	328	150



Technical

Model		Toilet	Bathroom	Kitchen and Laundry	High Steam Area
Supply			220-240V AC, 50Hz		
Max. Operating Temp			40°C		
Tri-Colour LED Fascia - Round	(W)	11	16		-
	(lm)	932 / 1054 / 1046	1294 / 1446 / 1443		-
	(K)	3000K / 4000K / 6000K	3000K / 4000K / 6000K		-
Tri-Colour LED Fascia - Square	(W)	12	16		-
	(lm)	1112 / 1197 / 1224	1488 / 1601 / 1641		-
	(K)	3000K / 4000K / 6000K	3000K / 4000K / 6000K		-
IP Rating			IP44		

Airflow by Duct Length



KAIPARA DISTRICT

Kaipara te Oranganui • Two Oceans Two Harbours

KAIPARA DISTRICT COUNCIL

Producer Statement Construction (PS3) - Plumbing

Issued by: PipeRite Plumbing Ltd being a Registered Certifying Plumber.

In respect of the testing of water pipework prior to concealment for:

(Owner) _____

At (Address) 30 Jordan Street, Mangawhai Heads, Northland

30 Jordan Street, Mangawhai Heads, Northland

Legal Description: Lot _____ DP_____ Valuation _____

I have sighted the issued building consent (BC 250084) and have constructed the plumbing pipes and fitting in accordance with the approved building consent, the New Zealand Building Code, and the manufacturers specifications and requirements.

I have tested the water supply system as follows:

☑ By pressurising the water supply system by subjecting the hot and cold system to a pressure of 1500kPa for a period of not less that 15 minutes and inspecting the system to ensure that there are no leaks, in accordance with NZBC G12/AS1 Clause 7.5.1

☐ By pressurising the UPVC water piping systems to 1.5 times the working pressure for a period not less than 15 minutes and checking that there are no leaks, as given in section 9 of NZS 7643, in accordance with NZBC G12/AS1 clause 7.5.2

I believe on reasonable grounds that the pipework has passed that test.

I also understand that Kaipara District Council in accepting this producer statement construction (PS3), will be relying on it to establish compliance at the completion of the building work.

☑ I understand and accept that Council may rely on this document, for the purposes of establishing compliance with the above building consent and that the content including the signature, whether electronic or not, is truly representative and authoritative of the information contained.

Signature of Registered Certifying Plumber: _____

Registration Number: 23093 Reg Expiry Date: 31/03/2026

Date: 09/10/2025

File: 3117.03

PRODUCT PERFORMANCE WARRANTY

Installation date:	Monday, November 24, 2025	**Issue date:**	Tuesday, December 9, 2025
Warranty number:	PW-0032677	**Applicator number:**	1068
Name of applicator:	Manh Nguyen		
Applicator company:	Good Guys Tiling Ltd		
Property owner:	Matthew Munro ; ;		
Project address:	30 Jordan Street, Mangawhai Heads, Mangawhai 0505		
Building consent number:	BC250084		
Application Description:	WET AREA (Shower enclosure), SPLASH AREA: (Kitchen, bathroom, laundry or toilet area)		
Products under warranty:	MAPELASTIC AQUADEFENSE [15 years],32 sqm		

Subject to the terms and conditions herewith, MBP (NZ) LTD warrants to the above listed property owner that the product/s listed above when prepared and applied in accordance with the Technical Data Sheet (TDS) will achieve the properties and characteristics set out in the TDS and will retain these properties and characteristics for the duration of the above listed Warranty Period.

MAPEI conforms to the Performance and Quality Standards herewith;

- Since 1994, MAPEI SpA has applied a Quality System certified by Certiquality in compliance with ISO 9001 standards.
- MAPEI SpA's Italian-based facilities apply an Environmental Management System certified by Certiquality in compliance with ISO 14001 standards.
- The Italian-based production facilities have successfully completed OHSAS 18001 certification for their Occupational Health and Safety Management System.
- The group's main production facility also adopts EMAS III (Environmental Management and Audit Scheme), the European Union's environmental management system certified according to the European Regulation EC 1221/2009.
- Responsible Care Program of which Mapei SpA has been part of the chemical industry's world-wide Responsible Care program since 1992, and communicates data which is published in the annual Responsible Care report.


CE
EN 998
EN 1504
EN 15824
EN 12004
EN 13888
MAPEI
EN 1813
OHSAS 18001
CERTIQUALITY
OHSAS 18001
CERTIQUALITY
The Mapei Environmental Management System
ISO 14001
The Mapei Environmental Management System
ISO 14001
CERTIQUALITY
EMAS

Terms & Conditions - This warranty is subject to the terms and conditions hereafter

1. GENERAL TERMS

1.1. Subject to the terms and conditions herewith, MBP (NZ) LTD warrants that its products shall be reasonably fit for purpose for which they are supplied, free from manufacturing defects, and will perform under normal usage for the warranty period stated in this product performance warranty ("warranty"), when the products have been purchased and used within their shelf life according to;
1.1.1. the Technical Data Sheets (TDS) guidelines and other literature issued by MAPEI for the products collectively, the "Product Literature" which are applicable at the time the products were purchased and installation at the project site and;
1.1.2. Governmental regulations, building standards, codes, and normal industry practices.
1.2. It is expressly understood that the purchaser and Applicator of MAPEI products acknowledges that MAPEI is not responsible or liable under any circumstances for determining the suitability or compatibility of MAPEI products for the user's intended purpose.
1.3. The warranty will become void when MBP (NZ) LTD believes the Applicator/Installer is, or was in breach of the terms of this warranty.
1.4. Reference to applicator means the party who purchased the product, or who installed the product at the project site.
1.5. MBP (NZ) LTD is entitled to reach its own belief as to any matters associated with these terms and it does so in its absolute discretion.
1.6. This warranty applies when the conditions herewith are attained to the satisfaction of MBP (NZ) LTD; if at a later date it is discovered these conditions were not achieved, then MBP (NZ) LTD is entitled to refuse any claim made under this warranty.
1.7. This warranty; is only applicable to products purchased directly or indirectly from MBP (NZ) LTD and applied in New Zealand.
1.8. If the ownership of the property is transferred to a new owner within five (5) years of the release date of the warranty, the new owner shall receive benefit of this Warranty provided that MBP (NZ) LTD is advised in writing within three months of the change in ownership. In all other circumstances where the property is transferred during the term of this Warranty, this Warranty is non-transferable.

2. THIS WARRANTY IS VALID WHEN

2.1. All money owed under MBP (NZ) LTD terms of trade for the supply of the warranted product/s has been paid.
2.2. The substrate to which the MAPEI product has been applied was thoroughly and sufficiently prepared as per the requirements of the MAPEI Product Literature.
2.3. A primer or any other MAPEI product linked to the Warranted product has been applied correctly as part of a product system, or applicable to the MAPEI Product Literature.
2.4. The warranted product has been correctly applied in accordance with all relevant MAPEI Product Literature and specification guidelines.
2.5. The product has been protected from service until fully cured, or able to achieve its intended performance as per the MAPEI Product Literature.
2.6. All MBP (NZ) Limited and Mapei Group maintenance documents and guidelines for the products have been followed (these are supplied with this warranty and are also available on request from MBP (NZ) Limited).

3. THIS WARRANTY EXCLUDES

3.1. The following are specifically excluded from coverage under this warranty;
3.1.1. Structural failure of the substrate, inadequate subflooring, or improper subfloor preparation;
3.1.2. Damages caused by Acts of God, including, but not limited to hurricane, flooding, earthquake, fire, or other types of natural disasters, or,
3.1.3. As a result of unforeseen circumstances; acts of negligence, terrorism, or product misuse or abuse;
3.1.4. Failure to comply with MAPEI Product Literature, applicable Building Codes and standards and/or regulations, standards, or industry practices at the time of product application or installation;
3.1.5. Variations in color, shade, or texture, from those shown on samples, product packaging or any other marketing materials;
3.1.6. Changes in color due to exposure to sunlight and aging; subfloor moisture or water damage; normal wear and tear resulting from usage;
3.1.7. Efflorescence and shading inherent in all cementitious products; cracking due to structural movement, excessive deflection, or other failure of the substrate, including but not limited to substrate failures caused by Alkali Silica Reaction (ASR), or Near Surface Alkali Reaction (NSAR).
3.2. If any of these terms are breached, or if in addition, MBP (NZ) LTD believes;
3.2.1. It is discovered there is or was a fault in the manner in which the product was stored or applied;

3.2.2. It is discovered there is or was a fault in the design, preparation, application, construction or maintenance of the substrate relevant to the product, or where it has been applied;
3.2.3. The surface to which the product has been applied was not thoroughly and sufficiently prepared in accordance to MAPEI Product Literature;
3.2.4. There has been an intentional or negligent act done to the warranted product that impacts on the product's performance;
3.3. MBP (NZ) LTD does not warrant nor shall it be liable for any other loss, either consequential, or damage resulting from incorrect product application, or for any failure resulting from poor workmanship by the Applicator, Installer, or for lack of maintenance or inappropriate in-service use of the product during its in-service life.

4. LEGAL RIGHTS

4.1. This constitutes the warranty for the products purchased to the extent permitted by law; all other warranties, whether express or implied, but not limited to the implied warranties of merchantability and fitness for a particular purpose do not apply.
4.2. Any implied warranties arising by operation of law are limited in duration to the term of this warranty.
4.3. MBP (NZ) LTD will not pay, or be liable under this warranty in any circumstances for incidental, consequential, special or exemplary damages, lost profits, or business interruption loss.
4.4. No implied warranty can be modified by any course of dealing, course of performance or usage of trade.
4.5. MBP (NZ) LTD assumes no responsibility or liability to any other person or entity.
4.6. No representation, promise, affirmation or statement by any MBP (NZ) LTD Employee, or agent of MAPEI will be enforceable against MAPEI unless it is specifically included in the warranty.
4.7. This warranty is subject to the Laws of New Zealand.
4.8. The entire agreement is to be read in conjunction with MBP (NZ) LTD terms and conditions of sale and where relevant, the terms contained in the MBP (NZ) LTD Terms of Trade applicable at the issue date of this warranty.
4.8.1. All such documents constitute the entire agreement between the parties and supersede any other prior agreement, arrangement, representation, negotiation or inducement.

5. PROCESSING A PRODUCT PERFORMANCE ALLEGATION

5.1. If the warranted product does not comply with the terms of this warranty, MBP (NZ) LTD shall replace or repair the warranted product at its cost to the fullest extent permitted by law.
5.2. The asset owner or applicator / installer of the product must notify MBP (NZ) LTD in writing or via email of any alleged product defect within fourteen (14) days of the date of discovery of the alleged defect; If this is not done, the request may be declined.
5.3. A copy of the product warranty as executed herewith and product purchase receipt must be provided at the time of notification.
5.4. MBP (NZ) LTD receives approval form the asset owner, without any obligation, to;
5.4.1. physically inspect, perform testing, and obtain samples at the site where the product performance allegation has occurred, and to,
5.4.2. engage a third party for services required by MBP (NZ) LTD to determine the validity of the product performance allegation.
5.5. In order to perform (or have performed) the services described in Point 5.4.1 & 2 , the asset owner of the site consents to access for such services and agrees to pay for those services and all related costs to MBP (NZ) LTD if the product performance allegation is found to be invalid under this warranty.
5.6. A claim must be received and evaluated by MBP (NZ) LTD before any repairs are performed; otherwise, this warranty will be null and void.
5.7. The maximum recovery entitled under this product performance warranty is either repairs to the product, product replacement, or the value of the product required to replace the defective product.
5.8. For this warranty, MBP (NZ) LTD's liability will reduce annually on a linear proportionate basis over the term of the Warranty. For example,
5.8.1. for a claim made within a fifteen (15) year Warranty term, the first year of the Warranty MBP (NZ) LTD will meet the full product cost, whereas for a claim in year ten (10), MBP (NZ) LTD will provide a third of the product cost.

Producer Statement Construction (PS3)

Tick applicable Contractor for:

☐	Building	☐	Cladding	☐	Drainlayer
☐	Effluent system design	☐	Solar heating	☐	Solid Fuel Heating
☐	Waterproof membranes	☐	Plumbing		
☐	SS1 Automatic sprinkler system	☐	SS2 Fire alarm	☐	SS3 Access controlled doors or windows
☐	SS4 Emergency lighting	☐	SS7 Plumbing Backflow Prevention Devices	☐	SS8 Lift
☐	SS9 Mechanical (HVAC)	☐	SS12 Audio Loops		
☐	SS14/1 Emergency Power Systems (associated with SS1, Engine that drives sprinkler system pump or back engine driven generator power system)			☐	SS15/3 Fire Separations
☑	**Glass Balustrade**	☐		☐	
☐		☐		☐	
☐		☐		☐	

Please list the current standard used for installation and applicable building inspection standard e.g. Performance standard AS/NZS 2293.1 2018, Inspections AS/NZS2293.2 2019

*Standard	NZBC F3, F4		
Authors name	Matthew Munro	Building Consent No	BC250084
Author's company	Steadfast Construction	Author Registration No	BP120336
Site address	30 Jordan Street, Mangawhai		
Owner's name	30 Jordan Street Limited		
Legal description	Lot	DP	

Description of work:

Supply and installation of Guardian spigot top mounted glass balustrade including interlinking rail

Scope of work covered by statement	Glass balustrade to deck
Any limitations or conditions	
System/product used if applicable	Gaurdian Glass Fencing

I (constructor) have been engaged by

(applicant)

to construct ☐ All ☐ Part only

NZBC clauses (select as applicable)																				
☐ B1	☐ B2	☐ C1	☐ C2	☐ C3	☐ C4	☐ C5	☐ C6	☐ D1	☐ D2	☐ E1	☐ E2	☐ E3								
☐ F1	☐ F2	✔ F3	✔ F4	☐ F5	☐ F6	☐ F7	☐ F8	☐ F9	☐ G1	☐ G2	☐ G3	☐ G4								
☐ G5	☐ G6	☐ G7	☐ G8	☐ G9	☐ G10	☐ G11	☐ G12	☐ G13	☐ G14	☐ G15	☐ H1									

I have sighted the above building consent and read the attached conditions of consent and I am satisfied on reasonable grounds that the building work specified above has been completed to the extent required by that building consent and complies with the NZ Building Code. I understand that this Producer Statement, if accepted, may be relied on by the Council for the purpose of establishing compliance with the Building Consent.

Signature		Date	12.12.25
Name	Matthew Munro		
Address	40 Albert Street, Riverhead		
Email	matt.munro@steadfastconstruction.co.nz	Mobile	021973041

New Zealand Building Code			
A1	Classified Uses	The New Zealand Building Code is contained in the Building Regulations 1992	
A2	Interpretation		
Stability		**Fire Safety**	
B1	Structure	C1	Objectives of Clause C2-C6
B2	Durability	C2	Prevention of fire occurring
		C3	Fire affecting areas beyond the fire source
		C4	Movement to a place of safety
		C5	Access and safety for fire fighting operations
		C6	Structural stability
Access		**Moisture**	
D1	Access routes	E1	Surface water
D2	Mechanical installations for access	E2	External moisture
		E3	Internal moisture
Safety of users		**Service and facilities**	
F1	Hazardous agents on site	G1	Personal hygiene
F2	Hazardous building materials	G2	Laundering
F3	Hazardous substances and processes	G3	Food preparation and prevention of contamination
F4	Safety from falling	G4	Ventilation
F5	Construction and demolition hazards	G5	Interior environment
F6	Visibility in escape routes	G6	Airborne and impact sound
F7	Warning systems	G7	Natural light
F8	Signs	G8	Artificial light
		G9	Electricity
		G10	Piped services
		G11	Gas as an energy source
		G12	Water supplied
		G13	Foul water
		G14	Industrial liquid waste
		G15	Solid waste
		H1	Energy efficient

NZBC Clause B1 Structure - Design

Seismic Restraint of Non-Structural Building Elements

Project number:	16050744-01N		
Company name:	GUARDIAN FENCING (Harkness & Young Ltd)		
Issue Date:	18/06/2025	Expiration Date:	18/06/2026
Location:	Various Locations		

Cider Building Level 9, 4 Williamson Ave
Ponsonby, Auckland 1021, New Zealand.

p: +64 9 216 7104
e: info@teambrevity.com

PRODUCER STATEMENT – PS1
DESIGN

BUILDING CODE CLAUSE(S): B1, F4, F9 **JOB NUMBER:** 16050744-01N
ISSUED BY: Brevity Ltd
(Engineering Design Firm)
TO: GUARDIAN FENCING (Harkness & Young Ltd)
(Owner/Developer)
TO BE SUPPLIED TO: Territorial Authority
(Building Consent Authority)
IN RESPECT OF: Brevity Report # 16050744-01N Design of Non-Structural Building Elements
(Description of Building Work)
AT: Various Locations
(Address, Town/City)
LEGAL DESCRIPTION: Lot no. DP no. **N/A** ☐

We have been engaged by the owner/developer referred to above to provide *(Extent of Engagement)*:
Design of Non-Structural Building Elements
in respect of the requirements of the Clause(s) of the Building Code specified above for Part only , as specified in the Schedule, of the proposed building work.

The design carried out by us has been prepared in accordance with:

- ☑ Compliance documents issued by the Ministry of Business, Innovation & Employment *(Verification method/acceptable solution)* B1 / VM1, F4/AS1, F9/AS1 and/or;
- ☐ Alternative solution as per the attached Schedule.

The proposed building work covered by this producer statement is described on the drawings specified in the Schedule, together with the specification, and other documents set out in the Schedule.

On behalf of the Engineering Design Firm, and subject to:

- Site verification of the following design assumptions: refer to attached report .
- All proprietary products meeting their performance specification requirements;

I believe on reasonable grounds that:

- the building, if constructed in accordance with the drawings, specifications, and other documents provided or listed in the Schedule, will comply with the relevant provisions of the Building Code and that;
- the persons who have undertaken the design have the necessary competency to do so.

I recommend the Choose one level of **construction monitoring**. ☑ as per agreement with owner/developer (Architectural)

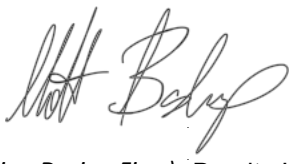
I, *(Name of Engineering Design Professional)* Matt Bishop , am:

- ☑ CPEng number 243276

and hold the following qualifications BE (Hons)

The Engineering Design Firm holds a current policy of Professional Indemnity Insurance no less than $200,000
The Engineering Design Firm is a member of ACE New Zealand.

SIGNED BY *(Name of Engineering Design Professional)*: Matt Bishop
(Signature below):



ON BEHALF OF *(Engineering Design Firm)*: Brevity Ltd Date: /0 /2025

Note: This statement has been prepared solely for the Building Consent Authority named above and shall not be relied upon by any other person or entity. Any liability in relation to this statement accrues to the Engineering Design Firm only. As a condition of reliance on this statement, the Building Consent Authority accepts that the total maximum amount of liability of any kind arising from this statement and all other statements provided to the Building Consent Authority in relation to this building work, whether in tort or otherwise, is limited to the sum of $200,000.

This form is to accompany **Form 2 of the Building (Forms) Regulations 2004** for the application of a Building Consent.

SCHEDULE to PS1

Please include an itemised list of all referenced documents, drawings, or other supporting materials in relation to this producer statement below:

16050744-01 Glass Balustrade and Pool Fencing - Maximum Spigot Spans - SF-RSF Spigot
16050744-01 Glass Balustrade and Pool Fencing - Maximum Spigot Spans - SF-RRF Spigot
16050744-01 Glass Balustrade and Pool Fencing - Maximum Spigot Spans - SF-MRFU Spigot
16050744-01 Glass Balustrade and Pool Fencing - Maximum Spigot Spans - SF-RSNF Spigot
16050744-01 Glass Balustrade and Pool Fencing - Maximum Spigot Spans - 50mm Standoff
16050744-01 Glass Balustrade and Pool Fencing - Maximum Spigot Spans - Side Mounted Spigot
16050744-01 Glass Balustrade and Pool Fencing - Maximum Spigot Spans
16050744-01 Glass Balustrade and Pool Fencing - M12 Anchor Spigot Fixing Details
16050744-01 Pool Balustrade Layout For Barriers Surrounding Immediate Pool Area
Harkness & Young Limited - Cantilever Glass Balustrade - Glass Support Details
F9/AS1 Residential Pool Barriers pg12-pg15
Brevity - Design of Balustrade Systems Report
STS14-0048-01 Scope Testing Report
STS13-0008-02 Scope Testing Report
STS13-0150-03 Scope Testing Report
STS14-0048-07 Scope Testing Report
STS14-0048-10 Scope Testing Report

GUIDANCE ON USE OF PRODUCER STATEMENTS

Information on the use of Producer Statements and Construction Monitoring Guidelines can be found on the Engineering New Zealand website
https://www.engineeringnz.org/engineer-tools/engineering-documents/producer-statements/

Producer statements were first introduced with the Building Act 1991. The producer statements were developed by a combined task committee consisting of members of the New Zealand Institute of Architects (NZIA), Institution of Professional Engineers New Zealand (now Engineering New Zealand), Association of Consulting and Engineering New Zealand (ACE NZ) in consultation with the Building Officials Institute of New Zealand (BOINZ). The original suite of producer statements has been revised at the date of this form to ensure standard use within the industry.

The producer statement system is intended to provide Building Consent Authorities (BCAs) with part of the reasonable grounds necessary for the issue of a Building Consent or a Code Compliance Certificate, without necessarily having to duplicate review of design or construction monitoring undertaken by others.

PS1 DESIGN Intended for use by a suitably qualified independent engineering design professional in circumstances where the BCA accepts a producer statement for establishing reasonable grounds to issue a Building Consent;

PS2 DESIGN REVIEW Intended for use by a suitably qualified independent engineering design review professional where the BCA accepts an independent design professional's review as the basis for establishing reasonable grounds to issue a Building Consent;

PS3 CONSTRUCTION Forms commonly used as a certificate of completion of building work are Schedule 6 of NZS 3910:2013 or Schedules E1/E2 of NZIA's SCC 2011[2]

PS4 CONSTRUCTION REVIEW Intended for use by a suitably qualified independent engineering construction monitoring professional who either undertakes or supervises construction monitoring of the building works where the BCA requests a producer statement prior to issuing a Code Compliance Certificate.

This must be accompanied by a statement of completion of building work (Schedule 6).

The following guidelines are provided by ACE New Zealand and Engineering New Zealand to interpret the Producer Statement.

Competence of Engineering Professional
This statement is made by an engineering firm that has undertaken a contract of services for the services named, and is signed by a person authorised by that firm to verify the processes within the firm and competence of its personnel.

The person signing the Producer Statement on behalf of the engineering firm will have a professional qualification and proven current competence through registration on a national competence-based register such as a Chartered Professional Engineer (CPEng).

Membership of a professional body, such as Engineering New Zealand provides additional assurance of the designer's standing within the profession. If the engineering firm is a member of ACE New Zealand, this provides additional assurance about the standing of the firm.

Persons or firms meeting these criteria satisfy the term "suitably qualified independent engineering professional".

Professional Indemnity Insurance
As part of membership requirements, ACE New Zealand requires all member firms to hold Professional Indemnity Insurance to a minimum level.

The PI Insurance minimum stated on the front of this form reflects standard practice for the relationship between the BCA and the engineering firm.

Professional Services during Construction Phase
There are several levels of service that an engineering firm may provide during the construction phase of a project (CM1-CM5 for engineers[3]). The building Consent Authority is encouraged to require that the service to be provided by the engineering firm is appropriate for the project concerned.

Requirement to provide Producer Statement PS4
Building Consent Authorities should ensure that the applicant is aware of any requirement for producer statements for the construction phase of building work at the time the building consent is issued as no design professional should be expected to provide a producer statement unless such a requirement forms part of the Design Firm's engagement.

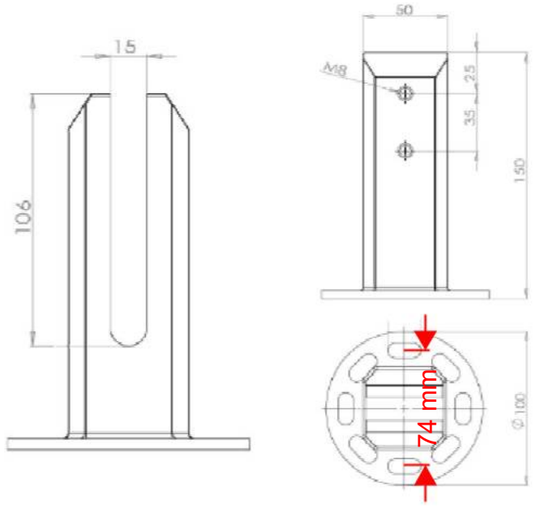
Refer Also:

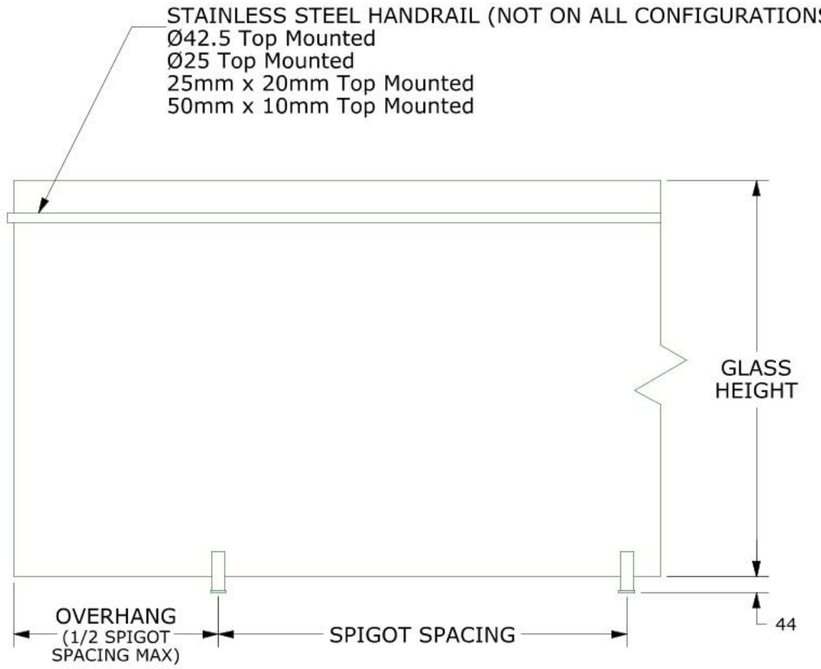
1 Conditions of Contract for Building & Civil Engineering Construction NZS 3910: 2013
2 NZIA Standard Conditions of Contract SCC 2011
3 Guideline on the Briefing & Engagement for Consulting Engineering Services (ACE New Zealand/Engineering New Zealand 2004)
4 PN01 Guidelines on Producer Statements

www.acenz.org.nz
www.engineeringnz.org

ITEM CODE
SF-RSF







G

Configuration	Maximum Allowable Spigot Spacing (m)							
	Interior Use		Exterior Use					
	Occupancy Type (To AS/NZS 1170.1:2002)		Wind Zone (To NZS 3604:2011)					
	A,B,C3	C1,C2	L	M	H	VH	DoBH ULS Load	EH
970mm High No Rail*	0.80	0.43	0.80	0.80	0.80	0.80	0.80	0.71
970mm High, Top Rail (Any)	0.80	0.43	0.80	0.80	0.80	0.80	0.80	0.71
970mm High, Side Rail (Any)	0.80	0.43	0.80	0.80	0.80	0.80	0.80	0.71
1200mm High, No Rail* POOL FENCE ONLY	N/A	N/A	0.80	0.80	0.80	0.64	0.59	0.53

NOTES:

1. OCCUPANCY TYPES A, B, AND C3, AND C1 AND C2 HAVE BEEN GROUPED TOGETHER AS THE MAXIMUM APPLIED LOADS ARE THE SAME.
2. IMPOSED WIND ACTIONS MUST BE APPLIED TO ALL EXTERIOR INSTALLATIONS AND MAY LIMIT THE MAXIMUM SPIGOT SPACING
3. IMPOSED ACTIONS ARE CURRENT AT THE DATE OF DRAWING
4. *NOTE THAT GLASS BARRIERS WITHOUT INTERLINKING RAILS MUST STILL COMPLY WITH B1/AS1

DESIGNER:

Brevity

Cider Building
Victoria Park Market,
Unit 12B,
210 Victoria Street West
Auckland 1010

Level 3/4 Williamson Ave,
Ponsonby, Auckland
1021, New Zealand

+64 9 216 7104
www.teambrevity.com

Tolerances (unless specified)	1-100	<1000	>1000
	± 2	± 10	± 70

All dim. in mm

Rev	Description
A	FOR CONSENT RELEASED FOR CONSENT
B	PRODUCT UPDATE
H	ADDED EH WIND SPEED
I	DRAWING UPDATED

Designed	BREVITY LTD	18/05/23
Drawn	BREVITY LTD	18/05/23
Approved	BREVITY LTD	18/05/23

HARKNESS & YOUNG LTD
GLASS BALUSTRADE AND POOL FENCING - MAXIMUM SPIGOT SPANS - SF-RSF SPIGOT

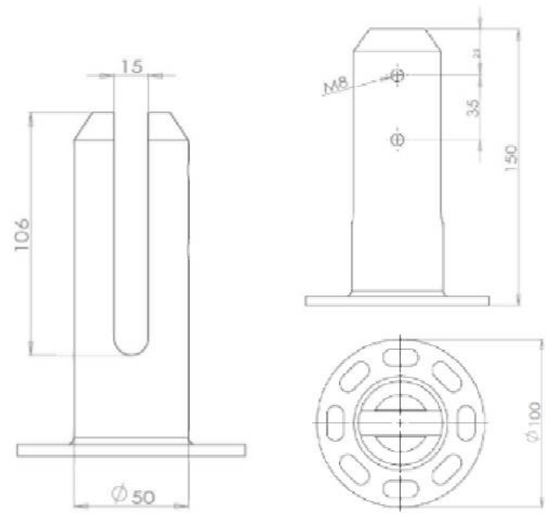
Scale: Do not Scale

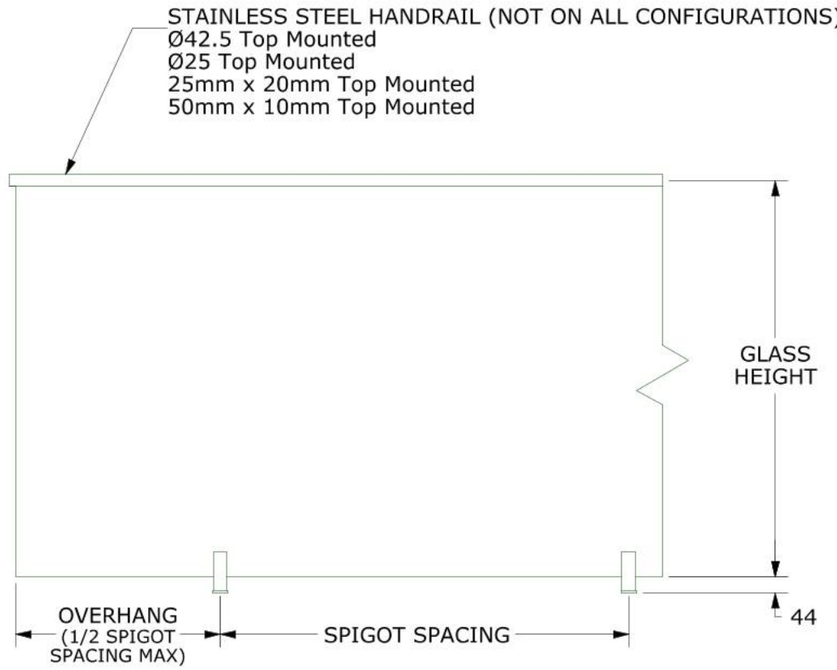
DRG No. 16050744-01

ITEM CODE

SF-RRF







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Configuration	Maximum Allowable Spigot Spacing (m)							
	Interior Use		Exterior Use					
	Occupancy Type (To AS/NZS 1170.1:2002)		Wind Zone (To NZS 3604:2011)					
	A,B,C3	C1,C2	L	M	H	VH	DoBH ULS Load	EH
970mm High No Rail*	0.80	0.43	0.80	0.80	0.80	0.80	0.80	0.71
970mm High, Top Rail (Any)	0.80	0.43	0.80	0.80	0.80	0.80	0.80	0.71
970mm High, Side Rail (Any)	0.80	0.43	0.80	0.80	0.80	0.80	0.80	0.71
1200mm High, No Rail* POOL FENCE ONLY	N/A	N/A	0.80	0.80	0.80	0.64	0.59	0.53

NOTES:

1. OCCUPANCY TYPES A, B, AND C3, AND C1 AND C2 HAVE BEEN GROUPED TOGETHER AS THE MAXIMUM APPLIED LOADS ARE THE SAME.
2. IMPOSED WIND ACTIONS MUST BE APPLIED TO ALL EXTERIOR INSTALLATIONS AND MAY LIMIT THE MAXIMUM SPIGOT SPACING
3. IMPOSED ACTIONS ARE CURRENT AT THE DATE OF DRAWING
4. *NOTE THAT GLASS BARRIERS WITHOUT INTERLINKING RAILS MUST STILL COMPLY WITH B1/AS1

DESIGNER:

Brevity

Victoria Park Market,
Victoria Building
Level 2B4, 210 Victoria Street West
Auckland 1010
+64 9 216 7104
www.teambrevity.com

Tolerances (unless specified)	1-100	<1000	>1000
	± 2	± 10	± 70

All dim. in mm

Rev	Description
A	FOR CONSENT RELEASED FOR CONSENT
B	PRODUCT UPDATE
H	ADDED EH WIND SPEED
I	DRAWING UPDATED

Designed	BREVITY LTD	18/05/23
Drawn	BREVITY LTD	18/05/23
Approved	BREVITY LTD	18/05/23

HARKNESS & YOUNG LTD
GLASS BALUSTRADE AND POOL FENCING - MAXIMUM SPIGOT SPANS - SF-RRF SPIGOT

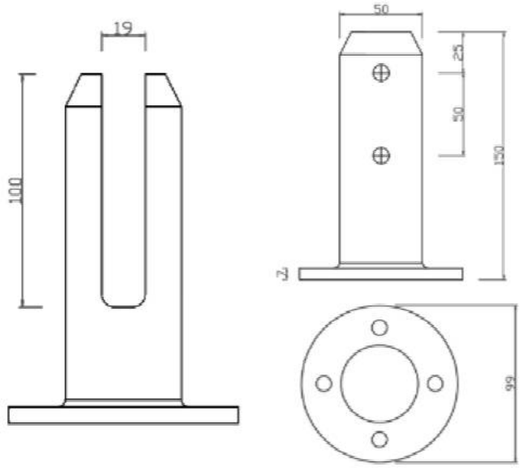
Scale: Do not Scale

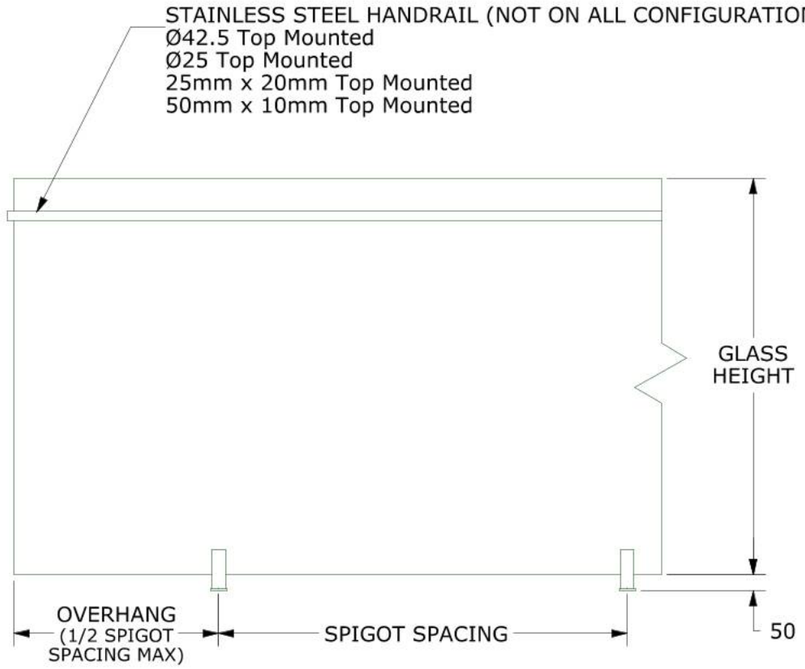
DRG No. 16050744-01

ITEM CODE

SF-MRFU







G

Configuration	Maximum Allowable Spigot Spacing (m)							
	Interior Use		Exterior Use					
	Occupancy Type (To AS/NZS 1170.1:2002)		Wind Zone (To NZS 3604:2011)					
	A,B,C3	C1,C2	L	M	H	VH	DoBH ULS Load	EH
970mm High No Rail*	0.80	0.43	0.80	0.80	0.80	0.79	0.73	0.65
970mm High, Top Rail (Any)	0.80	0.43	0.80	0.80	0.80	0.79	0.73	0.65
970mm High, Side Rail (Any)	0.80	0.43	0.80	0.80	0.80	0.79	0.73	0.65
1200mm High, No Rail* POOL FENCE ONLY	N/A	N/A	0.80	0.80	0.80	0.64	0.59	0.58

NOTES:

1. OCCUPANCY TYPES A, B, AND C3, AND C1 AND C2 HAVE BEEN GROUPED TOGETHER AS THE MAXIMUM APPLIED LOADS ARE THE SAME.
2. IMPOSED WIND ACTIONS MUST BE APPLIED TO ALL EXTERIOR INSTALLATIONS AND MAY LIMIT THE MAXIMUM SPIGOT SPACING
3. IMPOSED ACTIONS ARE CURRENT AT THE DATE OF DRAWING
4. *NOTE THAT GLASS BARRIERS WITHOUT INTERLINKING RAILS MUST STILL COMPLY WITH B1/AS1

DESIGNER:

Brevity

Victoria Park Market,
Cider Building
Level 2, 24 Williamson Ave,
218 Victoria Street West
Auckland 1010
Auckland 1219
New Zealand

+64 9 216 7104
www.teambrevity.com

Tolerances (unless specified)	1-100	<1000	>1000
	± 2	± 10	± 70

All dim. in mm

Rev	Description
A	FOR CONSENT RELEASED FOR CONSENT
B	PRODUCT UPDATE
H	ADDED EH WIND SPEED
I	DRAWING UPDATED

Designed	BREVITY LTD	18/05/23
Drawn	BREVITY LTD	18/05/23
Approved	BREVITY LTD	18/05/23

HARKNESS & YOUNG LTD
GLASS BALUSTRADE AND POOL FENCING - MAXIMUM SPIGOT SPANS - SF-MRFU SPIGOT

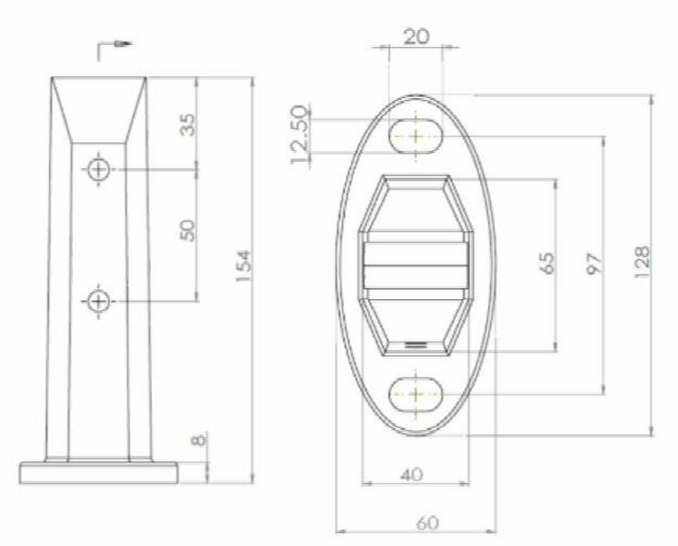
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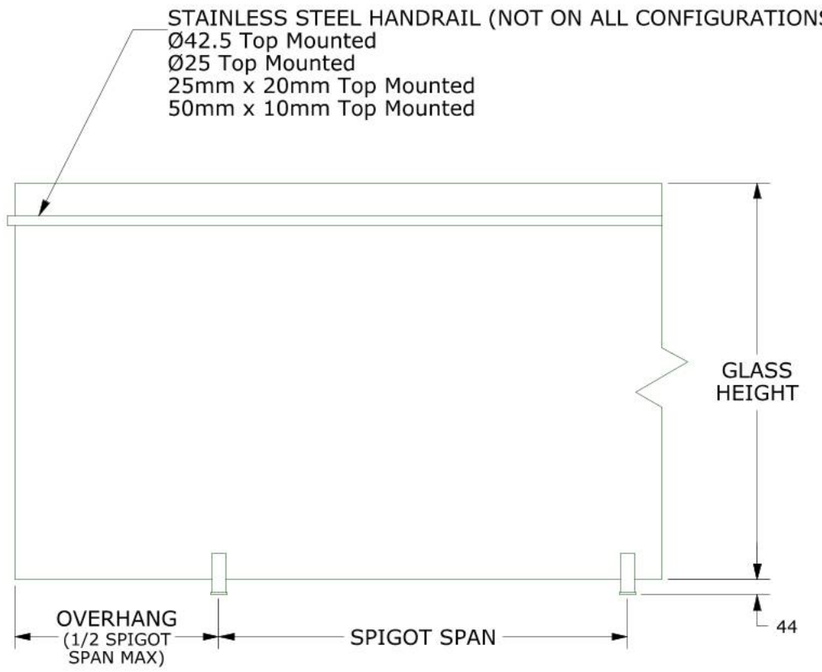
DRG No. 16050744-01

ITEM CODE

SF-RSNF







G

Configuration	Maximum Allowable Spigot Spacing (m)							
	Interior Use		Exterior Use					
	Occupancy Type (To AS/NZS 1170.1:2002)		Wind Zone (To NZS 3604:2011)					
	A,B,C3	C1,C2	L	M	H	VH	DoBH ULS Load	EH
970mm High No Rail*	0.80	0.43	0.80	0.80	0.80	0.79	0.79	0.65
970mm High, Top Rail (Any)	0.80	0.43	0.80	0.80	0.80	0.79	0.79	0.65
970mm High, Side Rail (Any)	0.80	0.43	0.80	0.80	0.80	0.79	0.79	0.65
1200mm High, No Rail* POOL FENCE ONLY	N/A	N/A	0.80	0.80	0.80	0.64	0.59	0.48

NOTES:

1. OCCUPANCY TYPES A, B, AND C3, AND C1 AND C2 HAVE BEEN GROUPED TOGETHER AS THE MAXIMUM APPLIED LOADS ARE THE SAME.
2. IMPOSED WIND ACTIONS MUST BE APPLIED TO ALL EXTERIOR INSTALLATIONS AND MAY LIMIT THE MAXIMUM SPIGOT SPACING
3. IMPOSED ACTIONS ARE CURRENT AT THE DATE OF DRAWING
4. *NOTE THAT GLASS BARRIERS WITHOUT INTERLINKING RAILS MUST STILL COMPLY WITH B1/AS1

DESIGNER:

Brevity

Victoria Park Market,
Unit 72B4 Williamson Ave,
210 Victoria Street West
Auckland 1010
New Zealand

+64 9 216 7104
www.teambrevity.com

Tolerances (unless specified)	1-100	<1000	>1000
	± 2	± 10	± 70

All dim. in mm

Rev	Description
A	FOR CONSENT RELEASED FOR CONSENT
B	PRODUCT UPDATE
H	ADDED EH WIND SPEED
I	DRAWING UPDATED

Designed	BREVITY LTD	18/05/23
Drawn	BREVITY LTD	18/05/23
Approved	BREVITY LTD	18/05/23

HARKNESS & YOUNG LTD
GLASS BALUSTRADE AND POOL FENCING - MAXIMUM SPIGOT SPANS - SF-RSNF SPIGOT

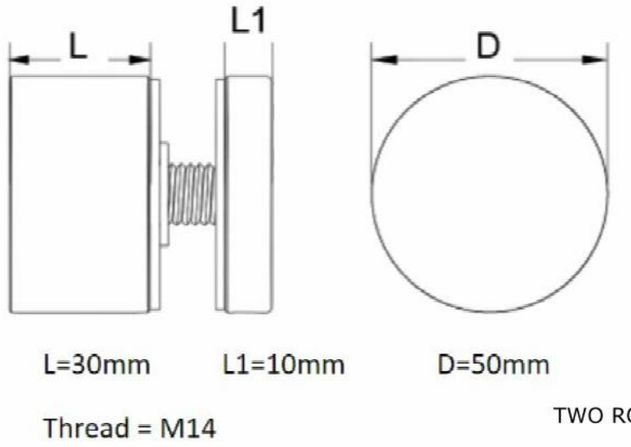
Scale: Do not Scale

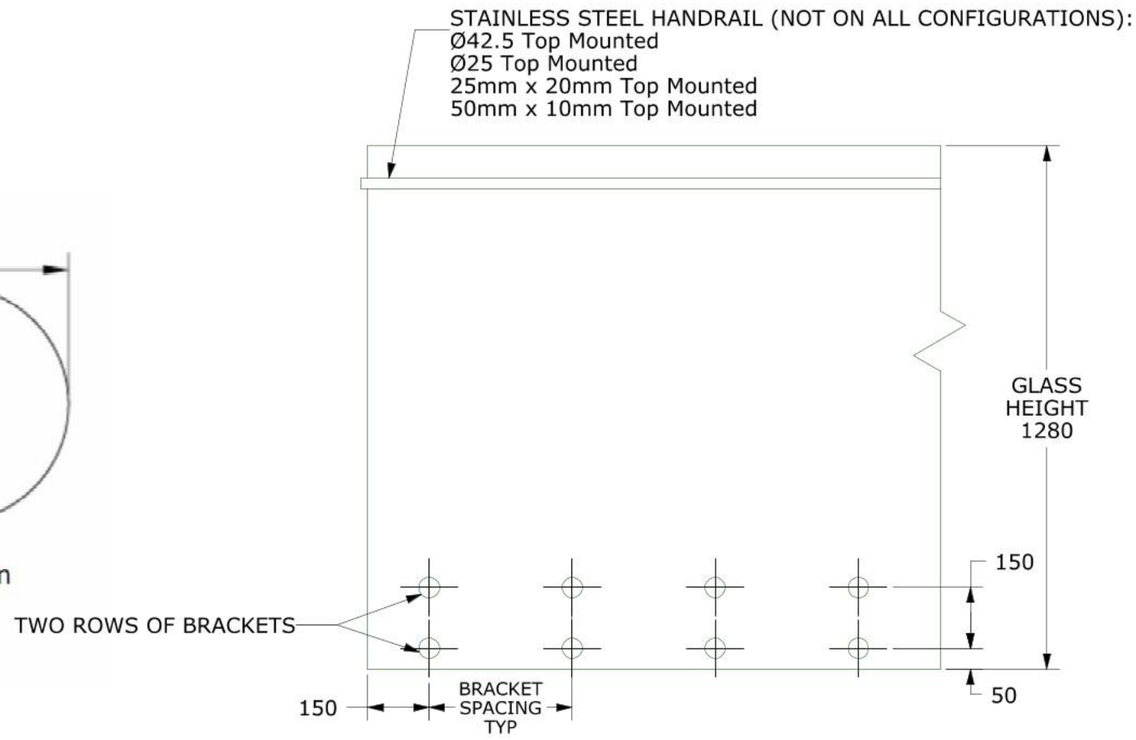
DRG No. 16050744-01

ITEM CODE

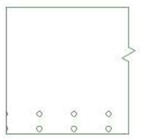
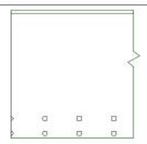
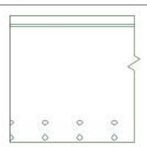
Ø50mm Stand-off







G

Configuration	Maximum Allowable Bracket Spacing (m)							
	Interior Use		Exterior Use					
	Occupancy Type (To AS/NZS 1170.1:2002)		Wind Zone (To NZS 3604:2011)					
	A,B,C3	C1,C2	L	M	H	VH	DoBH ULS Load	EH
No Rail* 	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.47
Top Rail (Any) 	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.47
Side Rail (Any) 	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.47

NOTES:

1. OCCUPANCY TYPES A, B, AND C3, AND C1 AND C2 HAVE BEEN GROUPED TOGETHER AS THE MAXIMUM APPLIED LOADS ARE THE SAME.
2. IMPOSED WIND ACTIONS MUST BE APPLIED TO ALL EXTERIOR INSTALLATIONS AND MAY LIMIT THE MAXIMUM SPIGOT SPACING
3. IMPOSED ACTIONS ARE CURRENT AT THE DATE OF DRAWING
4. *NOTE THAT GLASS BARRIERS WITHOUT INTERLINKING RAILS MUST STILL COMPLY WITH B1/AS1

DESIGNER:

Brevity

Victoria Park Market,
Unit 72B,
210 Victoria Street West
Auckland, New Zealand

+64 9 216 7104
www.teambrevity.com

Tolerances (unless specified)	1-100	<1000	>1000
	± 2	± 10	± 70

All dim. in mm

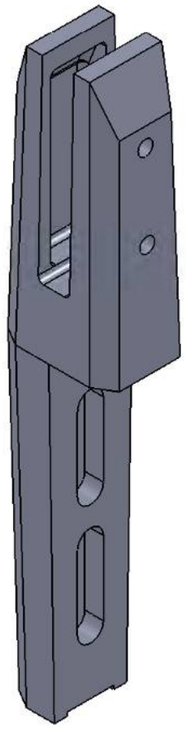
Rev	Description
A	FOR CONSENT RELEASED FOR CONSENT
B	PRODUCT UPDATE
H	ADDED EH WIND SPEED
I	DRAWING UPDATED

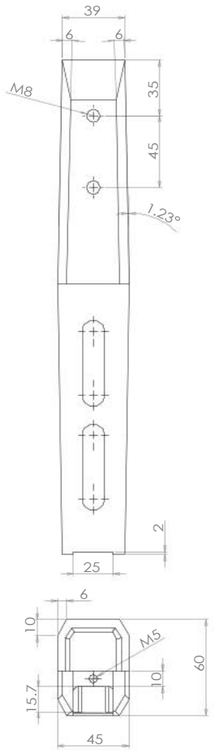
Designed	BREVITY LTD	18/05/23
Drawn	BREVITY LTD	18/05/23
Approved	BREVITY LTD	18/05/23

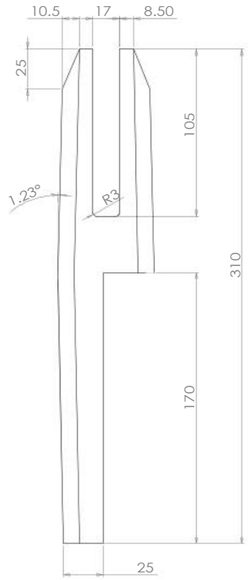
HARKNESS & YOUNG LTD
GLASS BALUSTRADE AND POOL FENCING - MAXIMUM SPIGOT SPANS - 50mm STANDOFF

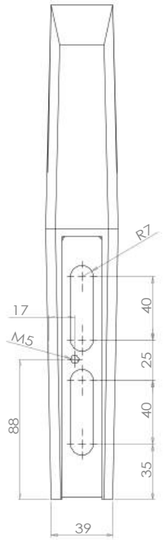
Scale: Do not Scale

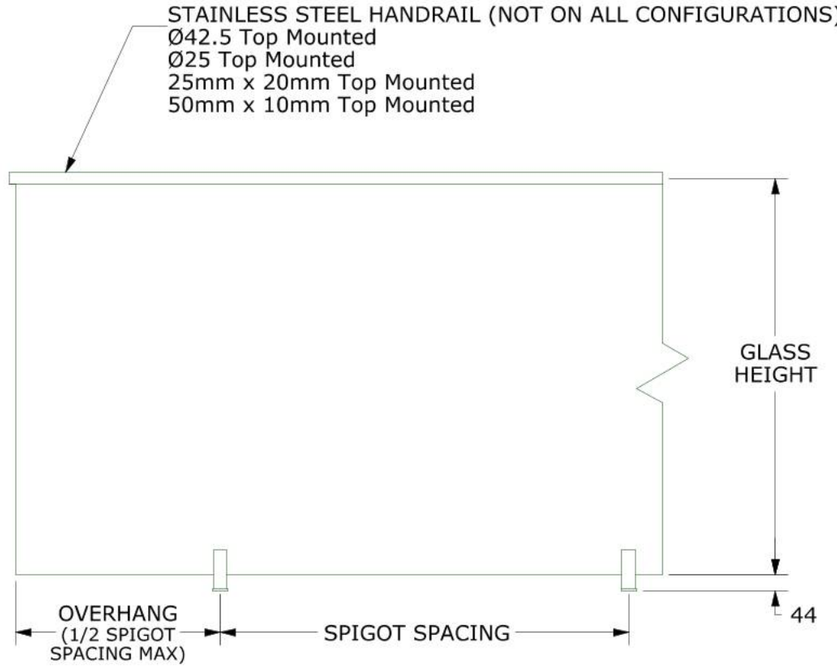
DRG No. 16050744-01











Configuration	Maximum Allowable Spigot Spacing (m)							
	Interior Use		Exterior Use					
	Occupancy Type (To AS/NZS 1170.1:2002)		Wind Zone (To NZS 3604:2011)					
	A,B,C3	C1,C2	L	M	H	VH	DoBH ULS Load	EH
970mm High No Rail*	0.80	0.43	0.80	0.80	0.67	0.52	0.80	0.71
970mm High, Top Rail (Any)	0.80	0.43	0.80	0.80	0.67	0.52	0.80	0.71
970mm High, Side Rail (Any)	0.80	0.43	0.80	0.80	0.67	0.52	0.80	0.71
1200mm High, No Rail* POOL FENCE ONLY	N/A	N/A	0.80	0.80	0.54	0.42	0.59	0.55

NOTES:

1. OCCUPANCY TYPES A, B, AND C3, AND C1 AND C2 HAVE BEEN GROUPED TOGETHER AS THE MAXIMUM APPLIED LOADS ARE THE SAME.

2. IMPOSED WIND ACTIONS MUST BE APPLIED TO ALL EXTERIOR INSTALLATIONS AND MAY LIMIT THE MAXIMUM SPIGOT SPACING

3. IMPOSED ACTIONS ARE CURRENT AT THE DATE OF DRAWING

4. *NOTE THAT GLASS BARRIERS WITHOUT INTERLINKING RAILS MUST STILL COMPLY WITH B1/AS1

DESIGNER:

Brevity

Victoria Park Market,
Unit 72B4
210 Victoria Street West
Auckland 1010
New Zealand

+64 9 216 7104
www.teambrevity.com

Tolerances (unless specified)	1-100	<1000	>1000
	± 2	± 10	± 70

All dim. in mm

Rev	Description
L	FOR CONSENT

Designed	BREVITY LTD	30/05/24
Drawn	BREVITY LTD	30/05/24
Approved	BREVITY LTD	30/05/24

HARKNESS & YOUNG LTD
GLASS BALUSTRADE AND POOL FENCING - MAXIMUM SPIGOT SPANS - SIDE MOUNTED SPIGOT

Scale: Do not Scale

DRG No. 16050744-01

EXAMPLE 1:

- Internal Barrier
- Occupancy type A
- 0.97m high x 1.6m pane
- SF-RSF Spigot
- Side rail



EXAMPLE 2:

- External Barrier - VH Wind Zone
- Occupancy type A
- 0.97m x 1.8m pane
- SF-RSF Spigot
- Side rail



No. of spigots per pane* = (pane span/max. allowable spigot spacing)

*If No. of spigots is not a whole number, round up to nearest whole number

For this example, from columnn 1, row 3 of table 1507616 sheet 3:

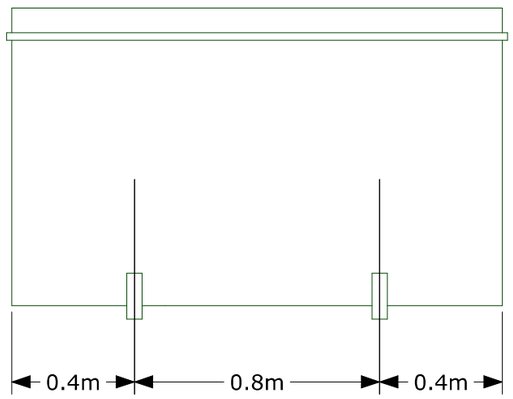
Maximum allowable spigot spacing = 0.8m

No. of spigots per pane = 1.6m/0.8m = 2

Spigot spacing = pane span/No. of spigots = 1.6m/2 = 0.8m

Locate spigots centrally to span

Therefore design for strength is:



For this example, from column 1, row 3 of table 1507616 sheet 3:

Maximum allowable spigot spacing for occupancy type = 0.8m

And check, maximum spacing for wind zone VH, from column 5, row 1:

Maximum allowable spigot spacing for wind zone = 0.8m

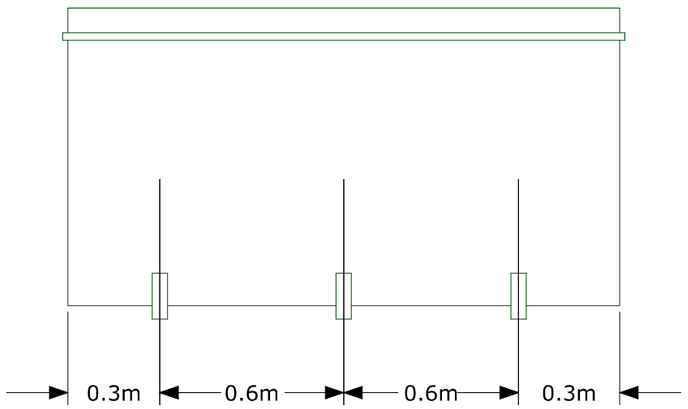
No. of spigots per pane = 1.8/0.8 = 2.25

Round up to 3 spigots per pane

Spigot spacing = pane span/No. of spigots = 1.8m/3 = 0.6m

Locate spigots centrally to span

Therefore design for strength is:



NOTES:

1. OCCUPANCY TYPES A, B, AND C3, AND C1 AND C2 HAVE BEEN GROUPED TOGETHER AS THE MAXIMUM APPLIED LOADS ARE THE SAME.

2. IMPOSED WIND ACTIONS MUST BE APPLIED TO ALL EXTERIOR INSTALLATIONS AND MAY LIMIT THE MAXIMUM SPIGOT SPACING

3. IMPOSED ACTIONS ARE CURRENT AT THE DATE OF DRAWING

4. *NOTE THAT GLASS BARRIERS WITHOUT INTERLINKING RAILS MUST STILL COMPLY WITH B1/AS1

DESIGNER:

Brevity

Cider Building
Level 9, 4 Williamson Ave,
Ponsonby, Auckland
1021, New Zealand

+64 9 216 7104
www.teambrevity.com

Tolerances (unless specified)	1-100	<1000	>1000
	± 2	± 10	± 70

All dim. in mm

Rev	Description
A	FOR CONSENT
B	PRODUCT UPDATE

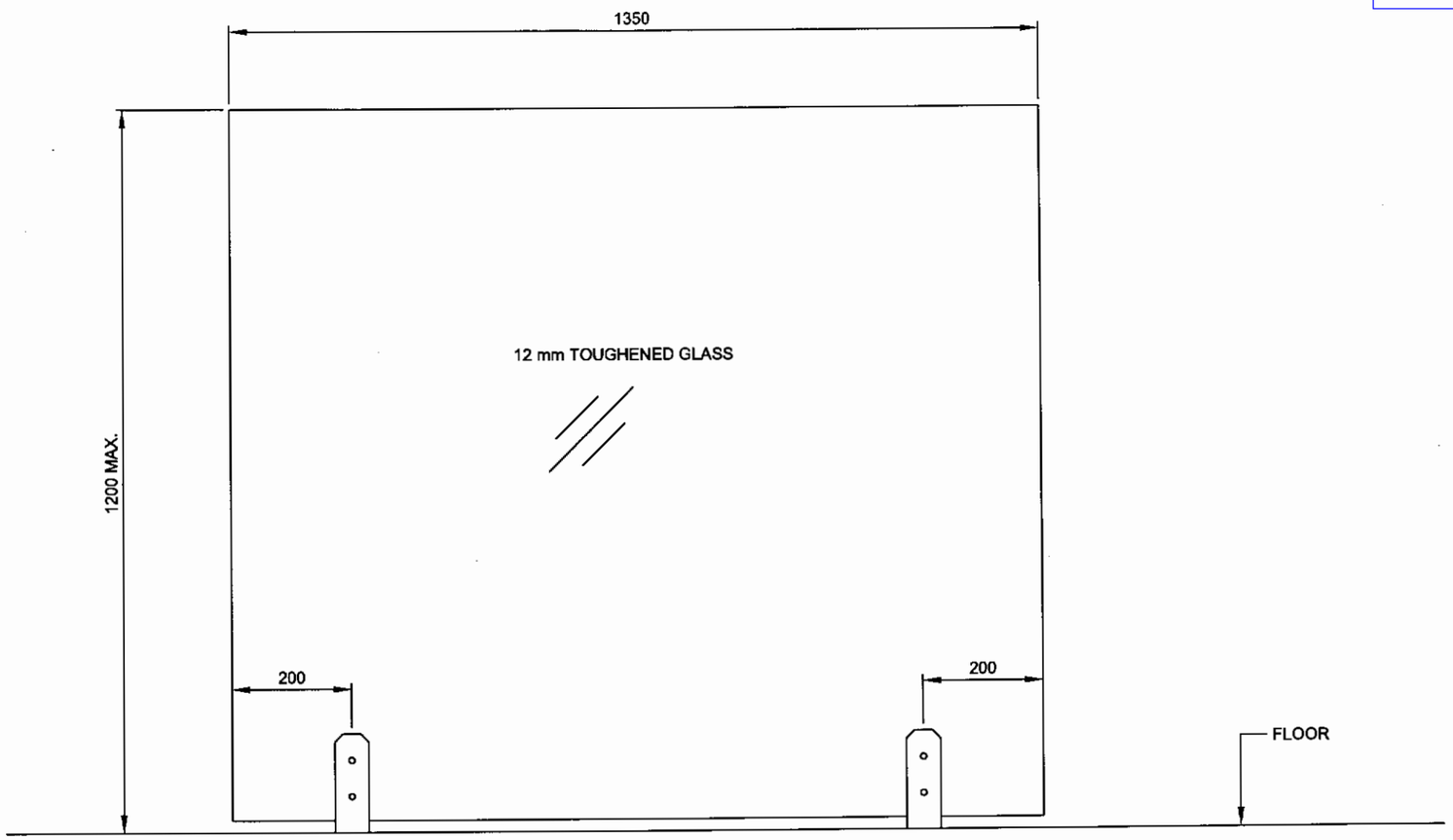
Designed	BREVITY LTD	18/05/23
Drawn	BREVITY LTD	18/05/23
Approved	BREVITY LTD	18/05/23

HARKNESS & YOUNG LTD
GLASS BALUSTRADE AND POOL FENCING - MAXIMUM SPIGOT SPANS

Scale: Do not Scale

DRG No. 16050744-01

TO ENSURE ADEQUATE CONSTRUCTION MONITORING IS CARRIED OUT, PLEASE CALL TEAM BREVITY ON +64 9 216 7104 AT LEAST FIVE BUSINESS DAYS PRIOR TO PROJECT CONSTRUCTION COMMENCEMENT



THESE SUPPORT DETAILS ARE TO BE USED FOR ALL SPIGOTS, WITH THE EXCEPTION OF SF-RNSF AND SIDE-MOUNTED SPIGOTS

THIS GLASS BALUSTRADE SYSTEM IS SUITABLE FOR THE FOLLOWING:

LIVE LOAD:

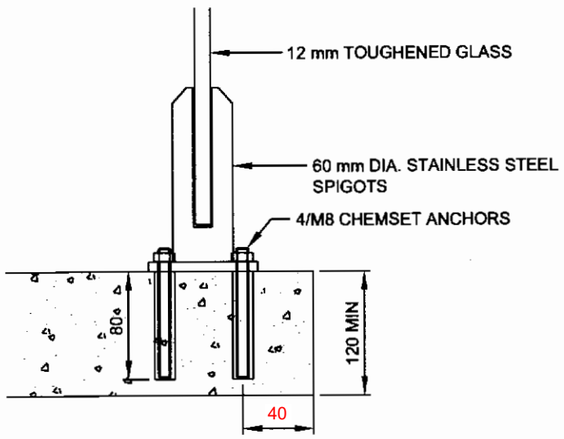
OCCUPANCY TYPE	REFER TABLE 3.3 OF AS/NZS 1170
A & C3	DOMESTIC & RESIDENTIAL BALCONY EDGES (NOT SUBJECT TO CROWD LOADINGS)

WIND LOAD: "HIGH" WIND ZONE WITH BASIC WIND SPEED UP TO 43 m/s.

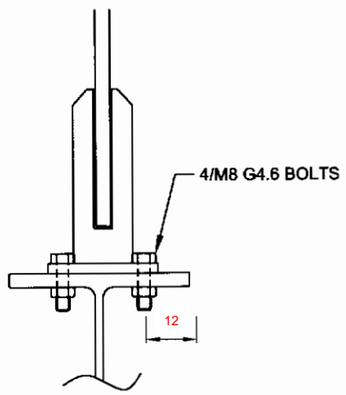
FIXINGS:
1. ALL ANCHORS MUST BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS.
2. BOLTING ARRANGEMENT MUST COMPLY WITH RELEVANT MATERIAL CODES.
3. STRENGTH & STIFFNESS OF THE SUBSTRATE STRUCTURE MUST BE SUFFICIENT FOR THE BALUSTRADE LOADS - THIS MUST BE SPECIFICALY CHECKED BY OTHERS FOR EACH SITUATION.

DURABILITY
THE FIXINGS MUST COMPLY WITH SECTION 4 "DURABILITY" OF NZS 3604:2011.

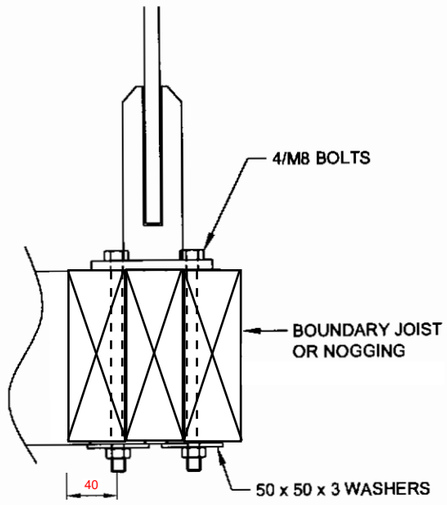
Substrate Material	Fixing/per base plate	Minimum Geometric Distance
Steel	4x Stainless Steel 316 M8 Bolt	12 mm (edge distance)
Timber	4x Stainless Steel 316 M8 Bolt with minimum 50x50x3mm Washer	32 mm (from edge of member) 80 mm (from end of member)
	4x Stainless Steel 316 M8 Coach Bolt	40 mm (from edge of member) 64 mm (from end of member) 140 mm (embedment depth)
Concrete	4x M8 Concrete Anchor	80 mm (embedment depth) 120 mm (concrete thickness) 40 mm (edge distance) Specific design required for overall size



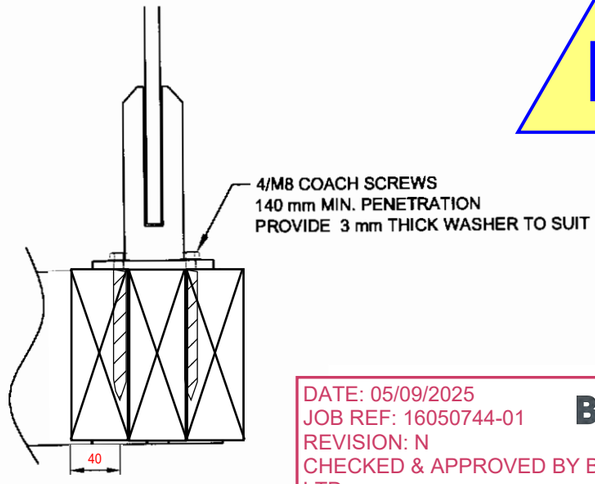
CONNECTION TO CONCRETE FLOOR



CONNECTION TO STEEL



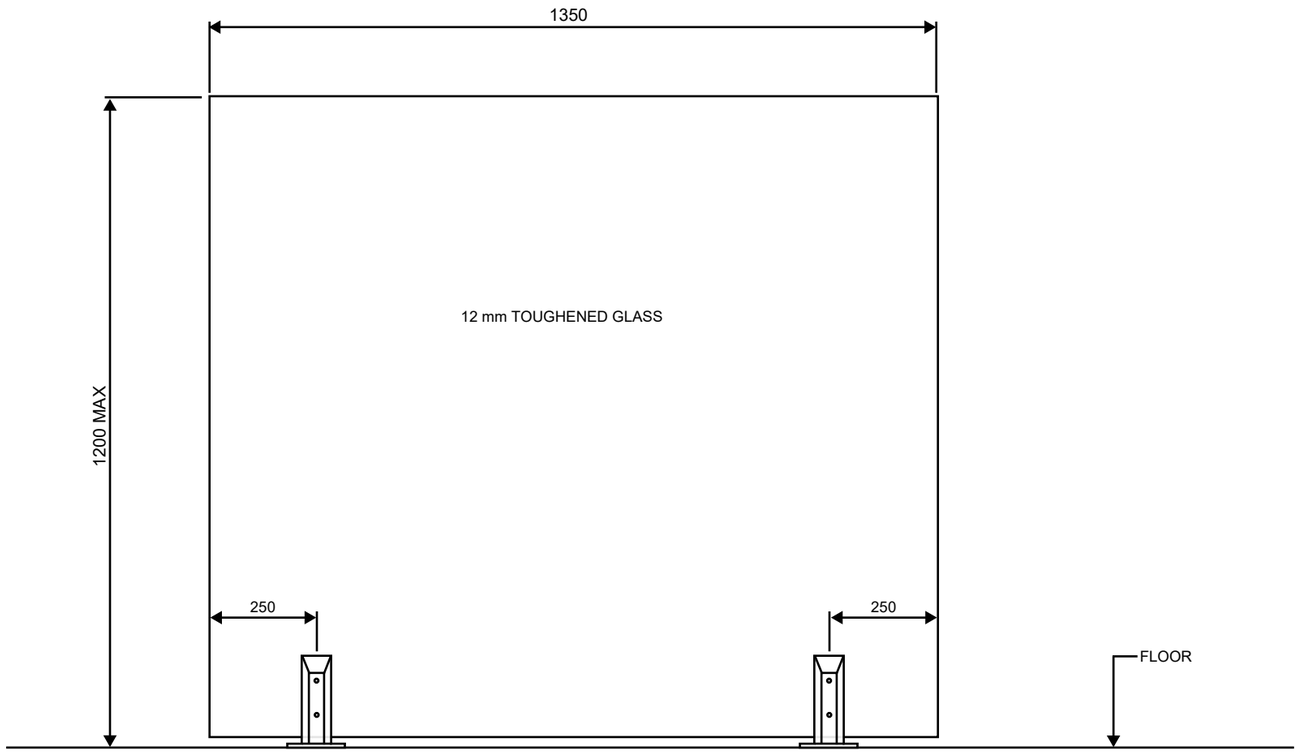
CONNECTION TO TIMBER



N

DATE: 05/09/2025
JOB REF: 16050744-01
REVISION: N
CHECKED & APPROVED BY BREVITY LTD.
MATT BISHOP, CMENGNZ, CPENG #243276
Brevity

P & P CONSULTING ENGINEERS LTD Civil and Structural Engineering 6A Montel Avenue, Henderson ph: 836-1853	HARKNESS & YOUNG LIMITED - CANTILEVER GLASS BALUSTRADE	Scales 1:10 (A3)	Project 11/097
	GLASS SUPPORT DETAILS	Drawn PP / Date 23-11-11	Sheet ENG 01



THIS GLASS BALUSTRADE SYSTEM IS SUITABLE FOR THE FOLLOWING:

LIVE LOAD:

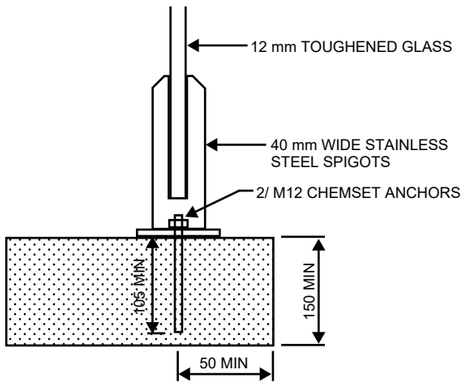
OCCUPANCY TYPE	REFER TABLE 3.3 OF AS/NZS 1170.1
A & C3	DOMESTIC AND RESIDENTIAL BALCONY EDGES (NOT SUBJECT TO CROWD LOADINGS)

WIND LOAD: "HIGH" WIND ZONE WITH BASIC WIND SPEED UP TO 43 m/s

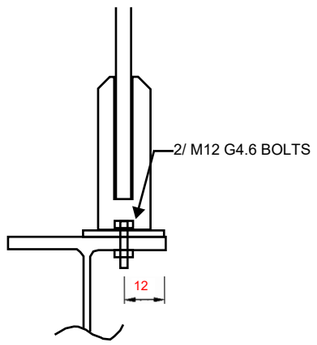
FIXINGS:
1. ALL ANCHORS MUST BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS.
2. BOLTING ARRANGEMENT MUST COMPLY WITH RELEVANT MATERIAL CODES.
3. STRENGTH AND STIFFNESS OF THE SUBSTRATE STRUCTURE MUST BE SUFFICIENT FOR THE BALUSTRADE LOADS - THIS MUST BE SPECIFICALLY CHECKED BY OTHERS FOR EACH SITUATION.

DURABILITY:
THE FIXINGS MUST COMPLY WITH SECTION 4 "DURABILITY" OF NZS 3604:2011.

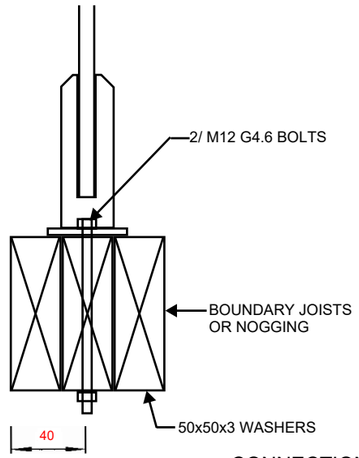
Substrate Material	Fixing/per base plate	Minimum Geometric Distance
Steel	2x Stainless Steel 316 M12 Bolt	20 mm (edge distance)
Timber	2x Stainless Steel 316 M12 Bolt*	50 mm (from edge of member) 60 mm (from end of member)
	2x Stainless Steel 316 M12 Coach Screw	60 mm (from edge of member) 120 mm (from end of member) 140 mm (embedment depth)
Concrete	2x M12 Hilti HUS-4/Powers Blue Tip II Concrete Anchor or equivalent	105 mm (embedment depth) 150 mm (concrete thickness) 50 mm (edge distance) Specific design required for overall size

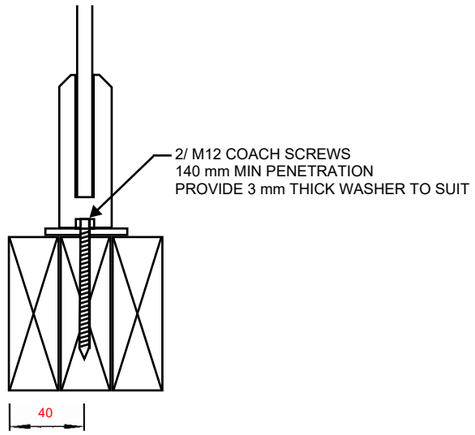


CONNECTION TO CONCRETE FLOOR



CONNECTION TO STEEL





CONNECTION TO TIMBER

NOTES:

1. THESE FIXING DETAILS ARE FOR THE SF-RSNF SPIGOTS ONLY.

CLIENT:

Harkness & Young Ltd

DESIGNER:

Brevity

Cider Building
Level 9, 4 Williamson Ave,
Ponsonby, Auckland
1021, New Zealand

+64 9 216 7104
www.teambrevity.com

Tolerances (unless specified)	1-100	<1000	>1000
	± 2	± 10	± 70

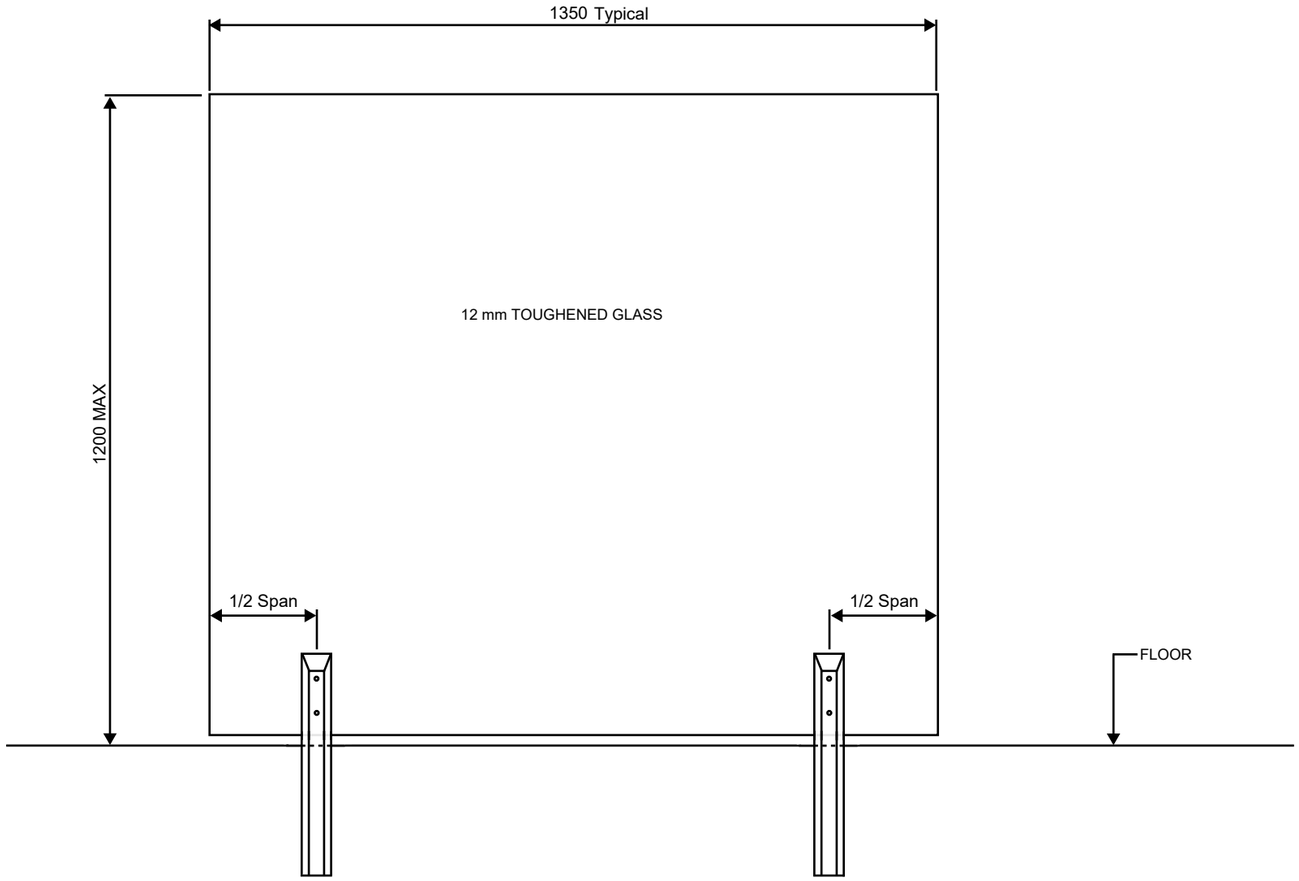
All dim. in mm

Rev	Description	Initial	Date
A	RELEASED FOR APPROVAL	DB	18/12/19
B	DETAILS ADDED	DB	24/04/23

Designed	EXAKT GROUP	20/07/15
Drawn	BREVITY	24/04/23
Checked		
Approved		

Harkness & Young Ltd
GLASS BALUSTRADE AND POOL FENCING - M12 ANCHOR SPIGOT FIXING DETAILS

Project	Scale	Sheet
16050744-01	Do not Scale	8 of 9
DRG No. 16050744-01	Date 24/04/23	A3



THIS GLASS BALUSTRADE SYSTEM IS SUITABLE FOR THE FOLLOWING:

LIVE LOAD:

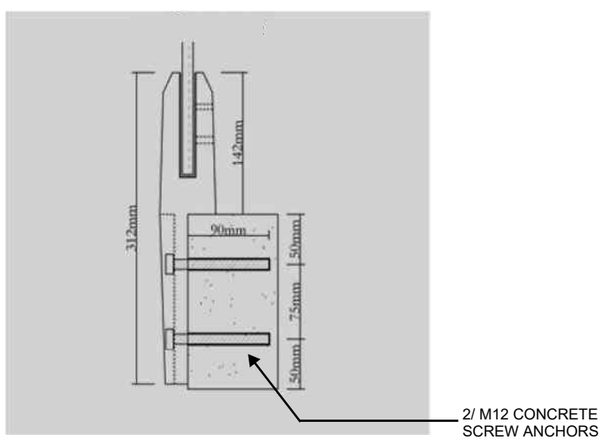
OCCUPANCY TYPE	REFER TABLE 3.3 OF AS/NZS 1170.1
A & C3	DOMESTIC AND RESIDENTIAL BALCONY EDGES (NOT SUBJECT TO CROWD LOADINGS)

WIND LOAD: REFER TO SPACING REQUIREMENTS FOR VARIOUS GLASS HEIGHTS AND WIND ZONES

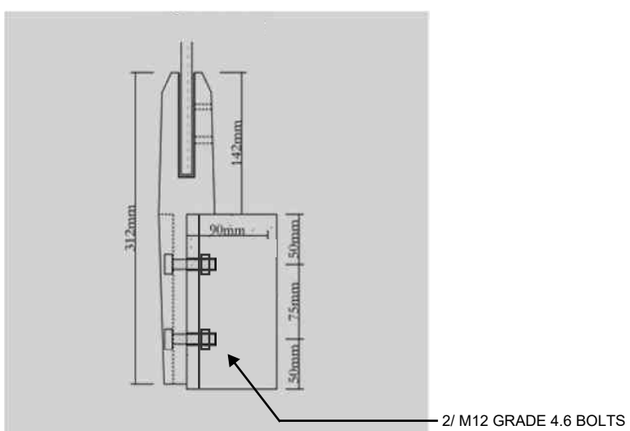
FIXINGS:
1. ALL ANCHORS MUST BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS.
2. BOLTING ARRANGEMENT MUST COMPLY WITH RELEVANT MATERIAL CODES.
3. STRENGTH AND STIFFNESS OF THE SUBSTRATE STRUCTURE MUST BE SUFFICIENT FOR THE BALUSTRADE LOADS - THIS MUST BE SPECIFICALLY CHECKED BY OTHERS FOR EACH SITUATION.

DURABILITY:
THE FIXINGS MUST COMPLY WITH SECTION 4 "DURABILITY" OF NZS 3604:2011.

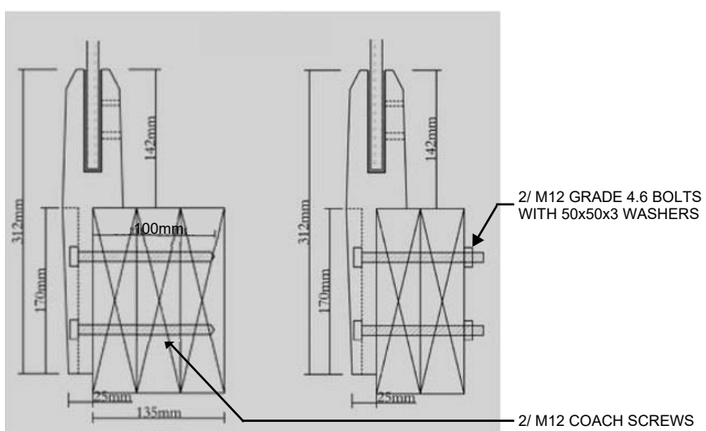
Substrate Material	Fixing/per base plate	Minimum Geometric Distance
Steel	2x Stainless Steel 316 M12 Bolt	20 mm (edge distance)
Timber	2x Stainless Steel 316 M12 Bolt*	50 mm (from edge of member) 60 mm (from end of member)
	2x Stainless Steel 316 M12 Coach Screw	50 mm (from edge of member) 120 mm (from end of member) 100 mm (embedment depth)
Concrete	2x M12 Hilti HUS-4/Powers Blue Tip II Concrete Anchor or equivalent	90 mm (embedment depth) 150 mm (concrete thickness) 50 mm (edge distance) Specific design required for overall size



CONNECTION TO CONCRETE FLOOR



CONNECTION TO STEEL



CONNECTION TO TIMBER

NOTES:

1. THESE FIXING DETAILS ARE FOR THE SIDE-MOUNTED SPIGOTS ONLY.

CLIENT:

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Tolerances (unless specified)	1-100	<1000	>1000
	± 2	± 10	± 70

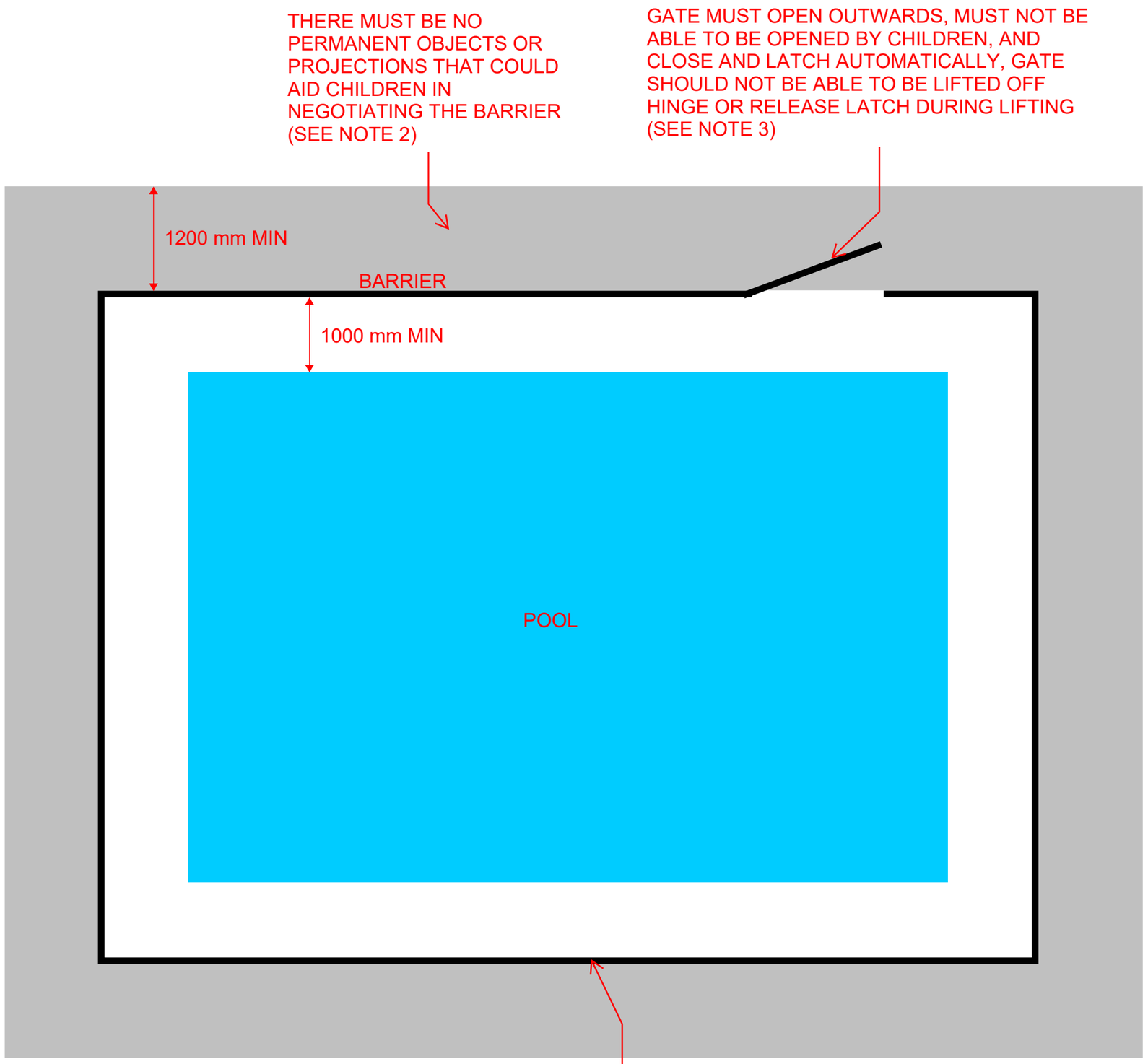
All dim. in mm

Rev	Description	Initial	Date
A	RELEASED FOR APPROVAL	DB	18/12/19
B	DETAILS ADDED	DB	24/04/23

Designed	BREVITY LTD	30/05/24
Drawn	BREVITY LTD	30/05/24
Checked	BREVITY LTD	30/05/24
Approved		

Harkness & Young Ltd
GLASS BALUSTRADE AND POOL FENCING - M12 ANCHOR SPIGOT FIXING DETAILS

Project	Scale	Sheet
16050744-01	Do not Scale	9 of 9
DRG No. 16050744-01	Date 30/05/24	A3



NOTES:

1. MEANS OF RESTRICTING POOL ACCESS IN ACCORDANCE WITH F9/AS1 POOL BARRIERS

2. REFER MBIE GUIDANCE DOCUMENT F9/AS1 FIGURE 2

3. REFER MBIE GUIDANCE DOCUMENT F9/AS1 FIGURE 3

4. IF THE BALUSTRADE IS ATTACHED TO OR ACTS AS PART OF THE BOUNDARY. THE MINIMUM HEIGHT OF THE BALUSTRADE MUST NOT BE LESS THAN 1,800 mm

5. THIS PS1 DOES NOT COVER THE BALUSTRADE BEING ATTACHED TO THE EXISTING PROPERTY BUILDING WALL I.E. THE BALUSTRADE MUST FORM A BARRIER TO RESTRICT ACCESS TO THE POOL INDEPENDANT OF THE EXISTING BUILDING

DESIGNER:

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Tolerances (unless specified)	1-100	<1000	>1000
	± 2	± 10	± 70

All dim. in mm

Rev	Description
A	FOR CONSENT

Designed	BREVITY LTD	27/06/18
Drawn	BREVITY LTD	27/06/18
Approved	BREVITY LTD	27/06/18

HARKNESS & YOUNG LTD

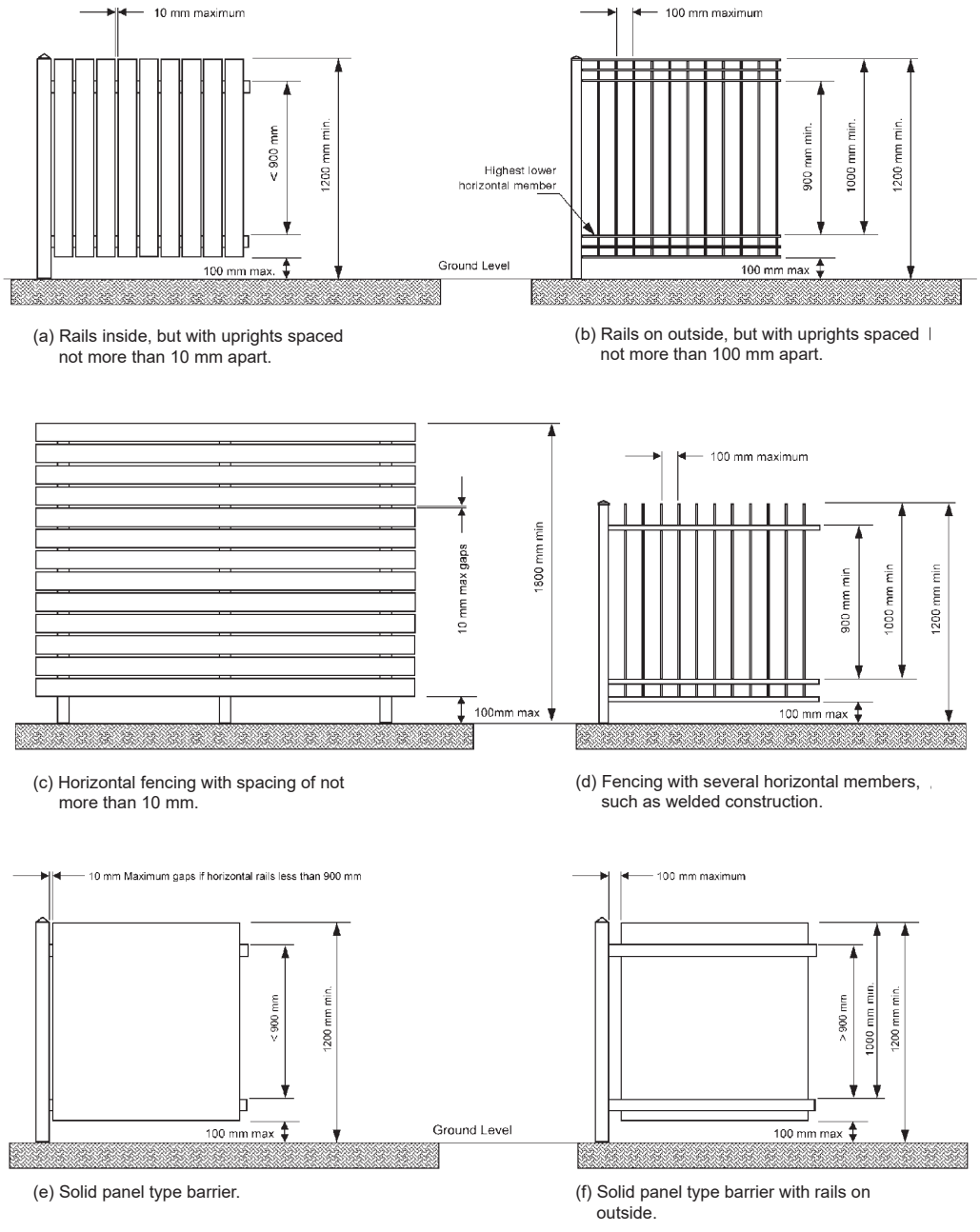
POOL BALUSTRADE LAYOUT FOR BARRIERS SURROUNDING IMMEDIATE POOL AREA

Scale: Do not Scale

DRG No. 16050744-01

SHEET 1 of 1

Figure 1: **Acceptable pool barriers**
Paragraphs 2.1.4, 2.1.5



(a) Rails inside, but with uprights spaced not more than 10 mm apart.

(b) Rails on outside, but with uprights spaced not more than 100 mm apart.

(c) Horizontal fencing with spacing of not more than 10 mm.

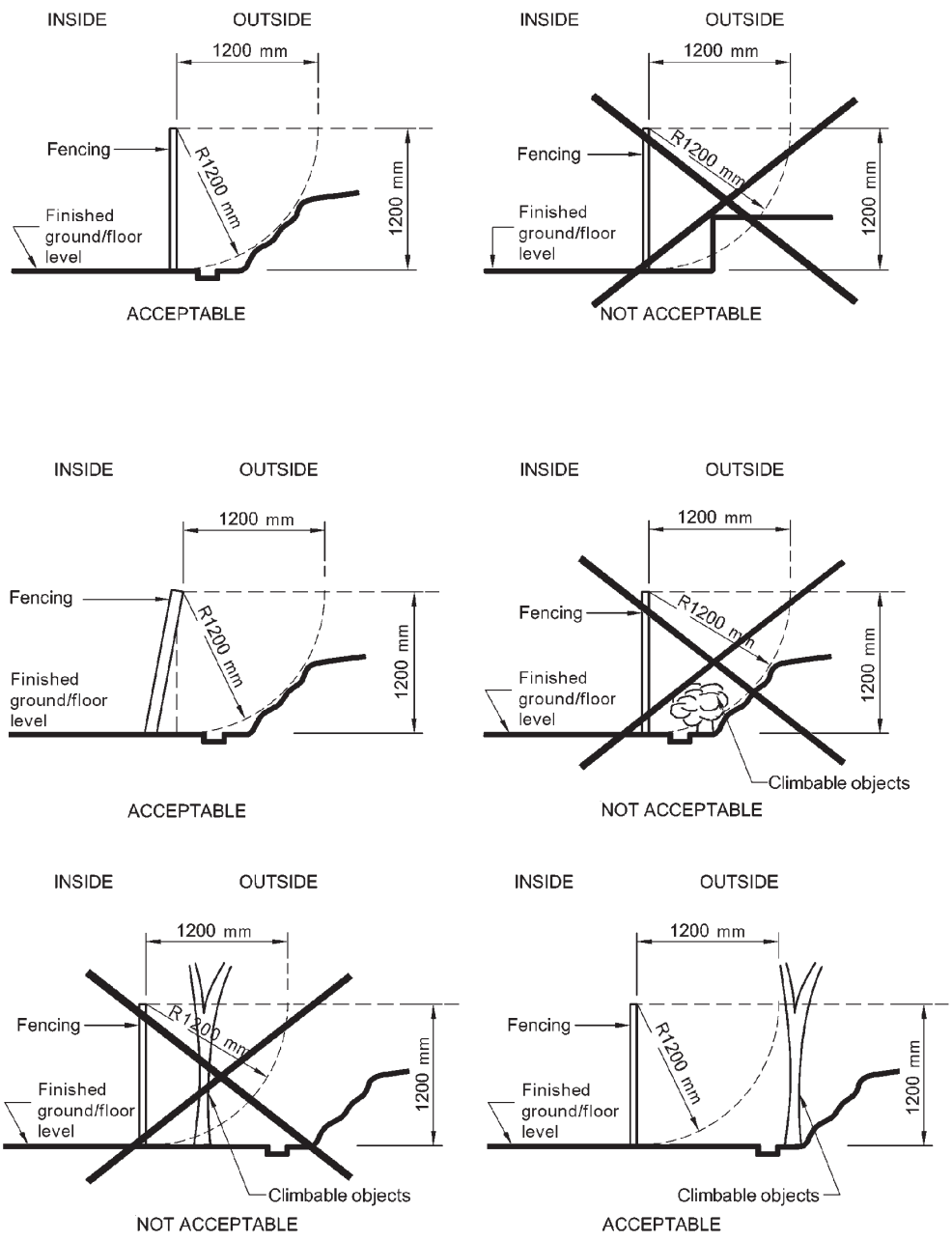
(d) Fencing with several horizontal members, such as welded construction.

(e) Solid panel type barrier.

(f) Solid panel type barrier with rails on outside.

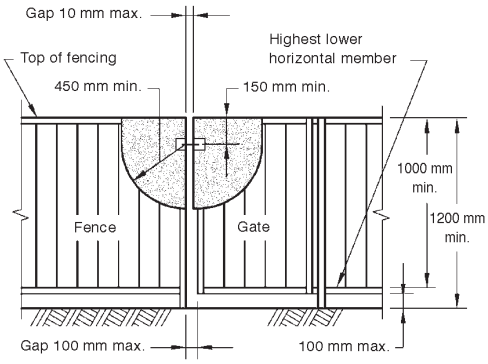
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Figure 2: **Determining pool barrier height**
Paragraph 2.1.6

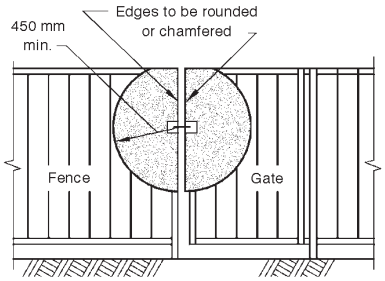


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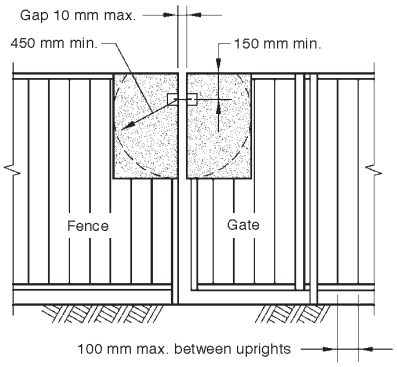
Figure 3: **Acceptable means of protecting a latch as viewed from the pool side**
Paragraph 3.1.2



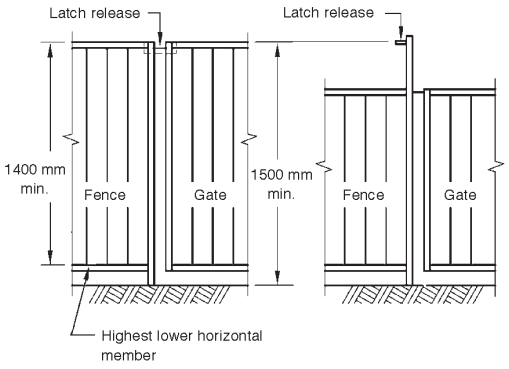
(a) Basic requirements



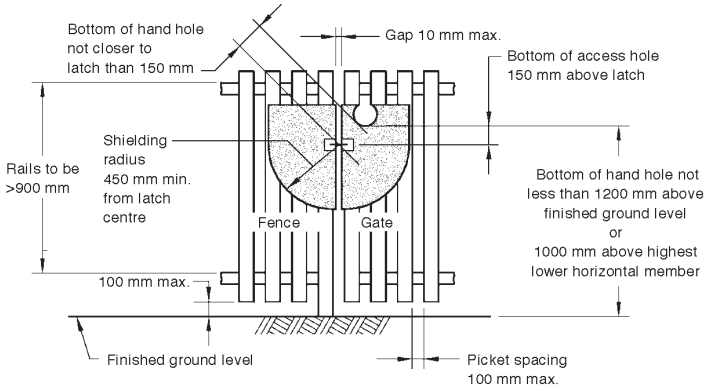
(b) Latch more than 150 mm below top of fence (shielding is centred on latch)



(c) Shield larger than minimum size



(d) Shield not required for latch or release located at 1500 mm or higher.



(e) Hand hole provided in fence or gate

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NZBC Clause B1: Structure
Design of Balustrade Systems

Prepared for: **Harkness & Young Ltd**

By: **Brevity Ltd**

Date: **05 July 2016**

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Rev	Date	Revision Details	Author
A	05/ 07 / 2016	For Consent	SJ A
B	05/ 07 / 2016	Standoff Spacings	SJ A
C	22/ 02/ 2018	F2 Compliance	M□
D	03/ 07 / 2018	F9 Compliance	D B
F	21/01/2020	Drawing ENG 01 Added	AW
G	19/06/2020	EH Wind Speed Added	AW
H	07/10/2020	Sheet 6 Updated	AW
I/J/K	17/05/2023 16	P&P Drawing Updated	DP
L	31/05/2024	Side-mounted spigots added	DB

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   6.2 Deflection
7. Derived Load Span Tables
   7.1 Method
   7.2 Overturning Resistance of Brackets
8. Results
   8.1 Imposed Barrier Actions
   8.2 Wind Actions
9. F9 / AS1 Requirements
10. Conclusions

Appendix A - Scope Testing Services Test Reports

Report Completed By

Sam Adshead, BE(Hons), CPEng, MIPENZ
Consulting Engineer, Brevity Ltd

EXECUTIVE SUMMARY

Brevity Ltd has been requested by James Harkness of Harness & Young Ltd to verify the conformance of a range of glass balustrading and fencing with the strength requirements of the New Zealand Building Code, and to generate permissible load span tables based on both live loads and wind loads.

The balustrading and fencing configurations considered in this report consist of 12mm thick toughened glass panels with the following components:

1. Base-fixing brackets (spigots), 1200mm high glass panels, for pool fencing:

   a. Cast square spigot (SF-RSF) with 1200mm high, 12mm Toughened glass.
   b. Cast circular spigot (SF-RRF) with 1200mm high, 12mm Toughened glass.
   c. Machined circular spigot (SF-MRFU) with 1200mm high, 12mm Toughened glass

2. Base-fixing brackets (spigots), 970mm high glass panels, for 1020mm high balustrading:

   a. Cast square spigot (SF-RSF) with 50x10 Side Mounted Stainless Steel 50H handrail
   b. Cast square spigot (SF-RSF) with 25x20 Top Mounted Rectangular Stainless Steel H handrail
   c. Cast square spigot (SF-RSF) with Ø25 Top Mounted Stainless Steel H handrail
   d. Cast square spigot (SF-RSF) with Ø42.5 Top Mounted Stainless Steel H handrail

   e. Cast circular spigot (SF-RRF) with 50x10 Side Mounted Stainless Steel H handrail
   f. Cast circular spigot (SF-RRF) with 25x20 Top Mounted Stainless Steel H handrail
   g. Cast circular spigot (SF-RRF) with Ø25 Top Mounted Stainless Steel H handrail
   h. Cast circular spigot (SF-RRF) with Ø42.5 Top Mounted Stainless Steel H handrail

   i. Machined circular spigot (SF-MRFU) with 50x10 Side Mounted Stainless Steel H handrail
   j. Machined circular spigot (SF-MRFU) with 25x20 Top Mounted Stainless Steel H handrail
   k. Machined circular spigot (SF-MRFU) with Ø25 Top Mounted Stainless Steel H handrail
   l. Machined circular spigot (SF-MRFU) with Ø42.5 Top Mounted Stainless Steel H handrail

   m. Cast Octagonal spigot (SF-RSNF) with 50x10 Side Mounted Stainless Steel H handrail
   n. Cast Octagonal spigot (SF-RSNF) with 25x20 Top Mounted Stainless Steel H handrail
   o. Cast Octagonal spigot (SF-RSNF) with Ø25 Top Mounted Stainless Steel H handrail
   p. Cast Octagonal spigot (SF-RSNF) with Ø42.5 Top Mounted Stainless Steel H handrail

3. Face-fix brackets, 1250mm high glass panels, for balustrading:

   a. Ø50mm Standoff brackets with 50mmx10mm Side Mounted Stainless Steel H handrail
   b. Ø50mm Standoff brackets with 25mmx20mm Top Mounted Stainless Steel H handrail
   c. Ø50mm Standoff brackets with Ø25mm Top Mounted Stainless Steel H handrail
   d. Ø50mm Standoff brackets with Ø42.5mm Top Mounted Stainless Steel H handrail

A total of 14 of the configurations have been subject to physical testing by Scope Testing Services, a NATA[1] approved testing laboratory located in Brisbane, Australia.

[1] NATA - National Association of Testing Authorities.

1. Scope of Works

The scope is in accordance with Brevity Ltd Design Brief L 4598 and the Conditions of Engagement.

2. New Zealand Building Code Requirements

The Department of Building and Housing's Guidance on Barrier Design sets out a methodology for verifying compliance with the provisions of clause B1 Structure of the New Zealand Building Code. The relevant provisions are:

1. Section 3.6 of NZS1170.1 as modified by the MBIE compliance document for B1 Structure.
2. Wind Loads as per AS/NZS 1170.2 and the The Department of Building and Housing's Guidance on Barrier Design.

3. Product Description Summary

The following products have been presented to us for review:

1. Frameless Glass Balustrade Spigot, Cast square type (SF-RSF)
2. Frameless Glass Balustrade Spigot, Cast circular type (SF-RRF)
3. Frameless Glass Balustrade Spigot, Machined circular type (SF-MRFU)
4. Frameless Glass Balustrade Spigot, Cast octagonal type (SF-RSNF)
5. Frameless Glass Balustrade Ø50mm Standoff brackets
6. Ø42.5mm Top Mounted Round Handrail
7. 50mmx10mm Side Mounted Handrail
8. 25mmx20mm Top Mounted Rectangular Handrail
9. Ø25 Top Mounted Round Handrail
10. 12mm "Heat Soaked" Toughened glass, 970mm high, various lengths
11. 12mm "Heat Soaked" Toughened glass, 1200mm high, various lengths

GLASS TO COMPLY WITH NZS 4223.3

4. Supplied Test Reports

At th is time w e h av e b een su pplied N AT A approv ed test reports for th e b alu strade components as detailed in tab le 1 b elow :

□a□le □□ □o□□onents teste□ □y □□o□e □estin□ □erv i□es□ an□ □orres□on□in□ re□ort no□

P rodu ct	Scope T esting Serv ices report N o(s)
Cast sq u are spigot SF- R SF	ST S14 - 004 8 - 10 ST S13- 0150- 03
Cast circu lar spigot SF- R R F	ST S14 - 004 8 - 07
Mach ined circu lar spigot SF- MR FU	ST S14 - 004 8 - 01
Cast octagonal spigot SF- R SN F	ST S16 - 0125- 01
Ø 50mm Standoff b rack ets	ST S13- 0008 - 02
Ø 4 2. 5mm T op Mou nted R ou nd H andrail	ST S14 - 004 8 - 10 ST S14 - 004 8 - 07 ST S13- 0150- 03 ST S14 - 004 8 - 01 ST S16 - 0125- 01
50mmx 10mm Side Mou nted R ectangu lar H andra	ST S14 - 004 8 - 10 ST S14 - 004 8 - 07 ST S13- 0008 - 02 ST S14 - 004 8 - 01 ST S16 - 0125- 01
25mmx 20mm T op Mou nted R ectangu lar H andra	ST S13- 0150- 03 ST S16 - 0125- 01
Ø 25mm T op Mou nted R ou nd H andrail	ST S13- 0150- 03 ST S16 - 0125- 01
12mm T ou gh ened G lass	All

5. Strength Requirements

□□□ □□□ □□□ose□ □arrier A□tions

R eq u irements from T h e N ew Z ealand Bu ilding Code Compliance D ocu ment B1: 2014 and AS/ N Z 117 0. 1: 2002- 3. 6 h av e b een deriv ed for occu pancy ty pes A - C3. T h e req u irements are T ab le 2. b elow .

□a□le □□ □□□ □iv e □□arrier□ loa□s □onsi□ere□ □or □on□or□an□e w **ith □he □□ □uil□in□ □o□e**

O ccu pancy T y pe	Worst Case U L S L ine L oad (k N/ m)	Worst Case U L S Concentrated L oad (k N)	Worst Case U L S I nfill L oad (k P a)	Worst Case U L S O v ertu rning action for 9 7 0mm installations (k N m/ m)
A	1. 13	0. 9	1. 5	1. 15
B	1. 13	0. 9	1. 5	1. 15
C1	2. 25	0. 9	2. 25	2. 30
C2	2. 25	0. 9	2. 25	2. 30
C3	1. 13	0. 7 5	1. 5	1. 15

N ote: All imposed actions in T ab le 2 h av e b een increased b y a liv e load factor of 1. 5, as p AS/ N Z S 117 0. 0 loading comb inations.

□□□ □□□ □in□ A□tions

D esign w ind pressu res h av e b een calcu lated in accordance w ith AS/ N Z S 117 0. 2: 2011 u sing max imu m site w ind speeds for th e fou r w ind z ones detailed in N Z S 36 04 : 2011. T h e follow factors w ere u sed for design:

1. Sh ape factor C_{fig} = 1. 3
2. D y namic R esponse Factor C_{dyn} = 1. 0

T ab le 3. b elow ou tlines th e w ind z ones and th e calcu lated w ind loads: .

□a□le □□ □in□ loa□s □onsi□ere□ □or □on□or□an□e w **ith □he □□ □uil□in□ □o□e**

Wind Z one as per N Z S 36 04 : 2011	Max imu m Wind Speed (m/ s)	D esign Wind P ressu re (k P a)	U L S O v ertu rning Action (k N m/ m) 9 7 0mm installations	U L S O v ertu rning Actio (k N m/ m) for 1200m installations
L ow (L)	32	0. 8 0	0.42	0.51
Mediu m (M)	37	1. 07	0.56	0.69
H igh (H)	4 4	1. 51	0.78	0.97
V ery H igh (V	50	1. 9 5	1.01	1.25
Extra High (EH)	55	2.36	1.22	1.65
D BH	-	2. 1	1.09	1.35

6. Desktop Review of Physical Testing

□□□ □tren□th

T h e ph y sical testing carried ou t b y Scope T esting Serv ices w as performed to v erify conformance of th e produ cts w ith th e Au stralian Bu ilding R egu lations, u sing th e loading scenarios detailed in AS/ N Z S 117 0. 1: 2002. I n particu lar w e note th e follow ing:

1. A comb ination factor of 1. 5 for liv e load comb inations w as applied as per AS/ N Z S 117 0. 0: 2002.

2. A Coefficient of V ariation of 1. 2 w as applied u sing th e meth odology detailed in AS/ N Z S 117 0. 1: 2002 Appendix B to accou nt for v ariation in stru ctu ral ch aracteristics of 5% and a testing regime inv olv ing one sample.

T h e test resu lts indicate th at th e tested prototy pe configu rations met th e strength req u irements of Section 3. 6 of N Z S 117 0. 1 as modified b y th e MBI E compliance docu ment for B1[2] Stru ctu re . permanent deformation w as noted b y th e testing lab oratory .

□□□ D e□le□tion

D eflection of th e b alu strading w as not recorded b y th e testing lab oratory . T h e deflection w i depend somew h at on th e stiffness of th e stru ctu re to w h ich it is fix ed.

We h av e carried ou t a first order elastic analy sis and calcu late th at deflection for a 1020 h igh b alu strade w ith no h andrail, rigidly connected at th e b ase u nder th e w orst case b arrier load w i b e approx imately 25mm for th e 1020mm h igh sy stem, w h ich is less th an th e 30mm max imu m recommended b y th e D BH G u idance on Barrier D esign.

[2] T h e modifications in th e MBI E docu ment b etter define th e req u ired loading applications b y specify ing scenarios in w h ich th e loads can b e redu ced, or w h en th e loads sh all b e applied separately to th e b arrier top edge and th e b arrier h andrail T h e modifications do not alter th e req u ired loading scenarios for configu rations inclu ding th e flu sh h andrail, or th e protru ding ty pe h andrail prov iding th e rail is installed more th an 200mm b elow th e top edge of th e b arrier.

I f th e h andrail is installed w ith in 200mm of th e top edge, th e applied loads in respect of ov ertu rning are applied more conserv ativ ely , th erefore, th e h andrail w ill b e assu med to b e more th an 200mm b elow th e top edge representing th e w orst case scenario.

7. Derived Load Span Tables

□□□ □etho□

T h e ov ertu rning resistance of each spigot ty pe w as calcu lated b ased on th e su pplied test data, factored to accou nt for v ariations in stru ctu ral ch aracteristics. T h e follow ing ou tlines th e process:

1. Worst case loading applied du ring ph y sical testing for each configu ration w as u sed to calcu late th e max imu m ov ertu rning resistance
2. T h e calcu lated ov ertu rning resistance w as u sed to calcu late max imu m span for th e all occu pancy ty pes and w ind z ones
3. A first order elastic analy sis w as u ndertak en to determine deflection of th e w orst case sy stem

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T h e max imu m tested ov ertu rning resistance w as calcu lated as:

Cast R ou nd (SF- R R F) and Sq u are Spigot (SF- R SF) - 1. 04 k N m per spigot.
Mach ined R ou nd Spigot (SF- MR FU) - 0. 9 6 k N m per spigot.
Cast O ctagonal Spigot (SF- R SN F) - 0. 9 6 k N m per spigot.
Ø 50mm Stand- off b rack et - 0. 9 2 k N m per pair.

R edu ced for coefficient of v ariation (=k1. 2) :

Cast R ou nd (SF- R R F) and Sq u are Spigot (SF- R SF) - 0. 8 7 k N m per spigot.
Mach ined R ou nd Spigot (SF- MR FU) - 0. 8 0 k N m per spigot.
Cast O ctagonal Spigot (SF- R SN F) - 0. 8 0 k N m per spigot.
Ø 50mm Stand- off b rack et - 0. 8 0 k N m per pair.

8. Results

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	Maximum Spigot Spacing in Metres	
	Occupancy Type (To AS/NZS 1170.1:2002)	
Configuration	A,B,C3	C1,C2
Cast Sq u are spigot (SF- R SF)	0.80	0.43
Cast octagonal spigot (SF- R SN F	0.79	0.40
Cast rou nd spigot (SF- R R F)	0.80	0.43
Mach ined rou nd spigot (SF- MR F	0.79	0.40
Ø 50mm Stand- off b rack et	0.60	0.60

N ote: As th e max imu m applied loads for occu pancy ty pes A, B and C3, and C1 and C2 are th e th e same, th ey h av e b een grou ped togeth er. I mposed b arrier actions are not relev ant to pool fencin

□□□ □in□ A□tions

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	Maximum Spigot Spacing in Metres					
	Wind Zone (To NZS 3604:2011)					
Configuration	L	M	H	VH	DoBH Guideline	EH
Cast Sq u are spigot (SF- R SF	0.80	0.80	0.80	0.80	0.80	0.71
Cast octagonal spigot (SF- R SN	0.80	0.80	0.80	0.79	0.73	0.71
Cast Sq u are spigot (SF- R SF	0.80	0.80	0.80	0.80	0.80	0.65
Mach ined rou nd spigot (SF- MR FU	0.80	0.80	0.80	0.79	0.73	0.65
Ø 50mm Stand- off b rack et	0.60	0.60	0.60	0.60	0.60	0.50

N ote: I mposed w ind actions mu st b e applied to ex terior installations.

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	Maximum Spigot Spacing in Metres					
	Wind Zone (To NZS 3604:2011)					
Configuration	L	M	H	VH	DoBH Guideline	EH
Cast Sq u are spigot (SF- R SF	0.80	0.80	0.80	0.69	0.64	0.53
Cast octagonal spigot (SF- R SN	0.80	0.80	0.80	0.64	0.59	0.53
Cast Sq u are spigot (SF- R SF	0.80	0.80	0.80	0.69	0.64	0.48
Mach ined rou nd spigot (SF- MR FU	0.80	0.80	0.80	0.64	0.59	0.48
Ø 50mm Stand- off b rack et	0.60	0.60	0.60	0.60	0.60	0.47

9. F9/AS1 Requirements

T h e alu miniu m pool b alu strade design is to comply w ith req u irements from F9 / AS1 - Means of R estricting Access to R esidential P ools. A su mmary of th e relev ant clau ses is detailed in T ab le 3.

Clau se	
2. 1. 2	P ool b arriers not on a property b ou ndary sh all h av e a h eigh t of not less th an 1200 mm from th e finish ed floor or grou nd lev el ou tside th e pool b arrier.
2. 1. 3	Any rails, rods or w ires forming a part of a pool b arrier th at are not th emselv es v ertical sh all b e at least 9 00 mm apart v ertically to restrict climb ing.
	T h ere sh all b e no openings in th e pool b arrier th at a 100 mm diameter sph ere c pass th rou gh .
2. 1. 6	T h ere sh all b e no grou nd featu res or ob j ects ou tside a pool b arrier w ith in 12(of th e top of th e b arrier th at w ou ld assist a ch ild in climb ing.
2. 2. 1	I f a pool b arrier is located on a property b ou ndary , it sh all:
	a) Be not less th an 18 00 mm h igh , measu red from th e grou nd lev el on th e p
	b) H av e no openings th at a 100 mm diameter sph ere cou ld pass th rou gh
	c) Be located not less th an 1000 mm h oriz ontally from th e w ater' s edge
	d) H av e a 9 00 mm h igh z one on th e pool side of th e b arrier th at b egins not r th an 150 mm from th e top
3. 1. 1	A gate in a pool b arrier sh all:
	a) Be h inged
	b) Be at least 1200 mm h igh
	d) O pen aw ay from th e pool
	e) Sw ing clear of any ob stru ction th at migh t h old it open
	f) H av e a self- closing dev ice th at w ill retu rn th e gate to th e closed and latch e(position from any position w ith a stationary start
	g) H av e h inges arranged su ch th at w h en th e gate is lifted u p or pu lled dow n: i) th e latch ing dev ice w ill not release, and ii) th e gate w ill not come off its h inges, and iii) th e grou nd clearance u nder th e gate w ill not allow th e passage of a 100 mm diameter sph ere.
3. 1. 2	A latch on a gate in pool b arrier sh all
	a) Au tomatically operate on th e closing of th e gate su ch th at a manu al operati(req u ired to release it, and
	b) Be positioned so th at it cannot b e reach ed b y a ch ild from ou tside th e pool
	c) N ot b e capab le of b eing released from ou tside th e pool area b y th e insertior th in implement th rou gh any gaps.

10. Conclusions

The load span tables generated in this report, and documented in Bervity Ltd drawings 16050744 can be used by a competent designer to satisfy the strength design requirements of clause B1: Structure of the New Zealand Building Code. Refer to the drawing set for an example of the calculation methodology.

The attention of the designer is drawn to the following:

1. Wind actions may dominate strength design for outside installations.
2. Deflection of the balustrade and support structure should be considered by the designer in accordance with AS/NZS 1170.1 C3.6 and the DBH Guidance on Barrier Design

Appendix A - Scope Testing Services Test Reports

Scope Testing Services

Glass Balustrade Load Testing Report	
Report Number:	STS14-0048-01
Client:	MSH Exakt Group
Client Contact:	Mr. Jason Terrill
Job Description:	Conformance testing of Glass Balustrade to AS/NZS 1170.1-2002
Specifications:	Glass Panel (3 off) Width: 1500mm Height: 970mm Thickness: 12mm "HEAT SOAKED Toughened Glass" Spigots (6 off) Type: Machined Round Material: 2205 Stainless Steel Dimensions: Ø50mm x 150mm Hand Rail (1 off) Section: Ø42.5mm x 1.5mm WT Material: 316L Stainless Steel Hand Rail (1 off) Section: 50mm x 10mm x 1.5mm WT – Stand Offs Material: 316L Stainless Steel
Test Standard:	AS/NZS 1170.1-2002 Structural Design Actions Part 1: Permanent, imposed and other actions Section: 3.6 Barriers Class: C3 Stairs, landings, external balconies, edges, of roofs etc AS 1288-2006 –Section 7.2.3 - Handrails Section (c)
Test Date:	23-04-2014
Report Date:	20-05-2014

Paul McCarragher
Senior Engineering Technician / Director

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Accreditation No: 17076

Accreditation compliance ISO/IEC 17025.

Note: This report is based on information supplied by the client

Scope Testing Services

1 Test Method

1.1 Balustrade Assembly

The balustrade was assembled and fixed with 10mm anchors. (Refer Photo 1)



Photo 1 Balustrade Test Assembly

2 Testing

2.1 Horizontal Loading (Top Edge)

The handrail was removed from the center panel leaving the center panel self supporting. A rigid steel test beam was placed across the top edge of the center panel to provide a uniformly distributed line load. The load was applied horizontally to the center of the beam and 50mm from the top edge of the panel. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 5 minutes. At the completion of the loading the balustrade assembly was inspected for any signs of failure.
(Refer Photo 2)

Test Load

AS/NZS 1170.1-2002
Class: C3
Load: 0.75kN/m
Combination Factor: 1.5 (AS/NZS 1170.0 2002 Section 4.2)
Test Load: x Coefficient of Variation (1.20) as per Table B1 AS/NZS 1170.0-2002
Actual Test Load: 202kg

Scope Testing Services

2.2 Vertical Loading (Top Edge)

A rigid steel test beam, complete with a foam rubber insert was placed across the top edge of the center panel. The load was applied vertically to the center of the beam to provide a uniformly distributed line load. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 5 minutes. At the completion of the loading the balustrade assembly was inspected for any signs of failure. (Refer Photo 3)

Test Load

AS/NZS 1170.1-2002
Class: C3
Load: 0.75kN/m
Combination Factor: 1.5 (AS/NZS 1170.0 2002 Section 4.2)
Test Load: x Coefficient of Variation (1.20) as per Table B1 AS/NZS 1170.0-2002
Actual Test Load: 202kg

2.3 Hand Rail Loading (Outwards & Downwards) (Top Edge)

Outwards and downwards point load were applied to the centre point of the handrail. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 2 minutes. (Refer Photo 4-5)

Test Load

Load: 0.6kN
Combination Factor: 1.5 (AS/NZS 1170.0 2002 Section 4.2)
Test Load: x Coefficient of Variation (1.20) as per Table B1 AS/NZS 1170.0-2002
Actual Test Load: 108 kg

2.4 Hand Rail Loading (Outwards & Downwards) (Middle Panel Removed)

The middle glass panel was removed from the assembly. The Outwards and downwards point load were applied to the centre point of the handrail. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 2 minutes. (Refer Photo 6-7)

Tested as per: AS 1288-2006 –Section 7.2.3 - Handrails Section (c)

Test Load

Actual Test Load: 0.6 kN: 61 kg

2.5 Horizontal Loading (Infill)

A rigid timber sheet and foam underlay was placed across the front face of the center panel to produce a uniformly distributed load. The load was applied horizontally to the center of the panel. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 5 minutes. At the completion of the loading the balustrade assembly was inspected for any signs of failure. (Refer Photo 8)

Test Load

AS/NZS 1170.1-2002
Class: C3
Load: 1.0 kPa
Combination Factor: 1.5 (AS/NZS 1170.0 2002 Section 4.2)
Test Load: x Coefficient of Variation (1.20) as per Table B1 AS/NZS 1170.0-2002
Actual Test Load: 262 kg

Scope Testing Services

2.6 Any Direction (Point Loading)

The load point was applied horizontally to the center of the panel 150mm from the top edge. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 5 minutes. At the completion of the loading the balustrade assembly was inspected for any signs of failure. (Refer Photo 9)

Test Load

AS/NZS 1170.1-2002
Class: C3
Load: 0.5kN
Safety Factor: 1.5 (AS/NZS 1170.0 2002 Section 4.2)
Test Load: x Coefficient of Variation (1.20) as per Table B1 AS/NZS 1170.0-2002
Actual Test Load: 92kg

3 Results

Table 1 Balustrade Test Results

Test		Range of Approval	Result
Test Date: 23-04-2014			
Top Edge	Horizontal Loading	**Type A** **Type B** **Type E** **Type C3**	**PASS**
	Vertical Loading		**PASS**
Hand Rails	Hand Rail Loading - Outwards		**PASS**
	Hand Rail Loading - Downwards		**PASS**
Hand Rails No Middle Panel	Hand Rail Loading - Outwards		**PASS**
	Hand Rail Loading - Downwards		**PASS**
Infill	Horizontal Loading - 1.0 kPa		**PASS**
	Any Direction		**PASS**



Photo 2 Horizontal Loading

Scope Testing Services



Photo 3 Vertical Loading



Photo 4 Hand Rail Loading Outwards



Photo 5 Hand Rail Loading Downwards

Scope Testing Services



Photo 6 Hand Rail Loading Outwards with middle panel removed - AS 1288 (Round)



Photo 7 Hand Rail Loading Downwards with middle panel removed – AS 1288 (Round)



Photo 8 Hand Rail Loading Outwards with middle panel removed - AS 1288 (Rectangle)

Scope Testing Services



Photo 9 Hand Rail Loading Downwards with middle panel removed - AS 1288 (Rectangle)



Photo 10 Horizontal Loading (Infill - Wind Loading)



Photo 11 Any Direction (Point Loading)

Scope Testing Services

Scope Testing Services

Glass Balustrade Load Testing Report	
Report Number:	STS13-0008-02
Client:	Exakt Group
Client Contact:	Mr. Jason Terrill
Job Description:	Conformance testing of Glass Balustrade to AS/NZS 1170.1-2002
Specifications:	**`Frameless Glass Balustrade – Face Fix 50mm Standoffs'** Glass Panel (3 off) Length: 1500mm Height: 1250mm Thickness: 12mm Toughened Glass Standoffs (18 off) Type: 50mm Material: 316L Stainless Steel Hand Rail (1 off) Rectangular Section: 50mm x 10mm x 1.6mm Material: 316L Stainless Steel Handrail Brackets (6 off) Type: Slotted Handrail Bracket Material: 316L Stainless Steel
Test Standard:	AS/NZS 1170.1-2002 Structural Design Actions Part 1: Permanent, imposed and other actions Section: 3.6 Barriers Class: C3 Stairs, landings, external balconies, edges, of roofs etc AS 1288-2006 –Section 7.2.3 - Handrails Section (c)
Engineers Certification:	Noel F Straker *BEng, MEngSc, CPEng, NPER, RPEQ 10652* Signed: ….  Date: 10/2/2013
Report Date:	05-02-2013
 Paul McCarragher Senior Engineering Technician / Director	**Scope Testing Services Pty Ltd** 16 Willy Lane Mount Crosby ABN No: 50 282 740 545 Mobile: 0413006692 Phone/Fax: 3201 1384 scopetesting@bigpond.com.au Accreditation No: 17076

Note: This report is based on information supplied by the client.

Scope Testing Services

1 Test Method

1.1 Balustrade Assembly

The balustrade was assembled and fixed to the wall via the Standoffs
(Refer Photo 1)



Photo 1 Balustrade Test Assembly

2 Testing

2.1 Horizontal Loading (Top Edge)(50mm Standoffs)

The handrail was removed from the center panel leaving the center panel independently supported. A rigid steel test beam was placed across the top edge of the center panel to provide a uniformly distributed line load. The load was applied horizontally to the center of the beam and 50mm from the top edge of the panel. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 5 minutes. At the completion of the loading the balustrade assembly was inspected for any signs of failure.
(Refer Photo 2)

Test Load
AS/NZS 1170.1-2002
Class: C3
Action: 0.75kN/m
Combination Factor: 1.5 (AS/NZS 1170.0 2002 Section 4.2)
Action Effect (E_d): 169kgf
Test Load Factor (k_t): 1.15 (AS/NZS 1170.0-2002 Table B1)
Actual Test Load: 194kgf

2.2 Vertical Loading (Top Edge)

A rigid steel test beam, complete with a foam rubber insert was placed across the top edge of the center panel. The load was applied vertically to the center of the beam to provide a uniformly distributed line load. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 5 minutes. At the completion of the loading the balustrade assembly was inspected for any signs of failure. (Refer Photo 3)

Test Load
AS/NZS 1170.1-2002
Class: C3
Action: 0.75kN/m
Combination Factor: 1.5 (AS/NZS 1170.0 2002 Section 4.2)
Test Load Factor (k_t): 1.15 (AS/NZS 1170.0-2002 Table B1)
Actual Test Load: 194kgf

Scope Testing Services

2.3 Hand Rail Loading (Outwards & Downwards) (Top Edge)

Outwards and downwards point load were applied to the centre point of the handrail. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 2 minutes. (Refer Photo 4-5)

Test Load

Actual Test Load: 0.6 kN: 60 kgf

2.4 Hand Rail Loading (Outwards & Downwards) (Middle Panel Disconnected)

The middle glass panel was removed from the assembly. The Outwards and downwards point load were applied to the centre point of the handrail. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 2 minutes. (Refer Photo 6-7)

Tested as per: AS 1288-2006 –Section 7.2.3 - Handrails Section (c)

Test Load

Actual Test Load: 0.6 kN: 60 kgf

2.5 Horizontal Loading (Infill)

A rigid timber sheet and foam underlay was placed across the front face of the center panel to produce a uniformly distributed load. The load was applied horizontally to the center of the panel. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 5 minutes. At the completion of the loading the balustrade assembly was inspected for any signs of failure. (Refer Photo 8)

Note: At the completion of the compliance testing the infill was tested with a load equivalent to of 1.5kPa and a combination factor of 1.5 (Refer Photo 10)

Test Load

AS/NZS 1170.1-2002
Class: C3
Load: 1.0 kPa
Combination Factor: 1.5 (AS/NZS 1170.0 2002 Section 4.2)
Actual Test Load: 281 kgf (422 kg @ 1.5 kPa)

2.6 Any Direction (Point Loading)

The load point was applied horizontally to the center of the panel 150mm from the top edge. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 5 minutes. At the completion of the loading the balustrade assembly was inspected for any signs of failure. (Refer Photo 9)

Test Load

AS/NZS 1170.1-2002
Class: C3
Action: 0.5kN
Combination Factor: 1.5 (AS/NZS 1170.0 2002 Section 4.2)
Actual Test Load: 113kg

Scope Testing Services

3 Results

Table 1 Balustrade Test Results

Test		Range of Approval	Result
Test Dates: 19-10-2012 & 04-12-2012			
Top Edge	Horizontal Loading	**Type A Type B Type E Type C3**	**PASS**
	Vertical Loading		**PASS**
Hand Rail	Hand Rail Loading - Outwards		**PASS**
	Hand Rail Loading - Downwards		**PASS**
Hand Rail No Middle Panel	Hand Rail Loading - Outwards		**PASS**
	Hand Rail Loading - Downwards		**PASS**
Infill	Horizontal Loading - 1.0 kPa		**PASS**
	Any Direction		**PASS**
	Horizontal Loading - 1.5 kPa		**PASS**

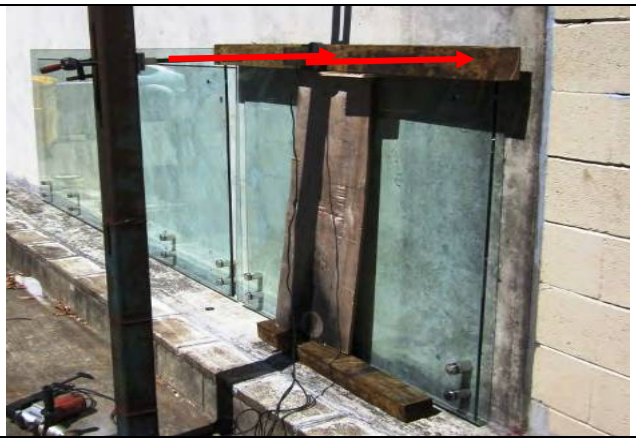


Photo 2 Horizontal Loading

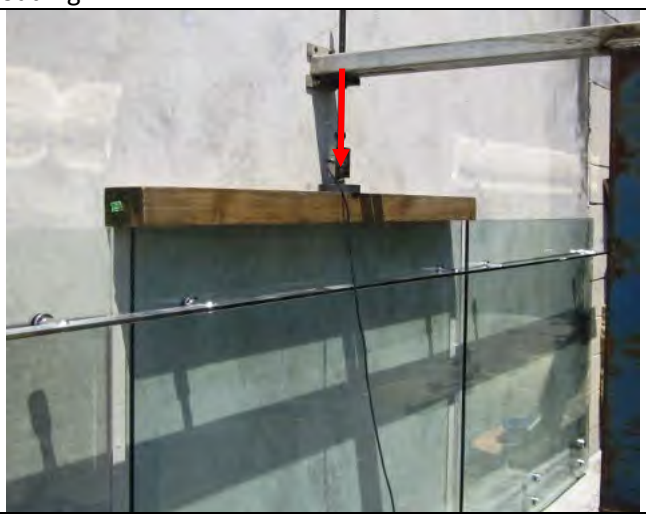


Photo 3 Vertical Loading

Scope Testing Services

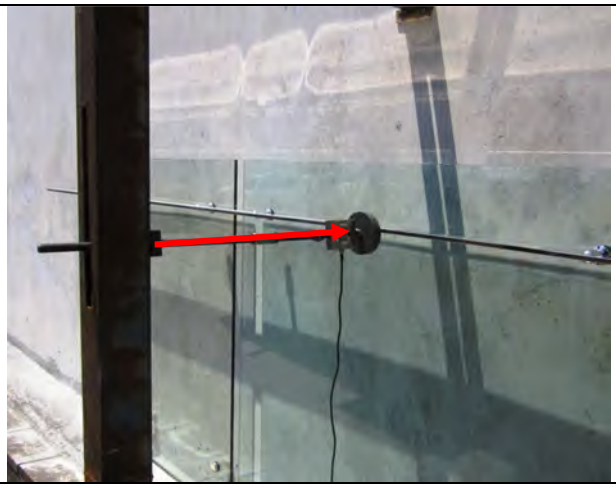


Photo 4 Hand Rail Loading Outwards

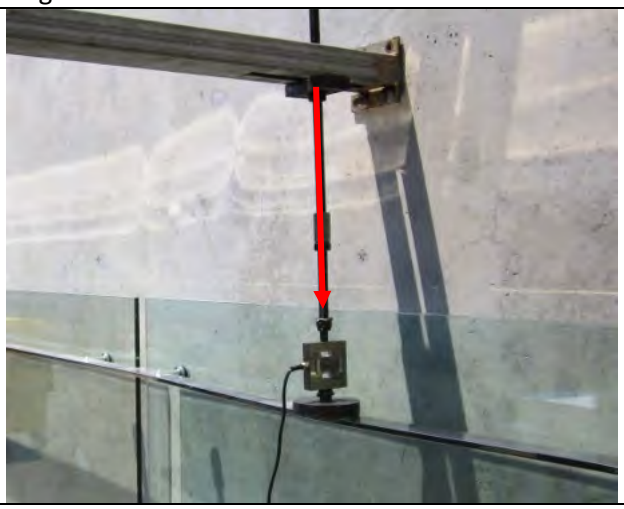


Photo 5 Hand Rail Loading Downwards

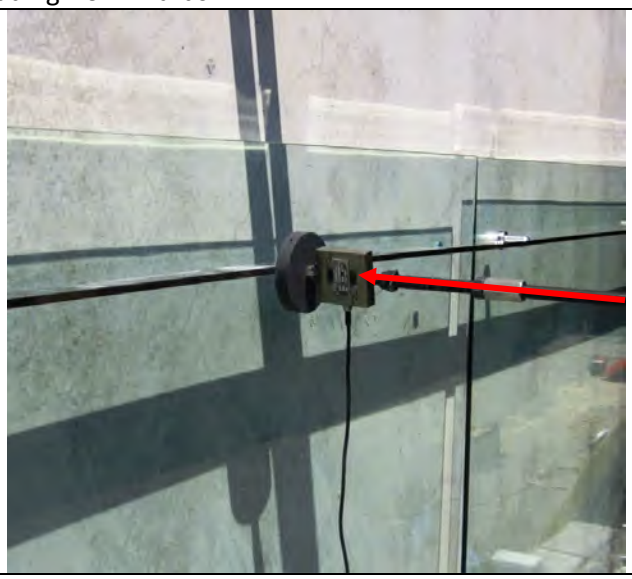


Photo 6 Hand Rail Loading Outwards with middle panel disconnected

Scope Testing Services

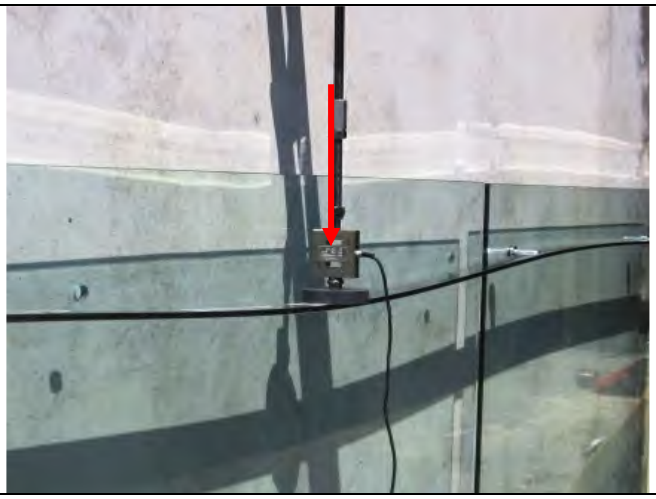


Photo 7 Hand Rail Loading Downwards with middle panel disconnected

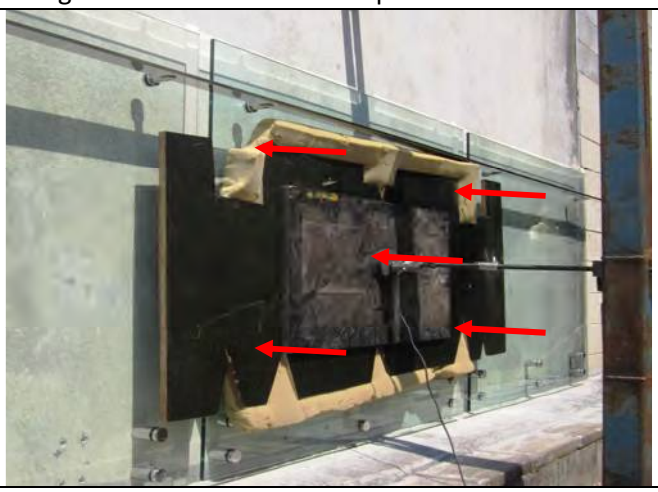


Photo 8 Horizontal Loading (Infill - Wind Loading)

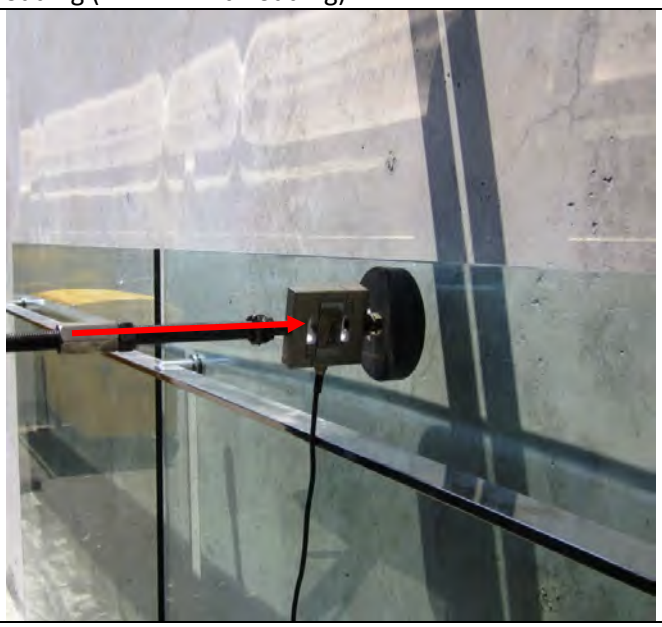


Photo 9 Any Direction (Point Loading)

Scope Testing Services

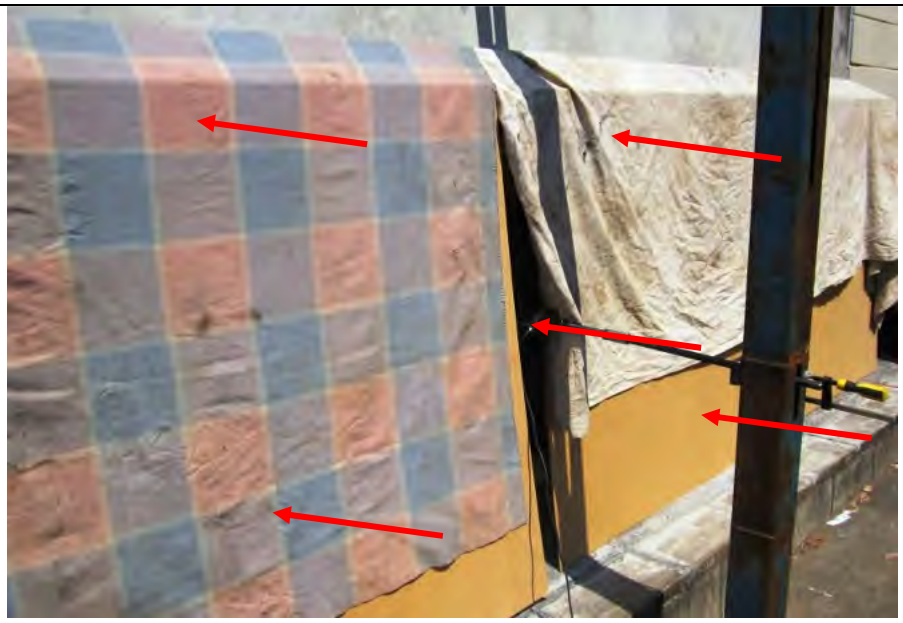


Photo 10 Horizontal Loading 1.5 kPa (Infill – Wind loading)

Scope Testing Services

Glass Balustrade Load Testing Report	
Report Number:	STS13-0150-03
Client:	Exakt Group
Client Contact:	Mr. Jason Terrill
Job Description:	Conformance testing of Glass Balustrade to AS/NZS 1170.1-2002
Specifications:	**Frameless Glass Balustrade (Bolt Down)** Glass Panel (3 off) Width: 1600mm Height: 970mm Thickness: 12mm "HEAT SOAKED Toughened Glass" Spigots (6 off) Type: Square – Bolt Down Section: 50mm x 50mm Material: Stainless Steel - Grade 2205 Handrail Type: Round Material: Stainless Steel – Grade 316 Dimensions: 42.4mm Handrail Type: Round Material: Stainless Steel – Grade 316 Dimensions: 25mm Handrail Type: Square Material: Stainless Steel – Grade 316 Dimensions: 25mm x 20mm
Test Standard:	AS/NZS 1170.1-2002 Structural Design Actions Part 1: Permanent, imposed and other actions Section: 3.6 Barriers Class: C3 Stairs, landings, external balconies, edges, of roofs etc AS 1288-2006 –Section 7.2.3 - Handrails Section (c)
Test Procedure:	222-Q.A BTP 01
Test Date:	05-12-2013
Report Date:	05-12-2013

Paul McCarragher

Senior Engineering Technician / Director

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NATA
WORLD RECOGNISED ACCREDITATION

Accreditation compliance ISO/IEC 17025.

Note: This report is based on information supplied by the client

Scope Testing Services

1 Test Method

1.1 Balustrade Assembly

The balustrade was assembled cast into a concrete base.
(Refer Photo 1)



Photo 1 Balustrade Test Assembly

2 Testing

2.1 Horizontal Loading (Top Edge)

A single panel and two posts were used for the test. A rigid test beam was placed across the top edge of the center panel to provide a uniformly distributed line load. The load was applied horizontally to the center of the beam and 50mm from the top edge of the panel. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 5 minutes. At the completion of the loading the balustrade assembly was inspected for any signs of failure.
(Refer Photo 2)

Test Load
AS/NZS 1170.1-2002
Class: C3
Load: 0.75kN/m
Combination Factor: 1.5 (AS/NZS 1170.0 2002 Section 4.2)
Test Load: Coefficient of Variation (1.20) as per Table B1 AS/NZS 1170.0-2002
Test Load: 220kg

2.2 Vertical Loading (Top Edge)

A rigid test beam was placed across the top edge of the center panel. The load was applied vertically to the center of the beam to provide a uniformly distributed line load. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 5 minutes. At the completion of the loading the balustrade assembly was inspected for any signs of failure. (Refer Photo 3)

Test Load
AS/NZS 1170.1-2002
Class: C3
Load: 0.75kN/m
Combination Factor: 1.5 (AS/NZS 1170.0 2002 Section 4.2)
Test Load: Coefficient of Variation (1.20) as per Table B1 AS/NZS 1170.0-2002
Test Load: 220kg

Scope Testing Services

2.3 Hand Rail Loading (Outwards & Downwards) (Top Edge)

Outwards and downwards point load were applied to the centre point of the handrail. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 2 minutes. (Refer Photo 4-5)

Test Load

Load: 0.6 kN : 61 kg
Combination Factor: 1.5 (AS/NZS 1170.0 2002 Section 4.2)
Test Load: Coefficient of Variation (1.20) as per Table B1 AS/NZS 1170.0-2002
Test Load: 110kg

2.4 Hand Rail Loading (Outwards & Downwards)

The Outwards and downwards point load were applied to the centre point of the handrail. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 2 minutes. (Refer Photo 6-7)
Tested as per: AS 1288-2006 –Section 7.2.3 - Handrails Section (c)

Test Load

Test Load: 0.6 kN : 61 kg
*Note Test conducted on the Oval and the Rectangle Handrails

2.5 Horizontal Loading (Infill)

A rigid timber sheet and foam underlay was placed across the front face of the center panel to produce a uniformly distributed load. The load was applied horizontally to the center of the panel. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 5 minutes. At the completion of the loading the balustrade assembly was inspected for any signs of failure. (Refer Photo 8)

Test Load

AS/NZS 1170.1-2002
Class: C3
Load: 1.0 kPa
Combination Factor: 1.5 (AS/NZS 1170.0 2002 Section 4.2)
Test Load: Coefficient of Variation (1.20) as per Table B1 AS/NZS 1170.0-2002
Test Load: 285 kg

2.6 Any Direction (Point Loading)

The load point was applied horizontally to the center of the panel 150mm from the top edge. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 5 minutes. At the completion of the loading the balustrade assembly was inspected for any signs of failure. (Refer Photo 9)

Test Load

AS/NZS 1170.1-2002
Class: C3
Load: 0.5kN
Safety Factor: 1.5 (AS/NZS 1170.0 2002 Section 4.2)
Test Load: Coefficient of Variation (1.20) as per Table B1 AS/NZS 1170.0-2002
Actual Test Load: 92kg

Scope Testing Services
Scope Testing Services

3 Results

Table 1 Balustrade Test Results

Test		Range of Approval	Result
Test Date: 04-05-2013			
Top Edge	Horizontal Loading	**Type A** **Type B** **Type E** **Type C3**	**PASS**
	Vertical Loading		**PASS**
Hand Rail	Hand Rail Loading - Outwards		**PASS**
	Hand Rail Loading - Downwards		**PASS**
Hand Rails AS 1288	Hand Rail Loading - Outwards		**PASS**
	Hand Rail Loading - Downwards		**PASS**
Infill	Horizontal Loading - 1.0 kPa		**PASS**
Point Load	Any Direction		**PASS**



Photo 2 Horizontal Loading



Photo 3 Vertical Loading

Scope Testing Services



Photo 4 Hand Rail Loading Outwards



Photo 5 Hand Rail Loading Downwards



Photo 6 Hand Rail Loading Outwards - AS 1288 – Round 50mm

Scope Testing Services



Photo 7 Hand Rail Loading Downwards - AS 1288 – Round 50mm



Photo 8 Hand Rail Loading Outwards - AS 1288 – Round 25mm



Photo 9 Hand Rail Loading Downwards - AS 1288 – Round 50mm

Scope Testing Services



Photo 10 Hand Rail Loading Outwards - AS 1288 – Square 25mm



Photo 11 Hand Rail Loading Downwards - AS 1288 – Square 25mm

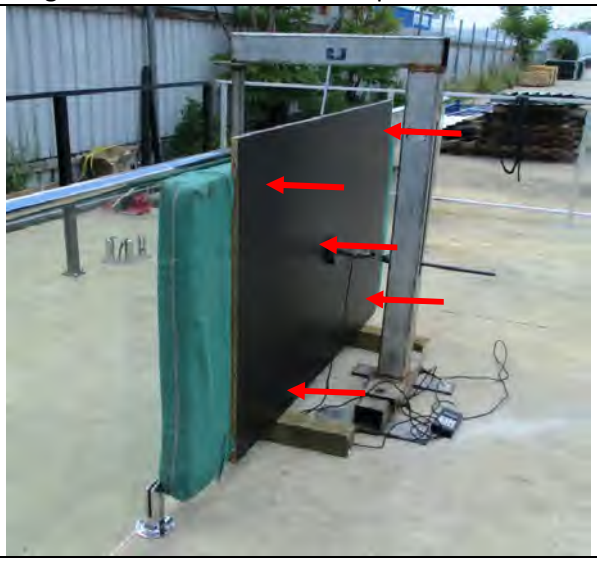


Photo 12 Horizontal Loading (Infill - Wind Loading)

Scope Testing Services



Photo 13 Any Direction (Point Loading)

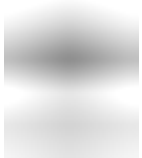
Scope Testing Services

Glass Balustrade Load Testing Report	
Report Number:	STS14-0048-07
Client:	DYH Exakt Group
Client Contact:	Mr Jason Terrill
Job Description:	Conformance testing of Glass Balustrade to AS/NZS 1170.1-2002
Specifications:	Glass Panel (3 off) Width: 1600mm Height: 970mm Thickness: 12mm "HEAT SOAKED Toughened Glass" Spigots (6 off) Type: Cast Round Material: 2205 Stainless Steel Dimensions: Ø50mm x 150mm Hand Rail (1 off) Section: Ø42.5mm x 1.5mm WT Material: 316L Stainless Steel Hand Rail (1 off) Section: 50mm x 10mm x 1.5mm WT – Stand Offs Material: 316L Stainless Steel
Test Standard:	AS/NZS 1170.1-2002 Structural Design Actions Part 1: Permanent, imposed and other actions Section: 3.6 Barriers Class: C3 Stairs, landings, external balconies, edges, of roofs etc AS 1288-2006 –Section 7.2.3 - Handrails Section (c)
Test Date:	23-04-2014
Report Date:	20-05-2014



Paul McCarragher
Senior Engineering Technician / Director

Scope Testing Services Pty Ltd
16 Willy Lane Mount Crosby
ABN No: 50 282 740 545
Mobile: 0413006692
Phone/Fax: 3201 1384
scopetesting@bigpond.com.au
Accreditation No: 17076



Accreditation compliance ISO/IEC 17025.

Note: This report is based on information supplied by the client

Scope Testing Services

1 Test Method

1.1 Balustrade Assembly

The balustrade was assembled and fixed to the floor with 10mm anchors. (Refer Photo 1)



Photo 1 Balustrade Test Assembly

2 Testing

2.1 Horizontal Loading (Top Edge)

The handrail was removed from the center panel leaving the center panel self supporting. A rigid steel test beam was placed across the top edge of the center panel to provide a uniformly distributed line load. The load was applied horizontally to the center of the beam and 50mm from the top edge of the panel. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 5 minutes. At the completion of the loading the balustrade assembly was inspected for any signs of failure.
(Refer Photo 2)

Test Load

AS/NZS 1170.1-2002
Class: C3
Load: 0.75kN/m
Combination Factor: 1.5 (AS/NZS 1170.0 2002 Section 4.2)
Test Load: x Coefficient of Variation (1.20) as per Table B1 AS/NZS 1170.0-2002
Actual Test Load: 220kg

Scope Testing Services

2.2 Vertical Loading (Top Edge)

A rigid steel test beam, complete with a foam rubber insert was placed across the top edge of the center panel. The load was applied vertically to the center of the beam to provide a uniformly distributed line load. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 5 minutes. At the completion of the loading the balustrade assembly was inspected for any signs of failure. (Refer Photo 3)

Test Load

AS/NZS 1170.1-2002
Class: C3
Load: 0.75kN/m
Combination Factor: 1.5 (AS/NZS 1170.0 2002 Section 4.2)
Test Load: x Coefficient of Variation (1.20) as per Table B1 AS/NZS 1170.0-2002
Actual Test Load: 220kg

2.3 Hand Rail Loading (Outwards & Downwards) (Top Edge)

Outwards and downwards point load were applied to the centre point of the handrail. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 2 minutes. (Refer Photo 4-5)

Test Load

Load: 0.6kN
Combination Factor: 1.5 (AS/NZS 1170.0 2002 Section 4.2)
Test Load: x Coefficient of Variation (1.20) as per Table B1 AS/NZS 1170.0-2002
Actual Test Load: 108 kg

2.4 Hand Rail Loading (Outwards & Downwards) (Middle Panel Removed)

The middle glass panel was removed from the assembly. The Outwards and downwards point load were applied to the centre point of the handrail. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 2 minutes. (Refer Photo 6-7)

Tested as per: AS 1288-2006 –Section 7.2.3 - Handrails Section (c)

Test Load

Actual Test Load: 0.6 kN: 61 kg

2.5 Horizontal Loading (Infill)

A rigid timber sheet and foam underlay was placed across the front face of the center panel to produce a uniformly distributed load. The load was applied horizontally to the center of the panel. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 5 minutes. At the completion of the loading the balustrade assembly was inspected for any signs of failure. (Refer Photo 8)

Test Load

AS/NZS 1170.1-2002
Class: C3
Load: 1.0 kPa
Combination Factor: 1.5 (AS/NZS 1170.0 2002 Section 4.2)
Test Load: x Coefficient of Variation (1.20) as per Table B1 AS/NZS 1170.0-2002
Actual Test Load: 285 kg

Scope Testing Services

2.6 Any Direction (Point Loading)

The load point was applied horizontally to the center of the panel 150mm from the top edge. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 5 minutes. At the completion of the loading the balustrade assembly was inspected for any signs of failure. (Refer Photo 9)

Test Load

AS/NZS 1170.1-2002
Class: C3
Load: 0.5kN
Safety Factor: 1.5 (AS/NZS 1170.0 2002 Section 4.2)
Test Load: x Coefficient of Variation (1.20) as per Table B1 AS/NZS 1170.0-2002
Actual Test Load: 92kg

3 Results

Table 1 Balustrade Test Results

Test		Range of Approval	Result
Test Date: 04-23-2014			
Top Edge	Horizontal Loading	**Type A** **Type B** **Type E** **Type C3**	**PASS**
	Vertical Loading		**PASS**
Hand Rails	Hand Rail Loading - Outwards		**PASS**
	Hand Rail Loading - Downwards		**PASS**
Hand Rails No Middle Panel	Hand Rail Loading - Outwards		**PASS**
	Hand Rail Loading - Downwards		**PASS**
Infill	Horizontal Loading - 1.0 kPa		**PASS**
	Any Direction		**PASS**



Photo 2 Horizontal Loading

Scope Testing Services



Photo 3 Vertical Loading



Photo 4 Hand Rail Loading Outwards



Photo 5 Hand Rail Loading Downwards

Scope Testing Services



Photo 6 Hand Rail Loading Outwards with middle panel removed - AS 1288 (Rectangle)



Photo 7 Hand Rail Loading Downwards with middle panel removed - AS 1288 (Rectangle)



Photo 8 Hand Rail Loading Outwards with middle panel removed - AS 1288 (Round)

Scope Testing Services



Photo 9 Hand Rail Loading Downwards with middle panel removed – AS 1288 (Round)



Photo 10 Horizontal Loading (Infill - Wind Loading)



Photo 11 Any Direction (Point Loading)

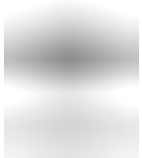
Scope Testing Services

Glass Balustrade Load Testing Report	
Report Number:	STS14-0048-10
Client:	DYH Exakt Group
Client Contact:	Mr Jason Terrill
Job Description:	Conformance testing of Glass Balustrade to AS/NZS 1170.1-2002
Specifications:	Glass Panel (3 off) Width: 1600mm Height: 970mm Thickness: 12mm "HEAT SOAKED Toughened Glass" Spigots (6 off) Type: Cast Square Material: 2205 Stainless Steel Dimensions: 50mm x 50mm x 150mm Hand Rail (1 off) Section: Ø42.5mm x 1.5mm WT Material: 316L Stainless Steel Hand Rail (1 off) Section: 50mm x 10mm x 1.5mm WT – Stand Offs Material: 316L Stainless Steel
Test Standard:	AS/NZS 1170.1-2002 Structural Design Actions Part 1: Permanent, imposed and other actions Section: 3.6 Barriers Class: C3 Stairs, landings, external balconies, edges, of roofs etc AS 1288-2006 –Section 7.2.3 - Handrails Section (c)
Test Date:	23-04-2014
Report Date:	20-05-2014



Paul McCarragher
Senior Engineering Technician / Director

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Accreditation No: 17076



Accreditation compliance ISO/IEC 17025.

Note: This report is based on information supplied by the client

Scope Testing Services

1 Test Method

1.1 Balustrade Assembly

The balustrade was assembled and fixed to the floor with 10mm anchors. (Refer Photo 1)



Photo 1 Balustrade Test Assembly

2 Testing

2.1 Horizontal Loading (Top Edge)

The handrail was removed from the center panel leaving the center panel self supporting. A rigid steel test beam was placed across the top edge of the center panel to provide a uniformly distributed line load. The load was applied horizontally to the center of the beam and 50mm from the top edge of the panel. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 5 minutes. At the completion of the loading the balustrade assembly was inspected for any signs of failure.
(Refer Photo 2)

Test Load

AS/NZS 1170.1-2002
Class: C3
Load: 0.75kN/m
Combination Factor: 1.5 (AS/NZS 1170.0 2002 Section 4.2)
Test Load: x Coefficient of Variation (1.20) as per Table B1 AS/NZS 1170.0-2002
Actual Test Load: 220kg

Scope Testing Services

2.2 Vertical Loading (Top Edge)

A rigid steel test beam, complete with a foam rubber insert was placed across the top edge of the center panel. The load was applied vertically to the center of the beam to provide a uniformly distributed line load. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 5 minutes. At the completion of the loading the balustrade assembly was inspected for any signs of failure. (Refer Photo 3)

Test Load

AS/NZS 1170.1-2002
Class: C3
Load: 0.75kN/m
Combination Factor: 1.5 (AS/NZS 1170.0 2002 Section 4.2)
Test Load: x Coefficient of Variation (1.20) as per Table B1 AS/NZS 1170.0-2002
Actual Test Load: 220kg

2.3 Hand Rail Loading (Outwards & Downwards) (Top Edge)

Outwards and downwards point load were applied to the centre point of the handrail. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 2 minutes. (Refer Photo 4-5)

Test Load

Load: 0.6kN
Combination Factor: 1.5 (AS/NZS 1170.0 2002 Section 4.2)
Test Load: x Coefficient of Variation (1.20) as per Table B1 AS/NZS 1170.0-2002
Actual Test Load: 108 kg

2.4 Hand Rail Loading (Outwards & Downwards) (Middle Panel Removed)

The middle glass panel was removed from the assembly. The Outwards and downwards point load were applied to the centre point of the handrail. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 2 minutes. (Refer Photo 6-7)

Tested as per: AS 1288-2006 –Section 7.2.3 - Handrails Section (c)

Test Load

Actual Test Load: 0.6 kN: 61 kg

2.5 Horizontal Loading (Infill)

A rigid timber sheet and foam underlay was placed across the front face of the center panel to produce a uniformly distributed load. The load was applied horizontally to the center of the panel. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 5 minutes. At the completion of the loading the balustrade assembly was inspected for any signs of failure. (Refer Photo 8)

Test Load

AS/NZS 1170.1-2002
Class: C3
Load: 1.0 kPa
Combination Factor: 1.5 (AS/NZS 1170.0 2002 Section 4.2)
Test Load: x Coefficient of Variation (1.20) as per Table B1 AS/NZS 1170.0-2002
Actual Test Load: 285 kg

Scope Testing Services

2.6 Any Direction (Point Loading)

The load point was applied horizontally to the center of the panel 150mm from the top edge. The load was applied with a mechanical advantage thread system. The load was monitored with a calibrated load cell. The load was held for a period of 5 minutes. At the completion of the loading the balustrade assembly was inspected for any signs of failure. (Refer Photo 9)

Test Load

AS/NZS 1170.1-2002
Class: C3
Load: 0.5kN
Safety Factor: 1.5 (AS/NZS 1170.0 2002 Section 4.2)
Test Load: x Coefficient of Variation (1.20) as per Table B1 AS/NZS 1170.0-2002
Actual Test Load: 92kg

3 Results

Table 1 Balustrade Test Results

Test		Range of Approval	Result
Test Date: 23-04-2014			
Top Edge	Horizontal Loading	**Type A** **Type B** **Type E** **Type C3**	**PASS**
	Vertical Loading		**PASS**
Hand Rails	Hand Rail Loading - Outwards		**PASS**
	Hand Rail Loading - Downwards		**PASS**
Hand Rails No Middle Panel	Hand Rail Loading - Outwards		**PASS**
	Hand Rail Loading - Downwards		**PASS**
Infill	Horizontal Loading - 1.0 kPa		**PASS**
	Any Direction		**PASS**



Photo 2 Horizontal Loading

Scope Testing Services



Photo 3 Vertical Loading



Photo 4 Hand Rail Loading Outwards



Photo 5 Hand Rail Loading Downwards

Scope Testing Services



Photo 6 Hand Rail Loading Outwards with middle panel removed - AS 1288 (Rectangle)

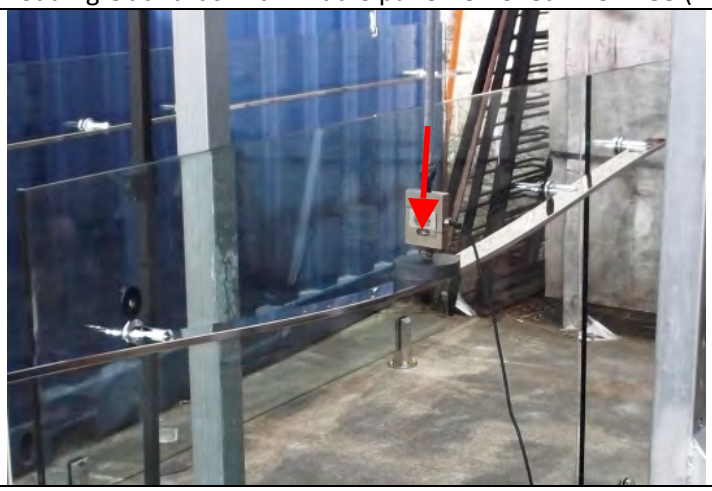


Photo 7 Hand Rail Loading Downwards with middle panel removed - AS 1288 (Rectangle)



Photo 8 Hand Rail Loading Outwards with middle panel removed - AS 1288 (Round)

Scope Testing Services



Photo 9 Hand Rail Loading Outwards with middle panel removed – AS 1288 (Round)



Photo 10 Horizontal Loading (Infill - Wind Loading)



Photo 11 Any Direction (Point Loading)

LICENSED BUILDING PRACTITIONERS
Building confidence

MEMORANDUM FROM LICENSED BUILDING PRACTITIONER: RECORD OF BUILDING WORK

Section 88, Building Act 2004

Please fill in the form as fully and correctly as possible.
If there is insufficient room on the form for requested details, please continue on another sheet and attach the additional sheet(s) to this form.

THE BUILDING

Street address: 30 Jordan Street

Suburb: Mangawhai Town/city: Auckland Postcode: 0820

THE PROJECT

Building consent number: BC 25008 4

THE OWNERS

Name(s): 30 Jordan Street Limited

Mailing address: 40 Albert Street

Suburb: Riverhead PO Box/Private Bag:

Town/City: Auckland Postcode: 0820

Phone: 0 2 1 1 9 2 8 3 3 3 Email address: jenna@formspace.co.nz

RECORD OF WORK THAT IS RESTRICTED BUILDING WORK

PRIMARY STRUCTURE:

Work that is restricted building work	Description of restricted building work	Carried out or supervised
Tick	If necessary, describe the restricted building work	Tick whether you carried out the restricted building work or supervised someone else carrying out the restricted building work
☑ Foundations and subfloor framing	Subfloor piles as per engineers and architectural drawings	☑ Carried out ☐ Supervised
☐ Walls		☐ Carried out ☐ Supervised
☐ Roof		☐ Carried out ☐ Supervised
☐ Columns and beams		☐ Carried out ☐ Supervised
☐ Bracing	GIB Bracing as per plans	☐ Carried out ☑ Supervised
☐ Other		☐ Carried out ☐ Supervised

EXTERNAL MOISTURE MANAGEMENT SYSTEMS:

Work that is restricted building work	Description of restricted building work	Carried out or supervised
Tick	If necessary, describe the restricted building work	Tick whether you carried out the restricted building work or supervised someone else carrying out the restricted building work
☐ Damp proofing		☐ Carried out ☐ Supervised
☐ Roof cladding or roof cladding system		☐ Carried out ☐ Supervised
☐ Ventilation system (for example, subfloor or cavity)		☐ Carried out ☐ Supervised
☐ Wall cladding or wall cladding system		☐ Carried out ☐ Supervised
☐ Waterproofing		☐ Carried out ☐ Supervised
☐ Other		☐ Carried out ☐ Supervised

ISSUED BY

I am providing my contact details as a licensed building practitioner who is licensed to carry out or supervise work that is restricted building work.

Name: Matt Munro

LBP or Registration number: 120336

Class(es) licensed in: Carpentry

Plumbers, Gasfitters and Drainlayers registration number **(if applicable)**:

Mailing address **(if different from below)**:

Street address/Registered office: 40 Albert Street Riverhead

Suburb: Riverhead

Town/City: Auckland

PO Box/Private Bag:

Postcode: 0820

Phone:

Mobile: 0 2 1 9 7 3 0 4 1

After hours:

Fax:

Email address: matt.munro@steadfastconstruction.co.nz

Website:

DECLARATION

I Matt Munro carried out or supervised the restricted building work recorded on this form.

Applicant's signature 

Date 1 5 / 1 0 / 2 5
day month year

Producer Statement Construction (PS3)

Tick applicable Contractor for:

- ☐ Building
- ☐ Cladding
- ☐ Drainlayer
- ☐ Effluent system design
- ☐ Solar heating
- ☑ Solid Fuel Heating
- ☐ Waterproof membranes
- ☐ Plumbing
- ☐ SS1 Automatic sprinkler system
- ☐ SS2 Fire alarm
- ☐ SS3 Access controlled doors or windows
- ☐ SS4 Emergency lighting
- ☐ SS7 Plumbing Backflow Prevention Devices
- ☐ SS8 Lift
- ☐ SS9 Mechanical (HVAC)
- ☐ SS12 Audio Loops
- ☐ SS14/1 Emergency Power Systems (associated with SS1, Engine that drives sprinkler system pump or back engine driven generator power system)
- ☐ SS15/3 Fire Separations
- ☐
- ☐
- ☐
- ☐
- ☐
- ☐
- ☐
- ☐
- ☐

Please list the current standard used for installation and applicable building inspection standard e.g. Performance standard AS/NZS 2293.1 2018, Inspections AS/NZS2293.2 2019

*Standard	AS/NZ 2918		
Authors name	Lyndsay Reid	Building Consent No	BC250084
Author's company	The Go 2 Guy Ltd	Author Registration No	3194 NZHHA
Site address	30 Jordan Street, Mangawhai Heads, Mangawhai		
Owner's name	Matthew Munro		
Legal description	Lot 22 DP 487158		

Description of work:

Install a free standing Kent Forbes Fireplace

Scope of work covered by statement	
Any limitations or conditions	
System/product used if applicable	

I Lyndsay Reid (constructor) have been engaged by

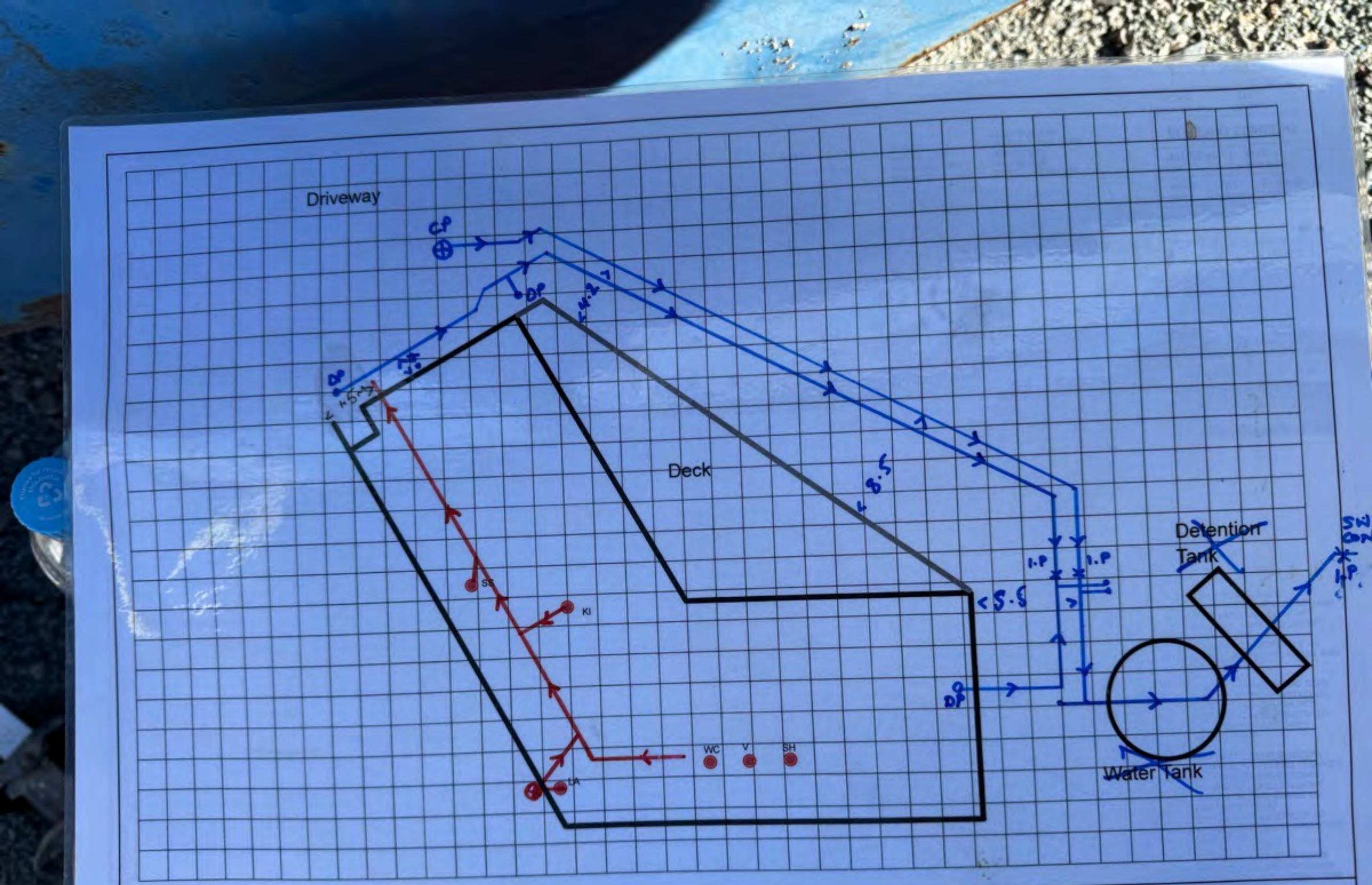
(applicant) Matthew Munro

to construct ☐ All ☐ Part only

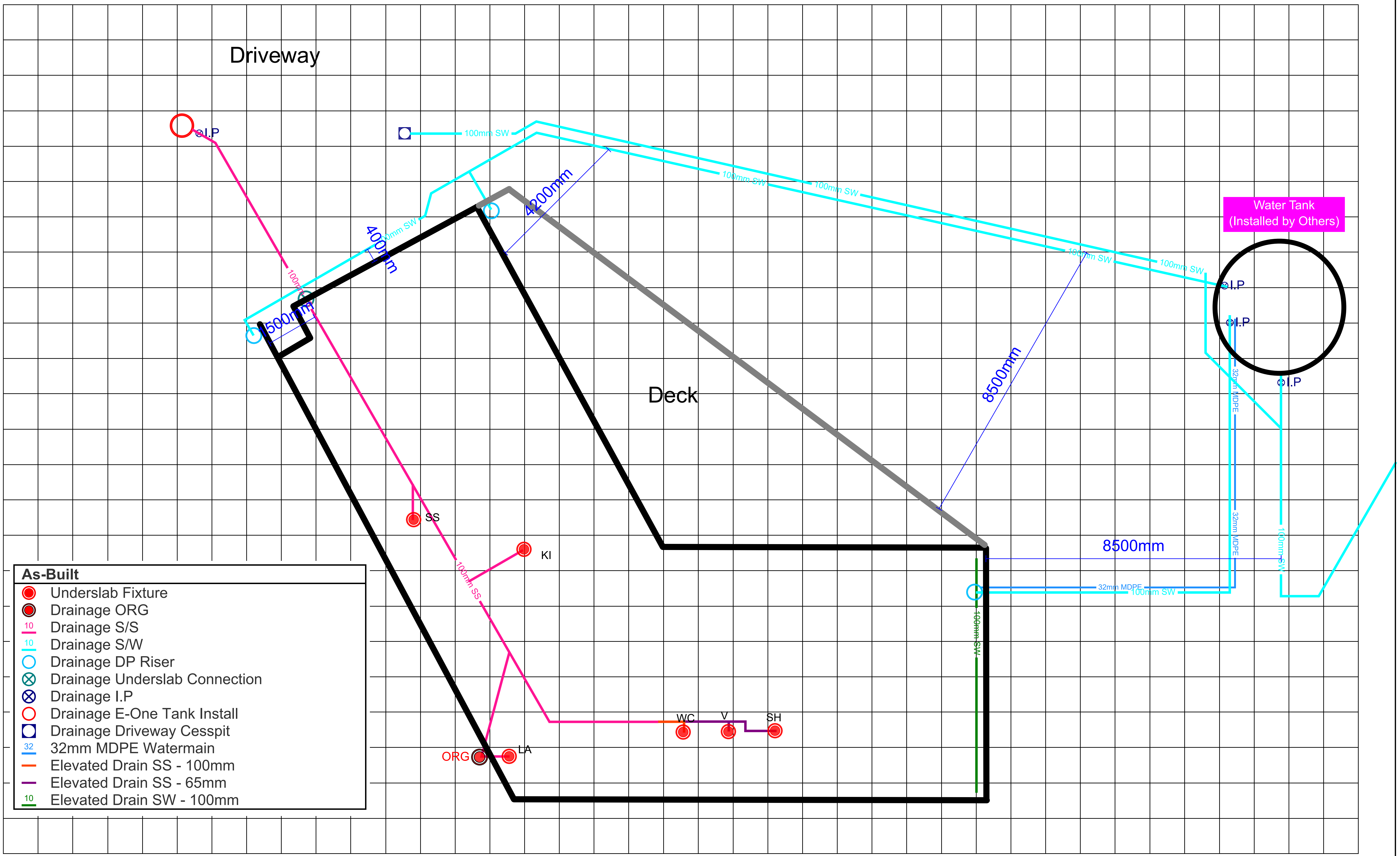
NZBC clauses (select as applicable)																									
	☐ B1	☑ B2	☑ C1	☐ C2	☐ C3	☐ C4	☐ C5	☐ C6	☐ D1	☐ D2	☐ E1	☑ E2	☐ E3												
	☐ F1	☐ F2	☐ F3	☐ F4	☐ F5	☐ F6	☐ F7	☐ F8	☐ F9	☐ G1	☐ G2	☐ G3	☐ G4												
	☐ G5	☐ G6	☐ G7	☐ G8	☐ G9	☐ G10	☐ G11	☐ G12	☐ G13	☐ G14	☐ G15	☐ H1													

I have sighted the above building consent and read the attached conditions of consent and I am satisfied on reasonable grounds that the building work specified above has been completed to the extent required by that building consent and complies with the NZ Building Code. I understand that this Producer Statement, if accepted, may be relied on by the Council for the purpose of establishing compliance with the Building Consent.

Signature	L Reid	Date	12/3/25
Name	Lyndsay Reid		
Address	1029 Sandspit Road, RD2 Warworth		
Email	lyndsay_reid@hotmail.com	Mobile	027 455 9159



Client:	Steadfast Construction		**Date:** 17.06.25
Site Address:	30 Jordan Street, Mangawhai Heads	pipeRITE plumbing	**Drainlayer : Dylan Demcanaj** 22507
Project Type:	Multi Level Dwelling Plumbing & Drainage		**Plumber: Kyle Wiltshire** 23093
BCO:			



Client: Steadfast Construction
Site Address: 30 Jordan Street, Mangawhai Heads
Project Type: Multi Level Dwelling Plumbing & Drainage
BC: 250084

pipeRITE plumbing

Date: 17.10.25
Drainlayer : Dylan Demcanaj 22507
Plumber: Kyle Wiltshire 23093

GAS FITTING CERTIFICATION OF COMPLIANCE

GAS SAFETY CERTIFICATE

Client Name:	Josh Dickson		
Reference/Job #:		**ICP(if known):**	
Address of work:	30 Jordan Street		
Suburb:		**Town/City:**	Mangawhai Heads

DESCRIPTION OF GASFITTING WORK: (if different gasfitting work was done by different people, state who was gasfitting).

8kg LPG change over and ininity installed
Rinnai A26
Serial number: 24.10-122640
Install date:13/10/2025
Material used: Spartan Dual Pex where concealed, NZ copper where exposed

Gas Supply Pressure 3.028kPa **Risk Classification** (tick one) [ ] Low-risk [x] General [ ] High-risk

Gas Type (Tick one) [ ] Natural Gas [x] LPG [ ] Biogas [ ] Other (specify) [ ]

This work has been done in accordance with means of compliance (specify):

[x] Yes - AS/NZS 5601.1 sections 3 to 6 [ ] Yes - AS/NZS 5601.2 sections 3 to 9 [ ] No

Were any other standards or gas code of practice required for compliance?

[ ] Yes (Specify) [ ] [x] No

Parts of the gas installation to which this certificate relates that are safe to connect to a gas supply?

[x] All [ ] Parts (Specify) [ ]

Date(s) on which the work was done:	13/10/2025
Name and registration number of anyone who carried out the work under supervision:	

Date of completion or connection:	13/10/2025

GAS SAFETY CERTIFICATION OF CONFIRMATION:

By signing this document I confirm that I am satisfied that the work described in this certificate of compliance has been done lawfully and safely, and that the information on this certificate is correct.

By signing this document I confirm that the work described in this Gas Safety Certificate, and the installation or part installation, is connected to a gas supply and is safe to use

Certifier name:	Paul Simpson	**Registration number:**	19615
Certifier signature:		**Date:**	16/12/2025

Form 6A:
Memorandum from licensed building practitioner (record of building work)

SECTION 88, BUILDING ACT 2004

The building

Street address of building: 30 Jordan Street, Mangawhai

The project

Building consent number: BC250084

The owner

Name of owner: Matt Munro

(include preferred form of address, eg, Mr, Miss, Dr, if an individual)

Mailing address: 40 Albert Street Riverhead

Street address/registered office:

Telephone number: Mobile number: 021973041

Email address: matt.munro@steadfastconstruction.co.nz

Record of work that is restricted building work

Work that is restricted building work ✓	**Description of restricted building work** *(If necessary, describe the restricted building work)*	**State whether carried out or supervised** *(Specify whether you carried out the restricted building work or supervised someone else carrying out the restricted building work)*
Primary structure		
Foundations and subfloor framing ☑	Ground level timber framed floor and midfloor 20mm stradfloor h3.1	Carried out as per plans
Walls ☑	Ground and firts floor wall framing prenail	Carried out as per prenail plans
Roof ☑	Ground level roof and first floor roof trusses install	Carried out as per prenail plans
Columns and beams ☐		
Bracing ☑	All hold down fixings and plywood bracing	Carried out as per plans
Other ☐		

External moisture management systems			
Damp proofing	☐		
Roof cladding or roof cladding system	☐		
Ventilation system (for example, subfloor or cavity)	☑	Installed cavity and envelope as per plans	carried out
Wall cladding or wall cladding system	☑	Installed abodo cavity	carried out as per plans and manufacturers specs
Waterproofing	☐		
Other	☐		

Note: *Continue on another page if necessary.*

Issued by

Kamrin May

(Name of licensed building practitioner who is licensed to carry out or supervise restricted building work)

Licensed building practitioner number: 148499

(if applicable)

Classe(s) licensed in: Carpentry

Plumbers, Gasfitters and Drainlayers Board registration number:

(if applicable)

Mailing address: 31 Kaipara Lake Road

Street address/registered office: South HEad Auckland 0874

Telephone number: Mobile number: 021594110

Facsimile:

Email address: kam@maybuilders.co.nz

Website:

(if applicable)

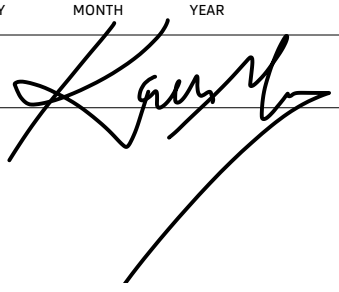
Declaration

I, Kamrin May

(name of licensed building practitioner), carried out or supervised the restricted building work recorded on this form:

Date: 16 (DAY) 12 (MONTH) 25 (YEAR)

Signature:



Natural Hazards S44B(2)(a)

Drought

The Council has no known information about this natural hazard, including as exacerbated by climate change, that would affect the property. Please consult the Northland Regional Council Hazard attachment for further information, provided by the Northland Regional Council, in relation to this natural hazard.

Earthquake, Geothermal and Volcanic

Kaipara District Council commissioned ENGEO Limited to undertake an assessment of engineering geology and geotechnical hazards and their associated risk for development within certain growth areas of the Kaipara District. ENGEO Limited summarized its findings on these matters in a report to the Council dated 16th April 2019 and 17th June 2019 (**ENGEO Report**).

The Council is providing the ENGEO Report as it is information relating to natural hazards that is known to the Council.

The information contained in the ENGEO Report was current as at the date of the report and has been provided in good faith. The Kaipara District Council makes no representation, warranty or undertaking as to the accuracy, completeness, quality or fitness for any particular purpose of the information contained in the ENGEO Report.

The information contained in the ENGEO Report is provided on a regional/catchment basis and in most cases is not site specific. Any users of the information must obtain advice from suitably qualified practitioners if site specific information is required.

Users must also note that natural hazards outlined in the ENGEO Report do not consider any interventions that may modify the natural hazard risks to a specific site.

Mangawhai Technical Report

Scope of report	*This report presents a geotechnical assessment and hazard mapping for the Mangawhai Area*
Report Title:	*Geotechnical Assessment Mangawhai*
Report date:	*16.04.2019*
Entity/Person who prepared the report:	*Engeo Limited*
Entity/person who commissioned the report:	*Kaipara District Council*
Purpose of the report:	*The purpose of this geotechnical assessment is to provide the Kaipara District Council (KDC) with information on land stability and other geotechnical hazards that could constrain development of the area defined by KDC as 'Future Residential and Business Growth Area' and 'Greater Structure Plan Policy Area' of Mangawhai*
Where or how to access report	*Engeo Reports*

Kaipara District Technical Report

Scope of report	*This report presents a geotechnical assessment and hazard mapping for the Kaipara District*
Report Title:	*Geotechnical Assessment Kaipara District*
Report date:	*17.06.2019*
Entity/Person who prepared the report:	*Engeo Limited*
Entity/person who commissioned the report:	*Kaipara District Council*
Purpose of the report:	*The purpose of this geotechnical assessment is to provide the Kaipara District Council (KDC) with information on land stability and other geotechnical hazards that could constrain development of the area defined by KDC as 'Future Residential and Business Growth Area' and 'Greater Structure Plan Policy Area' of Kaipara District.*
Where or how to access report	*Engeo Reports*

Northland Regional Council may provide further data regarding this Natural Hazard. Please refer to the Northland Regional Council attachment for any applicable information.

Erosion and Landslide

Kaipara District Council commissioned ENGEO Limited to undertake an assessment of engineering geology and geotechnical hazards and their associated risk for development within certain growth areas of the Kaipara District. ENGEO Limited summarized its findings on these matters in a report to the Council dated 16th April 2019 and 17th June 2019 (ENGEO Report).

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Natural Hazards

Mangawhai Technical Report

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Where or how to access report	*Engeo Reports*

Kaipara District Technical Report

Scope of report	*This report presents a geotechnical assessment and hazard mapping for the Kaipara District*
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Where or how to access report	*Engeo Reports*

Northland Regional Council may provide further data regarding this Natural Hazard. Please refer to the Northland Regional Council attachment for any applicable information.

Flooding

Kaipara District Council relies on flooding information provided by the Northland Regional Council. Please consult the Northland Regional Council Hazard attachment, for information provided by the Northland Regional Council, relating to this hazard.

Fire

Kaipara District Council has no known information about this natural hazard, including as exacerbated by climate change, that would affect the property.

Wind

Kaipara District Council has no known information about this natural hazard, including as exacerbated by climate change, that would affect the property.

S44B(2)(a) Natural Hazards

Dated 20 August 2026 v3.0

T e information in t is report as een prepared t e Nort land Re ional ouncil for t e purposes of providin information to t e Territorial Aut orities in Nort land in accordance it Part 6A of t e Local overnment fficial nformation and Meetin s Act 1987

T e information contained in t is report is current as at t e date of t e report and as een provided in ood fait est efforts ave een made to ensure t e accurac and completeness of t e information o ever Nort land Re ional ouncil makes no representation arrant or undertakin as to t e accurac completeness ualit or fitness for an particular purpose ere information is provided in draft form t at information ma not ave een peer revie ed or accepted Nort land Re ional ouncil as correct

T e information is provided on a re ional catc ment asis and in most cases is not site specific An users of t e information must o tain advice from suita l ualified practitioners if site specific information is re uired

Users must also note t at natural a ards outlined in t is report do not take into account an interventions t at ma modif t e natural a ard risks to a specific site

Flooding
Not Applica le

River flood maps
Not Applica le

Draft river flood reports
Not Applica le

Coastal inundation hazard maps
Not Applica le

Surveyed and observed flood levels
Not Applica le

Flood susceptible lands
Not Applica le

Erosion and Landslide
Not Applica le

Coastal erosion
Not Applica le

Tsunami
Not Applica le

Drought

Drou t in Te Taitokerau Nort land is a comple a ard to define and detect and its impacts var from one area to t e ot er

Technical Report for Northland Drought Assessment

cope of report	*Regional*
Report Title	*Droughts in Northland: A Local and Regional Analysis*
Report date	*2024*
Report prepared	*National Institute of Water and Atmosphere*
Report commissioned	*Northland Regional Council*
Purpose of t e report	*Analysis of the development, occurrence and severity of droughts in Northland Region.*
ere or o to access report	*Envirolink website* Drou ts in Nort land A local and re ional anal sis

n eptem er 2024 t e Ministr for t e nvironment and N A pu lis ed national climate pro ections Drou ts are e pected to ecome more fre uent and more severe in Te Taitokerau Nort land 2090

Volcanic, Geothermal and Earthquake

T ere are man processes associated it volcanic eruptions and t ese can e a ardous en t e interact it people and or infrastructure T e t pe and intensit of volcanic process ill var from volcano to volcano T ere are t o areas of past local volcanic activit in Nort land at Pu ipu i Whangārei and at aiko e a of slands ile climate c an e does not affect volcanic eruptions it can affect t e risk from volcanic a ards suc as la ars volcanic mudflo s ecause of t e forecast c an es in rainfall

art uakes occur en stress t at as uilt up alon a fault – a break in the Earth's crust – is suddenl released art uakes can cause round s akin fault rupture permanent round movement su sidence or lateral spreadin li uefaction landslides rock falls and tsunami Alt ou climate c an e does not affect eart uakes it can make some of t e pro lems eart uakes cause suc as su sidence li uefaction and landslides more likel or more severe T is is ecause climate c an e affects rainfall and round ater ic pla roles in t ese a ards

ile t e eart uake risk in Nort land is lo t ere ave een eart uakes recorded in t e re ion

Nort land Re ional ouncil does not ave a map of volcanic eot ermal or eart uake risk ut did commission information on volcanic a ards as part of t e *review of natural hazards information for Northland region.* T is information relates to re ion ide studies and ma not reflect t e on site situation or natural a ard investi ations and miti ation done on a site specific propert level

Technical Report for earthquake information

cope of report	*Regional*
Report Title	*A review of natural hazards information for Northland region* *Section 2.0 Seismic Hazards*
Report date	*2004*
Report prepared	*Institute of Geological & Nuclear Sciences Limited*
Report commissioned	*Northland Regional Council and Whangarei District Council*
Purpose of t e report	*The aim of this report is to assemble and present a review of existing information on natural hazards, including earthquakes. The report identifies gaps and possible future work.* *Please note sections on flooding and erosion prone land have been superseded by more recent work and modelling.*
ere or o to access report	*Northland Regional Council Website* ttps nrc ovt n media 2iti uo natural a ards pdf

Print Date: 10/9/2026
Print Time: 10:56 AM

Asset Map 0122182621

KAIPARA DISTRICT
Kaipara ki Oranganui • Two Oceans Two Harbours



Scale: 1:568
Original Sheet Size: A4

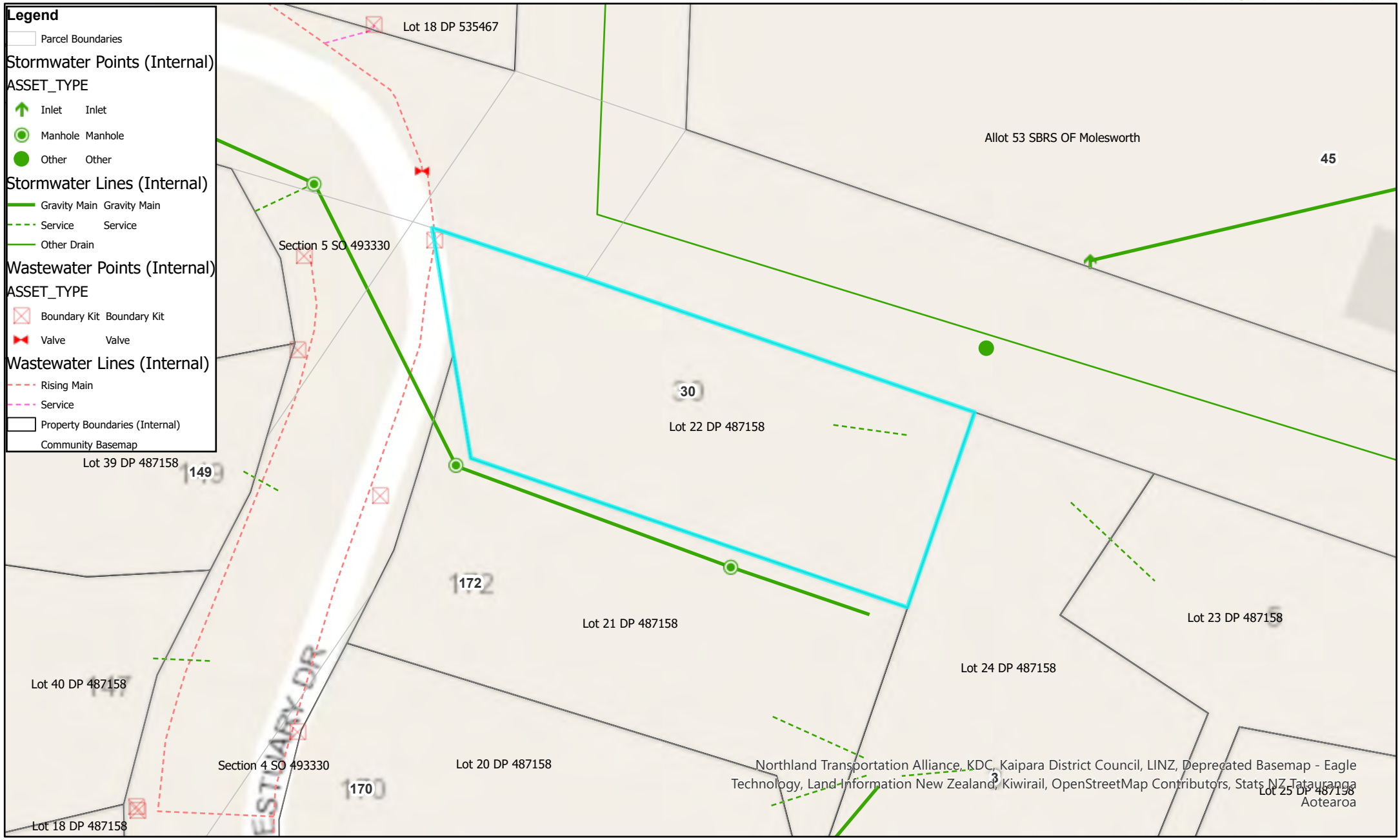
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1743372.182414E 6002233.241582N

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Print Date: 10/9/2026
Print Time: 10:36 AM

Asset Map 0122182621

KAIPARA DISTRICT
Kaipara ki Oraanaui • Two Oceans Two Harbours



Scale: 1:568
Original Sheet Size: A4

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