Memorandum

To: Vineway Ltd

From: Ian Campbell

Date: 3 July 2025

Subject: Vineway Limited - Delmore

1. Introduction

1.1 This memorandum is prepared by Ian Campbell, Director of Public Works Advisory ("PWA") as part of the applicant's response to comments to the panel.

1.2 PWA is assisting the applicant with:

a. Engagement

b. Matters relating to paper roads and road stopping

c. NOR6 and the NOR6 road

1.3 This memorandum responds to the matters raised in comments 5 a and b from Katelyn Orton, AV Jennings Project Director which are also addressed in the supporting statement by Isla Daniels, Campbell Brown.

2. Response

Comment A – Katelyn Orton, also raised by Isla Daniels: AV Jennings is not required to vest the NOR6 road connection within its site until April 2028. AV Jennings could choose to vest it earlier.

2.1 The applicant and I were aware that the original agreement entered between AV Jennings and the applicant required the road connection to be vested by April 2026.

2.2 We were also aware that the agreement had recently been varied but we were not aware of the Handover Date because Auckland Transport would only provide a redacted version of the variation.

2.3 The applicant is committed to working with AV Jennings on the interface between the two developments, and I am advised there have already been discussions between the two companies about this. This is not referred to in AV Jenning's comments.

2.4 The applicant invites AV Jennings to vest the road earlier than 2028, and sees no reason why it should not, given development of AV Jennings' Stage 1 is almost complete.

Comment B – Katelyn Orton, also raised by Isla Daniels: AV Jennings is not required to construct the piece of road connecting its road network with Delmore at the NOR6 road interface

2.5 This does not align with my understanding of what AV Jennings resource consent requires, based on the conditions themselves and the detailed information in the property file for this part of the AV Jennings site. My understanding is that the consent requires a road to be "formed" from the eastern boundary of AV Jennings' site to the Delmore boundary. The reasons for this are below.

2.6 The resource consent bundle reference is BUN20441333. According to the property file, the most recent version of subdivision consent is SUB60035991-J and the most recent version of the land use consent is LUC60010513-J. This most recent version of the consent bundle is provided in **Attachment A.**

2.7 Below I have included a snip of Condition 13(f) in that consent, along with its advice note:

(f) Design of a local road (Road 1) to be formed from the entry road across the site to the western boundary as generally outlined on the plan 12516-01S127 300 Rev E prepared

by Airey Consultants Limited. The design of Road 1 shall ensure a threshold treatment is provided at an appropriate distance from the motorway interchange to encourage drivers to lower vehicle speeds before entering the site. The gradient of Road 1 shall be designed and constructed in accordance with the Auckland Transport Code of Practice and the Austroads Guide to Road Design. The design of the Road 1 shall be submitted with the engineering plans for Stage 1.

Advice Note:

Road 1 follows the alignment determined by Auckland Transport as a future arterial road. Although condition 13(f) requires the design of a local road, if Auckland Transport constructs the arterial road, a formal Infrastructure Funding Agreement ("IFA") will be required. The IFA will set out how the costs of the road construction to arterial road standards are to be shared.

2.8 This requires Road 1 to be formed from the entry road across the site to the western boundary. Road 1 is the road that extends from the eastern boundary of AV Jennings' site and extends to the west. The AV Jenning's road network sees Road 1 then turn to the north to service houses. However, to me, this condition also requires it to continue west up to the Delmore boundary.

2.9 This same intent appears to be to be reflected in the decision on the original consent. Both the decision and consent are provided in **Attachment B**. Snips of the relevant excerpts are included below:

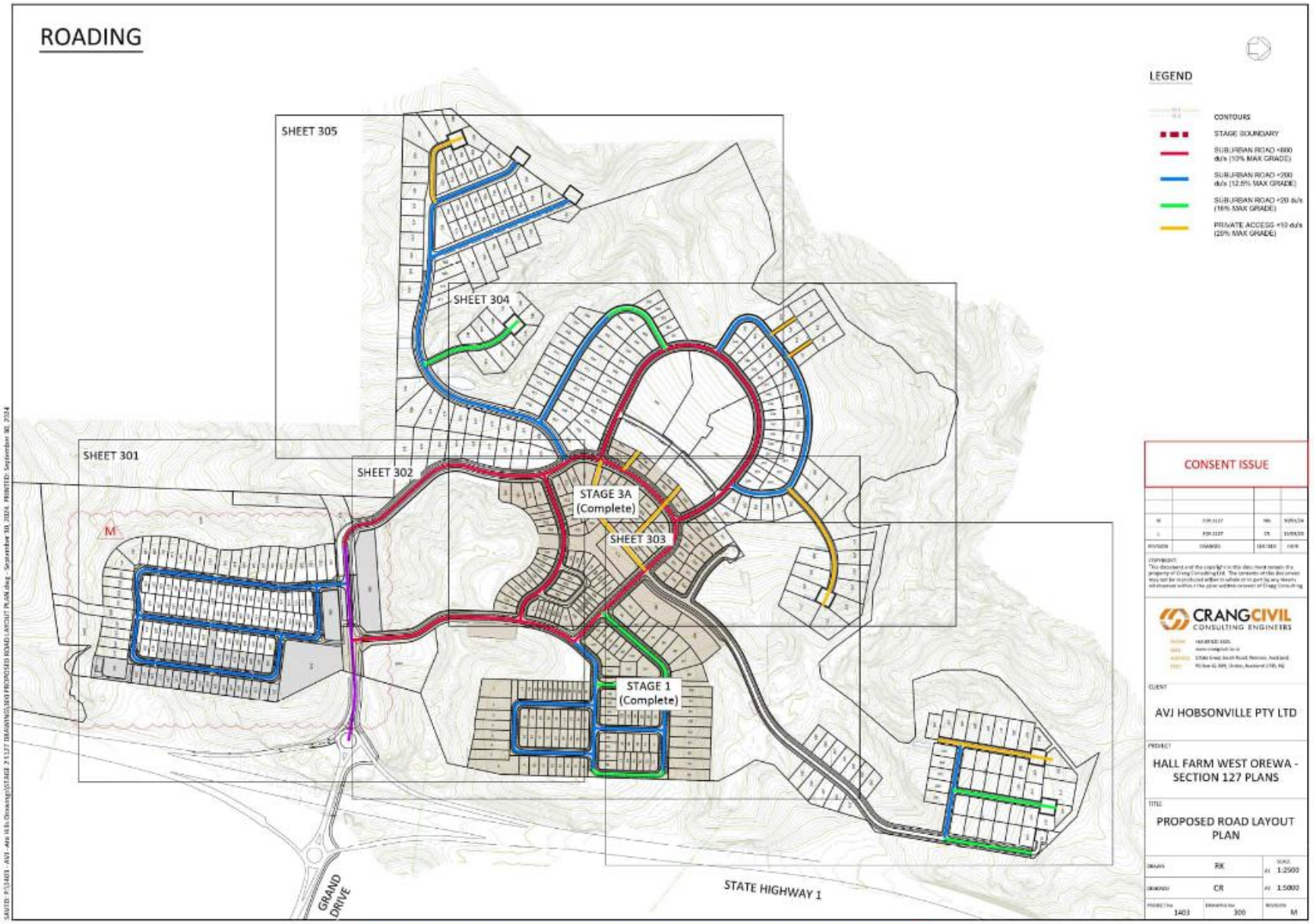
> 103. In the main Mr Constable for the applicant and Mr Mitchell for the Council agreed that the traffic effects can be appropriately managed and that a suite of conditions can be applied to ensure this occurs. The matters to which these conditions apply are:
>
> - Formation of an arterial from the entry of the site across the site to the western boundary which has been designed to the satisfaction of Auckland Transport;

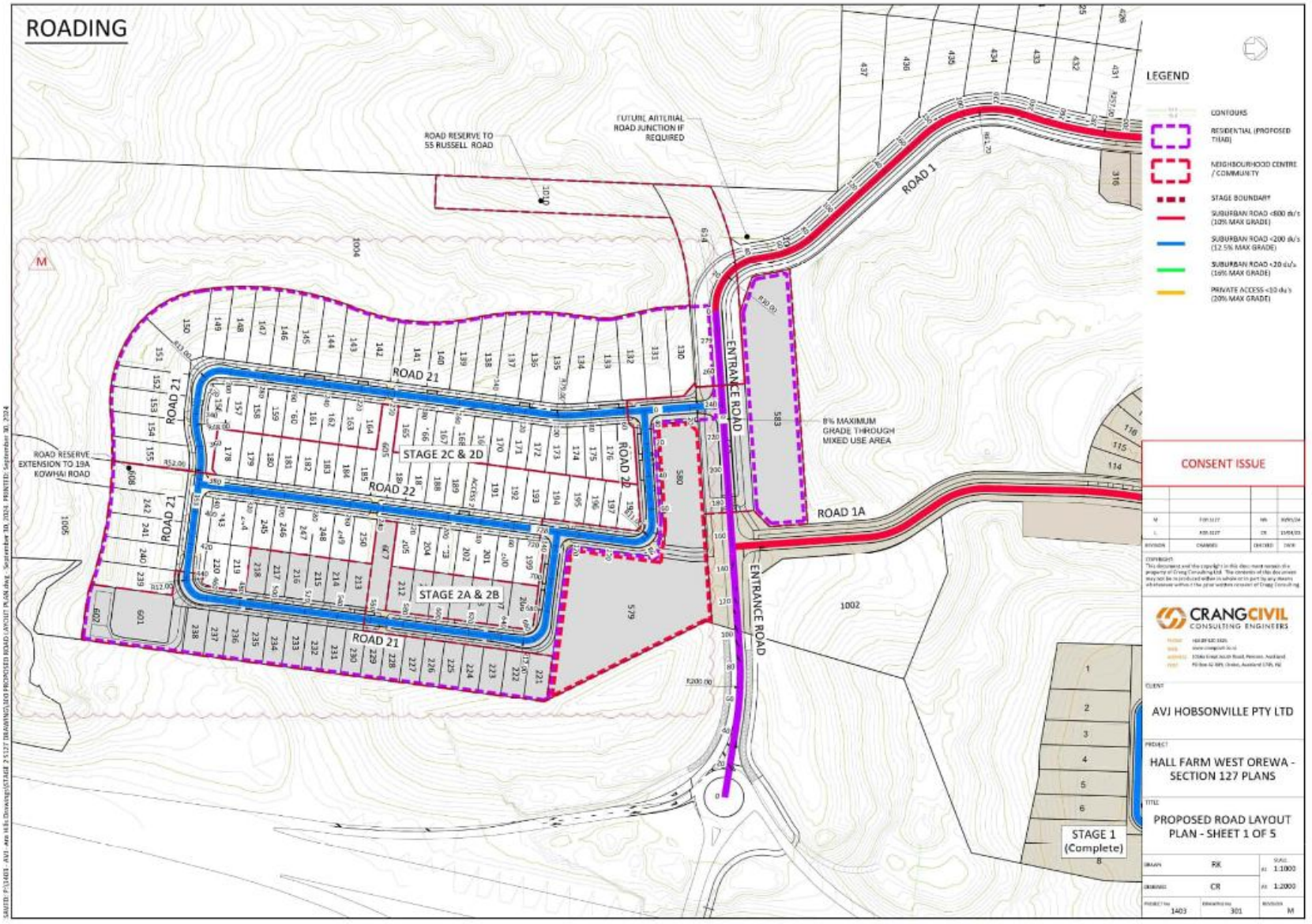
And

> 106. Our finding is that subject to the proposed conditions the traffic effects of the proposal will be minor. Furthermore, from a traffic point of view, the access to the RTN station as proposed is appropriate.

2.10 There may be some confusion over where Road 1 starts and finishes which has led to the statements from Ms Orton and Ms Daniels. I raise this because the plan snip included in figure 2 to Ms Daniels' statement marks the road extending up from Grand Drive as "the entrance road" with "Road 1" only starting at the end of that road as it turns.

2.11 Based on what it shows, I understand this snip as being from the road plan no. 300 from the plan set recently approved under SUB60035991-J. This is Rev M of the no. 300 plan. I have reproduced this plan and plan no. 301 which accompanies it below in full below. The purple is marked "entrance road" and the red at the top is marked "Road 1":

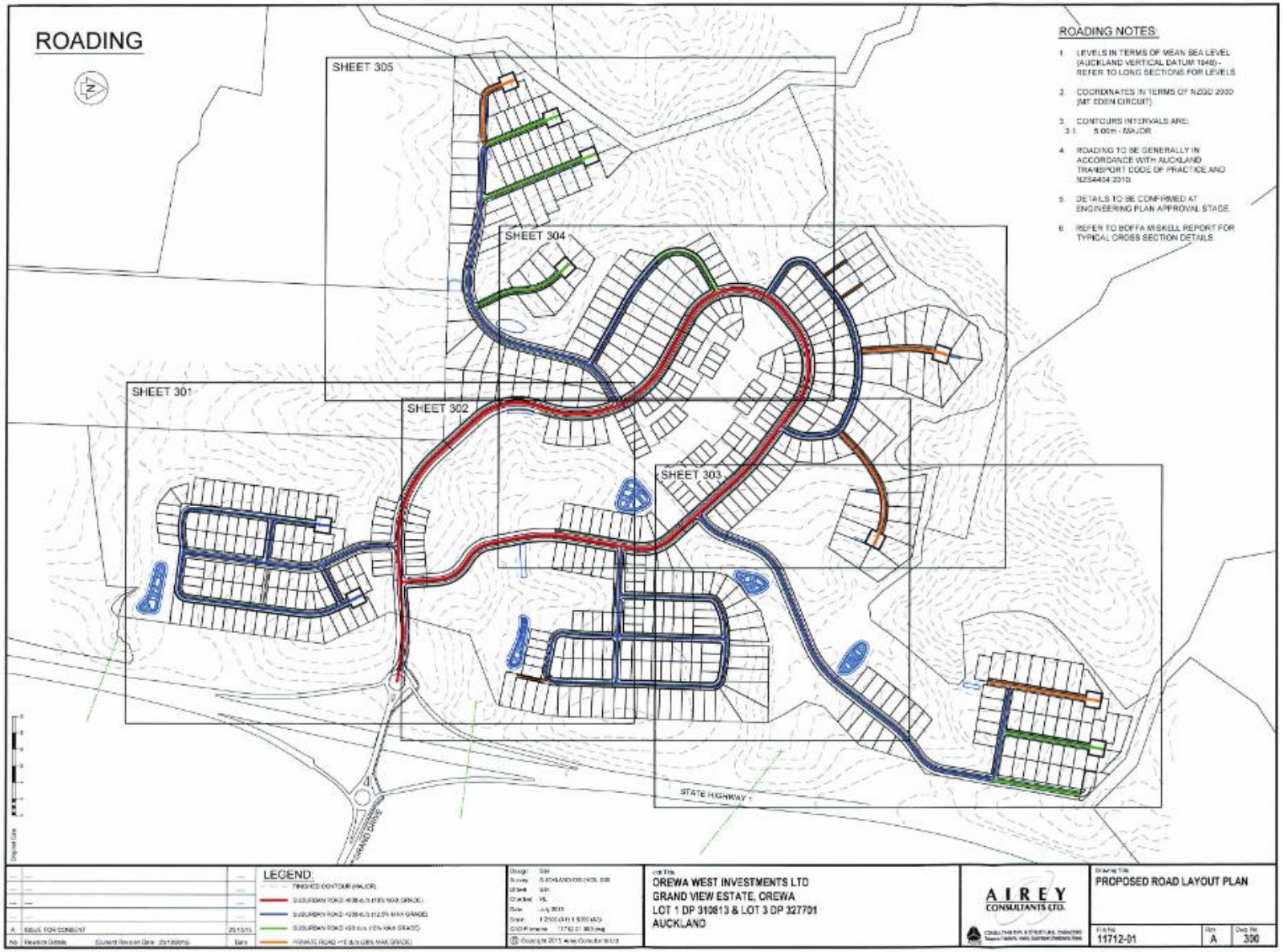

ROADING
LEGEND
CONTOURS
STAGE BOUNDARY
SUBURBAN ROAD <600 du/s (10% MAX GRADE)
SUBURBAN ROAD <200 du/s (12.5% MAX GRADE)
SUBURBAN ROAD <20 du/s (16% MAX GRADE)
PRIVATE ACCESS <10 du/s (20% MAX GRADE)
SHEET 305
SHEET 304
SHEET 301
SHEET 302
SHEET 303
STAGE 3A (Complete)
STAGE 1 (Complete)
GRAND DRIVE
STATE HIGHWAY 1
CONSENT ISSUE
CRANGCIVIL CONSULTING ENGINEERS
CLIENT
AVJ HOBSONVILLE PTY LTD
PROJECT
HALL FARM WEST OREWA - SECTION 127 PLANS
TITLE
PROPOSED ROAD LAYOUT PLAN
DRAWN RK SCALE A1 1:2500
DESIGNED CR A3 1:5000
PROJECT No 1403
DRAWING No 300
REVISION M

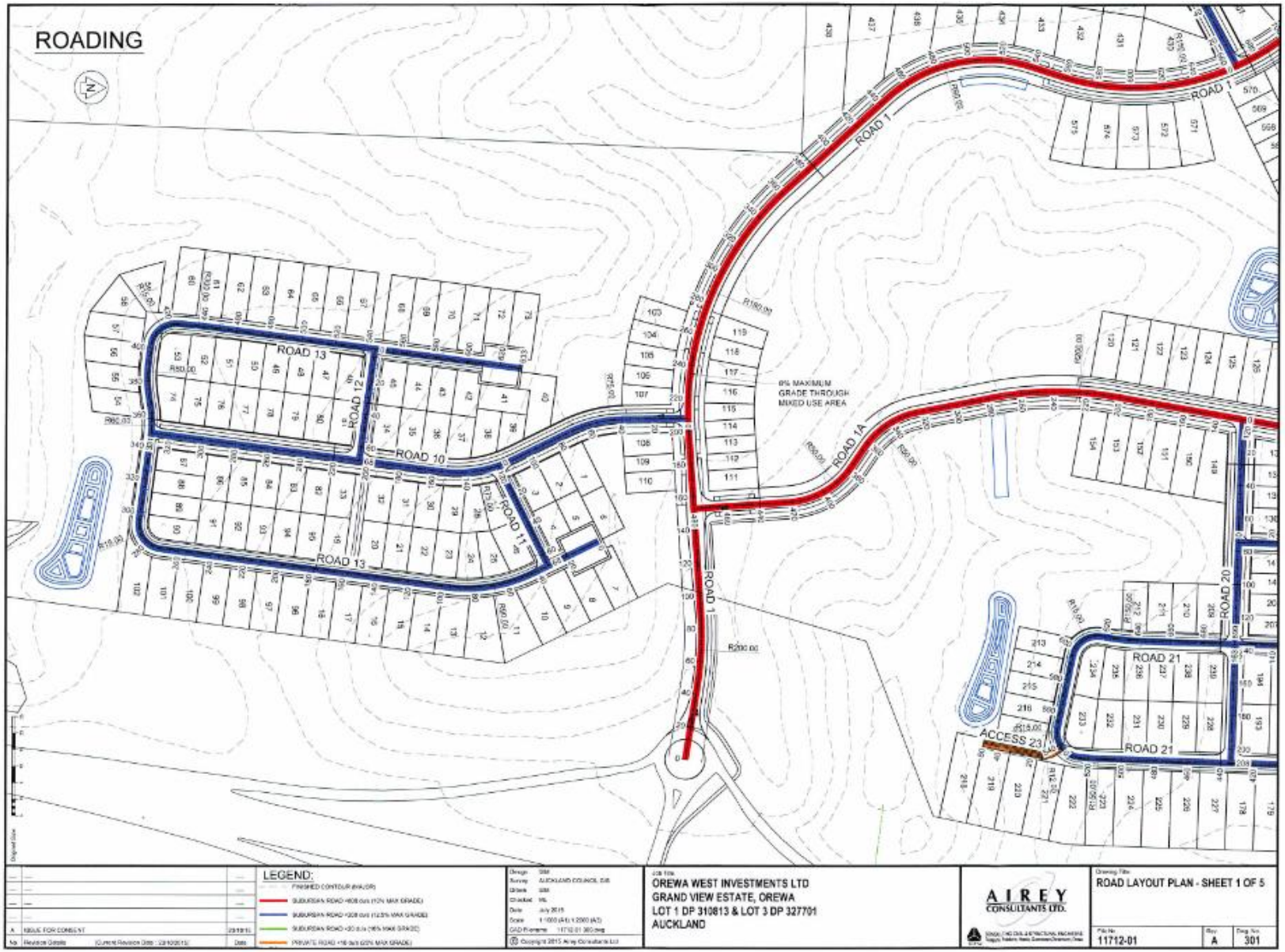

ROADING
LEGEND
CONTOURS
RESIDENTIAL (PROPOSED THAB)
NEIGHBOURHOOD CENTRE / COMMUNITY
STAGE BOUNDARY
SUBURBAN ROAD <600 dv/s (10% MAX GRADE)
SUBURBAN ROAD <200 dv/s (12.5% MAX GRADE)
SUBURBAN ROAD <20 dv/s (16% MAX GRADE)
PRIVATE ACCESS <10 dv/s (20% MAX GRADE)
ROAD RESERVE TO 55 RUSSELL ROAD
FUTURE ARTERIAL ROAD JUNCTION IF REQUIRED
ROAD 1
ROAD 21
ROAD 22
ROAD 2D
ROAD 1A
ENTRANCE ROAD
8% MAXIMUM GRADE THROUGH MIXED USE AREA
ROAD RESERVE EXTENSION TO 19A KOWHAI ROAD
STAGE 2C & 2D
STAGE 2A & 2B
STAGE 1 (Complete)
CONSENT ISSUE
CRANGCIVIL CONSULTING ENGINEERS
AVJ HOBSONVILLE PTY LTD
HALL FARM WEST OREWA - SECTION 127 PLANS
PROPOSED ROAD LAYOUT PLAN - SHEET 1 OF 5
RK
CR
1:1000
1:2000
1403
301
M

2.12 As I have noted above, this is Rev M of the 300 plan.

2.13 The reason this labelling may cause confusion is that when resource consent was first granted, and condition 13(f) was first imposed, the part of the road extending into the site from Grand Drive was also labelled Road 1. To the east, Grand Drive extends all the way through to Orewa. The Road 1 label is shown in the Rev A version of the plan 300, which is included in the property file with the original consent decision and supporting application material (folder SUB60035991). Rev A of plan 300 and plan 301 are reproduced below.

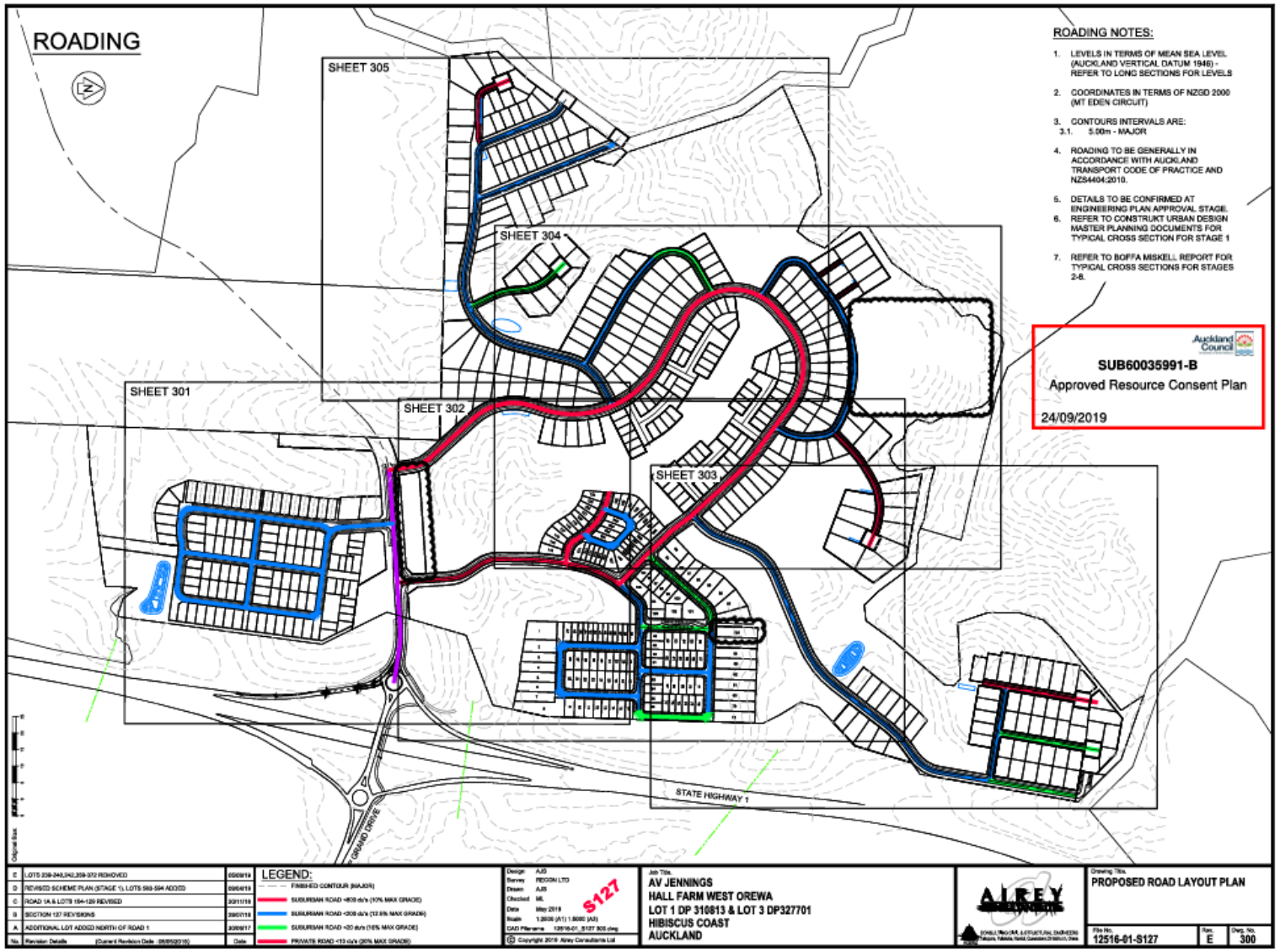
2.14 I note that these plans do not show the road to the western boundary, but this is consistent with the extension being added as part of the consenting process as referred to in the quotations above. However, this plan illustrates what the decision-making panel understood to be Road 1 when it was considering the application as lodged.


ROADING
SHEET 305
SHEET 304
SHEET 301
SHEET 302
SHEET 303
STATE HIGHWAY 1
ROADING NOTES:
1. LEVELS IN TERMS OF MEAN SEA LEVEL (AUCKLAND VERTICAL DATUM 1946) - REFER TO LONG SECTIONS FOR LEVELS
2. COORDINATES IN TERMS OF NZGD 2000 (MT EDEN CIRCUIT)
3. CONTOURS INTERVALS ARE:
3.1. 5.00m - MAJOR
4. ROADING TO BE GENERALLY IN ACCORDANCE WITH AUCKLAND TRANSPORT CODE OF PRACTICE AND NZS4404:2010.
5. DETAILS TO BE CONFIRMED AT ENGINEERING PLAN APPROVAL STAGE.
6. REFER TO BOFFA MISKELL REPORT FOR TYPICAL CROSS SECTION DETAILS.
LEGEND:
A ISSUE FOR CONSENT 25/11/15
OREWA WEST INVESTMENTS LTD
GRAND VIEW ESTATE, OREWA
LOT 1 DP 310813 & LOT 3 DP 327701
AUCKLAND
AIREY CONSULTANTS LTD.
PROPOSED ROAD LAYOUT PLAN
11712-01
A
300


ROADING
ROAD 1
ROAD 1A
ROAD 10
ROAD 11
ROAD 12
ROAD 13
ROAD 20
ROAD 21
ACCESS 23
8% MAXIMUM GRADE THROUGH MIXED USE AREA
LEGEND:
FINISHED CONTOUR (MAJOR)
SUBURBAN ROAD 18.0m (12% MAX GRADE)
SUBURBAN ROAD 20.0m (12.5% MAX GRADE)
SUBURBAN ROAD 20.0m (16% MAX GRADE)
PRIVATE ROAD 16.0m (20% MAX GRADE)
OREWA WEST INVESTMENTS LTD
GRAND VIEW ESTATE, OREWA
LOT 1 DP 310813 & LOT 3 DP 327701
AUCKLAND
AIREY CONSULTANTS LTD.
ROAD LAYOUT PLAN - SHEET 1 OF 5
11712-01
A
301

2.15 Turning back to condition 13(f), it requires Road 1 to be formed "as generally outlined in plan 12516/01S127-300 Rev E prepared by Airey Consultants Limited."

2.16 This version of the 300 plan is reproduced below, and it shows the road, with road contours indicated, extend up to and connecting with Delmore's boundary.


ROADING
SHEET 305
SHEET 304
SHEET 301
SHEET 302
SHEET 303
STATE HIGHWAY 1
ROADING NOTES:
1. LEVELS IN TERMS OF MEAN SEA LEVEL (AUCKLAND VERTICAL DATUM 1946) - REFER TO LONG SECTIONS FOR LEVELS
2. COORDINATES IN TERMS OF NZGD 2000 (MT EDEN CIRCUIT)
3. CONTOURS INTERVALS ARE:
3.1. 5.00m - MAJOR
4. ROADING TO BE GENERALLY IN ACCORDANCE WITH AUCKLAND TRANSPORT CODE OF PRACTICE AND NZS4404:2010.
5. DETAILS TO BE CONFIRMED AT ENGINEERING PLAN APPROVAL STAGE.
6. REFER TO CONSTRUKT URBAN DESIGN MASTER PLANNING DOCUMENTS FOR TYPICAL CROSS SECTION FOR STAGE 1
7. REFER TO BOFFA MISKELL REPORT FOR TYPICAL CROSS SECTIONS FOR STAGES 2-8.
Auckland Council
SUB60035991-B
Approved Resource Consent Plan
24/09/2019
LEGEND:
FINISHED CONTOUR (MAJOR)
SUBURBAN ROAD
SUBURBAN ROAD
SUBURBAN ROAD
PRIVATE ROAD
S127
AV JENNINGS
HALL FARM WEST OREWA
LOT 1 DP 310813 & LOT 3 DP327701
HIBISCUS COAST
AUCKLAND
AIREY
PROPOSED ROAD LAYOUT PLAN
12516-01-S127
E
300

2.17 I have interpreted the purple colouring simply to show the extent of the east to west part of Road 1 that is part of the internal road network, as opposed to showing what will be formed. This is because the road to the western boundary that is not purple is still identified as having a "finished contour", and there is no other road type description for the purple road in the legend.

2.18 For the purposes of condition 13(f) I understand it is this Rev E version of the 300 plan that is relevant because it the revision referred to in the condition and condition 2, which we reproduce below, says that the list of plans in the conditions, which refers to Rev M of the 300 plan, applies "unless any changes are required by the conditions below." For condition 13(f) a change is needed to refer to the Rev E plan.

> 2. Unless any changes are required by the conditions below, the land use, discharge, stream works, subdivision and water take activities shall be carried out in general accordance with the plans and all information submitted with the application, detailed in Appendix 1, and all referenced by the Council as consent numbers LUC60010513 (landuse), SUB60035991 (subdivision), DIS60048302 (stormwater discharge), DIS60048335 (wastewater discharge), LUS60048380 (stream works) and WAT60051016 (water permit).

I hope that this memorandum assists the panel with its deliberations.

Regards

Ian Campbell

Decision on an application to change/cancel conditions of a resource consent under section 127 of the Resource Management Act 1991

Discretionary activity under section 127(3)

Application numbers:	LUC60010513-J & SUB60035991-J
Original consent numbers:	BUN20441333 (LUC60010513, LUC60010513-A, LUC60010513-B, LUC60010513-C, LUC60010513-D, LUC60010513-E, LUC60010513-F, LUC60010513-G, LUC60010513-H, SUB60035991, SUB60035991-B, SUB60035991-C, SUB60035991-D, SUB60035991-E, SUB60035991-F, SUB60035991-G, SUB60035991-H, SUB60035991-I, DIS60048302, DIS60048302-A, DIS60048302-B, DIS60048335, LUS60048380 and WAT60051016)
Applicant:	AV Jennings Hobsonville Pty Limited
Site address:	226 Grand Drive, Orewa 0931, 47 Ara Hills Drive, Upper Orewa 0992
Legal description:	Lot 1 DP 310813, and Lot 1001 DP 582417, Lot 1003 DP 576136

Proposal:

To vary conditions of resource consents LUC60010513-H and SUB60035991-I under the original bundled consent BUN20441333 to allow for eight additional lots due to the removal of the private pocket park (consented Lot 605), the reorientation of lots adjacent to it, along with reductions in lot widths and amendments to the walkway lot between contested Lots 140 and 141. Conditions to be varied are 1, 2, 3, 9, Table 1 of 116; as well as relevant plans within Appendix 1.

Note: For the avoidance of doubt, any reference in this decision to 'vary' or 'variation application' shall be taken to mean an application to change or cancel consent conditions under s127 of the RMA.

This discretionary activity under s127 of the Resource Management Act 1991 (RMA) is for changes to the following conditions of consents LUC60010513-H and SUB60035991-I under the original bundled consent BUN20441333 involving the following amendments (with ~~strikethrough~~ for deletion, **bold** and underline for insertions):

Changes to condition 1

General Conditions

Note: These general conditions apply to each of the land use, discharge, stream works, subdivision and water take consents (LUC60010513, LUC60010513-A, LUC60010513-B, LUC60010513-C, LUC60010513-D, LUC60010513-E, LUC60010513-F, LUC60010513-G, LUC60010513-H, **LUC60010513-J,** SUB60035991, SUB60035991-B, SUB60035991-C, SUB60035991-D, SUB60035991-E, SUB60035991-F, SUB60035991-G, SUB60035991-H, SUB60035991-I, **SUB60035991-J,** DIS60048302, DIS60048302-A, DIS60048302-B, DIS60048302-C, DIS60048335, LUS60048380 and WAT60051016).

Definition of Terms

1. In these conditions:

   (d) "approve", "approval" and "approved" or "to the satisfaction of" in relation to plans or management plans means assessed by Council staff acting in a technical certification capacity, and in particular as to whether the document or matter is consistent with, or sufficient to meet, the conditions of this consent, and certified as such for the purposes of the conditions of this consent;

   (e) "conditions" means the conditions of this consent imposed under section 108 RMA, or offered by the Consent Holder and included in the consents;

   (f) "consent" means the land use, discharge, stream works, subdivision and water take consents (LUC60010513, LUC60010513-A, LUC60010513-B, LUC60010513-C, LUC60010513-D, LUC60010513-E, LUC60010513-F, LUC60010513-G, LUC60010513-H, **LUC60010513-J,** SUB60035991, SUB60035991-B, SUB60035991-C, SUB60035991-D, SUB60035991-E, SUB60035991-F, SUB60035991-G, SUB60035991-H, SUB60035991-I, **SUB60035991-J,** DIS60048302, DIS60048302-A, DIS60048302-B, DIS60048302-C, DIS60048335, LUS60048380 and WAT60051016);

….

Changes to condition 2

Application Plans and Materials

2. Unless any changes are required by the conditions below, the land use, discharge, stream works, subdivision and water take activities shall be carried out in general accordance with the plans and all information submitted with the application, detailed in Appendix 1, and all referenced by the Council as consent numbers LUC60010513 (landuse), SUB60035991 (subdivision), DIS60048302 (stormwater discharge), DIS60048335 (wastewater discharge), LUS60048380 (stream works) and WAT60051016 (water permit) and as varied by consent LUC60010513-A, LUC60010513-B, LUC60010513-C, LUC60010513-D, LUC60010513-E, LUC60010513-F, LUC60010513-G, LUC60010513-H, **LUC60010513-J,** SUB60035991-B, SUB60035991-C, SUB60035991-D, SUB60035991-E, SUB60035991-F, SUB60035991-G, SUB60035991-H, SUB60035991-I, **SUB60035991-J,** DIS60048302-A, DIS60048302-B, and DIS60048302-C.

Changes to condition 3

3. In the event of any inconsistency between the approved drawings and supplementary documentation, the approved drawings will prevail. In the event of any inconsistency between the approved drawings, plan titled "Proposed Road Layout Plan", drawing no.: 300, Rev ~~L~~ **M,** prepared by Crang Civil Limited will prevail.
   ….

Changes to condition 9

9. For each stage the Consent Holder (or their successor in title) shall comply with the corresponding works required under the engineering and other management and maintenance plans set out below as necessary for the specific stage of the subdivision.

Conditions to be Complied with Prior to the Commencement of Works

Note*:* These conditions apply to all works authorised by the land use, discharge, stream works, subdivision and water take consents (LUC60010513 and as varied by consent LUC60010513-A, LUC60010513-B, LUC60010513-C*,* LUC60010513-D, LUC60010513-E, LUC60010513-F, LUC60010513-G, LUC60010513-H, **LUC60010513-J,** SUB60035991, SUB60035991-B, SUB60035991-C, SUB60035991-D, SUB60035991-E, SUB60035991-F, SUB60035991-G, SUB60035991-H, SUB60035991-I, **SUB60035991-J,** DIS60048302, DIS60048302-A, DIS60048302-B, DIS60048302-C, DIS60048335, LUS60048380 and WAT60051016)**.**

….

Changes to condition 116 – Table 1

116. The following conditions of consent shall be complied with on a continuing basis by the Consent Holder (which includes the subdividing owner and subsequent owners) and shall be recorded in a consent notice issued pursuant to s221 of the RMA registered on the titles:

…..

TABLE 1 – LAND USE AND DEVELOPMENT CONSENT NOTICES

Note: Capitalised letters in the following table refer to the specific consent notices set out below.

Applicable Lots/Areas	**Land Use**	**Built form**	**Guidelines**	**Restrictions**	**Exclusions**
Lots 259, 261, 268-305, 307, 308, 317-323, 325, 332, 334, 373-380, 386-389, 413-450, 459-474, 481, 482 and 491-497	A	E	K	-	N, O

Lots 243-258, 261-267, 326-331, 381-385, 390-412, 451-458, 475-480, 483-490, 498-501	A	F	K	-	
Stage 1 - Lots 1-107~~,~~ 113-129, 583-586, 591-595 Stage 3 Lots 309-316, 502-518, 529-531, 543-545, 565-575, 598, 599	A	G	K	-	
Stage 2A – Lot 579 Stages 2B, 2C and 2D – Lots 130-**250** ~~242~~ and 601	A	H	K	-	
Stage 2A – Lots 580 and 581	B	I	K	-	
Lots 130, 579, 580 and 581				L	
All Lots	-	-	-	M	

….

Changes to Plans (Appendix 1)

Drawing No.	Rev/ Ref	Title	Prepared by	Date
Engineering Plans				
712/1		Road Access off Northern Motorway Interchange	Traffic Solutions Ltd	9 August 2016
100	Rev **K** ~~I~~	Proposed Site Plan and Aerial Photograph	Crang Civil	**29/10/24** ~~13/04/23~~
101	Rev **N** ~~L~~	Proposed Staging Plan	Crang Civil	**29/10/24** ~~13/04/23~~
105	Rev **J** ~~I~~	Scheme Plan Comparison with Consented Development	Crang Civil	**30/09/24** ~~13/04/23~~
200	Rev **M** ~~L~~	Proposed Finished Contour Plan	Crang Civil	**30/09/24** ~~13/04/23~~
201	Rev **J** ~~I~~	Proposed Cut-Fill Plan	Crang Civil	**30/09/24** ~~13/04/23~~
205	Rev **M** ~~L~~	Proposed Slope Analysis Plan Slopes Greater than 1 in 3	Crang Civil	**30/09/24** ~~13/04/23~~

Drawing No.	Rev/ Ref	Title	Prepared by	Date
210	Rev **G** ~~F~~	Stage 2 – **Existing** Earthworks & Sediment Control Plan	Crang Civil	**30/09/24** ~~13/04/23~~
211	**Rev A**	**Stage 2 – Proposed Earthworks & Sediment Control Plan**	**Crang Civil**	**02/10/24**
…	…	…	…	…
300	Rev **M** ~~L~~	Proposed Road Layout Plan	Crang Civil	**30/09/24** ~~13/04/23~~
301	Rev **M** ~~L~~	Proposed Road Layout Plan – Sheet 1 of 5	Crang Civil	**30/09/24** ~~13/04/23~~
…	…	…	…	…
311	Rev **H** ~~G~~	Stage 2 – Road Enabling Plan	Crang Civil	**30/09/24** ~~13/04/23~~
312	Rev **H** ~~G~~	Stage 2 – Completed Road Plan	Crang Civil	**30/09/24** ~~13/04/23~~
313	Rev **F** ~~E~~	Stage 2 – Entrance Road Long Section **& Accesses Long Sections**	Crang Civil	**30/09/24** ~~13/04/23~~
314	Rev **F** ~~E~~	Stage 2 – Road **21 Long Sections** ~~s 10 & 12 Long Sections~~	Crang Civil	**30/09/24** ~~13/04/23~~
315	Rev **F** ~~E~~	Stage 2 – Road **21 & 22** ~~13~~ Long Section**s**	Crang Civil	**30/09/24** ~~13/04/23~~
…	…	…	…	…
400	Rev **L** ~~K~~	Proposed Stormwater Layout & Flood Plan	Crang Civil	**30/09/24** ~~13/04/23~~
…	…	…	…	…
408	Rev **D** ~~C~~	Bio-Retention Details (Sheet 1 of 2)	Crang Civil	**30/09/24** ~~13/04/23~~
409	Rev **D** ~~C~~	Bio-Retention Details (Sheet 2 of 2)	Crang Civil	**30/09/24** ~~13/04/23~~
410	Rev **I** ~~H~~	Stage 2 – Stormwater Enabling Plan	Crang Civil	**30/09/24** ~~13/04/23~~
411	Rev **I** ~~H~~	Stage 2 – Completed Stormwater Plan	Crang Civil	**30/09/24** ~~13/04/23~~
…	…	…	…	…
500	Rev **L** ~~K~~	Proposed Wastewater Layout Plan	Crang Civil	**30/09/24** ~~13/04/23~~
…	…	…	…	…
511	Rev **I** ~~H~~	Stage 2 – Wastewater Enabling Plan	Crang Civil	**30/09/24** ~~13/04/23~~
512	Rev **I** ~~H~~	Stage 2 – Completed Wastewater Plan	Crang Civil	**30/09/24** ~~13/04/23~~
…	…	…	…	…
Subdivision Plans				

Drawing No.	Rev/ Ref	Title	Prepared by	Date
Sheet 1 of 7	**P** ~~H~~	Scheme Plan Overall	Survey Worx	**28/11/24** ~~12 July 2024~~
Sheet 2 of 7	**P** ~~H~~	Scheme Plan Stage 2A	Survey Worx	**28/11/24** ~~12 July 2024~~
Sheet 3 of 7	**P** ~~H~~	Scheme Plan Stage 2A	Survey Worx	**28/11/24** ~~12 July 2024~~
Sheet 4 of 7	**P** ~~H~~	Scheme Plan Stage 2A	Survey Worx	**28/11/24** ~~12 July 2024~~
Sheet 5 of 7	**P** ~~H~~	Scheme Plan Stage 2B	Survey Worx	**28/11/24** ~~12 July 2024~~
Sheet 6 of 7	**P** ~~H~~	Scheme Plan Stage 2C	Survey Worx	**28/11/24** ~~12 July 2024~~
Sheet 7 of 7	**P** ~~H~~	Scheme Plan Stage 2D	Survey Worx	**28/11/24** ~~12 July 2024~~
…	…	…	…	…
Character Area, Structure Plan and Revegetation/ Open Space Plans				
Figure 8	A	Proposed Character Areas	Boffa Miskell Limited	7 August 2018
Figure 9	Rev **8** ~~7~~	Concept Structure Plan	Boffa Miskell Limited	**10 Sep 2024** ~~17 Dec 2021~~
Figure 11	**Rev 17** ~~16~~	Revegetation and Open Space Concept	Boffa Miskell Limited	**10 Sep 2024** ~~17 Dec 2021~~
…	…	…	…	…
	Rev **F** ~~D~~	Ara Hills Stage 2 Landscape Package for s127	Boffa Miskell	**13 September 2024** ~~24 March 2023~~
		Ara Hills Stage 2 Design Guidance	Oculus	13 Sept 2021

Decision

I have read the application, supporting documents, and the report and recommendations on the application for variation. I am satisfied that I have sufficient information to consider the matters required by the RMA and make a decision under delegated authority on the application.

Acting under delegated authority, under sections 127, 104, 104B, 106 and Part 2 of the RMA, the application for variation to conditions of a resource consent is **GRANTED**.

Reasons

The reasons for this decision are:

1. The proposal is appropriately considered under s127 as the changes will not result in a fundamentally different activity or materially different effects.

2. In accordance with an assessment under s104(1)(a)-(ab) and s127(3) of the RMA, the actual and potential effects from the variation will be acceptable as:

    a. The effects on the receiving environment with regards to the proposed changes are negligible as the proposed variation seeks to introduce eight new lots within Stages 2 (Stages 2C and 2D) due to the loss of a pocket park (Lot 605 as consented) and the reduction of lot sizes in general that allow for the increased yield within this stage. The walkway between lots 140 and 141 will also be reduced in size. The changes to the consented engineering, scheme and landscaping plans are relating these changes. There is extensive landscaping and open areas provided within and around the area to ensure that residential amenity is maintained. The proposal will maintain the overall anticipated residential character, open space provisions, and amenity values expected in the area.

    b. The proposed changes within Stage 2 will not materially change the overall layout, sub-staging, and design of the consented development. No changes to how the site (and resulting sites) are accessed and serviced are proposed as part of this variation. The applicant has demonstrated that all proposed lots within Stage 2 can be suitably accessed and serviced.

    c. No further changes are proposed or sought under this variation. No changes to the works methodology or extend of consented earthworks and associated roading and servicing. As such there are no physical or consenting changes needed in relation to all other aspects of the original bundled consent and as subsequently varied. As such, there are no further physical or consenting changes are proposed or sought through this proposal.

    d. There are no additional effects arising from the proposed changes on the receiving environment and the proposed variation does not increase the scale and intensity of adverse effects over and above what has been already granted and accepted with the previous variations. The overall number of lots within the Ara Hills Development will remain as consented at 575 lots.

    e. In terms of positive effects, it will enable the development of the Ara Hills Development area to carry out the approved subdivision in stages as revised in a more efficient way and the proposal will provide additional housing in the area.

    f. With reference to s104(1)(ab), there are no specific offsetting or environmental compensation measures proposed or agreed to by the applicant to ensure positive effects on the environment

3. In accordance with an assessment under s104(1)(b) and s127(3) of the RMA, the variation is consistent with the relevant statutory documents including the assessment criteria, objectives and policies contained in Chapters E38, E39 and H18 of the Auckland Unitary Plan (Operative in part). The underlying zone for the subject sites is currently Future Urban which seeks to retain the rural use of the land and to avoid urbanisation until the land has been rezoned for urban purposes (H18.2 (1), (4); H18.3 (1)). Development of the Future Urban Zone should also not result in fragmentation that will compromise any future urban development, including the provision of infrastructure, built form, and transport network (H18.2 (3); H18.3 (4), (6)).

Under bundled consent application BUN20441333, the wider area is effectively rezoned residential. The proposed variation is consistent with the layout and design of the underlying residential development of the subject site, through the provision for the vesting of the portion of Grand Drive instead of the gazetting process to allow for the timely release of residential lots within Stage 2 of the Ara Hills development. This variation is consistent with the outcomes as granted under the original consent in terms of the anticipated residential character and form; and the development can be adequately serviced accessed. The proposed variation is considered not to be contrary to the objectives and policies of the relevant chapters of the Auckland Unitary Plan (Operative in part).

4. In accordance with an assessment under s104(1)(c) and s127(3) of the RMA, no other matters are considered relevant.

5. In terms of s106 of the RMA the proposal is not considered to give rise to a significant risk from natural hazards, and sufficient provision has been made for legal and physical access to the proposed allotments. Accordingly, council is able to grant this subdivision consent subject to the varied conditions below.

6. In the context of this variation application, where the objectives and policies of the relevant statutory documents were prepared having regard to Part 2 of the RMA, they capture all relevant planning considerations and contain a coherent set of policies designed to achieve clear environmental outcomes. They also provide a clear framework for assessing all relevant potential effects and there is no need to go beyond these provisions and look to Part 2 in making this decision as an assessment against Part 2 would not add anything to the evaluative exercise.

7. Overall, the proposal is consistent with the relevant statutory documents and will have adverse effects on the environment that are acceptable.

Conditions

Under sections 108 and 108AA of the RMA, this variation is subject to the amendments as detailed in the application proposal section above with no further conditions considered necessary to impose.

Advice notes

1. *A copy of the consolidated set of conditions of consent as amended is included as attachment 1 to this section 127 decision.*

2. *The consent holder is reminded that the decision on this section 127 application does not affect the lapse period for the resource consent.*

3. *This decision is to be read in conjunction with any other relevant approved resource consent(s) and does not negate the consent holder's requirement to continue to comply with the conditions of any previously granted resource consent(s) that have been implemented.*

Delegated decision maker:

Name: Steve Seager

Title: Team Leader, Resource Consents

Signed:

Date: 3 December 2024

Attachment 1: Consolidated conditions of consent as amended

General Conditions

Note: These general conditions apply to each of the land use, discharge, stream works, subdivision and water take consents (LUC60010513, LUC60010513-A, LUC60010513-B, LUC60010513-C, LUC60010513-D, LUC60010513-E, LUC60010513-F, LUC60010513-G, LUC60010513-H, LUC60010513-J, SUB60035991, SUB60035991-B, SUB60035991-C, SUB60035991-D, SUB60035991-E, SUB60035991-F, SUB60035991-G, SUB60035991-H, SUB60035991-I, SUB60035991-J, DIS60048302, DIS60048302-A, DIS60048302-B, DIS60048302-C, DIS60048335, LUS60048380 and WAT60051016).

Definition of Terms

1. In these conditions:

   (a) "approve", "approval" and "approved" or "to the satisfaction of" in relation to plans or management plans means assessed by Council staff acting in a technical certification capacity, and in particular as to whether the document or matter is consistent with, or sufficient to meet, the conditions of this consent, and certified as such for the purposes of the conditions of this consent;

   (b) "conditions" means the conditions of this consent imposed under section 108 RMA, or offered by the Consent Holder and included in the consents;

   (c) "consent" means the land use, discharge, stream works, subdivision and water take consents (LUC60010513, LUC60010513-A, LUC60010513-B, LUC60010513-C, LUC60010513-D, LUC60010513-E, LUC60010513-F, LUC60010513-G, LUC60010513-H, LUC60010513-J, SUB60035991, SUB60035991-B, SUB60035991-C, SUB60035991-D, SUB60035991-E, SUB60035991-F, SUB60035991-G, SUB60035991-H, SUB60035991-I, SUB60035991-J, DIS60048302, DIS60048302-A, DIS60048302-B, DIS60048302-C, DIS60048335, LUS60048380 and WAT60051016);

   (d) "Consent Holder" means the applicant, AV Jennings Hobsonville Pty Limited, at Auckland;

   (e) "Council" means the Auckland Council;

   (f) "engineering works" includes, but is not limited to:

   - Earthworks and sediment control;
   - The formation of roads, the laying of pipes and other ancillary equipment for stormwater, water supply, drainage or sewage disposal;
   - Street lights, landscaping or structures on land; and
   - Any other works required by conditions of this consent.

Note: Structures such as retaining walls, in-ground walls and bridges may require a separate Building Consent or could be processed with the Engineering Plan Approval if associated with ground works.

(g) "RMA" means the Resource Management Act 1991;

(h) "Team Leader" means the Team Leader Northern Monitoring.

Application Plans and Materials

2. Unless any changes are required by the conditions below, the land use, discharge, stream works, subdivision and water take activities shall be carried out in general accordance with the plans and all information submitted with the application, detailed in Appendix 1, and all referenced by the Council as consent numbers LUC60010513 (landuse), SUB60035991 (subdivision), DIS60048302 (stormwater discharge), DIS60048335 (wastewater discharge), LUS60048380 (stream works) and WAT60051016 (water permit) and as varied by consent LUC60010513-A, LUC60010513-B, LUC60010513-C, LUC60010513-D, LUC60010513-E, LUC60010513-F, LUC60010513-G, LUC60010513-H, LUC60010513-J, SUB60035991-B, SUB60035991-C, SUB60035991-D, SUB60035991-E, SUB60035991-F, SUB60035991-G, SUB60035991-H, SUB60035991-I, SUB60035991-J, DIS60048302-A, DIS60048302-B, and DIS60048302-C.

3. In the event of any inconsistency between the approved drawings and supplementary documentation, the approved drawings will prevail. In the event of any inconsistency between the approved drawings, plan titled "Proposed Road Layout Plan", drawing no.: 300, Rev M, prepared by Crang Civil Limited will prevail.

Advice Note:

All engineering plans, including Erosion and Sediment Control Plans, referenced in condition 2 are indicative (information purpose only) and will be subject to the Engineering Plan Approval or similar process required by the conditions of this consent.

Monitoring Charges

4. The Consent Holder shall pay the Council an initial consent compliance monitoring charge of $1500 (inclusive of GST), plus any further monitoring charge or charges to recover the actual and reasonable costs that have been incurred to ensure compliance with the conditions attached to this consent.

Advice Note:

The initial monitoring charge is to cover the cost of inspecting the site, carrying out tests, reviewing conditions, updating files, etc, all being work to ensure compliance with the resource consent. In order to recover actual and reasonable costs, inspections, in excess of those covered by the base fee paid, shall be charged at the relevant hourly rate applicable at the time. The Consent Holder will be advised of the further monitoring charge or charges as they fall due. Such further charges are to be paid within one month of the date of invoice. Only after all conditions of the resource consent have been met, will Council issue a letter confirming compliance on request of the Consent Holder.

Lapse of Consent

5. Under section 125 of the RMA, this consent lapses ten years after the date it is granted unless:

   - The consent is given effect to (i.e. a survey plan or plans for all stages of the subdivision have been submitted to Council for approval under section 223 of the RMA), but shall thereafter lapse if the survey plan or plans are not deposited in accordance with section 224 of the RMA; or

   - The Council extends the period after which the consent lapses

Review of Conditions

6. At least 7 days prior to any work commencing in relation to this consent, the Consent Holder shall notify the Council's RMA Compliance Administrator by telephone (0800 426 5169) of the expected date of work commencing.

Access to property

7. Until all the conditions of this consent have been completed to the satisfaction of the Team Leader, Resource Consenting and Compliance, servants or agents of the Council are to be permitted to have access to relevant parts of the property at all reasonable times for the purpose of carrying out inspections, surveys, investigations, tests, measurements and/or to take samples while adhering to the Consent Holder's Health and Safety Policy.

Staging

8. Subdivision of the land may be undertaken in accordance with the staging plans referred to under condition 2, comprising eight stages, including sub-stages where relevant, 59 super-lots and 575 finished lots.

9. For each stage the Consent Holder (or their successor in title) shall comply with the corresponding works required under the engineering and other management and maintenance plans set out below as necessary for the specific stage of the subdivision.

Conditions to be Complied with Prior to the Commencement of Works

Note*:* These conditions apply to all works authorised by the land use, discharge, stream works, subdivision and water take consents (LUC60010513 and as varied by consent LUC60010513-A, LUC60010513-B, LUC60010513-C*,* LUC60010513-D, LUC60010513-E, LUC60010513-F, LUC60010513-G, LUC60010513-H, LUC60010513-J, SUB60035991, SUB60035991-B, SUB60035991-C, SUB60035991-D, SUB60035991-E, SUB60035991-F, SUB60035991-G, SUB60035991-H, SUB60035991-I, SUB60035991-J, DIS60048302, DIS60048302-A, DIS60048302-B, DIS60048302-C, DIS60048335, LUS60048380 and WAT60051016)**.**

Advice Note:

For the purposes of completing Stage 3-A3, the vesting of "wetland 5 – Lot 1005" and the stopping of the paper road (legal road) that goes through the wetland, the consent holder must apply and be granted consent to have the legal status of that paper road changed to a freehold title. The road-stopping process is governed by either the Local Government Act 1974 or the Public Works Act 1981. The sections of road to be stopped must go through a legal road

stopping process. There are no guarantees that a road can be stopped, and the process includes public notification and the ability for objectors to appeal to the Environment Court. Information and application forms can be found on the Auckland Transport website: https://at.govt.nz/about-us/working-on-the-road/road-processes-for-property-owners/changing-the-legal-status-of-a-road/

Engineering Plan Approval

10. Prior to commencement of any construction work for each stage, or prior to lodgement of the survey plan pursuant to section 223 of the RMA for that stage, whichever is earlier, the Consent Holder shall submit two hard copies and one PDF/CD version of complete engineering plans (including engineering calculations and specifications) for the works to be completed in that stage of the development to the Team Leader for approval ("EPA").

11. No construction activity shall commence on site until written confirmation of approval of the engineering plans and associated management plans has been obtained from the Team Leader and all measures identified as required to be established prior to commencement of works have been established to the satisfaction of the Team Leader.

12. Details of the chartered professional engineer who will act as the Consent Holder's representative for the duration of the development must also be provided with the application for EPA. Any subsequent change to the nominated Developer's Representative shall be immediately notified in writing to the Consents Engineer.

13. The engineering plans are to include the following:

    (a) Details of the extent of works to be undertaken in the stage and the extent of stabilisation to be completed at the end of the stage and/or construction season.

    (b) A Construction Management Plan ("CMP") for the stage containing sufficient detail to address the following matters (where relevant):

        - Who the site or project manager is and contact details (phone, facsimile, postal address).
        - The location of notice boards that clearly identify the name, telephone number and address for service of the site or project manager.
        - Measures to be adopted to ensure that pedestrian access past the works is provided where practicable and that such access is safe.
        - Procedures for controlling sediment runoff and removal of debris and construction materials from public roads or places
        - The location and design of all hoardings and gantries.
        - Measures to be adopted to maintain the site in a tidy condition in terms of disposal/storage of rubbish, storage and unloading of building materials and similar construction activities.
        - Control procedures for delivery and removal of construction materials from public roads or places.

- Location of workers conveniences (e.g. portaloos).
- Ingress and egress to and from the site for construction vehicles.
- Hours of operation and days of the week for construction activities (in accordance with any other specific condition in this consent relating to construction hours).
- Construction noise management.

(c) Prior to the commencement of any earthworks activity on the subject site, a finalised Erosion and Sediment Control Plan (ESCP), prepared by a suitably qualified person, shall be prepared and submitted to the Team Leader – Northern Monitoring, No earthworks on the subject site shall commence until written approval from the Team Leader has been provided confirming that the ESCP is satisfactory. The ESCP shall include but is not limited to:

- staging details with specific erosion and sediments control works including location, dimensions and drawing in A3 format. All controls should be in line with Industry Best Practice as well as in general GD05 Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region (GD05));
- details of the site's stabilised construction entrance(s);
- timing and duration of construction and operation of control works;
- details relating to the management of exposed areas (e.g. grassing, mulching or placing of hard fill);
- the maximum exposed areas proposed and/or confirmation that an area no greater than 15ha will be exposed at any one time throughout the duration of the earthworks;
- monitoring and maintenance requirements for the proposed erosion and sediment controls; and
- measures for the management and measurement of dust in accordance with GD05 and the MfE Good Practice Guide for Assessing and Managing Dust.

(d) Erosion and sediment control measures shall be constructed and maintained in general accordance with GD05 and any amendments to this document, except where a higher standard is detailed in the documents referred to in the conditions elsewhere, in which case the higher standard shall apply. For the purposes of clarity, the following additional standards are to be included:

- sediment retention ponds (SRP) are to be sized to meet, and where possible exceed the minimum volume of 3% (300m³ of storage for each 1ha of contributing catchment);
- The decant systems in the SRPs are to have devices to enable the raising of these decants;
- SRPs are to have forebays with a minimum volume of 10% of the pond's volume;

- Floating booms are to be installed in the SRPs where appropriate to trap and floating debris (such as mulch) to minimise blockages of the decants;

- Decanting earth bunds (DEBs) are to be sized to a minimum of 3% (90m³ of storage capacity for each 3,000m² of contributing catchment);

- DEBs shall have a minimum length to width ration of 3:1, a level impoundment area, a single perforated, floating T-bar decant, a decant rate of 3l/sec/ha of contributing catchment, a stabilised emergency spillway, a minimum of 2m in width;

- All sediment control fencing utilised during earthworks shall be constructed as super silt fences in accordance with GD05;

Advice Note:

In the event that minor amendments to the ESCP are required, any such amendments should be limited to the scope of this consent. Any amendments which affect the performance of the erosion and sediment controls may require an application to be made in accordance with section 127 of the RMA. Any minor amendments should be provided to the Team Leader prior to implementation to confirm that they are within the scope of this consent.

(e) Prior to bulk earthworks commencing, a certificate signed by an appropriately qualified and experienced engineer shall be submitted to the Team Leader, to certify that the erosion and sediment controls have been constructed in accordance with the erosion and sediment control plans as specified in condition 13 (c) of this consent.

Certified controls shall include the sediment retention ponds, the decanting earth bunds, chemical treatment arrangements, super silt fences and diversion channels/bunds. The certification for these subsequent measures shall be supplied immediately upon completion of construction of those measures. Information supplied if applicable, shall include:

a) Contributing catchment area;

b) Shape of structure (dimensions of structure);

c) Position of inlets/outlets; and

d) Stabilisation of the structure.

Advice Note:

Perimeter controls include cleanwater diversions, silt fences and any other erosion control devices that are appropriate to divert stabilised upper catchment runoff from entering the site, and to prevent sediment-laden water from leaving the site.

Advice Note:

Certified controls may include sediment treatment devices, any decanting earth bunds and diversion channels/bunds.

(f) Design of a local road (Road 1) to be formed from the entry road across the site to the western boundary as generally outlined on the plan 12516-01S127 300 Rev E prepared

by Airey Consultants Limited. The design of Road 1 shall ensure a threshold treatment is provided at an appropriate distance from the motorway interchange to encourage drivers to lower vehicle speeds before entering the site. The gradient of Road 1 shall be designed and constructed in accordance with the Auckland Transport Code of Practice and the Austroads Guide to Road Design. The design of the Road 1 shall be submitted with the engineering plans for Stage 1.

Advice Note:

Road 1 follows the alignment determined by Auckland Transport as a future arterial road. Although condition 13(f) requires the design of a local road, if Auckland Transport constructs the arterial road, a formal Infrastructure Funding Agreement ("IFA") will be required. The IFA will set out how the costs of the road construction to arterial road standards are to be shared.

(g) Details of the location and design of all rubbish collection points.

(h) Design of footpaths to be constructed on each street designed to be vested as a public road, including along Road 1. Such design to be generally in accordance with Auckland Transport's Code of Practice. Footpaths shall be provided on both sides of the road. Provision for footpaths is not required for any public 'shared zone' streets but for the 'shared zone' streets, pedestrians must be able to walk along these streets safely. For all other private roads, a 1.8m wide footpath shall be installed on at least one side. The details of these footpaths shall be determined at the EPA stage.

(i) Detailed design of all street and accessway lighting and any other structures/facilities on the roads to be vested in the Council which are to be designed in accordance with Auckland Transport's Code of Practice. The type of light fittings shall be acceptable to the electricity network supplier responsible for the area.

(j) Detailed design of private accessways to be constructed as vehicle crossings, with the footpath continuous in grade, width, colour and cross-fall. The accessways shall also ensure a 5m platform no steeper than 1 in 20 prior to the footpath.

(k) Detailed design of all new public accessways in accordance with Auckland Transport's Code of Practice. Detailed design of pedestrian and cycle trails within the common areas of the site, generally in accordance with Fig. 27 of the Boffa Miskell Pedestrian and Cycle Strategy Diagram Rev. B and in accordance with the guidelines set out in the NZ Cycle Trail Design Guide (4th Edition).

(l) Detailed design of a new left turn lane to be constructed on the northbound offramp at the approach to the western interchange roundabout, generally as per Traffic Solutions Ltd Dwg.712/1. Detailed engineering design plans shall be submitted to NZTA prior to construction, and implemented in accordance with NZTA requirements. The slip lane shall be constructed and operational upon completion of Section 224(c) for Stage 1.

(m) Detailed design of a shared path to be provided from Road 1 to the signalised pedestrian crossing at Arran Drive, in general accordance with the plan 1171201 drawing 310 Rev E, prepared by Airey Consultants Limited or an amended design approved by the NZ Transport Agency. The width of the pedestrian/cycle bridge shall be designed to allow for a 3.5m usable shared path width. The design of the proposed shared path shall include anti-throw screens along its length to prevent the ability for path users to throw items onto

the State Highway 1 motorway corridor. The proposed shared path shall be designed to be constructed a minimum of 6m from the existing Grand Drive overpass, or at a location agreed to by the NZ Transport Agency. Design plans shall be submitted to the NZ Transport Agency for consideration and approval, at the detailed engineering design phase and shall be submitted by 31 August 2022, or an alternative date as agreed in writing by Council.

(n) Deleted.

(o) Design of pedestrian / cyclist crossing places to the satisfaction of the NZ Transport Agency across both the northbound on ramp and the south bound off ramp to connect the proposed shared path to the eastern and western areas of Grand Drive. At the northbound on ramp, it is anticipated that a suitable crossing point would be between 19 – 22m down the on ramp and at the southbound ramp, it is anticipated that a suitable crossing point would be between 20 – 23 m from the roundabout. The design of the crossing places shall be submitted with the engineering plans for item 13(m) above for Stage _by 31 August 2022, or an alternative date as agreed in writing by Council.

(p) At the time of detailed engineering design for the final stage of the development, or at the time Road 1 becomes a regional arterial road, whichever occurs first, the Consent Holder shall undertake an assessment of the safety and effectiveness of the crossing points referred to in Condition 13(o) for the review of the NZ Transport Agency. If the NZ Transport Agency determines that a crossing treatment at these locations (such as a zebra crossing or signals to assist pedestrians and cyclists to safely cross the road) is necessary, the cost of these works shall be met by the Consent Holder.

(q) The Consent Holder will consult with the Department of Conservation regarding the provision of additional connections from the development to the Nukumea Scenic Reserve and to the walking and cycling network.

(r) Infrastructure projects with respect to the roading connections to the potential Rapid Transit Network (RTN) station, construction of a future arterial and others will require the Consent Holder to enter into a formal Infrastructure Funding Agreement (IFA) with Auckland Council and/or Auckland Transport. An agreed IFA shall be provided to the Team Leader Compliance and Monitoring prior to stage 2 s224c as evidence for how such current/future infrastructure projects can be delivered. The IFA may include but is not limited to:

- Landowner's approvals from Auckland Transport for works in the road reserve land.
- A road stopping or road exchange process.
- Further analysis to determine whether the road reserve space between Road 1 and Lots 573 will provide an acceptable radius of curvature and gradient for a future RTN Station access road, which will need to provide for buses and potentially walking and cycling access.
- Further analysis to determine the design of the intersection of the RTN Station access road/ Road 1 arterial for example whether it is a roundabout or a signalised intersection.

- Further analysis to assess the interaction of the future RTN Station access road/ Road 1 intersection with the Grand Drive interchange and to determine whether the arterial road and SH1 interchange will operate effectively under the proposed layout. It is expected that this analysis will occur over the next 5 years as part of the Supporting Growth programme.

- Further analysis to assess the internal circulation of traffic flows within the residential sub-division and the interaction of local access traffic with commuter traffic entering/ exiting the proposed park and ride.

Advice Notes:
Auckland Transport may request additional infrastructure be included in the IFA and it is recommended that further discussions are held with Auckland Transport.

The Consent Holder will ultimately be required to complete Auckland Transport's Road Stopping process to remove the paper road status from the two sections of existing paper road through the land towards the southern end of the site. It should be noted that the process for legally stopping a road can take some time and therefore this process should be initiate as soon as possible to reduce potential delays.

All signage and markings for traffic controls within the development shall be made legally enforceable.

The consent holder is advised that all regulatory controls, such as no stopping restrictions, give way or stop controls, must be officially resolved by AT's Traffic Control Committee. Any controls within the existing road reserves may require consultation. All costs related to the implementation of regulatory controls are to be borne by the applicant.

(s) Details of how the public stormwater system will be constructed. Full design calculations, detailed drawings and maintenance schedules shall be provided with the engineering plans to cover the expected ongoing requirements for all stormwater treatment devices.

(t) Full design details and calculations demonstrating options for the collection, treatment and utilisation of roof collected water. The report shall also provide stormwater storage, attenuation and discharge details for a range of impermeable surfaces.

(u) Detailed design, for each stage, of the reticulated water supply network, to be provided in accordance with New Zealand Fire Service Fire Fighting Water Supplies Code of Practice SNZ PAS 4509:2008.

(v) Details of how development of roads and access ways will enable access for emergency vehicles for firefighting purposes in accordance with New Zealand Fire Service Fire Fighting Water Supplies Code of Practice SNZ PAS 4509:2008.

(w) Details of fire hydrants to be installed. Should fire hydrants be incorporated as part of the reticulated network, they must be placed on the footpath to enable unimpeded access for the New Zealand Fire Service and must be located within 135m of all lots in accordance with New Zealand Fire Service Fire Fighting Water Supplies Code of Practice SNZ PAS 4509:2008.

Advice Note:

Should the applicant wish to undertake alternative methods of providing water supply for firefighting purposes such as sprinkler systems or water tanks, it is strongly recommended the NZFS are consulted prior to such concepts.

Advice Note:

The applicant is reminded that they will need to obtain an encroachment

licence from Auckland Transport for the proposed private water supply lines within public roads.

(x) Detailed design of a car park to be constructed at the northern end of the site, physically separate from the adjoining reserve. The separation shall be suitable to prevent access to the reserve by motor vehicles including motor cycles, but enable access for pedestrians.

(y) The details of a boundary fence (minimum seven wire post and batten) to be constructed along the boundary of the Nukumea Reserve, including details of the staging of its construction.

(z) Confirmation that a Narrow Road Assessment for Road 8 within stage 1 has been approved by Auckland Transport. In the event that the approval is not obtained then Road 8 must become a private road.

Advice Note:

In the event that the road becomes private then the consent holder would need to reconsider the location of the water mains and ensure hydrant distances complied which may necessitate amendments to the EPA.

(aa) The termination of Road 4 in stage 1 shall incorporate a hammer head to be designed in accordance with Auckland Transports Code of Practice.

(bb) Unless otherwise agreed with Auckland Transport at EPA stage, the removal of the proposed parking bays directly outside Lots 507, 516, 517 and 518, and the removal of one parking bay adjacent to Lot 513 and one parking bay adjacent to Lot 568.

(cc) Unless otherwise agreed with Auckland Transport at EPA stage, the shortening of the parking bay outside Lot 406 to provide space for a kerb crossing to the north of the future stage intersection.

(dd) Intersection designs in accordance with the Transport Design Manual standards, including kerb crossings on all legs of all intersections except unless otherwise agreed with Auckland Transport at EPA stage.

(ee) Detailed design of the safe crossing point for pedestrians and cyclists travelling crossing Road 1 and connecting with the pedestrian walkway between Road 1 and Road 10 within Stage 2 as shown on Drawing 301 Rev 1 Titled ‘Proposed Roads Layout Plan 0-Sheet 1 of 5’ prepared by Airey Consultants Ltd.

(ff) Wayfinding signage details on both ends of paths between Road 10 and Road 1 to be vested to Auckland Transport within Stage 2 as shown on Drawing 301 Rev 1 Titled

'Proposed Roads Layout Plan 0- Sheet 1 of 5' prepared by Airey Consultants Ltd, along with plans showing drainage along the path.

14. As part of the application for Engineering Plan Approval for each stage, a chartered professional engineer must:

    (a) Certify that the public stormwater system has been designed in accordance with the requirements of the Council's Code of Practice for Land Development and Subdivision Chapter 4 (Stormwater) to serve all lots within the stage of development.

    (b) Certify that all water supply and wastewater systems have been designed in accordance with the *Water and Wastewater Code of Practice for Land Development and Subdivision,* May 2015 prepared by Watercare Services Limited.

    (c) Certify that the requirements of the New Zealand Fire Service Fire Fighting Water Supplies Code of Practice SNZ PAS 4509:2008 have been met.

    (d) Certify that all public road and associated structure/facilities or accessways have been designed in accordance with the Auckland Transport Code of Practice.

    (e) Confirm that all practical measures are included in the design to facilitate safe working conditions.

15. Any variation or changes to the approved engineering plans shall be submitted for approval to the Team Leader as an amendment and approval received thereto prior to construction of the varied works.

16. A Road Safety Audit (RSA) shall be undertaken on the detailed design of the roading within the development and for any works within the existing road reserve. Separate RSAs shall be undertaken for each stage of development. Any safety related changes identified in the RSA's and required by the road controlling authority shall be implemented at the cost of the consent holder.

17. An independent safety audit shall be prepared and provided to the NZ Transport Agency for proposed Road 1 and its connection to within the existing western roundabout of the Grand Drive interchange. Any safety related changes identifies in the RSA's and required by the road controlling authority shall be implemented at the cost of the consent holder.

    Advice Note:

    The New Zealand Transport Agency may have additional safety audit requirements for works within its designation.

18. Where an approach to an intersection results in a K value less than 4, advance warning for the intersection shall be provided by way of signage, markings or additional speed calming.

Temporary Traffic Management Plan

19. Prior to the commencement of any works, the Consent Holder shall submit a Temporary Traffic Management Plan ("TTMP") to the Team Leader for approval. The TTMP shall:

    (a) Address the effects of temporary works associated with the western Grand Drive Interchange roundabout.

(b) Address the effects of heavy vehicle movements to and from the site, particularly associated with removal or importation of fill materials and topsoil (as required by any other specific condition of this consent) and for all works associated with the western Grand Drive Interchange roundabout and within the State Highway 1 motorway corridor and designation.

20. The TTMP shall meet Council's and NZTA requirements (refer s.109.2 of the "Standards for Engineering Design and Construction") and shall be provided to the NZ Transport Agency for consideration and approval.

21. The Consent Holder shall obtain written approval and an 'agreement as to works' from the NZ Transport Agency for all works within the State highway 1 motorway corridor and designation.

Advice Note:

Prior to the commencement of construction, any works to be carried out on NZ Transport Agency property requires its land owner approval.

Vegetation Removal Plan

22. Prior to commencement of any works the Consent Holder shall submit a Vegetation Removal Plan ("VRP") to the Team Leader for approval. No vegetation removal shall occur outside the property boundary. i.e. no vegetation shall be removed from the adjacent Nukumea Reserve. The Consent Holder shall undertake all efforts to retain as much vegetation as possible on site.

Planting Management Plan

23. Prior to commencement of any works, the Consent Holder shall submit a detailed Planting Management Plan ("PMP") to the Team Leader for approval for all site areas to be planted. The PMP shall:

(a) Provide for the use of native, eco-sourced, vegetation from as close as possible, including fruiting and flowering trees and plants.

Advice note:

This is to ensure continuity and connectivity with Nukumea Scenic Reserve, enhancing the overall environment for native biodiversity (taonga). Appropriate plants should be used in the varying habitats to provide the natural, native foods and refuges for the differing species e.g. fruiting plants for forest birds, reptile friendly plants, habitat for fernbirds, protection and enhancement of wetland areas for swamp birds.

(b) Provide for the use of appropriate species (that will be restricted in height at maturity) for the higher contoured areas at the western boundary of the site for a distance of at least 20m below the unformed legal road.

(c) Show planting of native species around the northern permitter of the site to provide a buffer between the development and the Nukumea Reserve and limit edge effects as depicted on Figure 11: Revegetation and Open Space Concept Plan prepared for Orewa West Ltd by Boffa Miskell Limited 17 December 2021.

(d) Show boundary screen planting to a width of 5m wide along the southern and western boundaries, including the interface with 53A and 53B Russell Road, as depicted on Figure 12: Revegetation and Open Space Concept Plan prepared for Orewa West Ltd by Boffa Miskell Limited 17 December 2021. The planting shall be comprised of a mixture of bush and tree species.

(e) Provide for a weed and pest animal control plan for all existing vegetation and planting areas.

(f) Provide for the planting of all fringe areas of the site currently dominated by gorse and woolly nightshade (and other weeds) with appropriate native species, including the long-term management of these plantings.

(g) Show the specific planting works to be undertaken in each stage of the development, ensuring that the boundary screen planting proposed in (f) above shall be completed as part of Stage 2 of the development.

(h) Include a maintenance schedule and programme for all site areas to be planted.

24. The Consent Holder shall carry out all planting in the stages identified and in accordance with the approved PMP. The Consent Holder will advise Council when planting for each stage is initiated.

25. Plant maintenance in accordance with the approved PMP shall occur for five years or until 75% canopy closure has occurred and a minimum survival rate of the plants (being 90% of the original density through the entire planting area(s)) has been achieved. Plant maintenance includes the ongoing replacement of plants that do not survive. All invasive weeds and animal pests shall be controlled in accordance with the weed and pest animal control plan both at the time of initial planting and any replacement planting if required and on an ongoing basis.

26. The Consent Holder shall submit a Planting Monitoring Report to the Team Leader for approval 6 monthly for the first 18 months then annually thereafter for the remaining period to make up a total minimum period of five years. The Monitoring Report shall include but is not limited to the following information in respect of each lot:

(a) Success rates, including growth rates and number of plants lost (including an analysis of the distribution of losses);

(b) Canopy closure, beginnings of natural ecological processes - natural regeneration in understorey, use by native birds;

(c) A running record of fertilisation, animal and weed pest control and replacement of dead plants;

(d) Details on the condition of, and recommendations for maintenance of, the fencing.

(e) Recommendations for replacement of dead plants and implementation of these recommendations (remediation work). Any recommended remediation work shall include a start date for replanting.

27. If remediation work is recommended in accordance with condition 26, the Consent Holder shall:

(a) Undertake this remediation work within six months from the start date.

(b) Provide Council with a report confirming the remediation work has been undertaken. This report shall be submitted to Council's Team Leader, Compliance Monitoring (Orewa) within 6 months after the remediation work has been undertaken.

28. Once Council has provided a practical completion certificate the Consent Holder may enter into a surety bond of a sum calculated to be 1.5 times the cost of maintenance and 10% the cost of planting or $3000 per hectare (whichever is the greater sum) to allow the early release of s.224(c) Certificate. The value of this bond shall be to the satisfaction of the Team Leader. The purpose of the bond is to ensure a minimum survival rate of the plants to 90% of the original density and 75% canopy closure through the entire planting areas.

Streamworks and Riparian Planting and Management Plan

29. Prior to commencement of any works the Consent Holder shall submit a Streamworks and Riparian Planting and Management Plan ("SRPMP") to the Team Leader for approval. The plan shall follow best practice methodology and shall include:

(a) Specific erosion and sediment controls for instream work.

(b) Specific details regarding the placement of the culvert under Road 1.

(c) Methodology for the reclamation and installation of the counterfort drainage to be placed in the upper middle stream.

(d) Details of how flows will be managed during this time.

(e) Provision for a minimum of 10 metres from the bank edge of intermittent streams, and 20 metres from the bank edge of permanent streams to be planted in native vegetation.

(f) The specific planting works to be undertaken in each stage of the development.

(g) A planting and maintenance schedule

30. The Consent Holder shall carry out riparian planting in accordance with the approved SRPMP. Any weeds present in the riparian area shall be controlled prior to planting in accordance with the weed and pest animal control plan.

Lizard Management Plan

31. Prior to the commencement of any vegetation removal works the Consent Holder shall submit and have certified by the Team Leader (North/West) Biodiversity, a Lizard Management Plan ("LMP") prepared by a suitably qualified and experienced ecologist/herpetologist. The LMP shall have two objectives:

(a) The population of each species of native lizard present on the site shall be maintained or enhanced, either on site or at an appropriately translocated; and

(b) The habitats on the site or at the translocation site post development support viable native lizard populations for all species present pre-development.

32. The LMP shall address the following (as appropriate):

(a) Credentials and contact details of the ecologist/herpetologist who will implement the plan.

(b) Timing of the implementation of the LMP.

(c) A description of methodology for survey, trapping and relocation of lizards rescued including but not limited to: salvage protocols, relocation protocols, nocturnal and diurnal capture protocols, supervised habitat clearance/transfer protocols, artificial cover object protocols, and opportunistic relocation protocols.

(d) A description of the relocation site(s); including discussion of:

- provision for additional refugia, if required e.g. depositing salvaged logs, wood or debris for newly released native skinks that have been rescued;
- any protection mechanisms (if required) to ensure the relocation site is maintained (e.g.) covenants, consent notices etc;
- any weed and pest management to ensure the relocation site is maintained as appropriate habitat;
- monitoring methods, including but not limited to: baseline surveying within the site; baseline surveys outside the site to identify potential release sites for salvaged lizard populations and lizard monitoring sites; ongoing annual surveys to evaluate translocation success; pre and post – translocation surveys; and monitoring of effectiveness of pest control and/or any potential adverse effects on lizards associated with pest control; and
- A post-vegetation clearance search for remaining lizards.

33. A suitably qualified and experienced ecologist/herpetologist approved to oversee the implementation of the LMP shall certify that the lizard related works have been carried out according to the approved LMP within two weeks of completion of the vegetation clearance works.

34. Upon completion of works, all findings resulting from the implementation of the LMP shall be recorded by a suitably qualified and experienced ecologist/herpetologist on an Amphibian and Reptile Distribution Scheme (“ARDS”) Card. A copy shall be sent to the Team Leader (North/West) Biodiversity.

35. All works on site must comply with the certified LMP.

Advice note:

Please note that it is recommended that the lizard rescue plan is undertaken in conjunction with the vegetation clearance operations (and contractor) for an integrated approach (on the same day), to enable the physical search for gecko’s following felling of trees and shrubs and to rescue any skinks from ground cover vegetation and terrestrial retreats.

Fish Capture and Relocation Plan

36. Prior to the commencement of any works the Consent Holder shall submit a Fish Capture and Relocation Plan to the Team Leader for approval. The plan will detail, as a minimum:

(a) The timing of fish capture in relation to works methods.

(b) Fish capture methods to be used.

(c) Requirement for a freshwater ecologist to supervise all stream channel dewatering.

(d) Proposed fish release sites.

(e) Requirement to prepare a fish relocation report, to be provided to Council at the completion of stream works.

Stream and Wetland Environmental Compensation Plan

37. Prior to any streamworks reclamation, the applicant will provide the following:

The Consent Holder shall submit a Stream and Wetland Environmental Compensation Plan ("SWECP") to the Team Leader for approval. The purpose of the SWECP shall be to identify and provide for suitable offsite mitigation and/or compensation for streamworks undertaken as part of the consent. The plan will detail, as a minimum:

(a) Final location details of the compensation site(s).

(b) Full calculations (including all supporting documentation) to determine the required amount of offsetting, including onsite and offsite SEV and ECR calculations, in accordance with TR2011/009, and TP148.

(c) A compete quantified and qualified assessment and robust offsetting package for wetland loss.

(d) Plans that identify the onsite impact and offsite mitigation locations for both streams and wetlands which clearly depict the widths of all riparian margins, the length of stream proposed to be impacted and mitigated and the wetland areas proposed to be impacted and mitigated.

(e) A description of, and justification for, the form the offset compensation will take. This will include (but is not limited to):

- Riparian planting;
- Daylighting or naturalisation; and
- Instream habitat enhancement.

(f) Where mitigation is carried out offsite, the inclusion of a planting and maintenance plan, in accordance with Appendix 16 AUP:OP.

(g) Details of any of the provision(s) for fish passage at the offsetting sites.

(h) A detailed programme for the implementation of the compensation works demonstrating how they will be completed within two earthworks seasons from the start of the reclamation.

(i) Prior to streamworks commencing a native fish relocation plan shall be prepared and submitted to the Team Leader for certification.

(j) A suitably qualified freshwater ecologist shall conduct the fish relocation as per the fish relocation plan required in condition 36 and be on site during dewatering to rescue and relocate and native fish present.

(k) If fish relocation is carried out, the Team Leader shall be provided information regarding the species and number of fish relocated prior to and during dewatering within 5 days of completion of dewatering.

Chemical Treatment Management Plan

38. Prior to the commencement of bulk earthworks at the site, a Chemical Treatment Management Plan ("ChTMP") shall be submitted for the written approval of the Team Leader. The plan shall include as a minimum:

(a) Specific design details of the chemical treatment system based on a rainfall activated methodology for the site's sediment retention ponds and decanting earth bunds.

(b) Monitoring, maintenance (including post storm) and contingency programme (including a record sheet).

(c) Details of optimum dosage (including assumptions).

(d) Results of initial chemical treatment trial.

(e) A spill contingency plan.

(f) Details of the person or bodies that will hold responsibility for long term operation and maintenance of the chemical treatment system and the organisational structure which will support this system.

Advice Note:

The Consent Holder shall consider using environmentally sustainable or recyclable materials and products, including floccing products as part of its ChTMP.

In the event that minor amendments to the ChTMP are required, any such amendments should be limited to the scope of this consent. Any amendments which affect the performance of the ChTMP may require an application to be made in accordance with section 127 of the Act. Any minor amendments should be provided to the Team Leader prior to implementation to confirm that they are within the scope of this consent.

West Hoe Stream Arch Culvert

39. Prior to any streamworks in the West Hoe Stream catchment a West Hoe Stream Arch culvert design plan shall be submitted to the Team Leader for approval. The West Hoe Stream Arch culvert design plan shall include as a minimum:

    (a) Final location details of the siting of the Arch culvert.

    (b) Final design of the Arch culvert, abutments and inlet and outlet features.

    (c) Details of how the design has avoided or minimised impact on the stream and wetland associated with the final location.

    (d) Staging of the construction of the Arch culvert.

    (e) Timing of the construction and if occurring during the main fish migration season (September-January) how streamworks will be managed to avoid any impediments to the passage of fish.

    (f) How the final design will provide for fish passage in subsequent years.

    (g) How the final design will minimise impact on the area and functions of the natural wetlands of the West Hoe Stream.

    (h) How the final design will minimise variations in flows upstream and downstream of the culvert location.

    (i) The development of a monitoring plan to ensure that the final design does not affect the ecological values of the West Hoe Stream and associated wetland areas.

Common Areas Maintenance Plan

40. Prior to the lodgement of s223 for Stage 1 the Consent Holder shall provide to the Team Leader for approval a Common Areas Maintenance Plan ("CAMP"). In particular this plan is to:

    (a) Provide details of the legal structure to be formed for the eventual owners to hold responsibility for the on-going maintenance and management of private infrastructure and planted areas to be developed as part of this consent. All land owners must be members/shareholders of this legal entity or otherwise legally obliged to contribute to its outgoings on a perpetual basis.

    (b) Provide details of the staging of participation of eventual owners in the maintenance and management structure to ensure that all eventual owners participate in the legal structure on a fair and reasonable basis.

Design Guidelines

41. Prior to the lodgement of s223 for Stage 1 the Consent Holder shall submit to the Team Leader for approval an updated set of Design Guidelines for the development of the subdivision. The updated guidelines shall be based on the design guidelines contained within Appendix 2 of the Grand View Estate Integrated Landscape, Ecology and Urban Design Report prepared by

Boffa Miskell dated November 2015. The design guidelines shall be updated where necessary to reflect the changes made to the development since the scheme was first proposed.

Works in Progress Conditions

Pre-commencement meeting

42. Prior to the commencement of earthworks in each season, the Consent Holder shall hold a pre-start meeting to discuss the erosion and sediment control measures, the earthworks methodology and to ensure all relevant parties are aware of and familiar with the necessary conditions of this consent. The meeting shall be:

    - Located on the subject site.
    - Scheduled not less than five days before the anticipated commencement of earthworks.
    - Include Auckland Council officer[s].
    - Include representation from the contractors who will undertake the works.

43. The following information shall be made available at the pre-start meeting:

    - Timeframes for key stages of the works authorised under this consent.
    - Resource consent conditions.
    - Approved Erosion and Sediment Control Plan, Construction Traffic Management Plan and Chemical Treatment Management Plan.

44. A pre-start meeting shall be held prior to the commencement of the earthworks activity in each period between October 1 and April 30 that this consent is exercised.

    Advice Note:

    To arrange the pre-start meeting please contact the Team Leader Northern Monitoring. The conditions of consent should be discussed at this meeting. All additional information required by the Council should be provided 2 days prior to the meeting.

Hours of work

45. All construction /earthworks activities on the site must comply with the New Zealand Standard 6803:1999 for Acoustics – Construction Noise, at all times. The use of any noise generating tools, motorised equipment, and vehicles associated with construction and/or earthworks activity on the site are therefore restricted to between the following hours to comply with this Standard: Summer (1 November – 30 April)

    - Monday to Friday 7:00 am to 6:00 pm
    - Saturday 7:30 am to 6:00 pm

    Winter (1 May – 31 October)

- Monday to Friday 7:30 am – 5:00 pm
- Saturday 8:00 am – 1:00 pm

All access and work on site associated with the activity shall be prohibited on Sundays and public holidays and for a two week period over the Christmas period (23 December – 5 January inclusive).

Advice Note:

Works may be undertaken outside these hours only with the written approval of the Council. This will be granted only under special circumstances, for example in the event of urgent stabilisation works or inclement weather preventing work Monday to Saturday. Any work outside these hours will be subject to the approval of any neighbouring residents or other affected parties that may be identified by the Council's Manager, Resource Consenting and Compliance in his/her sole discretion.

Health and Safety

46. A detailed Health and Safety Plan to the requirements of the Health and Safety at Work Act 2015, specifically addressing control of works on and adjacent to public land, and the protection of the public, shall be submitted to the Consents Engineer prior to the commencement of any works on the site (refer s.109.1 of the "Standards for Engineering Design and Construction"). A copy of the Health and Safety Plan shall be kept on the site at all times. All measures for the protection of the public and other personnel set out in the Plan shall be maintained and complied with at all times until such time as the works are completed.

Construction Effects Management

47. All management plans approved with the EPA shall be implemented during the course of development works for each stage. Prior to bulk earthworks commencing, a certificate signed by an appropriately qualified and experienced engineer shall be submitted to the Team Leader to certify that the erosion and sediment controls have been constructed in accordance with the approved ESCP.

48. Beyond the boundary of the site where the activity is undertaken there shall be no noxious, dangerous, offensive or objectionable odour or dust. There shall be no burning of any material (including cleared vegetation) on site.

49. There shall be no more than 15ha of disturbance or earthworks on site at any one time.

50. There shall be no deposition of earth, mud, dirt or other debris on any road or footpath resulting from earthworks activity on the subject site. In the event that such deposition does occur, it shall immediately be removed. In no instance shall roads or footpaths be washed down with water without appropriate erosion and sediment control measures in place to prevent contamination of the stormwater drainage system, watercourses or receiving waters.

51. Prior to the construction of any sediment retention ponds, super silt fences, or other approved devices shall be constructed below the sub-catchment of the sediment retention pond and shall remain in place until such time as the contributing catchment to these devices is stabilised in accordance with GD05.

52. The Consent Holder shall, at all times, control any dust in accordance with the Good Practice Guide for Assessing and Managing the Environmental Effects of Dust Emissions, Ministry for the Environment (2001). All necessary actions shall be taken to prevent a dust nuisance to neighbouring properties and public roads; including, but not limited to:

- The staging of areas of the works.
- The retention of any existing shelter belts and vegetation.
- The installation and maintenance of wind fences and vegetated strips.
- Watering of all haul roads and manoeuvring areas during dry periods.
- Spraying of load dumping operations.
- Suspension of all operations if necessitated by the prevailing conditions.

53. No burning of vegetation or demolition materials is to be carried out on the site. All vegetation and demolition materials are to be removed from the site. Disposal by burying on site shall only be carried out in areas designated on the approved Engineering Plans for such disposal and not to be included within future building sites.

54. If applicable for staging, all excavation shall occur no closer than 100mm from the boundaries of the site. The excavation shall occur in such a manner that the land and any structures on the adjoining property will not collapse or become unstable. Any excavation within a distance equal to its own height from the boundary shall have its design, excavation sequence, temporary support for the excavated ground and construction of the retaining structure including backfill compaction supervised by a Chartered Professional Engineer.

55. At all times during construction, provision shall be made for Ngāti Manuhiri to monitor the removal of topsoil at strategic locations, including ridgelines and streams (as they are more likely to be associated with archaeological sites). In addition, provision for Ngāti Manuhiri to inspect the silt / stormwater wetland treatment devices and sediment controls in place prior to major earthworks associated with each commences. If a severe adverse weather event occurs during earthworks, Ngāti Manuhiri shall be invited to inspect the integrity of the controls, such monitoring and inspection to be at the Consent Holder's expense.

56. Procedures for checking heavy machinery for leaks of fluids before the machinery is permitted to enter riparian areas and a prohibition on machinery refuelling near waterways shall be followed at all times during construction.

Heritage

57. The Consent Holder shall put procedures in place to ensure work stops in the immediate vicinity of any exposed remains (Accidental Discovery Protocol) and that the project informs the project archaeologist, Heritage New Zealand Pouhere Taonga and the Cultural Heritage Implementation Team of any archaeological discoveries.

58. If koiwi tangata (human remains) are uncovered on the site during the implementation of this consent, work shall cease immediately in the immediate vicinity of the remains and the mana whenua, the New Zealand Police, the Auckland Council area-based Resource Consenting and

Compliance Team and Heritage New Zealand Pouhere Taonga shall be contacted so that appropriate arrangements can be made.

59. In the event that any unrecorded historic heritage sites are exposed as a result of consented work on the site, then these sites shall be recorded by the Consent Holder for inclusion within the Auckland Council Cultural Heritage Inventory. The Consent Holder's project archaeologist shall prepare documentation suitable for inclusion in the Cultural Heritage Inventory and forward the information to the Team Leader (for the Manager: Heritage Unit, heritageconsents@aucklandcouncil.govt.nz) within one calendar month of the completion of work on the site.

Advice Note:

That the CHI team leader be notified 48 hours before the commencement of works (Chris Mallows chris.mallows@aucklandcouncil.govt.nz).

Conditions relating to LUC60010513 (Earthworks)

Duration

60. Permit LUC60010513 shall expire ten years from the date it has been granted unless it has been surrendered or cancelled at an earlier date pursuant to the RMA.

61. Before the commencement of any work on site, adequate silt retention structures as detailed in the Auckland Regional Council technical publication GD05 shall be installed. These structures shall be maintained and cleaned out as necessary until such time as complete grass cover, or other non-erodible surfacing, has been established or re-established over the site.

Soil contamination

62. If evidence of soil contamination, which has not been previously identified, is discovered during the works, the Consent Holder shall immediately cease the works and notify the Team Leader, Northern Monitoring, Resource Consents, Auckland Council, and provide a site contamination report to the satisfaction of that Team Leader.

63. The Consent Holder shall ensure any soil removed from the site is disposed of in a managed or licensed landfill facility in accordance with the facility's soil testing requirements, and evidence of disposal is provided to the Team Leader, Northern Monitoring, Resource Consents, Auckland Council.

64. Imported fill materials shall be tested in compliance with cleanfill criteria as outlined in the Ministry for the Environment Guide for Managing Cleanfills (2002) and evidence thereof provided to the Team Leader, Northern Monitoring, Resource Consents, Auckland Council.

Geotechnical certification

65. Earthworks including the placement and compaction of fill materials must be supervised by an appropriately qualified geotechnical engineering professional.

66. All earthworks shall be designed and executed in compliance with the recommendations contained in the geotechnical report by KGA Geotechnical, dated 2 November 2015 and the

supplementary letter dated 17 May 2016, the Supplementary Report by CMW, dated 14 August 2018, titled Hall Farm West (Stages 1 & 8) Geotechnical Investigation Report referenced AKL2018-0066AD Rev A and the supplementary letter darted 21 August 2019 by CMW Geosciences referenced AKL2018-0066AQ Rev 0, ~~and~~ the supplementary letter dated 15 June 2021 by CMW Geosciences referenced AKL2020-0312AB Rev 0, and the Memo by Tetra Tech Coffey referenced 773-AKLGE290955AA-AF dated 14 October 2021, and undertaken in accordance with NZS4431:1989, *Code of Practice for Earth Fill for Residential Subdivisions,* by a Chartered Professional Engineer experienced in soil mechanics.

67. All earthworks and sediment control measures shall be carried out in accordance with Auckland Council's GD05.

68. Detailed earthworks plans with confirmed stabilisation and satisfactory factors of safety, as specified in the Standards, shall be submitted to the Consents Engineer, and approval thereto received in writing, prior to the commencement of any works on the site. Any variation or changes to the approved engineering plans shall be submitted for approval as an Amendment and approval received thereto prior to construction of the varied works.

Advice Note:

Council will not vest and maintain counterfort drains or any stabilisation drainage and its installation is permitted only if there is not anticipated to be any maintenance required. The installation of all stabilisation measures shall be carried out to such a standard that further development on each site will not be required to resort to section 72 notices at building consent stage.

Council reserves the right to request a peer review at any stage of the earthwork design, construction and certification documents.

68A Prior to the commencement of any earthworks at the site, an Adaptive Management Plan shall be submitted for the written approval of the Team Leader Northern Monitoring. The plan shall include as a minimum (unless agreed by the Team Leader Northern Monitoring):

- Fully automated and continuous water quality monitoring (limited to turbidity) of a minimum of one sediment retention pond discharge in each catchment; to be operational prior to earthworks commencing;
- One fully automated and continuous turbidity monitoring system shall be installed at the downstream boundary of the site on the tributary of the Nukumea Stream and one fully automated and continuous turbidity monitoring system shall be installed at the downstream boundary of the site on the tributary of the Orewa estuary; to be operational prior to earthworks commencing in the respective catchment.
- A water quality monitoring station site location plan shall be included within the AMP which will illustrate where the monitoring stations will be set up and installed.
- Additional manual monitoring of discharge water clarity at the outlet of all sediment retention ponds during a trigger event.
- Criteria for the discharge from the sites sediment retention ponds, as well as a management programme and actions which outlines the response if discharge criteria is exceeded.
- Criteria for the discharge from the site recorded by the downstream monitoring stations, as well as a management programme and actions which outlines the response if discharge criteria is exceeded.

Advice Note:

A storm trigger event shall be defined as greater than 15mm of rainfall within one hour or greater than 25mm of rainfall within a 24-hour period. We recommend that a rainfall tipping bucket (or similar) is installed on site to measure rainfall and provide rainfall trigger alerts, otherwise the most appropriate Auckland Council rainfall monitoring station is the Orewa @ Treatment Ponds monitoring station.

Advice Note:

The water quality monitoring and sampling shall be undertaken by a suitably experienced person engaged by, but independent from, the project contractor.

68B. Any proposed revisions of the Adaptive Management Plan must be submitted to the Team Leader Northern Monitoring for written approval prior to formalising and implementing the revised Adaptive Management Plan.

68C. If in the Council's opinion, there are changes required to be made to the AMP as a result of observing influences on site or identified within the site reporting, Council may request that the AMP be updated to address these inefficiencies. If a request is made, the revised plan shall be submitted to the Team Leader Northern Monitoring within five working days of the request for written approval prior to implementation.

Advice Note:

The AMP is a live document and updates are expected to address any unforeseen circumstances or changes in the earthworks methodology as the site responds through its adaptive monitoring regime to ensure the potential for sediment discharges are minimised.

68D. The consent holder shall make available all monitoring results and data as required by the AMP upon the request of Auckland Council.

68E. Auckland Council shall be notified of a rainfall trigger event within 12 hours of the event.

68F. All monitoring results should be sent to Auckland Council within 10 working days of the trigger event.

69. On completion of earthworks, an Earthworks Completion Report and a Certificate in the form of Appendix J of the "Standards for Engineering Design and Construction" signed by the Chartered Professional Engineer who designed and supervised the works shall be provided to the Consents Engineer.

70. Upon abandonment or completion of earthworks on the subject site all areas of bare earth shall be permanently stabilised against erosion to the satisfaction of the Team Leader.

Advice Note:

Should the earthworks be completed or abandoned, bare areas of earth shall be permanently stabilised against erosion. Measures may include:

- the use of mulching
- top-soiling, grassing and mulching of otherwise bare areas of earth
- aggregate or vegetative cover that has obtained a density of more than 80% of a normal pasture sward

The ongoing monitoring of these measures is the responsibility of the Consent Holder. It is recommended that you discuss any potential measures with the
Council's monitoring officer who will guide you on the most appropriate approach to take. Please contact the Team Leader Northern Monitoring for more details.
Alternatively, please refer to Auckland Regional Council, Technical Publication GD05. Advice

Note:

In order to prevent sediment laden water entering waterways from the road, the following methods may be adopted to prevent or address discharges should they occur:

- provision of a stabilised entry and exit(s) point for vehicles
- provision of wheel wash facilities
- ceasing of vehicle movement until materials are removed
- cleaning of road surfaces using street-sweepers
- silt and sediment traps
- catchpits or environpods

In no circumstances should the washing of deposited materials into drains be advised or otherwise condoned.

It is recommended that you discuss any potential measures with the Council's monitoring officer who may be able to provide further guidance on the most appropriate approach to take. Please contact the Team Leader Northern Monitoring for more details. Alternatively, please refer to Auckland Regional Council, Technical Publication GD05.

71. The site shall be progressively stabilised against erosion at all stages of the earthwork activity, and shall be sequenced to minimise the discharge of contaminants to groundwater or surface water.

Advice Note:

Earthworks shall be progressively stabilised against erosion during all stages of the earthwork activity. Interim stabilisation measures may include: □ the use of waterproof covers, geotextiles, or mulching

- top-soiling and grassing of otherwise bare areas of earth
- aggregate or vegetative cover that has obtained a density of more than 80% of a normal pasture sward

It is recommended that you discuss any potential measures with the Council's monitoring officer who may be able to provide further guidance on the most appropriate approach to take. Please contact the Team Leader Northern Monitoring for more details. Alternatively, please refer to Auckland Regional Council, Technical Publication GD05.

72. All perimeter controls shall be operational before earthworks commence. All 'cleanwater' runoff from stabilised surfaces including catchment areas above the site shall be diverted away from earthworks areas via a stabilised system, so as to prevent surface erosion.

Advice Note:

Perimeter controls include cleanwater diversions, silt fences and any other erosion control devices that are appropriate to divert stabilised upper catchment runoff from entering the site, and to prevent sediment-laden water from leaving the site.

73. All diversion drains shall be armoured where they are on grades that exceed two percent.

74. No sediment laden runoff shall leave the site without prior treatment via an approved sediment control device.

Seasonal Restrictions

75. No earthworks on the site shall be undertaken between 30 April and 1 October in any year, without the prior written approval of the Team Leader Northern Monitoring at least two weeks prior to 30 April of any year. Revegetation/stabilisation is to be completed by 30 April in accordance with measures detailed in GD05 and any amendments to this document.

Conditions relating to LUS60048380 (streamworks)

Duration

76. Permit LUS60048380 shall expire 35 years from the date it has been granted unless it has been surrendered or cancelled at an earlier date pursuant to the Act.

Seasonal Restrictions

77. No streamworks on the site shall be undertaken between 30 April and 1 October in any year, without the prior written approval of the Team Leader Northern Monitoring at least two weeks prior to 30 April of any year. Revegetation/stabilisation is to be completed by 30 April in accordance with measures detailed in GD05 and any amendments to this document.

Conditions relating to DIS60048302 (stormwater)

Duration

78. Stormwater diversion and discharge permit REG- 66078 shall expire 35 years from the date it has been granted unless it has lapsed, been surrendered or been cancelled at an earlier date pursuant to the RMA.

Stormwater works

79. The following stormwater management works shall be constructed for the following catchment areas and to the following design guidelines, and completed prior to discharges commencing from the site.

Works to be undertaken	Catchment area	Design guideline(s)
Rain Gardens and Bio-retention swales	Various – to be confirmed at detail design	Water quality treatment to a minimum 75% TSS removal standard on a long term annual average basis in accordance with TP10 or higher standard. Extended detention of the first 34.5mm of rainfall over a 24-hour period in accordance with TP10 or higher standard.
Raingardens on Street or Accessway		Additional water quality and extended detention benefits, above those associated with the larger downstream devices. For rain gardens on individual lots, extended detention of the first 34.5mm of rainfall over a 24hour period in accordance with TP10 or higher standard.
Rain gardens on street or accessway in Stage 1	Stage 1	As for raingardens. *Note: This is because there are no downstream treatment devices proposed in Stage 1.*
Roof material	All	No exposed unpainted metal surfaces
Reuse rain tanks	All Lots	Minimum 10mm retention volume for reuse within each dwelling and extended detention of the first 34.5mm of rainfall over a 24hour period in accordance with TP10 or higher standard.

Wetland Treatment devices	As shown on Airey Consultants plans, to be confirmed at detailed design.	Water quality treatment to a minimum 75% TSS removal standard on a long term annual average basis in accordance with TP10 or higher standard. Extended detention of the first 34.5mm of rainfall over a 24-hour period in accordance with TP10 or higher standard.
Outfall	All	Rock riprap structure Erosion protection in accordance with TP10

80. As built drawings of the facilities including a site survey shall be provided to the Council upon completion. The stormwater wetland treatment devices serving each relevant stage shall be completed prior to applying for the 224(c) for that stage of the subdivision.

81. All works impacting on land and assets within the NZTA Designation shall be designed and carried out in accordance with the NZ Transport Agency State Highway Stormwater Specification (P46).

82. All stormwater treatment works impacting on land and assets within the NZTA Designation shall be carried out in accordance with TP10 and reflecting the intent of Auckland Council's GD01 and GD04.

83. All stormwater culverts on land and assets within the NZTA Designation shall be fitted with security grills to minimise culvert safety risks. At the detailed engineering design phase and prior to the commencement of construction, the applicant shall provide design details to the satisfaction of the NZ Transport Agency.

84. All stormwater ponds on the boundary of NZ Transport Agency land shall be fenced to minimise pond safety risks. At the detailed engineering design phase and prior to the commencement of construction, the applicant shall provide design details to the satisfaction of the NZ Transport Agency.

85. If, at the detailed engineering design phase the Consent Holder and NZTA determine that there is an increased erosion or flooding risk profile on land and assets within the NZTA Designation (as a result of changes during detailed design of development layout), the Consent Holder shall provide options for erosion and flood management and agree on measures to be implemented in consultation with the NZ Transport Agency.

86. In the event that any minor modifications to the stormwater management system are required, the following information shall be provided:

    - Plans and drawings outlining the details of the modifications; and

- Supporting information that details how the proposal does not affect the capacity or performance of stormwater management system.

All information shall be submitted to, and verified by the Team Leader, prior to implementation.

Advice note:

All proposed changes must be discussed with the Team Leader, prior to implementation. Any changes to the proposal which will affect the capacity of performance of the stormwater system or will result in a change to the conditions of this consent will require an application to be made in accordance with Section 127 of the RMA.

Construction meetings

87. A pre-construction meeting shall be held by the consent holder, prior to commencement of the construction of any stormwater devices onsite and at each stage of the development, that:

(a) is arranged five working days prior to the initiation of the construction of any stormwater devices on the site;

(b) is located on the subject area;

(c) includes representation from the Team Leader; and

(d) includes representation from the site stormwater engineer, contractors who will undertake the works and any other relevant parties.

88. The following information shall be provided at the pre-construction meeting:

(a) timeframes for key stages of the works authorised under this consent;

(b) erosion and sediment control measures during construction activities;

(c) updated wetland planting details;

(d) contact details of the site contractor and site stormwater engineer; and

(e) approved (signed/stamped) construction plans.

89. A post construction site meeting shall be held by the Consent Holder within 20 working days of completion of the stormwater management works at each stage of the development, that:

(a) is located on the subject area;

(b) includes representation from the Team Leader; and

(c) includes representation from the site stormwater engineer, contractors who have undertaken the works and any other relevant parties.

Certification of construction works

90. As-Built certification and plans of the stormwater management works, which are certified (signed) by a Chartered Professional Engineer as a true record of the stormwater management

system, shall be provided to the Team Leader 5 days prior to the post-construction meeting required by this consent.

91. The As-Built plans shall include, but not be limited to:

    (a) the surveyed location (to the nearest 0.1m) and level (to the nearest 0.01m) of the discharge structure, with co-ordinates expressed in terms of NZTM and LINZ datum;

    (b) location, dimensions and levels of any major overland flowpaths including cross sections and long sections;

    (c) plans and cross sections of all stormwater management devices, including confirmation of the Water Quality Volume, storage volumes and levels of any outflow control structure; and

    (d) documentation of any discrepancies between the design plans and the As-Built plans.

Operation and maintenance

92. An Operation and Maintenance Plan shall be submitted to the Team Leader for approval 5 days prior to the post-construction meeting at each stage of the development required by this consent.

93. The Operation and Maintenance Plan shall set out how the stormwater management system is to be operated and maintained to ensure adverse environmental effects are minimised. The plan shall include, but not be limited to:

    (a) a programme for regular maintenance and inspection of the stormwater management system;

    (b) a programme for the collection and disposal of debris and sediment collected by the stormwater management devices or practices;

    (c) a programme for post storm inspection and maintenance;

    (d) a programme for inspection and maintenance of the outfall, including maintenance contracts, where in place;

    (e) any maintenance requirements including frequencies for all devices located within the floodplain of downstream culverts;

    (e) general inspection checklists for all aspects of the stormwater management system, including visual checks;

    (f) a program for inspection and maintenance of vegetation associated with the stormwater management devices; and

    (g) details of who will hold responsibility for long-term maintenance of the stormwater management system and the organisational structure which will support this process.

94. The stormwater management and treatment system shall be managed in accordance with the approved Operation and Maintenance Plan.

95. Any amendments to the Operation and Maintenance Plan shall be submitted to and approved by the Team Leader, in writing prior to implementation.

96. The stormwater management system shall be maintained to minimise erosion, risk of obstruction of the waterway and hazards to safety.

Overland flowpaths

97. For stormwater flows in excess of the capacity of the primary drainage systems, overland flow paths shall be provided and maintained to allow surplus stormwater from critical storms (up to the 100 year ARI event), to discharge with the minimum of nuisance and damage.

98. Roading, kerbs and channels constructed across overland flow paths shall be set at a level that maximises the capture of water by road cesspits. Other than at designated overland flow paths, driveway crossings shall be constructed in order to minimise the overflow of water from the road into private properties.

99. Minimum recommended habitable floor levels shall be stipulated for any lots that are affected by or adjacent to overland flow paths.

Outfall erosion

100. Any stormwater outfalls authorised by this Consent shall incorporate erosion protection measures to minimise the occurrence of bed scour and bank erosion in accordance with TP10/GD01.

Maintenance report

101. A maintenance report shall be provided to the Team Leader Northern Monitoring on request. The maintenance report shall include but not be limited to the following:

    (a) Details of who is responsible for maintenance of the stormwater management system and the organisational structure supporting this process;

    (b) Details of any maintenance undertaken;

    (c) Details of what inspections were completed over the preceding twelve months;

    (d) Details of all inspections and maintenance for the stormwater management system for the preceding three years shall be retained.

Conditions prior to s223 Approval

101. Approvals may be sought under s223 for the stages, super-lots and final lots identified in condition 9.

102. Any s223 approval sought must show all survey information relevant to the stage.

103. Before the Council will approve any survey plan or plans pursuant to s.223 of the Act, the Consent Holder shall:

(a) Show and identify the areas of native bush, riparian margin and boundary planting to be protected, in accordance with the relevant stage of the approved PMP, condition 23, and riparian planting and management plan, condition 29, as “areas to be subject to land covenant” on the survey title plan.

(b) The overland flow path over any of the lots affected shall be defined on the survey plan as an “area to be subject to land covenants”.

(c) Show any areas of land required for vehicular access outside the road network as rights of way available for access for all owners and to be included within the legal structure set up by condition 40.

(d) Show all roads to vest including the three future road reserves to enable connections to the properties to the south of Stage 2 (Carnell property), and to the south of Stages 6 and 7 (Harman and Mayes properties).

(e) The survey title plan shall show and identify any right of way, electricity, telephone and other service supply easements on a Schedule of Memorandum of Easements attached to the cadastral survey dataset as a supporting document.

(f) Pursuant to section 220(1)(b)(iv) of the Act, show any relevant common interests in land in accordance with the approved CAMP.

(g) Apart from Stage 1, show all stormwater ponds identified within a separately identified lot.

(h) Lot 603 (legal access) shall be held as to 24 undivided shares by the owners of lots 106, 107, 125-12+9, 583-85, 591-594, 610 and 611 as tenants in common in the said shares and individual computer registers (certificates of title) shall be issued.

(i) Lot 606 (legal access) shall be held as to 11 undivided shares by the owners of lots 57-62 and 67-71 as tenants in common in the said shares and individual computer registers (certificates of title) shall be issued.

(j) Party wall easements for the retaining walls on the shared boundaries of Lots 116 and 117, 118 and 119, 119 and 120, 120 and 121 and 121 and 122.

(k) Party wall easements shall be provided for any retaining walls (including their drainage and foundations) which cross a common boundary and are located over two or more sites.

Advice Note:

It is recommended that retaining walls which cross common boundaries at right angles should be structurally discontinuous at the boundary unless party wall easements are provided for a reasonable length in each property to allow for potential future maintenance.

(l) That Lot 7 and 8 shall be owned by an Incorporated Society established for the purpose of managing the Lane Way used by Lots 502-514, 518 and 565-568. All owners of Lots 502-514, 518 and 565-568 shall become members of the Incorporated Society.

(m) That Lot 4 shall be owned by an Incorporated Society established for the purpose of managing the Lane Way used by Lots 543-545 and 557-558. All owners of Lots 543-545 and 557-558 shall become members of the Incorporated Society at the relevant stage.

(n) That Lot 3 shall be owned by an Incorporated Society established for the purpose of managing the Lane Way used by Lots 529-531 and Lots 563-564. All owners Lots 529-531 and Lots 563-564 shall become members of the Incorporated Society at the relevant stage.

104. The Consent Holder shall suggest to the Council names, after consultation with Iwi, for the new roads shown on the Scheme Plan together with clearance from Land Information New Zealand, PO Box 5501 Wellington 6145, so that duplication of the name in any other part of the Auckland region is avoided. (Note: the Council shall determine the name having regard to any names so suggested and appropriateness to the area which the new roads will service.) When a name has been resolved by the Council the Consent Holder shall erect nameplates, in accordance with the Council's "Standards for Engineering Design and Construction".

Conditions prior to s224(c) Approval

Section 224(c) certificate

106. Certificates may be sought for the stages, super-lots and final lots as identified in condition 9.

107. All lots for certification must show compliance (for the relevant stage) with the following plans:

(a) Engineering plans identified in condition 13.

(b) Vegetation removal plan in conditions 22.

(c) Planting management plan, conditions 23 to 28.

(d) Streamworks, riparian planting and management plan, conditions 29 and 30.

(e) Lizard management plan, conditions 31 to 35.

(f) Fish capture and relocation plan, condition 36.

(g) Stream and wetland environmental compensation plan, condition 37.

(h) Weed and pest animal control plan, condition 23(e).

(i) Chemical treatment management plan, condition 38.

(j) West Hoe Stream Arch Culvert, condition 39.

(k) Common areas maintenance plan, condition 40.

108. Prior to application for the s224(c) certificate, the Consent Holder shall provide an undertaking in writing from their solicitor that they have implemented the approved CAMP to provide for the

common ownership and future management and maintenance of the private utilities and planted areas.

109. Written confirmation shall be provided from the electricity network supplier responsible for the area, that provision of an electric supply has been made available by underground means to all saleable lots created and that all the network supplier's requirements for making such means of supply available have been met or satisfactory arrangements have been concluded with the Consent Holder to complete the provision of the supply.

110. Prior to application for the first s224(c) certificate, the Consent Holder shall provide details to the satisfaction of the Team Leader that they have established an appropriate Panel to manage the implementation of the approved Design Guidelines, condition 41, for development on each of the lots. The Panel shall be responsible for ensuring building development is progressed in accordance with the Design Guidelines, including the approval of building proposals. Membership of the Panel shall be comprised of:

(a) A representative of the legal entity established by the CAMP, condition 40.

(b) Two qualified professional design experts appointed by the legal entity who hold appropriate qualifications and experience in architecture, landscape architecture or urban design.

110A. The consent holder shall provide to the council's Team Leader - Monitoring North for approval, a finalised set of landscape design drawings and supporting written documentation which have been prepared by a landscape architect or suitably qualified professional. The submitted information shall be consistent with the consented landscape concept plan for the relevant stage and, at a minimum, shall include landscape design drawings, specifications and maintenance requirements for all the streets including:

- An annotated planting plan(s) which communicate the proposed location of street trees and extent of all areas of planting, including any revegetation, reinstatement planting, mitigation planting and natural revegetation.
- A plant schedule based on the submitted planting plan and cross sections which details specific plant species, plant sourcing, the number of plants, height and/or grade (litre) / Pb size at time of planting, and estimated height / canopy spread at maturity
- Details of draft specification documentation for any specific drainage, soil preparation, tree pits, staking, irrigation and mulching requirements for street trees.
- An annotated pavement plan and related specifications, detailing proposed site levels and the materiality and colour of all proposed hard surfacing, and location of vehicle crossings.
- An annotated street furniture plan and related specifications which confirm the location and type of all seats, bins, lights, fences, walls and other structural landscape design elements
- A landscape maintenance plan (report) and related drawings and specifications for all aspects of the finalised landscape design, including in relation to the following requirements:
  - Irrigation
  - Weed and pest control
  - Plant replacement
  - Inspection timeframes
  - Contractor responsibilities

The finalised landscape design shall be consistent with the landscape design intent / objectives identified in the conceptual plans and street cross sections and information referenced in condition 110A.

Advice Note: *Terrace House design needs to ensure that living rooms are appropriately size for the potential number of inhabitants they can accommodate and should have a general width of at least 3.5m for practical and efficient use and internal amenity.*

110B. Prior to the application for the s224c certificate the consent holder shall provide evidence of the number of completed dwellings on site (completion is defined as Council issuing the CCC). No further applications for s224 can be made if the shared cycle/footpath approved under condition 13(m) has not been constructed and more than 300 dwellings have been completed on site.

111. Written confirmation shall be provided from the telecommunications network supplier responsible for the area, that provision of telephone services has been made available by underground means to all saleable lots created and that all the network supplier's requirements for making such services available have been met or satisfactory arrangements have been concluded with the Consent Holder to complete the provision of the service.

112. Stormwater ponds will be maintained after 224(c) approval for 2 years or until 80% of the Lots (of the relevant stage) are developed.

113. All infrastructure servicing any stage is to be installed as per Council's standards.

114. All of the earthworks conditions for each stage shall be met including sign offs and provision of Earthworks completion reports.

115. Wastewater infrastructure shall be installed prior to 224(c) approval.

Conditions to be Complied with on a Continuing Basis

116. The following conditions of consent shall be complied with on a continuing basis by the Consent Holder (which includes the subdividing owner and subsequent owners) and shall be recorded in a consent notice issued pursuant to s221 of the RMA registered on the titles:

(a) The respective owners of areas held in common ownership shall pay the council monitoring charge or charges to recover the actual and reasonable costs that have been incurred to ensure compliance with the conditions attached to this consent. Such charge/s shall be paid as part of the resource consent fee and the Consent Holder will be advised of the further monitoring charge or charges as they fall due. Such further charges are to be paid within one month of the date of invoice.

(b) The areas of native bush and riparian planting to be protected on areas held in common ownership identified in accordance with the planting and management plan and riparian planting and management plan, conditions 23 to 30, shall be protected in perpetuity to the satisfaction of the Team Leader.

(c) The boundary planting on the western and southern boundaries is to be protected in perpetuity.

(d) The owners of the common areas or their successors in title, shall:

- Preserve the native vegetation, wildlife habitats and the natural landscape within the areas of native bush and riparian planting to be protected.

- Not (without the prior written consent of the council and then only in strict compliance with any conditions imposed by the council) cut down, damage or destroy, or permit the cutting down, damage or destruction of the vegetation or wildlife habitats within the areas of native bush and riparian planting to be protected.

- Not do anything that would prejudice the health or ecological value of the areas of native bush and riparian planting to be protected, the long term viability and/or sustainability.

- Control all invasive plants and control pest animals within the areas of native bush and riparian planting to be protected, in accordance with the approved weed and pest animal control plan, condition 23.

- Not to be in breach of this covenant if any area of native bush or riparian planting to be protected dies as a result of fire and/or natural causes not attributable to any act or default on their part for which they are not responsible.

- Maintain an advocacy role with respect to educating and informing the community about the cat-free status of the lots.

(e) If intact subsurface archaeological features or artefacts associated with māori are exposed during any works, it will be necessary to cease works in the vicinity and representatives of the Auckland Council area-based Resource Consenting and Compliance Team, Ngāti Manuhiri and Heritage New Zealand should be notified immediately of the discovery.

(f) Deleted.

(g) Deleted.

(h) No buildings or other structures, including fences, shall be erected, nor shall the ground contour be changed in any way, that would impede the surface flow of stormwater within the overland flow path defined on the survey plan as area subject to land covenants.

(i) All owners must comply with Council's private stormwater disposal standards.

(j) Any buildings erected on all lots shall comply with such specific restrictions that arise as a consequence of recommendations in the Geotechnical Completion Report and Certification, or, when the completed subdivisional works are at variance with the "Standards for Engineering Design and Construction".

(k) Unless otherwise approved by Council, all stormwater from buildings and paved areas on all lots shall be collected and disposed of in accordance with the Engineering and Infrastructure Report prepared by Airey Consultants Ltd 11712-01 November 2015. The rainwater tank to provide the extended detention volume and to provide the 10mm retention shall be installed at the same time as the erection of any buildings or creation of impermeable surfaces on the sites and shall thereafter be maintained to the specified capacity and standard in perpetuity.

(l) If installed, any stability enhancing counterfort drains on or adjacent to affected lots shall be protected by the owner(s) in perpetuity. Any construction that intercepts the drains

shall maintain the integrity of the pipe and drainage medium, and shall reinstate the surface seal above the drainage medium.

(m) Any dwelling constructed or altered on the Lots identified below must be designed, constructed and maintained to achieve a design noise level of 40 dB $L_{Aeq(24h)}$ inside all habitable spaces:

Lots subject to acoustic controls	Stage 1 – Lots 8-16 and 78
	For stages 2 and 4 confirmation shall be provided to Council for approval at s224c stage by a suitably qualified acoustician the lots with will be exposed to traffic noise that is in excess of 57dB$LA_{eq(24h)}$ and therefore require compliance with 116(m) above.

Advice Note:

The lots identified for treatment are based on barrier mitigation being installed in accordance with the report prepared by Hegley Acoustics “Proposed Grand View Estate Subdivision, Hall Farm West, Assessment of Road Traffic Noise”, dated December 2015.

(n) If windows must be closed to achieve the design noise level in condition 116(m), the building must be designed, constructed and maintained with a ventilation and cooling system. For habitable spaces the system must achieve the following:

- Ventilation must be provided to meet Clause G4 of the New Zealand Building Code. At the same time the sound of the system must not exceed 30 dB $L_{eq(30s)}$ when measured 1m away from any grille or diffuser.

- The occupant must be able to control the ventilation rate in increments up to a high air flow setting that provides at least 6 air changes per hour. At the same time the sound of the system must not exceed 35 dB $L_{eq(30s)}$ when measured 1m away from any grille or diffuser.

- The system must provide cooling that is controllable by the occupant and can maintain the temperature at no greater than 25°C. At the same time, the sound of the system must not exceed 35 dB $L_{eq(30s)}$ when measured 1m away from any grille or diffuser.

(o) A design report prepared by an acoustic specialist must be submitted to the Team Leader demonstrating compliance with the acoustic requirements of conditions 116 (m) and (n), prior to construction or alteration of any dwelling on the Lots identified in condition 116(m). The design must take into account future permitted use of the state highway; for existing roads this is achieved by the addition of 3 dB to existing measured or predicted levels by estimating road-traffic noise ten years from completion or alteration of the dwelling.

(p) The use and development of the lots shall be subject to the conditions identified in Table 1 – Land use and development consent notices below.

TABLE 1 – LAND USE AND DEVELOPMENT CONSENT NOTICES

Note: Capitalised letters in the following table refer to the specific consent notices set out below.

Applicable Lots/Areas	**Land Use**	**Built form**	**Guidelines**	**Restrictions**	**Exclusions**
Lots 259, 261, 268-305, 307, 308, 317-323, 325, 332, 334, 373-380, 386-389, 413-450, 459-474, 481, 482 and 491-497	A	E	K	-	N, O
Lots 243-258, 261-267, 326-331, 381-385, 390-412, 451-458, 475-480, 483-490, 498-501	A	F	K	-	
Stage 1 - Lots 1-107, 113-129, 583-586, 591-595 Stage 3 Lots 309-316, 502-518, 529-531, 543-545, 565-575, 598, 599	A	G	K	-	
Stage 2A – Lot 579 Stages 2B, 2C and 2D – Lots 130-250 and 601	A	H	K	-	
Stage 2A – Lots 580 and 581	B	I	K	-	
Lots 130, 579, 580 and 581				L	
All Lots	-	-	-	M	

A. One dwelling per lot, “Accessory Activities” and “Accessory Buildings” (as defined in Chapter J AUP).

B. All land use activities identified in Table H12.4.1 Neighbourhood Centre Zone AUP as permitted activities (excluding (A39) to (A46) – Industry and mana whenua), and including a community centre and appurtenant parking and public open space.

C. Deleted.

D. Deleted.

E. All buildings shall comply with the relevant standards for development in Section H3.6 (Single House Zone) AUP.

F. All buildings shall comply with the relevant standards for development in Section H4.6 (Mixed Housing Suburban Zone) AUP.

G. All buildings shall comply with the relevant standards for development in Section H5.6 (Mixed Housing Urban Zone) AUP.

H. All buildings shall comply with the relevant standards for development in Section H6.6 (Terrace Housing and Apartment Zone) AUP.

I. All buildings shall comply with the relevant standards for development in Section H12.6 (Neighbourhood Centre Zone) AUP.

J. Deleted.

K. The design of any buildings on the lot shall take account of the design guidelines approved under condition 41. The lot owner shall obtain the approval of the Panel established under condition 110 for any building design and such approval shall be submitted to the Council with the lot owners application for building consent.

Where any conflict arises between the development standards that apply to the lot, as set out in Table 1 above, and the design guidelines, the relevant standards shall prevail.

L. There shall be no direct vehicle access onto Road 1 (entrance road) from the lot.

M. No mustelids, rodents, or cats shall be kept on the lot at any time. No more than two dogs shall be kept on the lot at any time. All dogs shall be spayed or neutered, microchipped or identifiable by collar, and kept securely contained on the lots at all times.

N. The consent notice requirements in A to J above will not apply if the owner of the lot obtains a resource consent allowing a different land use, built form or subdivision of the lot.

O. The consent notice requirements in A to J above will cease to apply and expire on the day that a zoning for the land that is not Future Urban zone in the AUP becomes operative for the lot.

(q) The owners of Lots identified in Table 1 within condition 116(p) above, shall at all times when registered as proprietors of the lots:

- be and remain members of any legal entity set up by condition 40; and
- comply with the obligations applying to the lot owners as members of the legal entity, recognising that the legal entity is required to maintain, manage and operate the facilities on the common areas in accordance with all relevant resource and other consents and all statutory and regulatory requirements applying to the facilities from time to time.

(r) Subject to the terms of the approved CAMP, the titles to each of the Lots in Table 1 within condition 116(p) will be subject to encumbrances granted in favour of the legal entity and

Auckland Council (respectively). Such encumbrances will, without limitation, require the owners of each lot to be and remain members of the legal entity and to comply with the obligations of the entity in regard to the common areas. The form of these encumbrances is to be agreed in advance by Auckland Council's solicitors.

Conditions relating to DIS60048335 (wastewater overflow discharge)

117. Wastewater overflow discharges shall be managed in accordance with the conditions of discharge permit R/REG/2013/3743 (overflows to land and water) and R/REG/2013/3755 (overflows to the coastal marine area) held by Watercare Services Limited with the addition of Appendix 2.

Conditions relating to WAT60051016 (water take permit)

Authorised Quantities

118. Permit WAT60051016 shall expire 35 years from the date it has been granted unless it has been surrendered or cancelled at an earlier date pursuant to the Act**.**

119. The abstraction shall not exceed:

    (a) 650 cubic metres per day.

    (b) 159,000 cubic metres per year (for the period commencing 1 June and ending 31 May the following year).

Installation of Water Meter

120. A water meter shall be installed and maintained at the head of the production bore to the satisfaction of the Team Leader – Consents & Compliance, Water Allocation. The water meter and recording device/system shall:

    (a) be fit for the purpose and water it is measuring;

    (b) measure the volume of water taken, with an accuracy of +/- 5% of the actual volume taken;

    (c) be tamper-proof and sealed; and

    (d) be installed and maintained in accordance to the manufacturer’s specifications.

Verification of Water Meter/device accuracy

121. The water meter, and any device or system used to record water take volume, shall be verified insitu as accurate by a suitably qualified professional at the following times:

    (a) Prior to exercise of this permit.

    (b) Within 5 working days of the water meter being serviced or replaced.

(c) By 30 June of the fifth year from the commencement of consent, and thereafter at five yearly intervals.

122. The water meter, its verification and evidence of its accuracy shall be in accordance with the Resource Management (Measurement and Reporting of Water Takes) Regulations 2010 (or any equivalent regulations that may replace them) and a copy of verification shall be provided to the Team Leader – Water Allocation within 10 working days of the meter/devices being verified as accurate.

Water Meter Readings

123. A water meter reading shall be taken from the production bore at weekly intervals consistently at one of these times:

(a) Before pumping starts for the day.

(b) At the end of pumping for that day.

The time, date and water meter readings shall be recorded and supplied to the Council in accordance with the reporting condition below.

Advice Note:

If no water is taken during any period the current meter reading must still be recorded.

Water Level Readings

124. Groundwater levels in the production and monitoring bores shall be measured and recorded at fortnightly intervals during October, and between February-April each year. The water levels shall be measured from the top of the casing, and shall be recorded to the nearest centimetre. The bores should not be pumped for at least 24 hours prior to the water level measurement being taken.

The time and date of the water level reading shall be recorded and supplied to the council in accordance with the reporting condition below.

Water Quality

125. A water sample shall be taken from the production and monitoring bore before the exercise of this consent in the first year to establish a saline trigger level and monitor for saline water intrusion, and thereafter on an annual basis during the months of February, March, April and October each year.

126. The initial sample (i.e. the sample taken prior to the exercise of the consent) shall be analysed for the following parameters:

(a) Conductivity at 25°C (mS/m);

(b) Chloride (Cl);

(c) Sulphate (SO_4);

(d) Temperature of water at the head of the bore;

(e) pH;

(f) Potassium (K);

(g) Silica (SiO_2);

(h) Nitrate nitrogen (NO_3N);

(i) Total Alkalinity ($CaCO_3$);

(j) Calcium Hardness ($CaCO_3$);

(k) Sodium (Na);

(l) Boron (B);

And any other parameters required to obtain an ion balance for the sample of between 95% and 105%.

127. The periodic annual samples shall be analysed for the following parameters:

(a) Conductivity at 25° (mS/m).

(b) Chloride (Cl).

(c) Sulphate (SO_4).

128. Before the water is sampled, water shall be purged from the bore by pumping for sufficient time to allow the volume of water contained in the bore to be completely replaced three times by water from the aquifer. Records shall be kept of the length of time and approximate rate of pumping required to purge the bore and records shall be provided to the Team Leader – Water Allocation, on request. For the annual sampling, the samples should be collected towards the end of a day's pumping, during the peak maximum seasonal pumping. Samples shall be collected and analysed in accordance with "Standard Methods for the Examination of Water and Wastewater" (latest Edition), a joint publication of the American Public Health Association, Water Environmental Federation and the American Water Works Association, or the equivalent as approved in writing by the Team Leader – Water Allocation.

<u>Saline intrusion</u>

129. If any water quality sample exceeds 70mg/l of Chloride, then:

(a) The Team Leader – Water Allocation shall be notified as soon as possible and no later than 2 working days from receipt of the sample analysis.

(b) Sampling of the production and monitoring bores shall be undertaken weekly with the results reported to the Team Leader – Water Allocation within 5 working days of the sample being taken. The weekly monitoring and reporting shall continue until the saline intrusion issue is resolved in accordance with the condition "d" below.

(c) If the saline levels are still being exceeded 21 working days after the initial breach, then within 42 working days of the initial breach a Groundwater Exceedance Report prepared by a suitably qualified hydrogeological professional shall be submitted to the satisfaction of the Team Leader – Water Allocation. The Groundwater Exceedance Report shall assess the reasons for and significance of the exceedance in terms of saline intrusion of the aquifer and shall include a review of all available data, including groundwater levels, groundwater use and groundwater quality. The report shall recommend a programme of remedial actions and timeframes for these actions.

(d) All recommendations specified in the Groundwater Exceedance Report (if such is required), and any other actions directed by the Team Leader – Water Allocation, shall be implemented to the satisfaction of the Team Leader – Water Allocation and shall continue for as long as the groundwater monitoring is considered to be indicative of saline intrusion and/or on-going declining groundwater levels by the Team Leader – Water Allocation.

Water Reporting

130. The following information is to be entered, at the frequency and date specified, to the Council's Water Use Data Management System or to any replacement database identified in writing by the Team Leader – Water Allocation.

Information	**Due Dates for reporting**
Water meter reading including date	By the 15th day of March, June, September and December
Water level reading including time and date	By the end of the month of March, for that respective year*
Water quality including time and date	By the end of the month of March, for that respective year**

***Preferably send water meter and water level information at the same reporting period

**If trigger levels breached for water quality, please send analysis with notification of breach.

Advice Note:

The web address for Council's on-line Water Use Data Management System is: http://maps.arc.govt.nz/hydrotel/cgi-bin/WUDMSWebServer.cgi/login

Please contact the Team Leader Consents and Compliance – Water Allocation to obtain your customer number and password. An on-line manual explaining how to enter and submit your readings is available at the web address specified above.

Environmental Monitoring Report

131. An environmental monitoring report shall be submitted to the satisfaction of the Team Leader – Water Allocation before the month of June 2020, 2025, 2030 and 2035. This report shall provide a summary and analysis of the water use, water level and water quality monitoring for

the previous five years required by the conditions above. The report shall assess the effects of the water take on the aquifer and on other users of the aquifer and the efficient use of the water.

Water Management Plan

132. Prior to the exercise of the consent, a Water Supply Demand Management Plan (WSDMP) shall be prepared by the Consent Holder and submitted to the Team Leader – Water Allocation for approval. The WSDMP shall contain but not necessarily be limited to:

(a) Network efficiency plan.

(b) Water Conservation management plan in accordance with the requirements of the relevant plan provisions (currently Policy E.2.3.(4) of the AUP (OP)).

Review Condition

133. Pursuant to Section 128 of the RMA, the conditions of this consent may be reviewed by the Team Leader at the Consent Holder's cost:

(a) In June 2020 and subsequently at intervals of not less than five years thereafter in order to:

- Deal with any adverse effect on the environment which may arise or potentially arise from the exercise of this consent and which it is appropriate to deal with at a later stage.

- Vary the quantities, monitoring and reporting requirements and performance standards in order to take account of information, including the results of previous monitoring and changed environmental knowledge, on: water use efficiency; water availability, including alternative water sources; actual and potential water use; water flow and level regimes; water quality; and the relationship of Māori with water.

- In the case of a coastal, water or discharge permit, to provide compliance with rules in any regional plan relating to use of water, water or air quality etc. (refer section 128(1)(b) of the RMA) that have been made operative since the commencement of consent.

- In the case of a coastal, water or discharge permit, to provide compliance with any relevant National Environmental Standard that has been made since the commencement of consent.

- At any time, if it is found that the information made available to the Council in the application contained inaccuracies which materially influenced the decision and the effects of the exercise of the consent are such that it is necessary to apply a more appropriate condition.

Advice Note:

The Consent Holder is advised that water supplied for human consumption should meet the requirements of the Drinking Water Standards for New Zealand (2005), the Health

Act 1956, as amended by the Health (Drinking Water) Amendment Act 2007 (HDWAA) and any other Ministry of Health requirements.

Advice notes

1. Please read the conditions of this resource consent carefully and make sure that you understand all the conditions that have been imposed before commencing the development.

2. Development contributions levied under the Local Government Act 2002 are payable in relation to this application. The Consent Holder will be advised of the development contributions payable separately from this resource consent decision. Further information about development contributions may be found on the Auckland Council website at www.aucklandcouncil.govt.nz.

3. Reports and limitations on the land regarding any features or characteristics of the land or works on the land, whether the subject of specific encumbrances on the land or not shall be discoverable as part of the Council's records.

4. The Consent Holder shall obtain all other necessary consents and permits, including those under the Building Act 2004, and the Heritage New Zealand Pouhere Taonga Act 2014. This consent does not remove the need to comply with all other applicable Acts (including the Property Law Act 2007), regulations, relevant Bylaws, and rules of law. This consent does not constitute building consent approval. Please check whether a building consent is required under the Building Act 2004. Please note that the approval of this resource consent, including consent conditions specified above, may affect a previously issued building consent for the same project, in which case a new building consent may be required.

5. The Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA) provides for the identification, protection, preservation and conservation of the historic and cultural heritage of New Zealand. Under s.2 of the HPA, an archaeological site is defined as a place associated with pre-1900 human activity where there may be evidence relation to history of New Zealand. All archaeological sites are protected under the provisions of the HNZPTA. It is an offence under this Act to destroy, damage or modify any archaeological site, whether or not the site is entered on the Heritage
   New Zealand Pouhere Taonga New Zealand Heritage List/Rārangi Kōrero, Historic Areas, Wahi Tapu and Wahi Tapu Areas. An authority is required for such work whether or not the land on which an archaeological site may be present is designated, or a resource, demolition or building consent has been granted, or the activity is permitted in a regional or district plan. It is the responsibility of the Consent Holder (Consent Holder) to consult with the HNZ about the requirements of the HNZPTA and to obtain the necessary authorities under the HNZPTA should these become necessary as a result of any activity associated with the proposed development. For information contact the HNZ Regional Archaeologist – Bev Parslow (09) 307 9923.

6. If required, the Consent Holder shall obtain a permit from the Department of Conservation to move any native lizards, skinks or geckos found on the property during development. The Department of Conservation will consult with iwi in determining whether a Wildlife Act Authority Application for a permit is granted.

7. The following shall be undertaken in accordance with the Cultural Impact Assessment received from Fiona McKenzie, Manuhiri Kaitiaki Charitable Trust dated November 2013:

   a) Prior to works commencing Ngāti Manuhiri shall be given the opportunity to perform a sod turning or blessing ceremony to acknowledge the place and to protect those working on the development. This could be in conjunction with, or in addition to, a pre-construction site meeting.

   b) Environmentally sustainable or recyclable materials and products can contribute to good cultural and environmental outcomes and should be used wherever practicable. For example consider natural floccing products.

   c) That recognition of the cultural values associated with the area be incorporated into the subdivision. Ngāti Manuhiri shall be given the opportunity to put forward traditional names for the new roading and/or track network and/or reserves as a means to reflect their cultural footprint as Mana Whenua.

   d) Considerable riparian and infill planting is proposed for the subdivision. Details of any sub-contract planting (fencing, weeding or other) work shall be made available to Ngāti Manuhiri in good time to allow for the preparation of a tender. Such opportunities allow the Trust to provide employment to rangatahi (young people).

   e) Consideration shall be given to establishing a Pā Harakeke and to commissioning a cultural marker (pou) or sculpture within the development.

8. A copy of this consent should be held on site at all times during the establishment and construction phase of the activity. The Consent Holder is requested to notify council, in writing, of their intention to begin works, a minimum of seven days prior to commencement. Such notification should be sent to the Compliance Administrator, Orewa Service Centre, at ResourceConsentAdmin@aucklandcouncil.govt.nz and include the following details:

   - name and telephone number of the project manager and the site owner;
   - site address to which the consent relates;
   - activity to which the consent relates; and
   - expected duration of works.

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

10. The granting of this resource consent does not in any way allow the Consent Holder to enter and construct drainage within neighbouring property, without first obtaining the agreement of all owners and occupiers of said land to undertake the proposed works. Any negotiation or agreement is the full responsibility of the Consent Holder, and is a private agreement that does not involve council. Should any disputes arise between the private parties, these are civil matters which can be taken to independent mediation or disputes tribunal for resolution. It is recommended that the private agreement be legally documented to avoid disputes arising. To

obtain signoff for the resource consent, the services described by the conditions above are required to be in place to the satisfaction of council.

11. Compliance with the consent conditions will be monitored by council (in accordance with section 35(1)(2)(d) of the RMA). The initial monitoring charge is to cover the cost of inspecting the site, carrying out tests, reviewing conditions, updating files, etc, all being work to ensure compliance with the resource consent. In order to recover actual and reasonable costs, inspections, in excess of those covered by the base fee paid, shall be charged at the relevant hourly rate applicable at the time. Only after all conditions of the resource consent have been met, will council issue a letter on request of the Consent Holder.

12. Ongoing inspections of the covenanted area will be carried out from time to time by council ecologists. These inspections will assess how the covenant is being managed and if the consent conditions are complied with. A report will be produced for the landowner to assist them in the management of the covenant. The inspections are charged at a rate in accordance with the council's schedule of fees.

13. Copies of the approved Weed and Pest Animal Control Plan shall be held at the offices of the council, 50 Centreway Road, Orewa, 0931.

14. A list of all current pest plants and animals can be found in the Auckland Regional Pest Management Strategy (ARPS 2007-2012 or any successive ARPS), available from council, which includes all plants identified in the National Pest Plant Accord (MAF).

15. Any activity pertaining to maintenance of covenant areas, including any required or ancillary structure(s), i.e. culvert or fish passage, may require lodgement for a Resource Consent.

16. Where significant weed and animal populations persist, the Consent Holder may wish to consider Local Landcare Groups, or the employment of a professional contractor to assist with the ongoing management of the protected area.

17. If the ownership or control of the site is to change, the Consent Holder is advised that this consent to divert and discharge stormwater should be transferred to the new owner or operator by notifying Auckland Council on prescribed form.

18. The Consent Holder is advised that any noxious, dangerous, offensive or objectionable odours beyond the property boundary as a result of the treatment and storage of wastewater, or if the number of people serviced by the wastewater plant exceeds 1000 people (municipal sewage), an air discharge consent may be required under Rule 4.5.1(a) of the Auckland Council Regional Plan (Air, Land and Water).

19. Any administrative charge fixed in accordance with Section 36(1) of the Resource Management Act 1991 and any additional charge required pursuant to Section 36(3) of the Act in respect of this consent shall be paid to Auckland Council.

20. The Resource Consent Holder is advised that groundwater supplied for human consumption should meet the requirements of the Drinking Water Standards for New Zealand (2005), and any other Ministry of Health requirements, such as those contained in the Health (Drinking Water) Amendment Act 2007.

Appendix 1: Consolidated plans as amended

Drawing No.	Rev/ Ref	Title	Prepared by	Date
Engineering Plans				
712/1		Road Access off Northern Motorway Interchange	Traffic Solutions Ltd	9 August 2016
100	Rev K	Proposed Site Plan and Aerial Photograph	Crang Civil	29/10/24
101	Rev N	Proposed Staging Plan	Crang Civil	29/10/24
105	Rev J	Scheme Plan Comparison with Consented Development	Crang Civil	30/09/24
200	Rev M	Proposed Finished Contour Plan	Crang Civil	30/09/24
201	Rev J	Proposed Cut-Fill Plan	Crang Civil	30/09/24
205	Rev M	Proposed Slope Analysis Plan Slopes Greater than 1 in 3	Crang Civil	30/09/24
210	Ref G	Stage 2 – Earthworks & Sediment Control Plan	Crang Civil	30/09/24
211	Rev A	Stage 2 – Proposed Earthworks & Sediment Control Plan	Crang Civil	02/10/24
220	Rev E	Stage 1 – Earthworks & Sediment Control Plan	Airey Consultants Ltd	May 2019
222	Rev B	Proposed Earthworks within NZTA Land	Crang Civil	13/04/23
230	Rev E	Stage 3 – Earthworks & Sediment Control Plan	Airey Consultants Ltd	02/06/21
240	Rev E	Stage 4 – Earthworks & Sediment Control Plan	Airey Consultants Ltd	02/06/21
250	Rev E	Stage 5 – Earthworks & Sediment Control Plan	Airey Consultants Ltd	02/06/21
260	Rev E	Stage 6 – Earthworks & Sediment Control Plan	Airey Consultants Ltd	02/06/21
270	Rev E	Stage 7 – Earthworks & Sediment Control Plan	Airey Consultants Ltd	02/06/21
280	Rev E	Stage 8 – Earthworks & Sediment Control Plan	Airey Consultants Ltd	02/06/21
300	Rev M	Proposed Road Layout Plan	Crang Civil	30/09/24
301	Rev M	Proposed Road Layout Plan – Sheet 1 of 5	Crang Civil	30/09/24
302	Rev F	Proposed Road Layout Plan – Sheet 2 of 5	Airey Consultants Ltd	02/06/21
303	Rev F	Proposed Road Layout Plan – Sheet 3 of 5	Airey Consultants Ltd	02/06/21
304	Rev F	Proposed Road Layout Plan – Sheet 4 of 5	Airey Consultants Ltd	02/06/21

Drawing No.	Rev/ Ref	Title	Prepared by	Date
305	Rev B	Proposed Road Layout Plan – Sheet 5 of 5	Airey Consultants Ltd	02/06/21
310	Rev F	Footpath Enabling Plan	Airey Consultants Ltd	November 2018
311	Rev H	Stage 2 – Road Enabling Plan	Crang Civil	30/09/24
312	Rev H	Stage 2 – Completed Road Plan	Crang Civil	30/09/24
313	Rev F	Stage 2 – Entrance Road Long Section	Crang Civil	30/09/24
314	Rev F	Stage 2 – Roads 10 & 12 Long Sections	Crang Civil	30/09/24
315	Rev F	Stage 2 – Road 13 Long Section	Crang Civil	30/09/24
316	Rev B	Stage 2 – Road 13 Long Section Chainages 600m-END	Airey Consultants Ltd	29 Nov 2018
320	Rev F	Stage 1 – Road Enabling Plan	Airey Consultants Ltd	May 2019
321	Rev F	Stage 1 – Completed Road Plan	Airey Consultants Ltd	May 2019
322	Rev C	Stage 1 – Entrance Road Long Section	Airey Consultants Ltd	30 Nov 2018
323	Rev D	Stage 1 – Road 1A & Road 2 Long Section	Airey Consultants Ltd	30 Nov 2018
324	Rev D	Stage 1 – Roads 3 4 & 5 Long Section	Airey Consultants Ltd	30 Nov 2018
325	Rev C	Stage 1 – Road 6 7 & 8 Long Sections	Airey Consultants Ltd	30 Nov 2018
330	Rev E	Stage 3 – Road Enabling Plan	Airey Consultants Ltd	02/06/21
331	Rev E	Stage 3 – Completed Road Plan	Airey Consultants Ltd	02/06/21
332	Rev D	Stage 3 – Road 1 & 40 Long Sections	Airey Consultants Ltd	02/06/21
333	Rev D	Stage 3 – Road 50 & Access 30 Long Sections	Airey Consultants Ltd	02/06/21
334	New Sheet	Stage 3 – Roads 32-33 and Accessways 35-37 Long Sections	Airey Consultants Ltd	02/06/21
340	Rev D	Stage 4 – Road Enabling Plan	Airey Consultants Ltd	02/06/21
341	Rev D	Stage 4 – Completed Road Plan	Airey Consultants Ltd	02/06/21
342	Rev C	Stage 4 – Road 40 Long Section	Airey Consultants Ltd	02/06/21
343	Rev C	Stage 4 – Road 40 & 41 Long Sections	Airey Consultants Ltd	02/06/21

Drawing No.	Rev/ Ref	Title	Prepared by	Date
344	Rev B	Stage 4 – Road 42 & 43 Long Sections	Airey Consultants Ltd	30 July 2018
350	Rev C	Stage 5 – Road Enabling Plan	Airey Consultants Ltd	July 2018
351	Rev C	Stage 5 – Completed Road Plan	Airey Consultants Ltd	July 2018
352	Rev B	Stage 5 – Road 1 Long Section	Airey Consultants Ltd	30 July 2018
353	Rev C	Stage 5 – Road 50 Long Section	Airey Consultants Ltd	30 July 2018
354	Rev A	Stage 5 – Access 51, 52 & 53 Long Sections	Airey Consultants Ltd	30 July 2018
360	Rev C	Stage 6 – Road Enabling Plan	Airey Consultants Ltd	July 2018
361	Rev C	Stage 6 – Completed Road Plan	Airey Consultants Ltd	July 2018
362	Rev B	Stage 6 – Road 1 Long Section	Airey Consultants Ltd	30 July 2018
363	Rev B	Stage 6 – Road 60 Long Section	Airey Consultants Ltd	30 July 2018
364	Rev B	Stage 6 – Road 61 & 62 Long Sections	Airey Consultants Ltd	30 July 2018
370	Rev C	Stage 7 – Road Enabling Plan	Airey Consultants Ltd	July 2018
371	Rev C	Stage 7 – Completed Road Plan	Airey Consultants Ltd	July 2018
372	Rev B	Stage 7 – Road 60 Long Section	Airey Consultants Ltd	30 July 2018
373	Rev B	Stage 7 – Road 70 & 71 Long Sections	Airey Consultants Ltd	30 July 2018
380	New Sheet	Stage 8 – Road Enabling Plan	Airey Consultants Ltd	May 2021
381	New Sheet	Stage 8 – Completed Road Plan	Airey Consultants Ltd	May 2021
382	New Sheet	Stage 8 – Road 50 and Access 80 Long Sections	Airey Consultants Ltd	31/05/21
400	Rev L	Proposed Stormwater Layout & Flood Plan	Crang Civil	30/09/24
401	Rev B	Wetland 1 Details	Airey Consultants Ltd	December 2018
402	Rev B	Wetland 2 Details	Airey Consultants Ltd	02/06/21
403	Rev C	Wetland 3 Details	Airey Consultants Ltd	December 2018
404	Rev C	Wetland 4 Details	Airey Consultants Ltd	December 2018

Drawing No.	Rev/ Ref	Title	Prepared by	Date
405	Rev B	Wetland 5 Details	Airey Consultants Ltd	02/06/21
406	Rev B	Proposed Raingarden Typical Details	Airey Consultants Ltd	6 August 2018
407	Rev B	Arch Bridge Typical Detail	Airey Consultants Ltd	6 August 2018
408	Rev D	Bio-Retention Details (Sheet 1 of 2)	Crang Civil	30/09/24
409	Rev D	Bio-Retention Details (Sheet 2 of 2)	Crang Civil	30/09/24
410	Rev I	Stage 2 – Stormwater Enabling Plan	Crang Civil	30/09/24
411	Rev I	Stage 2 – Completed Stormwater Plan	Crang Civil	30/09/24
420	Rev F	Stage 1 – Stormwater Enabling Plan	Airey Consultants Ltd	8 May 2019
421	Rev F	Stage 1 – Completed Stormwater Plan	Airey Consultants Ltd	8 May 2019
430	Rev E	Stage 3 – Stormwater Enabling Plan	Airey Consultants Ltd	02/06/21
431	Rev E	Stage 3 – Completed Stormwater Plan	Airey Consultants Ltd	02/06/21
440	Rev C	Stage 4 – Stormwater Enabling Plan	Airey Consultants Ltd	3 August 2018
441	Rev C	Stage 4 – Completed Stormwater Plan	Airey Consultants Ltd	3 August 2018
450	Rev C	Stage 5 – Stormwater Enabling Plan	Airey Consultants Ltd	3 August 2018
451	Rev C	Stage 6 – Completed Stormwater Plan	Airey Consultants Ltd	3 August 2018
460	Rev C	Stage 6 – Stormwater Enabling Plan	Airey Consultants Ltd	3 August 2018
461	Rev C	Stage 6 – Completed Stormwater Plan	Airey Consultants Ltd	3 August 2018
470	Rev C	Stage 7 – Stormwater Enabling Plan	Airey Consultants Ltd	3 August 2018
471	Rev C	Stage 7 – Completed Stormwater Plan	Airey Consultants Ltd	3 August 2018
480	Rev E	Stage 8 – Stormwater Enabling Plan	Airey Consultants Ltd	02/06/21
481	Rev E	Stage 8 – Completed Stormwater Plan	Airey Consultants Ltd	02/06/21
500	Rev L	Proposed Wastewater Layout Plan	Crang Civil	30/09/24
501	Rev E	Preliminary Wastewater Pump Station Layout Plans	Crang Civil	13/04/23

Drawing No.	Rev/ Ref	Title	Prepared by	Date
510	Rev E	Stage 1 – Wastewater Connection to Existing – Enabling Plan	Airey Consultants Ltd	30 Nov 2018
511	Rev I	Stage 2 – Wastewater Enabling Plan	Crang Civil	30/09/24
512	Rev I	Stage 2 – Completed Wastewater Plan	Crang Civil	30/09/24
515	Rev A	Stage 1 Wastewater Enabling Longsection (Sheet 1 of 2)	Airey Consultants Ltd	6 August 2018
516	Rev B	Stage 1 Wastewater Enabling Longsection (Sheet 2 of 2)	Airey Consultants Ltd	4 October 2018
520	Rev F	Stage 1 – Wastewater Enabling Plan	Airey Consultants Ltd	8 May 2019
521	Rev F	Stage 1 – Completed Wastewater Plan	Airey Consultants Ltd	8 May 2019
530	Rev D	Stage 3 – Wastewater Enabling Plan	Airey Consultants Ltd	02/06/21
531	Rev D	Stage 3 – Completed Wastewater Plan	Airey Consultants Ltd	02/06/21
540	Rev C	Stage 4 – Wastewater Enabling Plan	Airey Consultants Ltd	3 August 2018
541	Rev C	Stage 4 – Completed Wastewater Plan	Airey Consultants Ltd	3 August 2018
550	Rev C	Stage 5 – Wastewater Enabling Plan	Airey Consultants Ltd	3 August 2018
551	Rev C	Stage 5 – Completed Wastewater Plan	Airey Consultants Ltd	3 August 2018
560	Rev C	Stage 6 – Wastewater Enabling Plan	Airey Consultants Ltd	3 August 2018
561	Rev C	Stage 6 – Completed Wastewater Plan	Airey Consultants Ltd	3 August 2018
570	Rev C	Stage 7 – Wastewater Enabling Plan	Airey Consultants Ltd	3 August 2018
571	Rev C	Stage 7 – Completed Wastewater Plan	Airey Consultants Ltd	3 August 2018
580	Rev E	Stage 8 – Wastewater Enabling Plan	Airey Consultants Ltd	02/06/21
581	Rev E	Stage 8 – Completed Wastewater Plan	Airey Consultants Ltd	02/06/21
600	Rev A	Water Supply Enabling Plan	Airey Consultants Ltd	August 2018
601	Rev A	Water Supply Enabling Longsection under Motorway	Airey Consultants Ltd	August 2018
5011	Rev A	Contours Plan Lots 67-77	Airey Consultants Ltd	20 March 2020

Drawing No.	Rev/ Ref	Title	Prepared by	Date
5012	Rev A	Earthworks Plan Lots 67-77	Airey Consultants Ltd	20 March 2020
5013	Rev A	Retaining Walls Lots 67-77	Airey Consultants Ltd	20 March 2020
5021	Rev A	Contour Plan	Airey Consultants Ltd	12 March 2020
5022	Rev A	Earthworks Plan Lots 17-34	Airey Consultants	12 March 2020
5023	Rev A	Retaining Walls Lots 17-34	Airey Consultants Ltd	20 March 2020
5051	Rev A	Contours Plans Lots 117-124	Airey Consultants Ltd	20 March 2020
5052	Rev A	Earthworks Plans Lots 117-124	Airey Consultants Ltd	20 March 2020
5053	Rev A	Retaining Walls Lots 117-124	Airey Consultants Ltd	20 March 2020
5101	Rev A	Retaining Walls Details 0.60m and 1.00m high	Airey Consultants Ltd	12 March 2020
5102	Rev A	Retaining Walls Details 1.4m high	Airey Consultants Ltd	12 March 2020
5103	Rev A	Retaining Walls Details 0.60m and 1.00m High (Battered Slopes)	Airey Consultants Ltd	20 March 2020
5104	Rev A	Retaining Walls Details 1.40m High (Battered Slopes)	Airey Consultants Ltd	20 March 2020
5105	Rev A	Retaining Walls Table	Airey Consultants Ltd	20 March 2020
SK005	Rev A	NZTA Earthworks Plan	Crang Civil	16/06/22
SK006	Rev A	NZTA Cut Plan	Crang Civil	16/06/22
SK020	Rev A	Waka Kotahi Design Cross Sections Plan	Crang Civil	04/05/23
SK021	Rev A	Waka Kotahi Design Cross Sections Sheet 1	Crang Civil	04/05/23
SK022	Rev A	Waka Kotahi Design Cross Sections Sheet 2	Crang Civil	04/05/23
Subdivision Plans				
Sheet 1 of 7	P	Scheme Plan Overall	Survey Worx	28/11/24
Sheet 2 of 7	P	Scheme Plan Stage 2A	Survey Worx	28/11/24
Sheet 3 of 7	P	Scheme Plan Stage 2A	Survey Worx	28/11/24
Sheet 4 of 7	P	Scheme Plan Stage 2A	Survey Worx	28/11/24
Sheet 5 of 7	P	Scheme Plan Stage 2B	Survey Worx	28/11/24

Drawing No.	Rev/ Ref	Title	Prepared by	Date
Sheet 6 of 7	P	Scheme Plan Stage 2C	Survey Worx	28/11/24
Sheet 7 of 7	P	Scheme Plan Stage 2D	Survey Worx	28/11/24
S1	Sheet 1	Stage 1 Scheme Plan	Hampson & Associates Ltd	9 April 2020
S1	Sheet 2	Stage 1 Scheme Plan	Hampson & Associates Ltd	9 April 2020
S1	Sheet 3	Stage 1 Scheme Plan	Hampson & Associates Ltd	9 April 2020
S3	Sheet 1	Stages 3A-1, 3A-2. 3A-3 and 3B Scheme Plan	Hampson & Associates Ltd	01 Mar 2023
S3	Sheet 2	Stages 3A-1, 3A-2, 3A-3 and 3B Scheme Plan	Hampson & Associates Ltd	01 Mar 2023
S3	Sheet 3	Stages 3A-1, 3A-2, 3A-3 and 3B Scheme Plan	Hampson & Associates Ltd	01 Mar 2023
S3	Sheet 4	Stages 3A-1, 3A-2, 3A-3 and 3B Scheme Plan	Hampson & Associates Ltd	01 Mar 2023
S3	Sheet 5	Stages 3A-1, 3A-2, 3A-3 and 3B Scheme Plan	Hampson & Associates Ltd	01 Mar 2023
S3	Sheet 6	Stages 3A-1, 3A-2, 3A-3 and 3B Scheme Plan	Hampson & Associates Ltd	01 Mar 2023
S4	Sheet 1	Stage 4 Scheme Plan	Hampson & Associates Ltd	16 October 2015
S4	Sheet 2	Stage 4 Scheme Plan	Hampson & Associates Ltd	17 September 2015
S5	Sheet 1	Stage 5 Scheme Plan	Hampson & Associates Ltd	14 July 2021
S5	Sheet 2	Stage 5 Scheme Plan	Hampson & Associates Ltd	17 September 2015
S6	Sheet 1	Stage 6 Scheme Plan	Hampson & Associates Ltd	14 July 2021
S6	Sheet 2	Stage 6 Scheme Plan	Hampson & Associates Ltd	14 July 2021
S7	Sheet 1	Stage 7 Scheme Plan	Hampson & Associates Ltd	16 July 2021
S7	Sheet 2	Stage 7 Scheme Plan	Hampson & Associates Ltd	16 July 2021
S8	Sheet 1	Stage 8 Scheme Plan	Hampson & Associates Ltd	27 October 2015
S8	Sheet 2	Stage 8 Scheme Plan	Hampson & Associates Ltd	17 September 2015
Character Area, Structure Plan and Revegetation/ Open Space Plans				

Drawing No.	Rev/ Ref	Title	Prepared by	Date
Figure 8	A	Proposed Character Areas	Boffa Miskell Limited	7 August 2018
Figure 9	Rev 8	Concept Structure Plan	Boffa Miskell Limited	10 Sep 2024
Figure 11	Rev 17	Revegetation and Open Space Concept	Boffa Miskell Limited	10 Sep 2024
-	1	Detail Stage 1: Proposed Land Uses (with underlying proposed zoning)	Boffa Miskell Limited	30 June 2017
	1	Detail Stage 1: Indicative areas for integrated residential development (with underlying proposed zoning)	Boffa Miskell Limited	30 June 2017
SK02	F	Overall Site Plan – Stage 1	Construkt	16 April 2020
SK03	F	Stage 1 Site Presentation Plan	Construkt	16 April 2020
SK04	D	Stage 1 Roading Plan	Construkt	15 May 2019
SK10	B	Road Cross Sections	Construkt	6 Dec 2018
SK11	B	Road Cross Sections	Construkt	6 Dec 2018
SK12	C	Road Cross Sections	Construkt	15 May 2019
SK13	B	Road Cross Sections	Construkt	6 Dec 2018
SK14	B	Homezone Sample Plan	Construkt	15 May 2019
Fig 1	2	Tree Planting Strategy	Boffa Miskell	13 May 2019
Fig 2	2	Stage 1 – Street Tree Palette	Boffa Miskell	13 May 2019
Fig 3	2	Stage 1 – Street Tree Palette	Boffa Miskell	13 May 2019
Fig 4	2	Stage 1 – Street Tree Palette	Boffa Miskell	13 May 2019
Fig 5	2	Stage 1 - Planting Palette	Boffa Miskell	13 May 2019
Fig 6	2	Stage 1 - Planting Palette	Boffa Miskell	13 May 2019
Fig 7	2	Planting Palette	Boffa Miskell	13 May 2019
	Rev F	Ara Hills Stage 2 Landscape Package for s127	Boffa Miskell	13 September 2024
		Ara Hills Stage 2 Design Guidance	Oculus	13 Sept 2021

Resource Consent Notice of Works Starting

Please email this form to **monitoring@aucklandcouncil.govt.nz at least *5* days prior to work starting** on your development or post it to the address at the bottom of the page.

Site address:				
AREA (please tick the box)	**Auckland CBD☐**	**Auckland Isthmus☐**	**Hauraki Gulf Islands ☐**	**Waitakere ☐**
Manukau ☐	**Rodney ☐**	**North Shore ☐**	**Papakura ☐**	**Franklin ☐**

Resource consent number:	**Associated building consent:**
Expected start date of work:	**Expected duration of work:**

Primary contact	**Name**	**Mobile / Landline**	**Address**	**Email address**
Owner				
Project manager				
Builder				
Earthmover				
Arborist				
Other (specify)				

Signature: Owner / Project Manager (indicate which)	**Date:**

Once you have been contacted by the Monitoring Officer, all correspondence should be sent directly to them.

SAVE $$$ minimise monitoring costs!

The council will review your property for start of works every three months from the date of issue of the resource consent and charge for the time spent. You can contact your Resource Consent Monitoring Officer on 09 301 0101 or via monitoring@aucklandcouncil.govt.nz to discuss a likely timetable of works before the inspection is carried out and to avoid incurring this cost.

Decision following the hearing of an application for resource consent under the Resource Management Act 1991

Proposal

To subdivide the two existing rural lots providing for 575 lots, including 17 mixed use lots, ranging from 230m^2 to 2,000m^2, roads and utility/recreational reserves to vest, the taking of water for domestic consumption, the diverting, bridging and reclamation of streams, associated earthworks and vegetation removal and re-planting, and the discharge of stormwater and occasional wastewater overflows.

This resource consent is GRANTED, but excludes consent for the subdivision of Lots 93 to 109 and Lots 576 to 580, such lots all being part of the proposed Neighbourhood Centre. The reasons are set out below.

Application numbers:	BUN20441333, SUB60035991, LUC60010513, DIS60048302, DIS60048335, LUS60048380 & WAT60051016
Site address:	'Hall Farm', Lot 3 DP 327701 and Lot 1 DP 310813, State Highway 1, Upper Orewa
Applicant:	Orewa West Investments Limited
Hearing commenced:	9.30am, 14 & 16 June 2017 and reconvened at 1.00pm, 4 July 2017
Hearing Panel:	Dave Serjeant (Chairperson) Juliane Chetham Hugh Leersnyder Vanessa Neeson - Local Board Member
Appearances:	<u>For the Applicant:</u> Kitt Littlejohn, Legal Counsel Amelia Alden, Legal Counsel Simon Herbert – Applicant Greg Kernohan – Applicant Mike Lee, Engineering Phil Jaggard, Wastewater Ian Constable, Traffic Paul Hardcastle, Geotechnical Engineering John Goodwin, Landscape Lisa Mein, Urban Design Ian Boothroyd, Ecology Craig Shearer, Planning Jose Rodriguez, Principal Designer, Boffa Miskell

	<u>For the Submitters:</u> Alan, Dion and Melanie Mayes and Barry and Brendan Smith c/- Diana Bell (OPC Limited) Forest & Bird Society, Hibiscus Coast Branch C/- Philip Wrigley and Dr Margaret Stanley Rodney Harman <u>For Council:</u> Steve Seager, Team Leader Kate Madsen, Reporting Officer John Stenberg, Urban Designer Dave Paul, Policy Planner Rue Statham, Ecologist Dylan Walton, Wastewater NRSI Ray Smith, Development Engineer Jack Turner, Stormwater Engineer Mark Iszard, Stormwater Unit Arsini Hanna, Senior Specialist Advisor - Stormwater Matthew Byrne, Streamworks/Regional Earthworks Josh Markham, Streamworks David Mitchell, Traffic Mitra Prasad, Auckland Transport Lorraine Stone, Auckland Transport Emma Petrenas, Hearings Advisor
Hearing adjourned	Tuesday, 4 July 2017
Commissioners' site visit	Monday, 12 June 2017
Hearing Closed:	Monday, 17 July 2017

Introduction

1. This decision is made on behalf of the Auckland Council ("the Council") by Independent Hearing Commissioners Dave Serjeant, Juliane Chetham, Hugh Leersnyder and Vanessa Neeson appointed and acting under delegated authority under sections 34 and 34A of the Resource Management Act 1991 (**the RMA**).

2. This decision contains the findings from our deliberations on the application for resource consent and has been prepared in accordance with section 113 of the RMA.

3. The applications were publicly notified on 20 January 2017. A total of 10 submissions were received, with two in support, one neutral and seven in opposition.

Summary of proposal and activity status

4. The applicant proposes to subdivide the two existing rural lots providing for 575 lots, including 17 mixed use lots, ranging from 230m^2 up to 2,000m^2, roads and utility/recreational reserves to vest, the taking of water for domestic consumption, the diverting, bridging and reclamation of streams, associated earthworks and vegetation removal and re-planting, and the discharge of stormwater and occasional wastewater overflows. The proposal requires resource consent for the following reasons.

Land use consents (s9)

District land use

- E12.4.1 (A6) Earthworks greater than 2500m^2 and (A10) Earthworks greater than 2500m^3 in the Future Urban Zone is a Restricted Discretionary activity.
- E15.4.1 (A19) Vegetation alteration or removal within 10m of urban streams; (A20) Vegetation alteration or removal of greater than 25m^2 of contiguous vegetation, or tree alteration or tree removal of any indigenous tree over 3m in height, within 50m of MHWS in the Future Urban Zone and (A21) Vegetation alteration or removal of greater than 25m^2 of contiguous vegetation, or tree alteration or tree removal of any indigenous tree over 3m in height, within 20m of MHWS in the Future Urban Zone is a Restricted Discretionary activity.

Regional land use

- Natural Resources Rules (Taking, using, damming & diversion of water) Table E7.4.1 Activity Table (A41) New bores for purposes not otherwise specified, as a controlled activity.
- E11.4.1 (A5) Earthworks greater than 50,000m^2 where land has a slope less 10 degrees outside of the Sediment Control Protection Area (SCPA); (A9) Earthworks greater than 2500m^2 within the SCPA is a Restricted Discretionary activity.
- E11.4.3 (A28) Earthworks greater than 5m^2 and (A3) Earthworks greater than 5m^3 in an Significant Ecological Area is a Restricted Discretionary activity.
- E15.4.2 (A43) Any vegetation alteration or removal not otherwise provided for in an Significant Ecological Area is a Discretionary activity.

National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health

- Land use consent for change of use of land from rural to urban where a detailed site investigation confirms the soil contamination for DDT

contaminants is within the soil contaminant standard / guideline value (greater than 25m^3 of soil will be disturbed per 500m^2 of the site), as a controlled activity under regulation 9(3).

Subdivision consents (s11)

- Subdivision Rules: Table E39.4.3 Subdivision in Future Urban Zone – (A28) Subdivision for open spaces, reserves or road realignment, as a discretionary activity
- Subdivision Rules: Table E39.4.3 Subdivision in Future Urban Zone – (A29) Any other subdivision not provided for in Table E39.4.1 or E39.4.3, as a non-complying activity.

Streamworks consents (ss13 & 14)

- Natural Resources Rules (Lakes, rivers, streams & wetlands) Table E3.4.1 Activity table - (A19) Diversion of a river or stream to a new course and associated disturbance and sediment discharge, as a discretionary activity.
- Natural Resources Rules (Lakes, rivers, streams & wetlands) Table E3.4.1 Activity Table - (A29) for the construction of an arch-bridge (arch culvert) over a permanent stream within a Significant Ecological Area, as a discretionary activity.
- Natural Resources Rules (Lakes, rivers, streams & wetlands) Table E3.4.1 Activity table (A49) New reclamation or drainage, including filling over a piped stream, as a non-complying activity.

Groundwater consents (s14)

- Natural Resources Rules (Taking, using, damming and diversion of water and drilling) Table E7.4.1 Activity Table (A26) Take and use of groundwater not meeting the permitted activity or restricted discretionary activity standards or not otherwise listed, as a discretionary activity.

Stormwater permits (ss14 & 15)

- Natural Resources Rules (Stormwater – Discharge & diversion) Table E8.4.1 Activity table (A5) Diversion and discharge of stormwater runoff from additional impervious areas greater than 5,000m^2 of road (which include road ancillary areas that are part of a road, motorway or state highway operated by a road controlling authority) or rail corridor that complies with Standard E8.6.1 and Standard E8.6.4.1, as a restricted discretionary activity.
- Natural Resources Rules (Stormwater – Discharge & diversion) Table E8.4.1 Activity table – (A11) Diversion and discharge of stormwater runoff from an existing or a new stormwater network, as a discretionary activity.

Discharge permits (s15)

- Natural Resources Rules (Wastewater Network Management) Table E6.4.1 Activity table (A7) Any other discharge of wastewater onto or into land and/or into water from a wastewater network, as a discretionary activity.

5. Overall the proposal has been considered as a non-complying activity.

Relevant statutory provisions considered

6. In accordance with section 104 of the RMA, we have had regard to the relevant statutory provisions including the relevant sections of Part 2 and section(s) 104, 104B, 104D, 106 in relation to subdivision, 105 and 107 in relation to discharges and 108 in relation to conditions.

Relevant standards, policy statements and plan provisions considered

7. In accordance with section 104(1)(b)(i)-(vi) of the RMA, we have had regard to the relevant policy statements and plan provisions of the following documents as referred to in more detail below.

- National Policy Statement on Urban Development Capacity 2016 **(NPS-UDC**)
- National Policy Statement for Freshwater Management 2014 (**NPSFM**)
- New Zealand Coastal Policy Statement (**NZCPS**)
- Hauraki Gulf Marine Park Act 2000 (**HGMPA**) – s104(1)(b)(iv)
- Auckland Unitary Plan – Operative in Part (**AUP-OP**)
- National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (**NES CS**)

8. For all practical purposes the relevant provisions of the Auckland Council District Plan – Rodney Section 2011 are considered to have fallen away and been replaced by the AUP-OP. The same applies with respect to the Auckland Council Regional Plan – Sediment Control 2001, and the Auckland Council Regional Plan – Air, Land and Water 2012.

9. The planning report and the evidence of Mr Shearer also pointed us to the 2017 'refresh' of the Future Urban Land Supply Strategy (**FULSS**). Within the updated FULSS Refresh released for public comment, the subject site is identified independently, labelled as 'Upper Orewa resource consent area to be

sequenced pending outcome of resource consent process'. The process being referred to is of course this application. The applicant had lodged submissions on the status of the land in the FULSS, seeking that, irrespective of the outcome of this hearing, the land should be included in the first half of Decade One (2018-2022) development sequence. During the hearing, the Planning Committee of Auckland Council considered the FULSS Refresh and submissions and decided that the above notation should be unchanged.

Summary of evidence heard

10. We note at this point that the evidence presented at the hearing addressed successively amended versions of the application. The public notice of the application described the application as follows:

"Consent is sought to undertake a 575 residential lot subdivision taking up to 10 years including roads, reserves, vegetation removal (3.4ha), earthworks (1.153m^3 over 58ha), revegetation (34ha), discharge of stormwater and wastewater, streamworks, watertake and associated servicing and infrastructure. The proposal is a non- complying activity."

11. We note that the above notice contains an important inaccuracy in that it omits to mention the 'mixed use' area for 17 lots and approximately 7000m^2.[1] We do not consider that the omission leads to any procedural problems in terms of interested parties being potentially adversely affected by the proposal for the mixed use area but unaware of it. However, for the absence of doubt, we direct, pursuant to section 37(2) of the RMA, that as the broader application has been the subject of a full public notification process, the omission does not need any rectification.

12. Key amendments to the plans were subsequently made for the following reasons.

13. In response to Auckland Transport, the identification of a future arterial road alignment (Road 1) extending from the State Highway roundabout to the western boundary of the site as depicted on an Alternative Proposed Road Layout Plan attached to Mr Lee's evidence. This road required an amended width of road reserve and flatter gradient.

14. In response to Auckland Transport, the identification of access to a proposed Rapid Transit Network (**RTN**) Station from Road 1 and Stage 1 of the proposed subdivision. The plan for the entrance from Road 1 was presented by the applicant at the initial hearing.

[1] We note also the more obvious inaccuracy in relation to the (small) quantum of earthworks, which should have read 1.153 million m^3.

15. Following the initial hearing we issued directions for further information which included a request for the applicant to reconsider the relationship between the RTN Station and the neighbouring land uses. The applicant responded to this direction with an amended plan for Stage 1 that showed:

    i. A revised scheme plan for Stage 1;

    ii. A revised roading layout including the entrance to the RTN Station referred to above, a southern entrance to the RTN Station from Stage 1, and road reserve extensions to the common boundary with 19A Kowhai Road to the south and to 55 Russell Road to the west (these extensions being in response to submitters requests for future connections);

    iii. A relocated neighbourhood centre, containing 17 lots, now entirely on the southern side of Road 1, with carparking, open space and a 960m^2 lot for a community centre; and

    iv. A proposal that the rules governing the development of the Stage 1 residential lots be those of the Terrace House and Apartment Building zone (**THAB**) (whereas previously the development controls for Stage 1 were proposed to be of the Mixed Housing Urban zone). The THAB development controls are also to be applied to 13 lots on the northern side of Road 1, which are to be accessed from a lane on their northern side, not the future arterial.

16. Subject to the consideration of the matter of scope, it is this amended proposal that we are considering for consent.

Applicant's submissions and evidence

17. The submissions and evidence presented by the applicant at the hearing are summarised below. Each of the applicant's witness statements had been prepared as a summary of the relevant parts of the application and had responded to matters raised in the section 42A report (**the planning report**) and by submitters, as well as any amendments to the plans.

    Kitt Littlejohn, Legal Counsel

18. Mr Littlejohn provided legal submissions on the matters for our consideration. He summarised the key points of the application, provided considerable background on the existing environment including the importance of the previous consent for 105 large lots. He addressed the planning report and submitter concerns. Mr Littlejohn introduced us to the proposed conditions of consent prepared by the applicant. In relation to the implications of the *King Salmon* decision and related decisions of the Courts on the application of Part 2 to resource consents, Mr Littlejohn considered that Part 2 was a relevant consideration in this case. He

concluded that the application should be granted, subject to the recommended conditions.

Simon Herbert – Applicant

19. Mr Herbert, a director of the applicant company Orewa West Investments Ltd (OWIL), gave evidence about the history of his company's involvement with the site including obtaining the existing consent for a 105 lot subdivision granted for 10 years in 2014. He spoke of being encouraged to apply for a more intensive development subsequent to obtaining the 105 lot consent. This has resulted in the subject application for a 575 lot subdivision. Mr Herbert's role has been to provide commercial judgement to the development options. He proffered the company's intent to proceed with the 105 lot subdivision in October 2017 should the consent application for the 575 lot development be refused.

Mike Lee, Engineering

20. Mr Lee presented evidence on the civil engineering and infrastructure development aspects of the proposal. This included a description of the staging of development, earthworks and sediment control, stormwater management, works in watercourses, roading and access and the reticulation of water and wastewater. Mr Lee concluded that, subject to appropriate conditions, there is no impediment to granting consent from an engineering and infrastructure perspective.

21. Mr Lee provided further supplementary evidence in response to ongoing discussions with the New Zealand Transport Agency (**NZTA**), Auckland Transport and Council. He advised that the applicant had accepted the conditions proposed by NZTA.

22. Mr Lee advised that discussions with Auckland Transport related to:

    a. Amendments to the Road Layout Plans to accommodate Auckland Transport's future arterial road alignment;

    b. Changes to the road layout to enable access from the possible future RTN station site located in the NZTA motorway corridor;

    c. Confirmation that Road 1 will be constructed to a maximum gradient of 10% to comply with Auckland Transport standards.

    d. Concerns over the private ownership of the stormwater treatment devices to treat water from the public road network. The applicant proposed that either the treatment devices be privately owned by a common ownership entity such as a residents' association, or, preferably to the applicant, that the devices are either managed by or vested to Council along with the public stormwater reticulation.

Paul Hardcastle, Geotechnical Engineering

23. Mr Hardcastle gave geotechnical evidence. Although he considered the site to be challenging from a geotechnical perspective, given the steepness of the terrain and the geological features on the site, he concluded that the site was suitable for the purpose because the risks had been mitigated by appropriate design and engineering standards and conditions.

Lisa Mein, Urban Design

24. Ms Mein advised that her evidence was to be read in conjunction with the Landscape, Ecology and Urban Design (**LEUD**) report which had Design Guidelines attached to it. Ms Mein took us through the design philosophy for the subdivision. It was her opinion that although the subdivision had not been the subject of a formal structure plan process, the 'Concept Structure Plan' prepared for the site had been prepared in general accordance with the Structure Plan Guidelines in Appendix 1 of the AUP-OP. She explained the derivation of the 'zoning controls' that were proposed for the various stages of subdivision and confirmed that the appropriate controls for the business area were the Neighbourhood Centre zone controls of the AUP-OP. Ms Mein commented on the submissions and the Council's urban design review.

25. In a supplementary statement Ms Mein explained the rationale of the amendments to Stage 1 in relation to the neighbourhood centre that have been described above.

John Goodwin, Landscape

26. John Goodwin provided landscape evidence. Mr Goodwin had reviewed the LEUD report prepared by Boffa Miskell and assessed effects on views and visual amenity from seven different viewpoints. His assessment was made in light of the changing development context in the vicinity, taking into account the updated extent of the Future Urban Zone, residential development either anticipated or underway at Orewa and Wainui, as well as the consented 105 lot scheme. He considered that while the site's topography made it visible across a wide geographical area, this development context meant that it would be more readily absorbed and any effects would diminish over time as the surrounding areas were developed.

27. In Mr Goodwin's opinion, the Concept Structure Plan design had addressed potential adverse effects by creating different character areas across the site and clustering more intensive development near the Orewa interchange. Retention of the site's primary ridgelines and other key landscape features within the site such as watercourses and areas of native vegetation as far as practicable was considered to result in no greater landscape effect than previously allowed for.

28. Mr Goodwin gave supplementary evidence in response to the Panel's directions. After reviewing the revised layout for Stage One he considered that the physical landscape effects of the proposal would remain very low. In relation to the scale of built form, the proposed THAB area would enable development with a slightly higher and more densely built form and character. However, in Mr Goodwin's opinion, potential effects would be negligible as an additional building height would be difficult to distinguish due to distance and the urbanised foreground character of the view as well as existing and proposed screening vegetation.

Ian Boothroyd, Ecology

29. Dr Boothroyd provided evidence on ecological matters. In terms of the existing site context, Dr Boothroyd deemed the terrestrial and wetland ecological values of the property to be low and the aquatic ecological values of watercourses within the property to be of moderate value.

30. In terms of key potential ecological effects, Dr Boothroyd considered the effects of vegetation clearance to be outweighed by the planting proposed on site and improvements to ecological connectivity both on and off site. With respect to the adjacent reserve, he concluded that proposed weed and pest control, buffer planting and the construction of a cat and dog proof fence would result in minimial impacts on Nukumea Reserve.

31. Dr Boothroyd considered Middle Stream to be of moderate ecological value and concluded loss of stream length in this area could be appropriately mitigated. Effects associated with the construction of Arch culverts could be minimised through appropriate design providing for natural stream channels and fish passage. In Dr Boothroyd's opinion, the stormwater devices and final wetland treatment would minimise any impacts of contaminants on receiving waters.

32. In response to the Commissioner's direction, Dr Boothroyd provided supplementary evidence clarifying revegetation mitigation ratios and environmental compensation ratios (ECR) for stream and wetland loss. He maintained that as per his evidence-in-chief, the quantum of vegetation planting, stream and wetland mitigation would result in an overall environmental benefit in comparison to the current landuse and to the consented 105 lot proposal.

Ian Constable, Traffic

33. Mr Constable is a traffic engineer. He prepared an Integrated Transport Assessment (ITA) report for the proposal which he referred to in his evidence. His assessment included consideration of the wider roading local road and motorway network operated by Auckland Transport and the New Zealand Transport Agency respectively. Mr Constable's Evidence in Chief concluded that the traffic engineering aspects of the proposal met the relevant transport related

objectives of the Auckland Unitary Plan and that resource consent could be granted from a traffic and transportation engineering perspective.

34. Through the course of the hearing, at the direction of the Hearing Panel, an alternative layout scheme and transport links within Stage 1 of the proposal was prepared. This alternative focused on the transport links between the residential development, the neighbourhood centre, the future RTN station and the future arterial road network. Mr Constable presented supplementary transport evidence on this alternative concluding that it will not have any adverse transport effects.

Phil Jaggard, Wastewater

35. Mr Jaggard is a scientist with experience in the water and wastewater industry. He formerly worked for Watercare Services Limited (**WSL**) as their Wastewater Planning Manager. Mr Jaggard's evidence addressed wastewater management and the capacity of the public wastewater network to receive flows from the proposed development. He described the proposal to connect the subdivision's wastewater reticulation to WSL's existing Orewa West Trunk Sewer. This system is described as having sufficient capacity and the development has WSL's approval in principle to connect to it. Mr Jaggard concluded that there is no wastewater capacity constraint to granting consent.

Craig Shearer, Planning

36. Mr Shearer had prepared the current subdivision application and described the elements of the 105 lot subdivision that had been granted consent in September 2014. As part of the existing environment he considered that these elements provided an important part of the permitted baseline against which to assess the environmental effects of the proposed subdivision. Mr Shearer provided a comprehensive analysis of the proposal against the relevant policy and plan provisions recorded above, including an appendix of the specific AUP-OP provisions relevant to our assessment. While he agreed that the policy framework of the Future Urban zone anticipates rezoning before urbanisation he considered that the Concept Structure Plan had achieved the same outcome.

Submitter's evidence

37. The evidence presented by the submitters is summarised as follows.

Rodney Harman

38. Mr Harman, a neighbour at 55 Russell Road, did not object to the application, but had two concerns to be addressed, namely; the effects of dust generation on his property and the need to provide connection for future road access to a block of his land adjacent to the site boundary. The applicant agreed to provide this.

Forest & Bird Society, Hibiscus Coast Branch represented by Philip Wrigley and Dr Margaret Stanley

39. Mr Wrigley of the Hibiscus Coast Branch of Forest and Bird was supported by Dr Margaret Stanley, an ecologist based at the University of Auckland. Dr Stanley summarised research on the significant distances domestic cats can roam and the damage that they can inflict on native wildlife. They were both of the view that the proposed 1.8m high mesh fence proposed by the applicant would be insufficient and that the subdivision must be cat-free in order to provide adequate protection for ecological values in adjacent Nukumea Reserve.

40. Upon questioning from the Panel Dr Stanley and Mr Wrigley described cat management strategies in Wellington, and who might have the responsibility for enforcing a cat ban, noting also that a cat ban sends a clear signal to future buyers.

41. At the reconvening of the hearing, and in response to the applicant's proposal, Mr Wrigley provided supplementary evidence reiterating the need for a cat ban across the entire subdivision.

Alan, Dion and Melanie Mayes and Barry and Brendan Smith represented by Diana Bell, planner

42. Ms Melanie Mayes, a neighbour at 53B Russell Road, spoke to her written statement. Key concerns related to dust generation, details of the proposed vegetation buffer along the common boundary, as well as protection of a spring that fed into a wetland on her property.

43. Ms Diana Bell, an independent planning consultant, appeared for the Mayes family and Barry and Brendan Smith. Her evidence focussed on the lack of a structure planning process, suggesting that granting consent would compromise the ability for the subject site and surrounding land to be developed in the manner anticipated by the AUP. Ms Bell sought refusal of consent due to its potential to be precedent setting, to create reverse sensitivity impacts and compromise the rural character, amenity and landscape values currently enjoyed by her client.

44. Following adjournment of the hearing Ms Bell provided a further statement in response to changes made by the applicant in association with Stage 1. Her opinion about fundamental planning policy and process matters and the related adverse effects remained unchanged.

Other Submitters

45. Submissions were made by other submitters who did not appear at the hearing. These submissions and the matters raised therein are as follows.

46. Ian and Victoria Carnell and Rod Clarke share boundaries with the proposal site. Both submitters were supportive of the development provided that provision was made for roading and service linkages to their properties in future. A revised scheme was submitted in the course of the hearing that allows for such connections in future.

47. Susan Morrow, a resident of Orewa, was opposed to the proposal and had concerns about demands on infrastructure services, the density of the subdivision and environmental effects. The evidence we heard from both applicant and Council experts is that the proposal's infrastructure requirements could be sufficiently accommodated by the public network.

48. The Director General of Conservation took a neutral stance on the subdivision but had raised concerns about fencing the boundary of Nukumea Reserve and the location of the proposed public carpark to control public access. The applicant has addressed these concerns by relocating the carparking and providing for a fence. We discuss matters relating to the fence further below. There was also a request that stormwater treatment ponds should be designed in such a way that they are kept free of pest fish and pest aquatic plants. Dr Boothroyd addressed this matter in his primary evidence and recommended including a consent condition for the design of the treatment ponds to prevent the invasion of aquatic pests and weeds.

49. The New Zealand Fire Service Commission (**Commission**) did not appear at the hearing but tabled a submission seeking that the proposed subdivision should take into account the operational requirements of the Commission to provide for fire-fighting activities on the site. The Commission recommended specific conditions relating to design of the reticulated water supply, and adequate provision for and access to fire hydrants in accordance with the New Zealand Fire Service Fire Fighting Water Supplies Code of Practice SNZ PAS 4509:2008. The Commission's proposed conditions have all been accepted by the applicant.

50. The New Zealand Transport Agency (**NZTA**) did not appear at the hearing but tabled a submission seeking that the proposed subdivision should take into account the effective, safe and efficient operation of the State highway network. The Transport Agency does not consider there to be any effects on the State highway network or its infrastructure that cannot be mitigated with appropriate resource consent conditions. The Agency's proposed conditions have all been accepted by the applicant.

Council Officer's reports and responses

51. The Council planning officer's recommendation report and agenda was circulated prior to the hearing and taken as read.

52. The reports and further responses presented by the Council officers and representatives of Auckland Transport are summarised as follows.

John Stenberg, Urban Designer

53. Mr Stenberg reported on the original application and provided further comment for us on the application and its amendments at the hearing, plus a final written response. Mr Stenberg considered that the application should be declined as a structure plan had not been prepared to underpin an appropriate transition from rural to urban land use. He focussed in particular on the connectivity to land to the west and south and within the land itself, on the lost opportunity to address community needs that the proposed subdivision represented given that the land had direct motorway access, and the relationship between the applicant's Design Guidelines and the zoning controls. Following the applicant's revisions to Stage 1 Mr Stenburg identified more detailed design issues with the neighbourhood centre.

Dave Paul, Policy Planner

54. Mr Paul supported the structure plan approach to rezoning rural land and particularly focused on roading connectivity to the south and west, whether the proposed subdivision represents efficient use of land in terms of density, the scale of the centre proposed, and problems with the proposed zoning controls.

David Mitchell, Traffic

55. Mr Mitchell assessed and reported on the traffic effects of the proposed subdivision. He concluded in his initial assessment that the proposed traffic effects are no more than minor and that he saw no traffic related reason to refuse consent. In the event that consent be granted Mr Mitchell proposed a suite of traffic related conditions.

56. Having heard the evidence presented at the hearing Mr Mitchell's initial response and conclusions were unchanged, subject to adding an additional condition proposed by Mr Prasad of Auckland Transport.

Mitra Prasad, Auckland Transport

57. Mr Prasad is a Principal Consent Specialist who assessed the application for Auckland Transport. His report stated that a number of initial concerns raised by Auckland Transport had been addressed and that the key outstanding issues were:

a) The suitability of infrastructure, primarily stormwater treatment and wastewater reticulation within the site, being owned and managed by an incorporated residents' society. This may require private infrastructure to be located within the road reserve.

b) Provision for an arterial road coming off the Orewa interchange and providing adequate road width to accommodate the proposed development and further proximate development. This is a matter Mr Prasad recommends be covered by an appropriate condition and establishment of an Infrastructure Funding Agreement.

c) The need for the RTN station to be accommodated by the development.

d) Progress to stop two sections of paper road which Mr Prasad considers can be covered with an advice note.

58. A range of other matters are raised which Mr Prasad considered can be addressed by imposing appropriate conditions. These include the provision of a shared path, a "gateway treatment" to provide a visual cue to drivers that they are entering a residential zone, constructing private access ways which are 5m wide and no steeper than 1:20 prior to the footpath, provision for footpaths on both sides of the road and the need for a safety audit for the roading.

Lorraine Stone, Auckland Transport

59. Ms Stone is a Transport Planner with Auckland Transport's Future Transport Networks team. She presented verbal evidence on the prospect of the RTN station adjacent to and servicing the site and surrounding area. She considered it feasible to locate a RTN facility in part within the motorway corridor but raised some concerns about the accessibility for buses. These matters were subsequently addressed with amended plans provided by the applicant.

Ray Smith, Development Engineer

60. Mr Smith provided an assessment of a range of engineering related matters including geotechnical stability, earthworks, stormwater, water and wastewater reticulation and road access and parking. In summary he concluded that as long as the infrastructure is designed, constructed and operated to an appropriate public engineering standard the effects will be less than minor. In the event that the infrastructure is built to the appropriate standard, it could be vested to the Council.

Jack Turner, Stormwater Engineer

61. Mr Turner assessed the effects of the proposal on water quality, hydrology, water quantity/flooding, outfall structures and the operation and maintenance of stormwater quality control device. In all instances Mr Turner was satisfied that the approach taken is appropriate and that the effects of stormwater quality and quantity can be managed through compliance with conditions.

Matthew Byrne, Streamworks/Regional Earthworks

62. Mr Byrne is a specialist advisor to Council with respect to earthworks and streamworks. He assessed the applicant's earthworks strategy and erosion and sediment control plans for each stage of the development. Mr Byrne agreed with the applicant's assessment. That is, given the earthworks will be undertaken in a progressively stabilised and staged manner which limits the exposed area at any given time, the overall effects from erosion and sediment discharges can be adequately managed. Furthermore Mr Byrne agreed with the applicant's proposal to use erosion and sediment control measures which at least meet the design criteria recommended in the Council's erosion and sediment control guideline (TP90). Mr Byrne proposed a number of conditions in the event that consent be granted. Mr Byrne did not attend the hearing but did make further comment on conditions proposed by the applicant. These comments did not affect his conclusion that the effect of erosion and sediment discharges could be adequately managed.

Josh Markham, Streamworks

63. Mr Markham assessed and reported on the effects of the proposal in relation to streamworks. He considered that the application was lacking detail on how stream loss could be avoided or minimised which was contrary to AUP-OP provisions. Further, he stated that there was insufficient information to allow him to accurately quantify the amount of stream and wetland loss, and the resultant mitigation or compensation requirements. As such, Mr Markham concluded that the proposal would result in significant adverse environmental effects, was inconsisent with the relevant AUP-OP provisions and he was unable to support granting of consent.

64. Mr Markham provided a supplementary report following the reconvening of the hearing in response to Dr Boothroyd's supplementary evidence. He disagreed with Dr Boothroyd's proposed ECR values for the Middle Stream, the wetlands and intermittent watercourses, and in relation to the Arch culvert crossing located in the Significant Ecological Area (SEA) on West Hoe Stream. Mr Markham provided alternative wording for consent conditions relating to the implemetation of a Stream and Wetland Compensation Plan.

Rue Statham, Ecologist

65. Mr Statham, Senior Ecologist in Auckland Council's Biodiversity Team assessed and reported on the ecological effects of the proposal. He did not believe the applicant had adequately quantified stream and wetland loss, nor provided specific mitigation in relation to it. Mr Statham considered that the proposal had not sought to avoid SEA's and queried the mitigation quantum for the loss of terrestrial habitat. He found that the proposal was inconsistent with relevant provisions of the AUP and felt that a formal structure planning process would

have resulted in better ecological outcomes. With regards to potential effects on Nukumea Reserve, he supported relocation of the car park to a more central position and the use of demarcation fencing along the boundary. Additionally, he sought a condition requiring the development to be cat-free. Overall Mr Statham concluded that he was unable to support the proposal on ecological grounds.

66. Mr Statham provided addendum comments in response to the supplementary statement of Dr Boothroyd. He disagreed with the extent of wetland loss stipulated and the quantum of mitigation proposed. Mr Statham also addressed comments made by the applicant's legal counsel in relation to a buffer prohibition over part of the site rather than a total cat ban. He preferred the evidence of Mr Wrigley and Dr Stanley and remained of the view that a cat free covenant over the entire development was necessary. Alternative wording to clarify the applicant's Lizard Management Plan condition was also offered.

Simon Cocker, Landscape

67. Mr Cocker is a Landscape Architect. He did not appear at the hearing but provided supplementary evidence upon the Panel's directions specifically in relation to potential landscape effects generated by the revised Stage One proposal. He concluded that the physical landscape effect generated by the amended proposal would not materially change the level of landscape effects from those resulting from the proposal as lodged. Mr Cocker generally concurred with Mr Goodwin's assessment in terms of effects on scale and character, although he considered there would be a recognisable increase in the height and density of development from the viewpoint of occupants of three properties on Kowhai Road. However, the consequent slight increase in the level of initial effect would be progressively mitigated to an acceptable level over the mid to long term due to growth of existing and proposed planting. Mr Cocker also considered that Future Urban zoning anticipates residential development as a component of the view.

Kate Madsen, Reporting Officer

68. Ms Madsen processed the application and prepared the section 92 request for information and the planning report. Supported in her assessment by relevant experts, Ms Madsen concluded that the application passed neither of the section 104D gateway tests for a non-complying activity and should be declined. In relation to environmental effects she was particularly concerned about effects on streams and wetlands. She also referred to the plan provisions requiring a structure plan and difficulties with administering the rules as reasons for declining the application. Ms Madsen noted the various positive effects (housing supply, access to Nukumea Reserve, removal of stock and stream/wetland restoration) and that development engineering and services were matters that had been appropriately addressed and could be subject to conditions of consent.

Steve Seager, Team Leader

69. Mr Seager attended the hearing and provided comments in response to the applicant's reply (in lieu of Ms Madsen who was on leave). Mr Seager considered that the amendments to the plans in response to our directions to be out of scope of the notified application, based on Mr Cocker's analysis of the additional height allowed by the THAB zone controls over the MHU zone controls as referred to above. Mr Seager also commented on the details of several of the proposed conditions of consent.

Applicant's reply

70. In response to our directions the applicant provided supplementary evidence as noted above. Mr Littlejohn also provided submissions on scope comparing the fundamental parameters of the original application with that now proposed, concluding against the relevant legal tests that the changes were 'within scope'. He also provided wording for a 'no cat' condition, as sought by our direction.

71. Following the reconvened hearing on 4 July 2017 the applicant provided a final reply and set of conditions. Mr Littlejohn was critical of additional material that had been provided by Council staff and Ms Bell for the submitters, stating that this was not focused solely on additional matters resulting from our directions (principally stream and wetland matters and the Stage 1 amended plan).

Principal issues in contention

72. After analysis of the application and evidence (including proposed mitigation measures), undertaking a site visit, reviewing the Council planning officer's recommendation report, reviewing the submissions and concluding the hearing process, the proposed activity raises a number of issues for consideration. The principal issues in contention are:

- Were the proposed changes within scope?
- The need for structure planning
- Neighbourhood centre
- Traffic, roading and the RTN station
- Landscape and visual effects
- Effects on streams and wetlands
- The spring above the wetland on the Mayes property
- Lizard Management Plan

- Cats and the Nukumea Reserve
- Earthworks, dust and stability

Main findings on the principal issues in contention

73. Our main findings on the principal issues that were in contention are set out as follows.

Scope

74. We have recorded above the original application as notified and the changes that were made to Stage 1 following our directions. We note from the case law provided by Mr Littlejohn that particular factors to be considered are the scale, intensity and character of the altered activity (compared to the original) and potential prejudice to the parties and the public. We consider that potentially affected parties, beyond those already party to the hearing, to be those parties who could see the development in Stage 1, or might be adversely effected by generated effects, such as traffic. These effects related to increased intensity of development, in particular the increase in height limit between the MHU zone rules (12m) and the THAB zone rules (16m). Reverse sensitivity effects, in relation to the RTN station might also be generated, however Auckland Transport was present at the hearing. In the case of each of these effects it is a matter of whether the effects of the changes were of such different scale, intensity or character as make the changes out of scope. Visual and landscape effects also need to take into account the viewpoint of the receiver.

75. The applicant's evidence for Mr Constable, on traffic, and Mr Goodwin, on landscape and visual effects, was that there were no or negligible changes in the respective effects. Mr Cocker's view on the additional height, as noted above, was that in relation to one viewer, on the property at 19C Kowhai Road, there would be a "consequent slight increase in the level of initial effect". This viewer would be in the order of 300m away and direct line of sight would depend on intervening vegetation now and in the future, as noted by Mr Goodwin.

76. We received no additional comment in relation to traffic effects, and no other party identified for us aspects of the changes that would be out of scope.

Finding

77. Our finding is that that the proposed amendments are within scope.

The need for structure planning

78. The strong emphasis placed by the AUP-OP on structure planning as a precursor to zone changes was a substantial element in the Council officer's

opposition to the proposed subdivision. Ms Bell also gave evidence raising the same concerns. The Council and Ms Bell referred us to the objectives and policies in Chapter B2.2 Urban Growth and Form of the Regional Policy Statement section of the AUP-OP and to the objectives and policies of the Future Urban zone. The most directive of these are:

79. Policy B2.2.2(3) *Enable rezoning of future urban zoned land for urbanisation following structure planning and plan change processes in accordance with Appendix 1 Structure plan guidelines*; and

80. Objective H18.2 (4) *Urbanisation on sites zoned Future Urban Zone is avoided until the sites have been zoned for urban purposes*.

81. Ms Madsen considered that the proposal was contrary to the RPS provisions *"as it represents inappropriate ad-hoc subdivision ahead of zoning which may compromise future opportunities for coordinated growth and development and the land being used in an efficient manner to achieve appropriate relationships between existing and future development with high quality urban outcomes, which these higher order documents seek to avoid."* Ms Bell stated *"if this consent is granted in the face of clear regional policy requiring structure planning to be undertaken prior to developing Future Urban zoned land for urban purpose then a precedent will be set that will mean that other development throughout the Auckland region, is likely to seek to proceed ahead of proper infrastructure and structure planning exercises being completed."*

82. Mr Shearer considered that Policy B2.2.2(3) was not "*strictly relevant*", while he acknowledged that the proposal did not "*achieve*" Objective H18.2(4). His rationale on the Policy was that while structure planning and plan change processes "enabled" urbanisation, this could also be achieved by resource consent. Mr Shearer considered that the use of the verb "enable" made the policy less directive.

83. Our view is that the AUP-OP places a strong emphasis on structure planning to achieve efficient and effective outcomes and envisages the undertaking of this process before zone changes and urbanisation (hence the use of the verb 'avoided' in Objective H18.2 (4) above). By comparison, this proposal is to effectively re-zone land by way of resource consent application for subdivision, adopting various development standards from the AUP-OP in conditions of consent. Nevertheless, we also consider that good planning can be a matter of 'substance' (i.e. the components of structure planning) over 'form' (i.e. a process which is labelled "structure planning"). The context of the planning exercise must also be taken into account.

84. In regard to context, the locational and topographic features of the site are very important. From the evidence and our site visit the following features are noted:

- The site is located on the northern periphery of the Rural Urban Boundary and a large Future Urban zone spanning from Dairy Flat through Silverdale and Wainui East to the western edge of Orewa.

- To the east of the site is the Orewa Town Centre, to the south is the Silverdale Town Centre, Light and Heavy Industry and other business and employment zones, and to the southwest is the recently zoned land at Wainui East, which includes a Local Centre zone.

- State Highway One passes along its eastern boundary and the site has a common boundary with Nukumea Reserve to the north.

- To the west and south along a common boundary of some 2km is Future Urban zone land.

- In common with other land in Orewa West the land has significant slopes and elements of geotechnical instability that require extensive earthworks prior to urban use. On our site visit we viewed the current earthworks on similar land at 'Sunny Heights' to the east of State Highway One.

85. With reference to the components for structure planning (as detailed in Appendix 1 of the AUP-OP and referred to by the planning witnesses), we note that the form of the urban edge, and the transitions, linkages and integration with urban and rural land around the subject land are important considerations.

86. We consider that the features referred to above close down various options for land use and pre-determine the interface with land use to the east and north. The applicant has appropriately considered the interface with State Highway One in terms of setback and has accepted the NZTA conditions in relation to internal noise levels. In relation to the Nukumea Reserve interface, the applicant has located lower density development along the northern boundary and the bulk of the revegetation areas. Another important feature of this interface relates to pest management which is addressed below.

87. The Future Urban zone land to the west could be accessed from the site or from the south when it is rezoned. It has similar land capabilities as the subject site and we anticipate that it would have a residential use. The applicant has provided this land with a future road connection.

88. The Future Urban zone land to the south is of more significance as it connects to both Silverdale and Wainui. In recognition of this Auckland Transport has required that an arterial road alignment is secured through the site, which the applicant has accommodated, as previously described. It is this arterial that we would expect to be utilised to provide access to the future development of the land to the south and its connection with Orewa. Nevertheless, secondary

linkages have also been provided by the applicant to the neighbouring land in three locations.

89. Appendix 1 also refers to a compact urban form and efficient land use, and to the protection, maintenance and enhancement of natural resources. The topography of the site and its natural resources, particularly streams and riparian areas, creates a tension between these matters that requires a balance to be struck. The Council officers expressed concern as to whether the most appropriate densities had been proposed (Mr Stenburg), but also that more of the site's natural resources should be retained (Mr Statham).

90. It is our view that the applicant has considered the balance to be struck and adopted a design that uses the land efficiently and distributes density according to the attributes of the site, proximity to the proposed neighbourhood centre and the RTN station and proposed open space. The trade off in terms of the effects on streams comes principally in the proposed reclamation of the Middle Stream which enables the residential development of Stage 8. Our decision addresses this matter further below.

91. The availability of infrastructure is also a matter to be addressed in Appendix 1. In this case the proposed subdivision can be adequately provided with roading, water and wastewater infrastructure. We note that the availability of wastewater in particular will be a significant constraint in the ongoing development of Future Urban zone land elsewhere.

Finding

92. We find that there is no requirement under the AUP-OP for a structure planning exercise to precede a resource consent application for a development in a Future Urban zone. While Objective H18.2 (4) may use the verb 'avoid' in relation to urbanisation before structure planning and zoning, the substance of the structure planning exercise has been addressed. The applicant has considered a range of wider contextual matters that are included in Appendix 1 as part of its application, such that subdivision Concept Structure Plan responds not just to the features of the site, but also the wider environment. We find that the features of the site are unusual, if not unique, such that the site's interface with its surrounds and the range of potential land use options for the site are more narrow than they would be for most sites. Consequently, we consider that our grant of consent in this case provides little or no support for a departure from the general approach as anticipated by the AUP-OP of structure planning and rezoning prior to urbanisation.

Neighbourhood centre

93. The background to the current proposal for the neighbourhood centre has been set out above. We note that none of the issues raised in submissions related

specificially to the ‘mixed use’ area or neighbourhood centre. Both Mr Stenburg and Mr Paul expressed some concerns about its size and the potential for an alternative location (i.e. not within the site). Our concerns derived originally from the centre’s location straddling what had become an arterial through road, and then from the relationship between the centre and the RTN station when this materialised in response to Auckland Transport needs.

94. We do not see the neighbourhood centre as an intrinsically necessary part of the application, in the sense that it could be selectively refused consent if we considered that it did not meet the statutory tests. In that regard we considered its location, form and relationship with neighbouring land uses.

95. In relation to its location we asked various witnesses as to whether there was any particular framework, or even ‘rule of thumb’, for the spacing and size of centres within urbanising areas. Mr Stenburg suggested that other locations further south would be possible. However, taking into account the location of existing town centres and other neighbourhood and local centres in the zoning pattern we found no reason to question the general location of a neighbourhood centre within the subdivision. In terms of the commercial reality of such centres needing to rely on both a local population and passing traffic, we also have no doubt that the location of the centre adjacent to the future arterial road and to the RTN station is appropriate.

96. We have more concerns about its actual form and relationship to neighbouring land uses. The amended plan, prepared as it was in response to our direction in just a few days, has incorporated the critical elements of a centre in terms of open space and parking and has also responded to some concerns we expressed on social well-being with the identification of a site for a community centre. We also consider that its overall size of about 7000m^2 and orientation is appropriate, allowing as it must for the access to the RTN station down its northern edge.

97. However, we share some of the concerns expressed by Mr Stenberg in relation to the legibility of vehicle access to parking and retail frontage from the arterial, the double frontage and dual orientation of the retail floor space, the pedestrian access from the centre and subdivision to the bus station, the relationship between the RTN access, and the uncertainty of the RTN requirements overall.

98. In relation to this last point, we acknowledge that Auckland Transport will need to go through some kind of consent process for the RTN station, at the very least the approval of an Outline Plan of Works pursuant to its designation. That is a separate process to this one. Auckland Transport currently do not even have a plan, so that the interface with the neighbourhood centre is guess-work at the current time.

99. In summary, when viewed at a high level, we consider that there are many elements of the proposed neighbourhood centre that are 'right'. However, such a centre in many other circumstances would not be designed in a few days, or even a few months. It is simply not possible to ensure that adverse effects are avoided or minimised or, more aspirationally, to achieve anything approaching a 'best' outcome in so short a time. In that regard we are not being critical of the efforts made by the applicant in response to our direction.

Finding

100. We have considered two possible options for addressing the perceived shortcomings of the neighbourhood centre design. Firstly, we could grant consent to the proposed subdivision and layout of the neighbourhood centre, being Lots 93 to 109 and 576 to 580, and include conditions to address the shortcomings. We consider that drafting conditions that are certain and contain little discretion for Council as to whether the condition has been met or not would be very difficult.

101. Secondly, we could decline consent to the neighbourhood centre as proposed. This would allow the applicant, assuming that it still wished to pursue the neighbourhood centre, to engage collaboratively with the Council and Auckland Transport to achieve a better design outcome. Declining consent to the neighbourhood centre would not frustrate the implementation of Stage 1 overall in terms of bulk earthworks and servicing. Further we consider that consent for the neighbourhood centre would go as far as:

- Identifying the land within the two superlots being Stage 1J and 1K (see Airey drawing SK90 dated 30 June in applicant's reply drawings) of the proposed subdivision for a 7000m^2 neighbourhood centre; and

- Confirming that this area has the permitted activities and development controls, of the Neighbourhood Centre zone in the AUP-OP.

102. On balance, our finding is the second of these options. In terms of the statutory basis for declining consent, we refer to Chapter B2.3 of the AUP-OP regional policy statement which addresses a quality built environment. Policy B2.3.2 (1) states:

> *(1) Manage the form and design of subdivision, use and development so that it does all of the following:*
>
> *(a) supports the planned future environment, including its shape, landform, outlook, location and relationship to its surroundings, including landscape and heritage;*
>
> *(b) contributes to the safety of the site, street and neighbourhood;*

(c) develops street networks and block patterns that provide good access and enable a range of travel options;

(d) achieves a high level of amenity and safety for pedestrians and cyclists;

(e) meets the functional, and operational needs of the intended use; and

(f) allows for change and enables innovative design and adaptive re-use.

Traffic, roading and the RTN station

103. In the main Mr Constable for the applicant and Mr Mitchell for the Council agreed that the traffic effects can be appropriately managed and that a suite of conditions can be applied to ensure this occurs. The matters to which these conditions apply are:

- Formation of an arterial from the entry of the site across the site to the western boundary which has been designed to the satisfaction of Auckland Transport;
- Provision of a shared path from Road 1 to the signalised pedestrian crossing at Arran Drive with specified dimensions;
- Road 1 is to be designed with a threshold treatment at an appropriate distance from the motorway to encourage drivers to lower vehicle speeds before entering the subdivision;
- Private access ways are to be constructed as vehicle crossings with the footpath continuous in grade width, colour and cross fall;
- Advanced warning for specified intersections must be provided in the way of signage, markings or additional speed calming;
- Pedestrian and cycle trails shall be designed in accordance with the NZ Cycle Trail Design Guide (4th Edition); and
- A road safety audit shall be undertaken at the detailed design stage for each stage.

104. The provision of the RTN station adjacent to and linking with the site was considered a desirable and necessary feature to maximise the benefit of the site's location next the motorway. The plans for access proposed by the applicant and modified through the hearing have been accepted as appropriate by Auckland Transport and Auckland Council from a traffic management perspective.

105. Traffic and roading matters have been considered by both NZTA and Auckland Transport. Subject to the inclusion of conditions which have been agreed by the applicant the matters raised by both NZTA and Auckland Transport can be addressed.

Finding

106. Our finding is that subject to the proposed conditions the traffic effects of the proposal will be minor. Furthermore, from a traffic point of view, the access to the RTN station as proposed is appropriate.

Landscape and visual effects

107. In the main, Mr Goodwin and Mr Cocker were agreed on the landscape and visual effects of the proposed subdivision, the minor differences in opinion (as a result of the amended scheme) have been previously addressed in our discussion on matters of scope.

108. Visual effects on Ms Bell's clients were raised during the hearing and there were unresolved issues regarding the details of proposed screen planting along the southern and western boundary. In her supplementary evidence Ms Bell requested certainty on the timing and detail of the planting plan and ensuring the boundary planting was protected in perpetuity. In his final reply Mr Littlejohn accepted the amendments sought in regard to the covenanting and protection of the boundary planting, but did not accept the proposal to initiate planting prior to Stage 2 of the development, or to provide full details of the planting plan to the hearing. In his view the details being provided in the Planting Management Plan to be approved by the Team Leader and completed as part of Stage 2 was sufficient. We share his view and consider that any potential landscape or visual effects on the Mayes and Smith properties will be adequately mitigated through these conditions.

Finding

109. We find that the landscape and visual effects will be minor, subject to the implementation of the proposed conditions.

Effects on streams and wetlands

110. Council's ecologists disagreed with the applicant's proposed ecological assessment and mitigation from the outset as the application material was considered lacking in appropriate valuations and quantification to enable a robust assessment of ecological effects. In his primary evidence, Dr Boothroyd proposed a condition requiring a Stream (and Wetland) Environmental Compensation Plan (**SECP**) to be developed. He considered that full quantification of stream and wetland loss could be arrived at during the development of such a plan rather than during the consent process.

111. In considering the disparate viewpoints we considered further clarity was needed and requested that Dr Boothroyd provide further detail on the loss of stream and wetland areas. In his supplementary evidence he recommended a set of ECR's including:

- 0.5 for the loss of stream and wetland function as a result of placement of Arch culverts;
- 1:1 for wetland loss;
- 3:1 for the reclaimed length of the Middle Stream; and
- 3:1 for the reclaimed length of any intermittent streams.

112. In their response to the proposed ECR's Messrs Statham and Markham continued to have concerns about the methodology (or perceived lack thereof) utilised to derive the values. They considered the values to be arbitrary rather than based on Stream Ecological Valuation (SEV) or ECR calculations in accordance with the relevant Auckland Council technical publications. This view is borne out in Dr Boothroyd's rationale for the ECR for stream loss in association with Arch culverts which states *"as a consequence of the improved environmental performance of Arch culverts (compared to barrel culverts) and the retention of some important watercourse functions, I recommend a compensation ratio for the calculation of offset mitigation to be 0.5 of the length of watercourse and/or wetland area that is modified."* This effectively treats all the affected watercourses as being of the same quality, when as Mr Markham pointed out, one of the Arch culverts is located in the SEA on the West Hoe Stream, triggering a rule for consent that would require full assessment of the quantum of mitigation.

113. Further, Dr Boothroyd's rationale for the proposed 3:1 ECR for the loss of stream length in Middle Stream is based on an "Auckland 'average' representation of gain/loss" and from his "own knowledge of streams in the North Auckland area." Mr Markham was not satisifed that a 3:1 ratio would provide adequate mitigation for the loss of Middle Stream due to the "Auckland average value" being outdated. As acknowledged by Dr Boothroyd, the ratio was derived from permanent rather than intermittent streams and related to urban rather than rural

streams. Mr Markham further described how the ECR value is also driven by the quality of the mitigation site. The mitigation site could potentially increase or decrease the ECR value markedly, highlighting the need for specific calculations to be carried out and ECR values to remain unfixed prior to approval of the mitigation and compensation plan. There also remained unresolved questions about the inclusion of the riparian wetland margins of Middle Stream in Dr Boothroyd's stream mitigation calculations.

114. With respect to wetlands, the applicant's proposed 1:1 ECR was also disputed by Council's ecologist. Mr Statham emphasised that wetlands are a nationally significant issue and referenced principle 5 of the Guidance on Good Biodiversity Offsetting and the Business and Biodiversity Offsets Programme in New Zealand;

"A biodiversity offset should achieve conservation outcomes above and beyond results that would have occurred if the offset had not taken place."

115. He disagreed with Dr Boothroyd's suggestion that the 1:1 ratio utilised in the Puhoi to Warkworth Motorway consent was comparable and applicable in this instance. He explained that Council and the applicant were generally agreed in regard to the assessment of wetland reaches in the Puhoi to Warkworth case, finding them to be low throughout the site, whereas for this proposal there is variation in quality of wetlands across the site. He suggested that to base the quantum of mitigation on this example was merely a "rule of thumb" approach employed primarily to give certainty to the client, as opposed to a meaningful and well thought out approach to the issue of wetland reclamation. Given his outstanding concerns, Mr Statham again stressed the need for a complete quantified and qualified assessment and robust offsetting package for wetland loss to be submitted as part of the proposed SECP prior to any streamworks reclamation occurring on site.

116. Messrs Markham and Statham provided revised consent condition wording for the SECP. The timeframes for preparation and implementation of the SECP are the same, fixed ECR's are not included, but the detail of SEV and ECR calculations is required in accordance with TR2011/009 and TP148. These technical publications provide a standardised approach to quantify the ecological value of streams and a guideline for riparian zone management, respectively. While we had specifically asked Dr Boothroyd for more information including ECR's, it has become apparent to us that site specific quantification and qualification of stream and wetland loss is needed and that it would be unwise to fix ECR's prior to these calculations being undertaken. We generally concur with the format of the SECP condition as drafted by Messrs Statham and Markham noting its similarity to the originally drafted SECP condition in Dr Boothroyd's primary evidence. In our opinion this approach will ensure that effects on streams and wetlands are adequately measured and appropriately mitigated for.

117. There was discussion throughout the course of the hearing on the difficulties of locating available streams for offsite mitigation. However it appeared that the applicant had not undertaken any specific investigations in this regard. The applicant's final submitted set of conditions propose that the SECP is to be submitted within 12 months of the commencement of any works and is fully implemented prior to the completion of Stage 8 of the subdivision. Mr Markham raised concerns with this approach, noting the proposed wording of the condition would enable impacts on the stream environment to occur prior to any Council assessment of the proposed SECP. He highlighted that implementation of the SECP prior to Stage 8 could account for a significant time lag between the impact and mitigation occurring. We share Mr Markham's concerns with the length of time proposed to implement the SECP, given that Stage 8 may not be completed for a number of years, and although unlikely – could conceivably never be completed. As such we prefer the recommendations of Council's ecologists requiring the SECP to be submitted prior to any streamworks reclamation occurring and to be implemented within two earthworks seasons from the start of the reclamation. We note again that the proposed conditions reflect the timeframes for the preparation and implementation of the SECP proposed in Dr Boothroyd's primary evidence.

Findings

118. Our finding is that while we accept the applicant's proposal for stream and wetland reclamation and modification, in particular taking into account the existing consent for the 105 lot proposal, it would not be prudent to fix ECR's at this stage without a clear understanding of the quantum of stream and wetland loss and the confirmation of location of the mitigation site. We also consider that the off-site mitigation proposal needs to be identified and implemented early on in the subdivision staging process. We consider that the SECP condition proposed by Council's ecologists is more appropriate and will ensure that effects on stream and wetland ecology can be appropriately measured and mitigated for.

The spring above the wetland on the Mayes property

119. We heard from Ms Mayes and Ms Bell concerns that the development could interfere with a natural spring that discharges from just inside the site and down a gully into the Mayes wetland. However, the applicant had been unable to identify the precise location of the spring and the submitters have also not provided evidence of its location. We agree with Mr Shearer that it would be difficult to condition specific protection for the spring without having proof of its existence. Mr Lee has confirmed that stormwater management for that part of the development has been designed to replicate the pre-development flows to the wetland on 53B Russell Road and will be treated by Raingarden 7 prior to discharge. According to the submitter the spring is either very close to, or on the boundary fence and we agree with Mr Littlejohn's statement in his reply that the

5 metre boundary planting covenanted area will provide adequate protection for the spring.

Finding

120. In light of the above, we consider any potential effects on the spring will be appropriately avoided or mitigated.

Lizard Management Plan

121. Lizard management was not at issue during the hearing proceedings, however in the supplementary evidence of Council's ecologist the matter was raised in relation to the applicant's conditions. Specifically the applicant's proposed conditions relating to the Lizard Management Plan (**LMP**) were considered to contain unnecessary content and ambiguity. As currently worded the LMP would only need to be prepared if the survey results in the detection of:

- 1 or more individuals of a threatened native lizard species or;
- 3 or more individuals of a common native lizard species.

122. We concur with Mr Statham that this wording is redundant, particularly given that Dr Boothroyd's primary evidence described the Bioresearches survey on the property which recorded four visual sightings of forest gecko (threatened - at risk category) and one ornate skink (threatened – gradual decline category).

Finding

123. In our view the amended LMP conditions proposed by Mr Statham provide more certainty and a simplified approach and are preferred.

Cats and the Nukumea Reserve

124. In response to matters raised by submitters the original application was amended to include provision of a fence along the length of the Nukumea Reserve to prevent the movement of domestic pests into the reserve. In his primary evidence Dr Boothroyd noted that invasion of cats and other predators could potentially occur at the end points of the boundary fence but it would likely provide considerable benefit by excluding additional cats and dogs from the Reserve. Additionally, it would prevent pests which had been the subject of poisoning programmes from being consumed by and potentially poisoning domestic animals.

125. Mr Wrigley and Dr Stanley considered the proposed fence would be less effective than a cat ban across the subdivision. Dr Stanley summarised recent research on the distances domestic cats are able to roam and the damage they can inflict on wildlife within reserves. Examples were provided of domestic cats

being trapped inside reserves where predator proof fences are in place, such as at Omaha and Shakespear Regional Park. Mr Statham considered that a cat free condition provided more certainty than a fence, reiterated the issues Council has experienced with predator proof fences in parks and provided examples of nearby developments such as Sunny Heights and Weiti where pet free convenants were in place.

126. In response to our amended directions, the applicant provided an example of a anti-predator condition from a 74 lot subdivision proposal at Kamo, Whangarei. In that case a cat and dog proof fence was provided adjacent to the Pukenui Forest Reserve in conjunction with a 'no cat' buffer set back from the boundary of approximately 200m. Mr Littlejohn considered such a buffer could be applied to all of the lots within Stages 3, 4, 5 and 7 of the proposal and would act as a practicable management technique. De-sexing and microchipping, and limits on the number of dogs to two per lot, would further assist in managing potential wildlife risks from domestic animals in the forest.

127. In his supplementary statement, Mr Wrigley reminded us of the evidence presented by Dr Stanley emphasising that cats will travel much further than 200 metres. There was some discussion about whether cat free consent conditions can effectively be implemented. Dr Stanley had pointed out that buyers know they are purchasing in a cat-free development which acts as a deterrent in itself to cat owners. In supplementary evidence Mr Wrigley submitted that the body corporate should be responsible for enforcement. Mr Statham also provided draft wording in relation to a cat free covenant. We note that Council compliance officers have the ability to issue infringement notices to anyone acting contrary to a consent notice but consider that the legal entity to be established could have a role in terms of education and advocacy around these matters. This would best be captured in the matters listed in the conditions to be complied with on a continuing basis for the owners of the common areas. In his final response Mr Littlejohn confirmed a cat free condition was not the preferred approach of the applicant but could be accepted if the Panel was inclined to impose such a condition. He added that such a condition would render the proposed cat proof fence unnecessary. We agree that it would be onerous to require a fence of the same specifications (1.8m high mesh fence) if a cat free covenant was in place but are conscious of the Department of Conservations submission and the need to provide some form of boundary demarcation fence.

Finding

128. We prefer the evidence of Council's ecologist and that of Mr Wrigley and Dr Stanley that cats should be excluded from the entire subdivision to mitigate potential adverse effects on the ecological values of Nukumea Reserve. We consider that the motorway represents a relatively effective barrier and the rural land use to the south and west of the property (at least for some time yet) also lessens the likelihood of domestic pests entering the reserve. In our view that

increases the potential effectiveness of a cat free covenant on the site. We also consider that consistency with the cat free provisions of nearby developments in the Rodney ecological area will promote beneficial ecological outcomes. With the implementation of the total cat ban, the requirements for the fence along the Nukumea Reserve boundary are able to be reduced to a rural boundary fence.

Earthworks, dust and stability

129. The applicant's evidence from Mr Lee and Mr Hardcastle on earthworks, dust and stability demonstrated an approach which is consistent with standard practice and Auckland Council guidelines. We note that some submitters raised concern about the effects of dust during the construction phase. The Council's assessment of these matters agreed with the applicant and, subject to conditions accepted by the applicant, earthworks, dust and stability effects will be less than minor. To respond to the issue of dust management raised by some submitters we have added a further explicit requirement to the conditions that the Erosion and Sediment Control Plans include consideration of the best practicable option for dust management.

Finding

130. We accept that the effects of earthworks and the potential for instability can be appropriately managed with the proposed conditions.

Section 104D Conclusion

131. The application cannot be granted unless it satisfies either the minor adverse effects threshold of section 104D(1)(a) or the 'not contrary' to the objectives and policies of the relevant plan test of section 104D(1)(b).

132. The applicant submitted, principally through the planning evidence of Mr Shearer, that the application satisfied both tests. Mr Shearer appropriately acknowledged that the proposal did not satisfy all of the relevant objectives and policies, but he considered that, overall, there was a general consistency.

133. The Council's planning officers and Ms Bell disagreed with his conclusions. Ms Madsen focussed in particular on what she considered to be the more than minor adverse effects on streams and wetlands and Ms Bell considered that effects on rural character, amenity values and landscape values were potentially significantly adverse.

134. From our findings above it is evident that we do not agree with the Council officers' or Ms Bell's view on effects. Our conclusions take into account, as they must, the ability to mitigate adverse effects through the conditions of consent. As we have noted in relation to stream mitigation, we consider that to rely on an extended period for the mitigation to materialise would be pushing the

boundaries of ensuring that the effects of the stream reclamation and modification were only minor. In terms of other effects we consider that either the evidence demonstrates that effects are minor, or that the conditions will ensure that this is the case.

135. In relation to section 104D(1)(b) we agree with the Council officers and Ms Bell that providing for this development by way of resource consent is inconsistent with the approach to urbanisation envisaged by the objectives and policies within the regional policy statement of the AUP-OP and those of the Future Urban zone. However, largely based on our findings above on structure planning we consider that the features of the site and the measures taken by the applicant to arrive at an appropriate balance for development within the site and to connect the site to its neighbours we consider that the proposal is not contrary to the substance of the provisions. In relation to the matters raised by the Mayes/Smith submission by Ms Bell we are satisfied that the proposal is also not contrary to the Future Urban zone provisions on rural character and amenity.

Finding

136. Overall, we find that the proposal satisfied both limbs of the section 104D gateway tests. For the absence of doubt, that includes the neighbourhood centre part of the subdivision.

Sections 104, 105, 106, 107 and Part 2 of the RMA

137. In accordance with section 104(1)(b)(i)-(vi) of the RMA, we have had regard to the relevant policy statements and plan provisions. The Supreme Court decision in the *King Salmon* case, and the subsequent *Davidson* case, which has specific implications for the consideration of resource consents, held that only in limited circumstance is it necessary for decision-makers to make specific reference back to Part 2 as the planning documents have already given substance to the principles enunciated in that part of the RMA. This logic can be applied to the NZCPS, NPS-UDC, NPSFM and much of the regional policy statement, in that provisions for the Future Urban zone and the Auckland-wide sections of the AUP-OP have been prepared to give effect to each of these superior documents.

138. Mr Littlejohn submitted that this case was one of those where recourse to Part 2 was necessary as the AUP-OP had not envisaged the transitional circumstances where an application had been lodged before the zoning had been settled and, more substantively, that we might find that the lack of a formal structure planning exercise was fatal to the application. We have not found that to be the case. However, at the very least as a matter of caution and taking an integrated approach as the Environment Court did in the *Envirofume* case Mr Littlejohn referred us to, we have had recourse to Part 2 as a ‘check’.

139. We have previously referred to the key provisions of Chapter B2 and the Future Urban zone in relation the urbanisation of land within the zone. Our finding was that the applicant had addressed the substance of these provisions. In relation to the Auckland-wide provisions of the plan, particularly those on streams and wetlands in Chapter E3, we have considered the strong direction to avoid reclamation, "*unless there is no practicable alternative*" (Objective E3.2(6)). In this case 'practicability' had to take into account the existing 105 lot consent which reclaimed the majority of the Middle Stream already, and the balance to be struck between efficient land use and the protection of streams. The loss of the stream is to be mitigated on and off-site through measures that are to be implemented immediately.

140. In relation to the neighbourhood centre, while the proposal passes the gateway tests in terms of adverse effects being no more than minor and not being 'contrary to' the relevant objectives and policies, our finding is that current design does not respond sufficiently to Policy B2.3.2(1) and that adverse effects relating to the centres relationship to its surroundings, vehicle access and the amenity of pedestrians and cyclists could be avoided through well-considered design.

141. We are satisfied that there is nothing in the application that engages the cautionary aspects of sections 105 to 107 and would require us to decline either the wastewater overflow discharge, stormwater or the subdivision consent.

142. In terms of Part 2 of the RMA, we consider that the proposed subdivision will promote the sustainable management of natural and physical resources. It will enable the provision of social and economic well-being, but not at the expense of adverse effects on the environment that are not able to be avoided or mitigated. We consider that the applicant has appropriately addressed the most efficient use of land within its site that has significant topographic constraints, and considered land beyond the boundaries of the site in terms of connectivity and interface. The application recognises and provides for relevant matters in section 6 and has particular regard to relevant matters in section 7, including section 6(c) in relation to the small section of Significant Ecological Area, and sections 7(b), 7(c), 7(f) and 7(g). On the matters raised in section 6(e) and section 8 on the Treaty of Waitangi we record that although Ngati Manuhiri did not attend the hearing, the iwi recorded its general support for the proposal and expressed a wish to have ongoing involvement in the project.

Decision

143. In exercising our delegation under sections 34 and 34A of the RMA and having regard to the foregoing matters, sections 104, 104D, 105, 106 and 107 and Part 2 of the RMA, we determine that resource consent for the subdivision as sought is granted, with the exception of the land within the two superlots being Stage 1J

and 1K (see Airey drawing SK90 dated 30 June in applicant's reply drawings) for the reasons and subject to the conditions set out below.

Reasons for the decision

i. The proposal satisfies the threshold test of s104D because the adverse effects on the environment will be no more than minor and the proposal will not be contrary to the objectives and policies of the AUP-OP.

ii. Notwithstanding that the application urbanises the subject land without a formal structure plan process and rezoning, as contemplated by the AUP-OP, the application nevertheless demonstrates that the key elements of the substance of structure planning (as articulated in Appendix 1 of the AUP-OP) have been observed. In particular, the proposed use of land is efficient and strikes an appropriate balance between retaining the natural resources of the site and using the land in a manner that takes advantage of direct access to State Highway One and proximity to Orewa and Silverdale. Further, the proposed subdivision and development provides appropriate interfaces and connections to neighbouring land.

iii. The identification of land within the subdivision for the purposes of a neighbourhood centre is accepted in principle, however the details of the centre in terms of the number and size of individual lots, access, parking, community uses and open space require further design so as to achieve consistency with the relevant objectives and policies, and result in a centre that better meets the functional and operational needs of its intended use and relates more efficiently and effectively to its neighbouring land uses including the residential subdivision, the arterial road and the proposed RTN station.

iv. The adverse effects on the streams and wetlands within the site are able to be mitigated on and off-site through the implementation of a Stream Environmental Compensation Plan. Potential adverse effects on rural character and amenity values are minor and able to be mitigated through boundary planting conditions.

v. In summary, the proposed subdivision will promote the sustainable management of natural and physical resources as required by Section 5 of the RMA. It will enable the provision of social and economic well-being, but not at the expense of compromising the forseeable needs of the community either within or around the site as the area is urbanised, or creating adverse effects on the environment that are not able to be avoided or mitigated.

CONDITIONS

Pursuant to sections 108 and 220 of the Resource Management Act 1991 (Act) this consent is subject to the following conditions

General Conditions

Note: These general conditions apply to each of the land use, discharge, stream works, subdivision and water take consents (LUC60010513, SUB60035991, DIS60048302, DIS60048335, LUS60048380 andWAT60051016).

Definition of Terms

1. In these conditions:

   (a) "approve", "approval" and "approved" or "to the satisfaction of" in relation to plans or management plans means assessed by Council staff acting in a technical certification capacity, and in particular as to whether the document or matter is consistent with, or sufficient to meet, the conditions of this consent, and certified as such for the purposes of the conditions of this consent;

   (b) "conditions" means the conditions of this consent imposed under section 108 RMA, or offered by the Consent Holder and included in the consents;

   (c) "consent" means the land use, discharge, stream works, subdivision and water take consents (LUC60010513, DIS60048302, DIS60048335, LUS60048380 and *WAT60051016*);

   (d) "Consent Holder" means the applicant, Orewa West Investments Limited, at Auckland;

   (e) "Council" means the Auckland Council;

   (f) "engineering works" includes, but is not limited to:

   - Earthworks and sediment control;
   - The formation of roads, the laying of pipes and other ancillary equipment for stormwater, water supply, drainage or sewage disposal;
   - Street lights, landscaping or structures on land; and
   - Any other works required by conditions of this consent.

   Note: Structures such as retaining walls, in-ground walls and bridges may require a separate Building Consent or could be processed with the Engineering Plan Approval if associated with ground works.

   (g) "RMA" means the Resource Management Act 1991;

   (h) "Team Leader" means the Team Leader Northern Monitoring.

Application Plans and Materials

2. Unless any changes are required by the conditions below, the land use, discharge, stream works, subdivision and water take activities shall be carried out in general accordance with the plans and all information submitted with the application, detailed in Appendix 1, and all referenced by the Council as consent numbers LUC60010513 (landuse), SUB60035991 (subdivision), DIS60048302 (stormwater discharge), DIS60048335 (wastewater discharge), LUS60048380 (stream works) and WAT60051016 (water permit).

3. In the event of any inconsistency between the approved drawings and supplementary documentation, the approved drawings will prevail. In the event of any inconsistency between the approved drawings, plan 11712-01 drawing SK89 Rev A prepared by Airey Consultants Limited will prevail.

   Advice Note:

   All engineering plans, including Erosion and Sediment Control Plans, referenced in condition 2 are indicative (information purpose only) and will be subject to the Engineering Plan Approval or similar process required by the conditions of this consent.

Monitoring Charges

4. The Consent Holder shall pay the Council an initial consent compliance monitoring charge of $1500 (inclusive of GST), plus any further monitoring charge or charges to recover the actual and reasonable costs that have been incurred to ensure compliance with the conditions attached to this consent.

   Advice Note:

   The initial monitoring charge is to cover the cost of inspecting the site, carrying out tests, reviewing conditions, updating files, etc, all being work to ensure compliance with the resource consent. In order to recover actual and reasonable costs, inspections, in excess of those covered by the base fee paid, shall be charged at the relevant hourly rate applicable at the time. The Consent Holder will be advised of the further monitoring charge or charges as they fall due. Such further charges are to be paid within one month of the date of invoice. Only after all conditions of the resource consent have been met, will Council issue a letter confirming compliance on request of the Consent Holder.

Lapse of Consent

5. Under section 125 of the RMA, this consent lapses ten years after the date it is granted unless:

- The consent is given effect to (i.e. a survey plan or plans for all stages of the subdivision have been submitted to Council for approval under section 223 of the RMA), but shall thereafter lapse if the survey plan or plans are not deposited in accordance with section 224 of the RMA; or

- The Council extends the period after which the consent lapses

Review of Conditions

6. At least 7 days prior to any work commencing in relation to this consent, the Consent Holder shall notify the Council's RMA Compliance Administrator by telephone (0800 426 5169) of the expected date of work commencing.

Access to property

7. Until all the conditions of this consent have been completed to the satisfaction of the Team Leader, Resource Consenting and Compliance, servants or agents of the Council are to be permitted to have access to relevant parts of the property at all reasonable times for the purpose of carrying out inspections, surveys, investigations, tests, measurements and/or to take samples while adhering to the Consent Holder's Health and Safety Policy.

Staging

8. Subdivision of the land may be undertaken in accordance with the staging plans referred to under condition 2, comprising eight stages, 51 super-lots and 575 finished lots.

9. For each stage the Consent Holder (or their successor in title) shall comply with the corresponding works required under the engineering and other management and maintenance plans set out below as necessary for the specific stage of the subdivision.

Conditions to be Complied with Prior to the Commencement of Works

Note*: These conditions apply to all works authorised by the land use, discharge, stream works, subdivision and water take consents (LUC60010513, DIS60048302, DIS60048335, REG66080 and REG67197).*

Engineering Plan Approval

10. Prior to commencement of any construction work for each stage, or prior to lodgement of the survey plan pursuant to section 223 of the RMA for that stage, whichever is earlier, the Consent Holder shall submit two hard copies and one PDF/CD version of complete engineering plans (including engineering calculations and specifications) for the works to be completed in that stage of the development to the Team Leader for approval ("EPA").

11. No construction activity shall commence on site until written confirmation of approval of the engineering plans and associated management plans has been obtained from the Team Leader and all measures identified as required to be established prior to commencement of works have been established to the satisfaction of the Team Leader.

12. Details of the chartered professional engineer who will act as the Consent Holder's representative for the duration of the development must also be provided with the application for EPA. Any subsequent change to the nominated Developer's Representative shall be immediately notified in writing to the Consents Engineer.

13. The engineering plans are to include the following:

    (a) Details of the extent of works to be undertaken in the stage and the extent of stabilisation to be completed at the end of the stage and/or construction season.

    (b) A Construction Management Plan ("CMP") for the stage containing sufficient detail to address the following matters (where relevant):

        - Who the site or project manager is and contact details (phone, facsimile, postal address).
        - The location of notice boards that clearly identify the name, telephone number and address for service of the site or project manager.
        - Measures to be adopted to ensure that pedestrian access past the works is provided where practicable and that such access is safe.
        - Procedures for controlling sediment runoff and removal of debris and construction materials from public roads or places
        - The location and design of all hoardings and gantries.
        - Measures to be adopted to maintain the site in a tidy condition in terms of disposal/storage of rubbish, storage and unloading of building materials and similar construction activities.
        - Control procedures for delivery and removal of construction materials from public roads or places.
        - Location of workers conveniences (e.g. portaloos).
        - Ingress and egress to and from the site for construction vehicles.
        - Hours of operation and days of the week for construction activities (in accordance with any other specific condition in this consent relating to construction hours).
        - Construction noise management.

(c) Prior to the commencement of any earthworks activity on the subject site, a finalised Erosion and Sediment Control Plan (ESCP), prepared by a suitably qualified person, shall be prepared and submitted to the Team Leader – Northern Monitoring, No earthworks on the subject site shall commence until written approval from the Team Leader has been provided confirming that the ESCP is satisfactory. The ESCP shall include but is not limited to:

- staging details with specific erosion and sediments control works including location, dimensions and drawing in A3 format. All controls should be in line with Industry Best Practice as well as in general GD05 Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region (GD05));
- details of the site's stabilised construction entrance(s);
- timing and duration of construction and operation of control works;
- details relating to the management of exposed areas (eg grassing, mulching or placing of hard fill);
- the maximum exposed areas proposed and/or confirmation that an area no greater than 15ha will be exposed at any one time throughout the duration of the earthworks;
- monitoring and maintenance requirements for the proposed erosion and sediment controls; and
- measures for the management and measurement of dust in accordance with GD05 and the MfE Good Practice Guide for Assessing and Managing Dust.

(d) Erosion and sediment control measures shall be constructed and maintained in general accordance with GD05 and any amendments to this document, except where a higher standard is detailed in the documents referred to in the conditions elsewhere, in which case the higher standard shall apply. For the purposes of clarity, the following additional standards are to be included:

- sediment retention ponds (SRP) are to be sized to meet, and where possible exceed the minimum volume of 3% (300m³ of storage for each 1ha of contributing catchment);
- The decant systems in the SRPs are to have devices to enable the raising of these decants;
- SRPs are to have forebays with a minimum volume of 10% of the pond's volume;

- Floating booms are to be installed in the SRPs where appropriate to trap and floating debris (such as mulch) to minimise blockages of the decants;

- Decanting earth bunds (DEBs) are to be sized to a minimum of 3% (90m³ of storage capacity for each 3,000m² of contributing catchment);

- DEBs shall have a minimum length to width ration of 3:1, a level impoundment area, a single perforated, floating T-bar decant, a decant rate of 3l/sec/ha of contributing catchment, a stabilised emergency spillway, a minimum of 2m in width;

- All sediment control fencing utilised during earthworks shall be constructed as super silt fences in accordance with GD05;

Advice Note:

In the event that minor amendments to the ESCP are required, any such amendments should be limited to the scope of this consent. Any amendments which affect the performance of the erosion and sediment controls may require an application to be made in accordance with section 127 of the RMA. Any minor amendments should be provided to the Team Leader prior to implementation to confirm that they are within the scope of this consent.

(e) Prior to bulk earthworks commencing, a certificate signed by an appropriately qualified and experienced engineer shall be submitted to the Team Leader, to certify that the erosion and sediment controls have been constructed in accordance with the erosion and sediment control plans as specified in condition 13 (c) of this consent.

Certified controls shall include the sediment retention ponds, the decanting earth bunds, chemical treatment arrangements, super silt fences and diversion channels/bunds. The certification for these subsequent measures shall be supplied immediately upon completion of construction of those measures. Information supplied if applicable, shall include:

a) Contributing catchment area;

b) Shape of structure (dimensions of structure);

c) Position of inlets/outlets; and

d) Stabilisation of the structure.

Advice Note:

Perimeter controls include cleanwater diversions, silt fences and any other erosion control devices that are appropriate to divert stabilised upper catchment runoff from entering the site, and to prevent sediment-laden water from leaving the site.

Advice Note:

Certified controls may include sediment treatment devices, any decanting earth bunds and diversion channels/bunds.

(f) Design of a local road (Road 1) to be formed from the entry road across the site to the western boundary as generally outlined on the plan 11712-01 drawing SK89 Rev A prepared by Airey Consultants Limited. The design of Road 1 shall ensure a threshold treatment is provided at an appropriate distance from the motorway interchange to encourage drivers to lower vehicle speeds before entering the site. The gradient of Road 1 shall be designed and constructed in accordance with the Auckland Transport Code of Practice and the Austroads Guide to Road Design. The design of the Road 1 shall be submitted with the engineering plans for Stage 1.

Advice Note:

Road 1 follows the alignment determined by Auckland Transport as a future arterial road. Although condition 13(f) requires the design of a local road, if Auckland Transport constructs the arterial road, a formal Infrastructure Funding Agreement ("IFA") will be required. The IFA will set out how the costs of the road construction to arterial road standards are to be shared.

(g) Details of the location and design of all rubbish collection points.

(h) Design of footpaths to be constructed on each street designed to be vested as a public road, including along Road 1. Such design to be generally in accordance with Auckland Transport's Code of Practice. Footpaths shall be provided on both sides of the road. Provision for footpaths is not required for any public 'shared zone' streets but for the 'shared zone' streets, pedestrians must be able to walk along these streets safely. For all other private roads, a 1.8m wide footpath shall be installed on at least one side. The details of these footpaths shall be determined at the EPA stage.

(i) Detailed design of all street and accessway lighting and any other structures/facilities on the roads to be vested in the Council which are to be designed in accordance with Auckland Transport's Code of Practice. The type of light fittings shall be acceptable to the electricity network supplier responsible for the area.

(j) Detailed design of private accessways to be constructed as vehicle crossings, with the footpath continuous in grade, width, colour and cross-fall. The accessways shall also ensure a 5m platform no steeper than 1 in 20 prior to the footpath.

(k) Detailed design of all new public accessways in accordance with Auckland Transport's Code of Practice. Detailed design of pedestrian and cycle trails within the common areas of the site, generally in accordance with Fig. 27 of the Boffa Miskell Pedestrian and Cycle Strategy Diagram Rev. B and in accordance with the guidelines set out in the NZ Cycle Trail Design Guide (4th Edition).

(l) Detailed design of a new left turn lane to be constructed on the northbound off-ramp at the approach to the western interchange roundabout, generally as per Traffic Solutions Ltd Dwg.712/1. Detailed engineering design plans shall be submitted to NZTA prior to construction, and implemented in accordance with NZTA requirements. The slip lane shall be constructed and operational upon completion of Section 224(c) for Stage 1.

(m) Detailed design of a shared path to be provided from Road 1 to the signalised pedestrian crossing at Arran Drive, in general accordance with the plan 11712-01 drawing 310 Rev E, prepared by Airey Consultants Limited. The width of the pedestrian/cycle bridge shall be designed to allow for a 3.5m usable shared path width. The design of the proposed shared path shall include anti-throw screens along its length to prevent the ability for path users to throw items onto the State Highway 1 motorway corridor. The proposed shared path shall be designed to be constructed a minimum of 6m from the existing Grand Drive overpass, or at a location agreed to by the NZ Transport Agency. Design plans shall be submitted to the NZ Transport Agency for consideration and approval, at the detailed engineering design phase and shall be submitted with the engineering plans for Stage 1.

(n) Design of pedestrian / cyclist crossing places to the satisfaction of the NZ Transport Agency across both the northbound on ramp and the south bound off ramp to connect the proposed shared path to the eastern and western areas of Grand Drive. At the northbound on ramp, it is anticipated that a suitable crossing point would be between 19 – 22m down the on ramp and at the southbound ramp, it is anticipated that a suitable crossing point would be between 20 – 23 m from the roundabout. The design of the crossing places shall be submitted with the engineering plans for Stage 1.

(o) Design of pedestrian / cyclist crossing places to the satisfaction of the NZ Transport Agency across both the northbound on ramp and the south bound off ramp to connect the proposed shared path to the eastern and western areas of Grand Drive. At the northbound on ramp, it is anticipated that a suitable crossing point would be between 19 – 22m down the on ramp and at the southbound ramp, it is anticipated that a suitable crossing point would be between 20 – 23 m from the roundabout. The design of the crossing places shall be submitted with the engineering plans for Stage 1.

(p) At the time of detailed engineering design for the final stage of the development, or at the time Road 1 becomes a regional arterial road, whichever occurs first, the Consent Holder shall undertake an assessment of the safety and effectiveness of the crossing points referred to in Condition 13(o) for the review of the NZ Transport Agency. If the NZ Transport Agency determines that a crossing treatment at these locations (such as a zebra crossing or signals to assist pedestrians and cyclists to safely cross the road) is necessary, the cost of these works shall be met by the Consent Holder.

(q) The Consent Holder will consult with the Department of Conservation regarding the provision of additional connections from the development to the Nukumea Scenic Reserve and to the walking and cycling network.

(r) Infrastructure projects with respect to the roading connections to the potential Rapid Transit Network (RTN) station, construction of a future arterial and others will require the Consent Holder to enter into a formal Infrastructure Funding Agreement (IFA) with Auckland Council and/or Auckland Transport. An agreed IFA shall be provided to the Team Leader Compliance and Monitoring as evidence for how such current/future infrastructure projects can be delivered. The IFA may include but is not limited to:

- Landowner's approvals from Auckland Transport for works in the road reserve land.
- A road stopping or road exchange process.
- Further analysis to determine whether the road reserve space between Road 1 and Lots 95-99 will provide an acceptable radius of curvature and gradient for a future RTN Station access road, which will need to provide for buses and potentially walking and cycling access.
- Further analysis to determine the design of the intersection of the RTN Station access road/ Road 1 arterial for example whether it is a roundabout or a signalised intersection.
- Further analysis to assess the interaction of the future RTN Station access road/ Road 1 intersection with the Grand Drive interchange and to determine whether the arterial road and SH1 interchange will operate effectively under the proposed layout. It is expected that this analysis will occur over the next 5 years as part of the Supporting Growth programme.
- Further analysis to assess the internal circulation of traffic flows within the residential sub-division and the interaction of local access traffic with commuter traffic entering/ exiting the proposed park and ride.

Advice Notes:

Auckland Transport may request additional infrastructure be included in the IFA and it is recommended that further discussions are held with Auckland Transport.

The Consent Holder will ultimately be required to complete Auckland Transport's Road Stopping process to remove the paper road status from the two sections of existing paper road through the land towards the southern end of the site. It should be noted that the process for legally stopping a road can take some time and therefore this process should be initiate as soon as possible to reduce potential delays.

All signage and markings for traffic controls within the development shall be made legally enforceable.

The consent holder is advised that all regulatory controls, such as no stopping restrictions, give way or stop controls, must be officially resolved by AT's Traffic Control Committee. Any controls within the existing road reserves may require consultation. All costs related to the implementation of regulatory controls are to be borne by the applicant.

(s) Details of how the public stormwater system will be constructed. Full design calculations, detailed drawings and maintenance schedules shall be provided with the engineering plans to cover the expected ongoing requirements for all stormwater treatment devices.

(t) Full design details and calculations demonstrating options for the collection, treatment and utilisation of roof collected water. The report shall also provide stormwater storage, attenuation and discharge details for a range of impermeable surfaces.

(u) Detailed design, for each stage, of the reticulated water supply network, to be provided in accordance with New Zealand Fire Service Fire Fighting Water Supplies Code of Practice SNZ PAS 4509:2008.

(v) Details of how development of roads and access ways will enable access for emergency vehicles for firefighting purposes in accordance with New Zealand Fire Service Fire Fighting Water Supplies Code of Practice SNZ PAS 4509:2008.

(w) Details of fire hydrants to be installed. Should fire hydrants be incorporated as part of the reticulated network, they must be placed on the footpath to enable unimpeded access for the New Zealand Fire Service and must be located within 135m of all lots in accordance with New Zealand Fire Service Fire Fighting Water Supplies Code of Practice SNZ PAS 4509:2008.

Advice Note:

Should the applicant wish to undertake alternative methods of providing water supply for firefighting purposes such as sprinkler systems or water tanks, it is strongly recommended the NZFS are consulted prior to such concepts.

Advice Note:

The applicant is reminded that they will need to obtain an encroachment

licence from Auckland Transport for the proposed private water supply lines within public roads.

(x) Detailed design of a car park to be constructed at the northern end of the site, physically separate from the adjoining reserve. The separation shall be suitable to prevent access to the reserve by motor vehicles including motor cycles, but enable access for pedestrians.

(y) The details of a boundary fence (minimum seven wire post and batten) to be constructed along the boundary of the Nukumea Reserve, including details of the staging of its construction.

14. As part of the application for Engineering Plan Approval for each stage, a chartered professional engineer must:

(a) Certify that the public stormwater system has been designed in accordance with the requirements of the Council's Code of Practice for Land Development and Subdivision Chapter 4 (Stormwater) to serve all lots within the stage of development.

(b) Certify that all water supply and wastewater systems have been designed in accordance with the *Water and Wastewater Code of Practice for Land Development and Subdivision,* May 2015 prepared by Watercare Services Limited.

(c) Certify that the requirements of the New Zealand Fire Service Fire Fighting Water Supplies Code of Practice SNZ PAS 4509:2008 have been met.

(d) Certify that all public road and associated structure/facilities or accessways have been designed in accordance with the Auckland Transport Code of Practice.

(e) Confirm that all practical measures are included in the design to facilitate safe working conditions.

15. Any variation or changes to the approved engineering plans shall be submitted for approval to the Team Leader as an amendment and approval received thereto prior to construction of the varied works.

16. A Road Safety Audit (RSA) shall be undertaken on the detailed design of the roading within the development and for any works within the existing road reserve. Separate RSAs shall be undertaken for each stage of development. Any safety related changes identified in the RSA's and required by the road controlling authority shall be implemented at the cost of the consent holder.

17. An independent safety audit shall be prepared and provided to the NZ Transport Agency for proposed Road 1 and its connection to within the existing western roundabout of the Grand Drive interchange. Any safety related changes identifies in the RSA's and required by the road controlling authority shall be implemented at the cost of the consent holder.

    Advice Note:

    The New Zealand Transport Agency may have additional safety audit requirements for works within its designation.

18. Where an approach to an intersection results in a K value less than 4, advance warning for the intersection shall be provided by way of signage, markings or additional speed calming.

Temporary Traffic Management Plan

19. Prior to the commencement of any works, the Consent Holder shall submit a Temporary Traffic Management Plan ("TTMP") to the Team Leader for approval. The TTMP shall:

    (a) Address the effects of temporary works associated with the western Grand Drive Interchange roundabout.

    (b) Address the effects of heavy vehicle movements to and from the site, particularly associated with removal or importation of fill materials and topsoil (as required by any other specific condition of this consent) and for all works associated with the western Grand Drive Interchange roundabout and within the State Highway 1 motorway corridor and designation.

20. The TTMP shall meet Council's and NZTA requirements (refer s.109.2 of the "Standards for Engineering Design and Construction") and shall be provided to the NZ Transport Agency for consideration and approval.

21. The Consent Holder shall obtain written approval and an 'agreement as to works' from the NZ Transport Agency for all works within the State highway 1 motorway corridor and designation.

    Advice Note:

    Prior to the commencement of construction, any works to be carried out on NZ Transport Agency property requires its land owner approval.

Vegetation Removal Plan

22. Prior to commencement of any works the Consent Holder shall submit a Vegetation Removal Plan ("VRP") to the Team Leader for approval. No vegetation removal shall occur outside the property boundary. i.e. no vegetation shall be removed from the adjacent Nukumea Reserve. The Consent Holder shall undertake all efforts to retain as much vegetation as possible on site.

Planting Management Plan

23. Prior to commencement of any works, the Consent Holder shall submit a detailed Planting Management Plan ("PMP") to the Team Leader for approval for all site areas to be planted. The PMP shall:

    (a) Provide for the use of native, eco-sourced, vegetation from as close as possible, including fruiting and flowering trees and plants.

        Advice note:

        This is to ensure continuity and connectivity with Nukumea Scenic Reserve, enhancing the overall environment for native biodiversity (taonga). Appropriate plants should be used in the varying habitats to provide the natural, native foods and refuges for the differing species e.g. fruiting plants for forest birds, reptile friendly plants, habitat for fernbirds, protection and enhancement of wetland areas for swamp birds.

    (b) Provide for the use of appropriate species (that will be restricted in height at maturity) for the higher contoured areas at the western boundary of the site for a distance of at least 20m below the unformed legal road.

    (c) Show planting of native species around the northern permitter of the site to provide a buffer between the development and the Nukumea Reserve and limit edge effects as depicted on Figure 11: Revegetation and Open Space Concept Plan prepared for Orewa West Ltd by Boffa Miskell Limited 29 May 2017.

    (d) Show boundary screen planting to a width of 5m wide along the southern and western boundaries, including the interface with 53A and 53B Russell Road, as depicted on Figure 12: Revegetation and Open Space Concept Plan prepared for Orewa West Ltd by Boffa Miskell Limited 22 May 2017. The planting shall be comprised of a mixture of bush and tree species.

    (e) Provide for a weed and pest animal control plan for all existing vegetation and planting areas.

    (f) Provide for the planting of all fringe areas of the site currently dominated by gorse and woolly nightshade (and other weeds) with appropriate native species, including the long-term management of these plantings.

(g) Show the specific planting works to be undertaken in each stage of the development, ensuring that the boundary screen planting proposed in (f) above shall be completed as part of Stage 2 of the development.

(h) Include a maintenance schedule and programme for all site areas to be planted.

24. The Consent Holder shall carry out all planting in the stages identified and in accordance with the approved PMP. The Consent Holder will advise Council when planting for each stage is initiated.

25. Plant maintenance in accordance with the approved PMP shall occur for five years or until 75% canopy closure has occurred and a minimum survival rate of the plants (being 90% of the original density through the entire planting area(s)) has been achieved. Plant maintenance includes the ongoing replacement of plants that do not survive. All invasive weeds and animal pests shall be controlled in accordance with the weed and pest animal control plan both at the time of initial planting and any replacement planting if required and on an ongoing basis.

26. The Consent Holder shall submit a Planting Monitoring Report to the Team Leader for approval 6 monthly for the first 18 months then annually thereafter for the remaining period to make up a total minimum period of five years. The Monitoring Report shall include but is not be limited to the following information in respect of each lot:

(a) Success rates, including growth rates and number of plants lost (including an analysis of the distribution of losses);

(b) Canopy closure, beginnings of natural ecological processes - natural regeneration in understorey, use by native birds;

(c) A running record of fertilisation, animal and weed pest control and replacement of dead plants;

(d) Details on the condition of, and recommendations for maintenance of, the fencing.

(e) Recommendations for replacement of dead plants and implementation of these recommendations (remediation work). Any recommended remediation work shall include a start date for replanting.

27. If remediation work is recommended in accordance with condition 26, the Consent Holder shall:

(a) Undertake this remediation work within six months from the start date.

(b) Provide Council with a report confirming the remediation work has been undertaken. This report shall be submitted to Council's Team Leader, Compliance Monitoring (Orewa) within 6 months after the remediation work has been undertaken.

28. Once Council has provided a practical completion certificate the Consent Holder may enter into a surety bond of a sum calculated to be 1.5 times the cost of maintenance and 10% the cost of planting or $3000 per hectare (whichever is the greater sum) to allow the early release of s.224(c) Certificate. The value of this bond shall be to the satisfaction of the Team Leader. The purpose of the bond is to ensure a minimum survival rate of the plants to 90% of the original density and 75% canopy closure through the entire planting areas.

Streamworks and Riparian Planting and Management Plan

29. Prior to commencement of any works the Consent Holder shall submit a Streamworks and Riparian Planting and Management Plan ("SRPMP") to the Team Leader for approval. The plan shall follow best practice methodology and shall include:

    (a) Specific erosion and sediment controls for instream work.

    (b) Specific details regarding the placement of the culvert under Road 1.

    (c) Methodology for the reclamation and installation of the counterfort drainage to be placed in the upper middle stream.

    (d) Details of how flows will be managed during this time.

    (e) Provision for a minimum of 10 metres from the bank edge of intermittent streams, and 20 metres from the bank edge of permanent streams to be planted in native vegetation.

    (f) The specific planting works to be undertaken in each stage of the development.

    (g) A planting and maintenance schedule

30. The Consent Holder shall carry out riparian planting in accordance with the approved SRPMP. Any weeds present in the riparian area shall be controlled prior to planting in accordance with the weed and pest animal control plan.

Lizard Management Plan

31. Prior to the commencement of any vegetation removal works the Consent Holder shall submit and have certified by the Team Leader (North/West) Biodiversity, a Lizard Management Plan ("LMP") prepared by a suitably qualified and experienced ecologist/herpetologist. The LMP shall have two objectives:

    (a) The population of each species of native lizard present on the site shall be maintained or enhanced, either on site or at an appropriately translocated; and

    (b) The habitats on the site or at the translocation site post development support viable native lizard populations for all species present pre-development.

32. The LMP shall address the following (as appropriate):

(a) Credentials and contact details of the ecologist/herpetologist who will implement the plan.

(b) Timing of the implementation of the LMP.

(c) A description of methodology for survey, trapping and relocation of lizards rescued including but not limited to: salvage protocols, relocation protocols, nocturnal and diurnal capture protocols, supervised habitat clearance/transfer protocols, artificial cover object protocols, and opportunistic relocation protocols.

(d) A description of the relocation site(s); including discussion of:

- provision for additional refugia, if required e.g. depositing salvaged logs, wood or debris for newly released native skinks that have been rescued;
- any protection mechanisms (if required) to ensure the relocation site is maintained (e.g.) covenants, consent notices etc;
- any weed and pest management to ensure the relocation site is maintained as appropriate habitat;
- monitoring methods, including but not limited to: baseline surveying within the site; baseline surveys outside the site to identify potential release sites for salvaged lizard populations and lizard monitoring sites; ongoing annual surveys to evaluate translocation success; pre and post – translocation surveys; and monitoring of effectiveness of pest control and/or any potential adverse effects on lizards associated with pest control; and
- A post-vegetation clearance search for remaining lizards.

33. A suitably qualified and experienced ecologist/herpetologist approved to oversee the implementation of the LMP shall certify that the lizard related works have been carried out according to the approved LMP within two weeks of completion of the vegetation clearance works.

34. Upon completion of works, all findings resulting from the implementation of the LMP shall be recorded by a suitably qualified and experienced ecologist/herpetologist on an Amphibian and Reptile Distribution Scheme (“ARDS”) Card. A copy shall be sent to the the Team Leader (North/West) Biodiversity.

35. All works on site must comply with the certified LMP.

Advice note:

Please note that it is recommended that the lizard rescue plan is undertaken in conjunction with the vegetation clearance operations (and contractor) for an integrated approach (on the same day), to enable the physical search for gecko's following felling of trees and shrubs and to rescue any skinks from ground cover vegetation and terrestrial retreats.

Fish Capture and Relocation Plan

36. Prior to the commencement of any works the Consent Holder shall submit a Fish Capture and Relocation Plan to the Team Leader for approval. The plan will detail, as a minimum:

    (a) The timing of fish capture in relation to works methods.

    (b) Fish capture methods to be used.

    (c) Requirement for a freshwater ecologist to supervise all stream channel dewatering.

    (d) Proposed fish release sites.

    (e) Requirement to prepare a fish relocation report, to be provided to Council at the completion of stream works.

Stream and Wetland Environmental Compensation Plan

37. Prior to any streamworks reclamation, the applicant will provide the following:

    The Consent Holder shall submit a Stream and Wetland Environmental Compensation Plan ("SWECP") to the Team Leader for approval. The purpose of the SWECP shall be to identify and provide for suitable offsite mitigation and/or compensation for streamworks undertaken as part of the consent. The plan will detail, as a minimum:

    (a) Final location details of the compensation site(s).

    (b) Full calculations (including all supporting documentation) to determine the required amount of offsetting, including onsite and offsite SEV and ECR calculations, in accordance with TR2011/009, and TP148.

    (c) A compete quantified and qualified assessment and robust offsetting package for wetland loss.

    (d) Plans that identify the onsite impact and offsite mitigation locations for both streams and wetlands which clearly depict the widths of all riparian margins, the length of stream proposed to be impacted and mitigated and the wetland areas proposed to be impacted and mitigated.

    (e) A description of, and justification for, the form the offset compensation will take. This will include (but is not limited to):

- Riparian planting;
- Daylighting or naturalisation; and
- Instream habitat enhancement.

(f) Where mitigation is carried out offsite, the inclusion of a planting and maintenance plan, in accordance with Appendix 16 AUP:OP.

(g) Details of any of the provision(s) for fish passage at the offsetting sites.

(h) A detailed programme for the implementation of the compensation works demonstrating how they will be completed within two earthworks seasons from the start of the reclamation.

(i) Prior to streamworks commencing a native fish relocation plan shall be prepared and submitted to the Team Leader for certification.

(j) A suitably qualified freshwater ecologist shall conduct the fish relocation as per the fish relocation plan required in condition 36 and be on site during dewatering to rescue and relocate and native fish present.

(k) If fish relocation is carried out, the Team Leader shall be provided information regarding the species and number of fish relocated prior to and during dewatering within 5 days of completion of dewatering.

Chemical Treatment Management Plan

38. Prior to the commencement of bulk earthworks at the site, a Chemical Treatment Management Plan ("ChTMP") shall be submitted for the written approval of the Team Leader. The plan shall include as a minimum:

(a) Specific design details of the chemical treatment system based on a rainfall activated methodology for the site's sediment retention ponds and decanting earth bunds.

(b) Monitoring, maintenance (including post storm) and contingency programme (including a record sheet).

(c) Details of optimum dosage (including assumptions).

(d) Results of initial chemical treatment trial.

(e) A spill contingency plan.

(f) Details of the person or bodies that will hold responsibility for long term operation and maintenance of the chemical treatment system and the organisational structure which will support this system.

Advice Note:

The Consent Holder shall consider using environmentally sustainable or recyclable materials and products, including floccing products as part of its ChTMP.

In the event that minor amendments to the ChTMP are required, any such amendments should be limited to the scope of this consent. Any amendments which affect the performance of the ChTMP may require an application to be made in accordance with section 127 of the Act. Any minor amendments should be provided to the Team Leader prior to implementation to confirm that they are within the scope of this consent.

West Hoe Stream Arch Culvert

39. Prior to any streamworks in the West Hoe Stream catchment a West Hoe Stream Arch culvert design plan shall be submitted to the Team Leader for approval. The West Hoe Stream Arch culvert design plan shall include as a minimum:

(a) Final location details of the siting of the Arch culvert.

(b) Final design of the Arch culvert, abutments and inlet and outlet features.

(c) Details of how the design has avoided or minimised impact on the stream and wetland associated with the final location.

(d) Staging of the construction of the Arch culvert.

(e) Timing of the construction and if occurring during the main fish migration season (September-January) how streamworks will be managed to avoid any impediments to the passage of fish.

(f) How the final design will provide for fish passage in subsequent years.

(g) How the final design will minimise impact on the area and functions of the natural wetlands of the West Hoe Stream.

(h) How the final design will minimise variations in flows upstream and downstream of the culvert location.

(i) The development of a monitoring plan to ensure that the final design does not affect the ecological values of the West Hoe Stream and associated wetland areas.

Common Areas Maintenance Plan

40. Prior to the commencement of any works the Consent Holder shall provide to the Team Leader for approval a Common Areas Maintenance Plan ("CAMP"). In particular this plan is to:

(a) Provide details of the legal structure to be formed for the eventual owners to hold responsibility for the on-going maintenance and management of private infrastructure and planted areas to be developed as part of this consent. All land owners must be members/shareholders of this legal entity or otherwise legally obliged to contribute to its outgoings on a perpetual basis.

(b) Provide details of the staging of participation of eventual owners in the maintenance and management structure to ensure that all eventual owners participate in the legal structure on a fair and reasonable basis.

Design Guidelines

41. Prior to the commencement of any works the Consent Holder shall submit to the Team Leader for approval an updated set of Design Guidelines for the development of the subdivision. The updated guidelines shall be based on the design guidelines contained within Appendix 2 of the Grand View Estate Integrated Landscape, Ecology and Urban Design Report prepared by Boffa Miskell dated November 2015. The design guidelines shall be updated where necessary to reflect the changes made to the development since the scheme was first proposed.

Works in Progress Conditions

Pre-commencement meeting

42. Prior to the commencement of earthworks in each season, the Consent Holder shall hold a pre-start meeting to discuss the erosion and sediment control measures, the earthworks methodology and to ensure all relevant parties are aware of and familiar with the necessary conditions of this consent. The meeting shall be:

- Located on the subject site.
- Scheduled not less than five days before the anticipated commencement of earthworks.
- Include Auckland Council officer[s].
- Include representation from the contractors who will undertake the works.

43. The following information shall be made available at the pre-start meeting:

- Timeframes for key stages of the works authorised under this consent.
- Resource consent conditions.
- Approved Erosion and Sediment Control Plan, Construction Traffic Management Plan and Chemical Treatment Management Plan.

44. A pre-start meeting shall be held prior to the commencement of the earthworks activity in each period between October 1 and April 30 that this consent is exercised.

Advice Note:

To arrange the pre-start meeting please contact the Team Leader Northern Monitoring. The conditions of consent should be discussed at this meeting. All additional information required by the Council should be provided 2 days prior to the meeting.

Hours of work

45. All construction /earthworks activities on the site must comply with the New Zealand Standard 6803:1999 for Acoustics – Construction Noise, at all times. The use of any noise generating tools, motorised equipment, and vehicles associated with construction and/or earthworks activity on the site are therefore restricted to between the following hours to comply with this Standard:

Summer (1 November – 30 April)

- Monday to Friday 7:00 am to 6:00 pm
- Saturday 7:30 am to 6:00 pm

Winter (1 May – 31 October)

- Monday to Friday 7:30 am – 5:00 pm
- Saturday 8:00 am – 1:00 pm

All access and work on site associated with the activity shall be prohibited on Sundays and public holidays and for a two week period over the Christmas period (23 December – 5 January inclusive).

Advice Note:

Works may be undertaken outside these hours only with the written approval of the Council. This will be granted only under special circumstances, for example in the event of urgent stabilisation works or inclement weather preventing work Monday to Saturday. Any work outside these hours will be subject to the approval of any neighbouring residents or other affected parties that may be identified by the Council's Manager, Resource Consenting and Compliance in his/her sole discretion.

Health and Safety

46. A detailed Health and Safety Plan to the requirements of the Health and Safety at Work Act 2015, specifically addressing control of works on and adjacent to public land, and the protection of the public, shall be submitted to the Consents Engineer prior to the commencement of any works on the site (refer s.109.1 of the "Standards for Engineering Design and Construction"). A copy of the Health and Safety Plan shall be kept on the site at all times. All measures for the protection of the public and other personnel set out in the Plan shall be maintained and complied with at all times until such time as the works are completed.

Construction Effects Management

47. All management plans approved with the EPA shall be implemented during the course of development works for each stage. Prior to bulk earthworks commencing, a certificate signed by an appropriately qualified and experienced engineer shall be submitted to the Team Leader to certify that the erosion and sediment controls have been constructed in accordance with the approved ESCP.

48. Beyond the boundary of the site where the activity is undertaken there shall be no noxious, dangerous, offensive or objectionable odour or dust. There shall be no burning of any material (including cleared vegetation) on site.

49. There shall be no more than 15ha of disturbance or earthworks on site at any one time.

50. There shall be no deposition of earth, mud, dirt or other debris on any road or footpath resulting from earthworks activity on the subject site. In the event that such deposition does occur, it shall immediately be removed. In no instance shall roads or footpaths be washed down with water without appropriate erosion and sediment control measures in place to prevent contamination of the stormwater drainage system, watercourses or receiving waters.

51. Prior to the construction of any sediment retention ponds, super silt fences, or other approved devices shall be constructed below the sub-catchment of the sediment retention pond and shall remain in place until such time as the contributing catchment to these devices is stabilised in accordance with GD05.

52. The Consent Holder shall, at all times, control any dust in accordance with the Good Practice Guide for Assessing and Managing the Environmental Effects of Dust Emissions, Ministry for the Environment (2001). All necessary actions shall be taken to prevent a dust nuisance to neighbouring properties and public roads; including, but not limited to:

    - The staging of areas of the works.
    - The retention of any existing shelter belts and vegetation.
    - The installation and maintenance of wind fences and vegetated strips.
    - Watering of all haul roads and manoeuvring areas during dry periods.

- Spraying of load dumping operations.

- Suspension of all operations if necessitated by the prevailing conditions.

53. No burning of vegetation or demolition materials is to be carried out on the site. All vegetation and demolition materials are to be removed from the site. Disposal by burying on site shall only be carried out in areas designated on the approved Engineering Plans for such disposal and not to be included within future building sites.

54. If applicable for staging, all excavation shall occur no closer than 100mm from the boundaries of the site. The excavation shall occur in such a manner that the land and any structures on the adjoining property will not collapse or become unstable. Any excavation within a distance equal to its own height from the boundary shall have its design, excavation sequence, temporary support for the excavated ground and construction of the retaining structure including backfill compaction supervised by a Chartered Professional Engineer.

55. At all times during construction, provision shall be made for Ngāti Manuhiri to monitor the removal of topsoil at strategic locations, including ridgelines and streams (as they are more likely to be associated with archaeological sites). In addition, provision for Ngāti Manuhiri to inspect the silt / stormwater wetland treatment devices and sediment controls in place prior to major earthworks associated with each commences. If a severe adverse weather event occurs during earthworks, Ngāti Manuhiri shall be invited to inspect the integrity of the controls, such monitoring and inspection to be at the Consent Holder's expense.

56. Procedures for checking heavy machinery for leaks of fluids before the machinery is permitted to enter riparian areas and a prohibition on machinery refuelling near waterways shall be followed at all times during construction.

Heritage

57. The Consent Holder shall put procedures in place to ensure work stops in the immediate vicinity of any exposed remains (Accidental Discovery Protocol) and that the project informs the project archaeologist, Heritage New Zealand Pouhere Taonga and the Cultural Heritage Implementation Team of any archaeological discoveries.

58. If koiwi tangata (human remains) are uncovered on the site during the implementation of this consent, work shall cease immediately in the immediate vicinity of the remains and the mana whenua, the New Zealand Police, the Auckland Council area-based Resource Consenting and Compliance Team and Heritage New Zealand Pouhere Taonga shall be contacted so that appropriate arrangements can be made.

59. In the event that any unrecorded historic heritage sites are exposed as a result of consented work on the site, then these sites shall be recorded by the Consent Holder for inclusion within the Auckland Council Cultural Heritage Inventory. The Consent Holder's project archaeologist shall prepare documentation suitable for inclusion in the Cultural Heritage Inventory and forward the information to the Team Leader (for the Manager: Heritage Unit, heritageconsents@aucklandcouncil.govt.nz) within one calendar month of the completion of work on the site.

    Advice Note:

    That the CHI team leader be notified 48 hours before the commencement of works (Chris Mallows chris.mallows@aucklandcouncil.govt.nz).

Conditions relating to LUC60010513 (Earthworks)

Duration

60. Permit LUC60010513 shall expire ten years from the date it has been granted unless it has been surrendered or cancelled at an earlier date pursuant to the RMA.

61. Before the commencement of any work on site, adequate silt retention structures as detailed in the Auckland Regional Council technical publication GD05 shall be installed. These structures shall be maintained and cleaned out as necessary until such time as complete grass cover, or other non-erodible surfacing, has been established or re-established over the site.

Soil contamination

62. If evidence of soil contamination, which has not been previously identified, is discovered during the works, the Consent Holder shall immediately cease the works and notify the Team Leader, Northern Monitoring, Resource Consents, Auckland Council, and provide a site contamination report to the satisfaction of that Team Leader.

63. The Consent Holder shall ensure any soil removed from the site is disposed of in a managed or licensed landfill facility in accordance with the facility's soil testing requirements, and evidence of disposal is provided to the Team Leader, Northern Monitoring, Resource Consents, Auckland Council.

64. Imported fill materials shall be tested in compliance with cleanfill criteria as outlined in the Ministry for the Environment Guide for Managing Cleanfills (2002) and evidence thereof provided to the Team Leader, Northern Monitoring, Resource Consents, Auckland Council.

Geotechnical certification

65. Earthworks including the placement and compaction of fill materials must be supervised by an appropriately qualified geotechnical engineering professional.

66. All earthworks shall be designed and executed in compliance with the recommendations contained in the geotechnical report by KGA Geotechnical, dated 2 November 2015 and the supplementary letter dated 17 May 2016 and undertaken in accordance with NZS4431:1989, *Code of Practice for Earth Fill for Residential Subdivisions,* by a Chartered Professional Engineer experienced in soil mechanics.

67. All earthworks and sediment control measures shall be carried out in accordance with Auckland Council's GD05.

68. Detailed earthworks plans with confirmed stabilisation and satisfactory factors of safety, as specified in the Standards, shall be submitted to the Consents Engineer, and approval thereto received in writing, prior to the commencement of any works on the site. Any variation or changes to the approved engineering plans shall be submitted for approval as an Amendment and approval received thereto prior to construction of the varied works.

    Advice Note:

    Council will not vest and maintain counterfort drains or any stabilisation drainage and its installation is permitted only if there is not anticipated to be any maintenance required. The installation of all stabilisation measures shall be carried out to such a standard that further development on each site will not be required to resort to section 72 notices at building consent stage.

    Council reserves the right to request a peer review at any stage of the earthwork design, construction and certification documents.

69. On completion of earthworks, an Earthworks Completion Report and a Certificate in the form of Appendix J of the "Standards for Engineering Design and Construction" signed by the Chartered Professional Engineer who designed and supervised the works shall be provided to the Consents Engineer.

70. Upon abandonment or completion of earthworks on the subject site all areas of bare earth shall be permanently stabilised against erosion to the satisfaction of the Team Leader.

    Advice Note:

    Should the earthworks be completed or abandoned, bare areas of earth shall be permanently stabilised against erosion. Measures may include:

    - the use of mulching
    - top-soiling, grassing and mulching of otherwise bare areas of earth
    - aggregate or vegetative cover that has obtained a density of more than 80% of a normal pasture sward

The ongoing monitoring of these measures is the responsibility of the Consent Holder. It is recommended that you discuss any potential measures with the Council's monitoring officer who will guide you on the most appropriate approach to take. Please contact the Team Leader Northern Monitoring for more details. Alternatively, please refer to Auckland Regional Council, Technical Publication GD05.

Advice Note:

In order to prevent sediment laden water entering waterways from the road, the following methods may be adopted to prevent or address discharges should they occur:

- provision of a stabilised entry and exit(s) point for vehicles
- provision of wheel wash facilities
- ceasing of vehicle movement until materials are removed
- cleaning of road surfaces using street-sweepers
- silt and sediment traps
- catchpits or environpods

In no circumstances should the washing of deposited materials into drains be advised or otherwise condoned.

It is recommended that you discuss any potential measures with the Council's monitoring officer who may be able to provide further guidance on the most appropriate approach to take. Please contact the Team Leader Northern Monitoring for more details. Alternatively, please refer to Auckland Regional Council, Technical Publication GD05.

71. The site shall be progressively stabilised against erosion at all stages of the earthwork activity, and shall be sequenced to minimise the discharge of contaminants to groundwater or surface water.

Advice Note:

Earthworks shall be progressively stabilised against erosion during all stages of the earthwork activity. Interim stabilisation measures may include:

- the use of waterproof covers, geotextiles, or mulching
- top-soiling and grassing of otherwise bare areas of earth
- aggregate or vegetative cover that has obtained a density of more than 80% of a normal pasture sward

It is recommended that you discuss any potential measures with the Council's monitoring officer who may be able to provide further guidance on the most appropriate approach to take. Please contact the Team Leader Northern Monitoring for more details. Alternatively, please refer to Auckland Regional Council, Technical Publication GD05.

72. All perimeter controls shall be operational before earthworks commence. All 'cleanwater' runoff from stabilised surfaces including catchment areas above the site shall be diverted away from earthworks areas via a stabilised system, so as to prevent surface erosion.

Advice Note:

Perimeter controls include cleanwater diversions, silt fences and any other erosion control devices that are appropriate to divert stabilised upper catchment runoff from entering the site, and to prevent sediment-laden water from leaving the site.

73. All diversion drains shall be armoured where they are on grades that exceed two percent.

74. No sediment laden runoff shall leave the site without prior treatment via an approved sediment control device.

Seasonal Restrictions

75. No earthworks on the site shall be undertaken between 30 April and 1 October in any year, without the prior written approval of the Team Leader Northern Monitoring at least two weeks prior to 30 April of any year. Revegetation/stabilisation is to be completed by 30 April in accordance with measures detailed in GD05 and any amendments to this document.

Conditions relating to LUS60048380 (streamworks)

Duration

76. Permit LUS60048380 shall expire 35 years from the date it has been granted unless it has been surrendered or cancelled at an earlier date pursuant to the Act.

Seasonal Restrictions

77. No streamworks on the site shall be undertaken between 30 April and 1 October in any year, without the prior written approval of the Team Leader Northern Monitoring at least two weeks prior to 30 April of any year. Revegetation/stabilisation is to be completed by 30 April in accordance with measures detailed in GD05 and any amendments to this document.

Conditions relating to DIS60048302 (stormwater)

Duration

78. Stormwater diversion and discharge permit REG- 66078 shall expire 35 years from the date it has been granted unless it has lapsed, been surrendered or been cancelled at an earlier date pursuant to the RMA.

Stormwater works

79. The following stormwater management works shall be constructed for the following catchment areas and to the following design guidelines, and completed prior to discharges commencing from the site.

Works to be undertaken	**Catchment area**	**Design guideline(s)**
Rain Gardens	Various – to be confirmed at detailed design	Water quality treatment to a minimum 75% TSS removal standard on a long term annual average basis in accordance with TP10 or higher standard. Extended detention of the first 34.5mm of rainfall over a 24-hour period in accordance with TP10 or higher standard.
Raingardens on Street or Accessway		Additional water quality and extended detention benefits, above those associated with the larger downstream devices. For rain gardens on individual lots, extended detention of the first 34.5mm of rainfall over a 24-hour period in accordance with TP10 or higher standard.
Roof material	All	No exposed unpainted metal surfaces
Reuse rain tanks	All Lots	Minimum 10mm retention volume for reuse within each dwelling and extended detention of the first 34.5mm of rainfall over a 24-hour period in accordance with TP10 or higher standard.
Wetland treatment device X 5	As shown on Airey Consultants plans, to be confirmed at detailed	Water quality treatment to a minimum 75% TSS removal standard on a long term annual average basis in accordance with

	design	TP10 or higher standard. Extended detention of the first 34.5mm of rainfall over a 24-hour period in accordance with TP10 or higher standard. The design is to include features which minimise, to the extent practicable, the invasion of aquatic pests and weeds.
Outfall	All	Rock riprap structure Erosion protection in accordance with TP10

80. As built drawings of the facilities including a site survey shall be provided to the Council upon completion. The stormwater wetland treatment devices serving each stage shall be completed prior to applying for the 224(c) for that stage of the subdivision.

81. All works impacting on land and assets within the NZTA Designation shall be designed and carried out in accordance with the NZ Transport Agency State Highway Stormwater Specification (P46).

82. All stormwater treatment works impacting on land and assets within the NZTA Designation shall be carried out in accordance with TP10 and reflecting the intent of Auckland Council's GD01 and GD04.

83. All stormwater culverts on land and assets within the NZTA Designation shall be fitted with security grills to minimise culvert safety risks. At the detailed engineering design phase and prior to the commencement of construction, the applicant shall provide design details to the satisfaction of the NZ Transport Agency.

84. All stormwater ponds on the boundary of NZ Transport Agency land shall be fenced to minimise pond safety risks. At the detailed engineering design phase and prior to the commencement of construction, the applicant shall provide design details to the satisfaction of the NZ Transport Agency

85. If, at the detailed engineering design phase the Consent Holder and NZTA determine that there is an increased erosion or flooding risk profile on land and assets within the NZTA Designation (as a result of changes during detailed design of development layout), the Consent Holder shall provide options for erosion and flood management and agree on measures to be implemented in consultation with the NZ Transport Agency.

86. In the event that any minor modifications to the stormwater management system are required, the following information shall be provided:

- Plans and drawings outlining the details of the modifications; and
- Supporting information that details how the proposal does not affect the capacity or performance of stormwater management system.

All information shall be submitted to, and verified by the Team Leader, prior to implementation.

Advice note:

All proposed changes must be discussed with the Team Leader, prior to implementation. Any changes to the proposal which will affect the capacity of performance of the stormwater system or will result in a change to the conditions of this consent will require an application to be made in accordance with Section 127 of the RMA.

Construction meetings

87. A pre-construction meeting shall be held by the consent holder, prior to commencement of the construction of any stormwater devices onsite and at each stage of the development, that:

(a) is arranged five working days prior to the initiation of the construction of any stormwater devices on the site;

(b) is located on the subject area;

(c) includes representation from the Team Leader; and

(d) includes representation from the site stormwater engineer, contractors who will undertake the works and any other relevant parties.

88. The following information shall be provided at the pre-construction meeting:

(a) timeframes for key stages of the works authorised under this consent;

(b) erosion and sediment control measures during construction activities;

(c) updated wetland planting details;

(d) contact details of the site contractor and site stormwater engineer; and

(e) approved (signed/stamped) construction plans.

89. A post construction site meeting shall be held by the Consent Holder within 20 working days of completion of the stormwater management works at each stage of the development, that:

(a) is located on the subject area;

(b) includes representation from the Team Leader; and

(c) includes representation from the site stormwater engineer, contractors who have undertaken the works and any other relevant parties.

Certification of construction works

90. As-Built certification and plans of the stormwater management works, which are certified (signed) by a Chartered Professional Engineer as a true record of the stormwater management system, shall be provided to the Team Leader 5 days prior to the post-construction meeting required by this consent.

91. The As-Built plans shall include, but not be limited to:

(a) the surveyed location (to the nearest 0.1m) and level (to the nearest 0.01m) of the discharge structure, with co-ordinates expressed in terms of NZTM and LINZ datum;

(b) location, dimensions and levels of any major overland flowpaths including cross sections and long sections;

(c) plans and cross sections of all stormwater management devices, including confirmation of the Water Quality Volume, storage volumes and levels of any outflow control structure; and

(d) documentation of any discrepancies between the design plans and the As-Built plans.

Operation and maintenance

92. An Operation and Maintenance Plan shall be submitted to the Team Leader for approval 5 days prior to the post-construction meeting at each stage of the development required by this consent.

93. The Operation and Maintenance Plan shall set out how the stormwater management system is to be operated and maintained to ensure adverse environmental effects are minimised. The plan shall include, but not be limited to:

(a) a programme for regular maintenance and inspection of the stormwater management system;

(b) a programme for the collection and disposal of debris and sediment collected by the stormwater management devices or practices;

(c) a programme for post storm inspection and maintenance;

(d) a programme for inspection and maintenance of the outfall, including maintenance contracts, where in place;

(e) any maintenance requirements including frequencies for all devices located within the floodplain of downstream culverts;

(e) general inspection checklists for all aspects of the stormwater management system, including visual checks;

(f) a program for inspection and maintenance of vegetation associated with the stormwater management devices; and

(g) details of who will hold responsibility for long-term maintenance of the stormwater management system and the organisational structure which will support this process.

94. The stormwater management and treatment system shall be managed in accordance with the approved Operation and Maintenance Plan.

95. Any amendments to the Operation and Maintenance Plan shall be submitted to and approved by the Team Leader, in writing prior to implementation.

96. The stormwater management system shall be maintained to minimise erosion, risk of obstruction of the waterway and hazards to safety.

Overland flowpaths

97. For stormwater flows in excess of the capacity of the primary drainage systems, overland flow paths shall be provided and maintained to allow surplus stormwater from critical storms (up to the 100 year ARI event), to discharge with the minimum of nuisance and damage.

98. Roading, kerbs and channels constructed across overland flow paths shall be set at a level that maximises the capture of water by road cesspits. Other than at designated overland flow paths, driveway crossings shall be constructed in order to minimise the overflow of water from the road into private properties.

99. Minimum recommended habitable floor levels shall be stipulated for any lots that are affected by or adjacent to overland flow paths.

Outfall erosion

100. Any stormwater outfalls authorised by this Consent shall incorporate erosion protection measures to minimise the occurrence of bed scour and bank erosion in accordance with TP10/GD01.

Maintenance report

101. A maintenance report shall be provided to the Team Leader Northern Monitoring on request. The maintenance report shall include but not be limited to the following:

(a) Details of who is responsible for maintenance of the stormwater management system and the organisational structure supporting this process;

(b) Details of any maintenance undertaken;

(c) Details of what inspections were completed over the preceding twelve months;

(d) Details of all inspections and maintenance for the stormwater management system for the preceding three years shall be retained.

Conditions prior to s223 Approval

102. Approvals may be sought under s223 for the stages, super-lots and final lots identified in condition 9.

103. Any s223 approval sought must show all survey information relevant to the stage.

104. Before the Council will approve any survey plan or plans pursuant to s.223 of the Act, the Consent Holder shall:

(a) Show and identify the areas of native bush, riparian margin and boundary planting to be protected, in accordance with the relevant stage of the approved PMP, condition 23, and riparian planting and management plan, condition 29, as “areas to be subject to land covenant” on the survey title plan.

(b) The overland flow path over any of the lots affected shall be defined on the survey plan as an “area to be subject to land covenants”.

(c) Show any areas of land required for vehicular access outside the road network as rights of way available for access for all owners and to be included within the legal structure set up by condition 40.

(d) Show all roads to vest including the three future road reserves to enable connections to tho properties to the south of Stage 1 (Carnell property), and to the south of Stages 6 and 7 (Harman and Mayes properties).

(e) The survey title plan shall show and identify any right of way, electricity, telephone and other service supply easements on a Schedule of Memorandum of Easements attached to the cadastral survey dataset as a supporting document.

(f) Pursuant to section 220(1)(b)(iv) of the Act, show any relevant common interests in land in accordance with the approved CAMP.

(g) Show all stormwater ponds identified within a separately identified lot.

105. The Consent Holder shall suggest to the Council names, after consultation with Iwi, for the new roads shown on the Scheme Plan together with clearance from Land Information New Zealand, PO Box 5501 Wellington 6145, so that duplication of the name in any other part of the Auckland region is avoided. (Note: the Council shall determine the name having regard to any names so suggested and appropriateness to the area which the new roads will service.) When a name has been resolved by the Council the Consent Holder shall erect nameplates, in accordance with the Council's "Standards for Engineering Design and Construction".

Conditions prior to s224(c) Approval

Section 224(c) certificate

106. Certificates may be sought for the stages, super-lots and final lots as identified in condition 9.

107. All lots for certification must show compliance (for the relevant stage) with the following plans:

(a) Engineering plans identified in condition 13.

(b) Vegetation removal plan in conditions 22.

(c) Planting management plan, conditions 23 to 28.

(d) Streamworks, riparian planting and management plan, conditions 29 and 30.

(e) Lizard management plan, conditions 31 to 35.

(f) Fish capture and relocation plan, condition 36.

(g) Stream and wetland environmental compensation plan, condition 37.

(h) Weed and pest animal control plan, condition 23(e).

(i) Chemical treatment management plan, condition 38.

(j) West Hoe Stream Arch Culvert, condition 39.

(k) Common areas maintenance plan, condition 40.

108. Prior to application for the s224(c) certificate, the Consent Holder shall provide an undertaking in writing from their solicitor that they have implemented the approved CAMP to provide for the common ownership and future management and maintenance of the private utilities and planted areas.

109. Written confirmation shall be provided from the electricity network supplier responsible for the area, that provision of an electric supply has been made available by underground means to all saleable lots created and that all the network supplier's requirements for making such means of supply available have been met or satisfactory arrangements have been concluded with the Consent Holder to complete the provision of the supply.

110. Prior to application for the first s224(c) certificate, the Consent Holder shall provide details to the satisfaction of the Team Leader that they have established an appropriate Panel to manage the implementation of the approved Design Guidelines, condition 41, for development on each of the lots. The Panel shall be responsible for ensuring building development is progressed in accordance with the Design Guidelines, including the approval of building proposals. Membership of the Panel shall be comprised of:

    (a) A representative of the legal entity established by the CAMP, condition 40.

    (b) Two qualified professional design experts appointed by the legal entity who hold appropriate qualifications and experience in architecture, landscape architecture or urban design.

111. Written confirmation shall be provided from the telecommunications network supplier responsible for the area, that provision of telephone services has been made available by underground means to all saleable lots created and that all the network supplier's requirements for making such services available have been met or satisfactory arrangements have been concluded with the Consent Holder to complete the provision of the service.

112. Stormwater ponds will be maintained after 224(c) approval for 2 years or until 80% of the Lots are developed.

113. All infrastructure servicing any stage is to be installed as per Council's standards.

114. All of the earthworks conditions for each stage shall be met including sign offs and provision of Earthworks completion reports.

115. Wastewater infrastructure shall be installed prior to 224(c) approval.

Conditions to be Complied with on a Continuing Basis

116. The following conditions of consent shall be complied with on a continuing basis by the Consent Holder (which includes the subdividing owner and subsequent owners) and shall be recorded in a consent notice issued pursuant to s221 of the RMA registered on the titles:

(a) The respective owners of areas held in common ownership shall pay the council monitoring charge or charges to recover the actual and reasonable costs that have been incurred to ensure compliance with the conditions attached to this consent. Such charge/s shall be paid as part of the resource consent fee and the Consent Holder will be advised of the further monitoring charge or charges as they fall due. Such further charges are to be paid within one month of the date of invoice.

(b) The areas of native bush and riparian planting to be protected on areas held in common ownership identified in accordance with the planting and management plan and riparian planting and management plan, conditions 23 to 30, shall be protected in perpetuity to the satisfaction of the Team Leader.

(c) The boundary planting on the western and southern boundaries is to be protected in perpetuity.

(d) The owners of the common areas or their successors in title, shall:

- Preserve the native vegetation, wildlife habitats and the natural landscape within the areas of native bush and riparian planting to be protected.

- Not (without the prior written consent of the council and then only in strict compliance with any conditions imposed by the council) cut down, damage or destroy, or permit the cutting down, damage or destruction of the vegetation or wildlife habitats within the areas of native bush and riparian planting to be protected.

- Not do anything that would prejudice the health or ecological value of the areas of native bush and riparian planting to be protected, the long term viability and/or sustainability.

- Control all invasive plants and control pest animals within the areas of native bush and riparian planting to be protected, in accordance with the approved weed and pest animal control plan, condition 23.

- Not to be in breach of this covenant if any area of native bush or riparian planting to be protected dies as a result of fire and/or natural causes not attributable to any act or default on their part for which they are not responsible.

- Maintain an advocacy role with respect to educating and informing the community about the cat-free status of the lots.

(e) If intact subsurface archaeological features or artefacts associated with māori are exposed during any works, it will be necessary to cease works in the vicinity and representatives of the Auckland Council area-based Resource Consenting and Compliance Teaml, Ngāti Manuhiri and Heritage New Zealand should be notified immediately of the discovery.

(f) If any koiwi (human remains) should be exposed in relation to any of the proposed trenching or other, works should cease in the immediate vicinity and the police, Ngāti Manuhiri and Heritage New Zealand should be contacted so that appropriate arrangements can be made.

Advice note:

If modification of an archaeological site becomes necessary, an Authority must be applied for under Section 11 of the Historic Places Act 1993 and granted prior to any further work being carried out that will affect the site.

Alternatively, consideration could be given to applying for an Authority under Section 12 of the Historic Places Act 1993 prior to the start of works to cover all works undertaken as part of the project, as a precaution.

(g) An erosion and sediment control plan shall be prepared for any future earthworks on the site.

(h) No buildings or other structures, including fences, shall be erected, nor shall the ground contour be changed in any way, that would impede the surface flow of stormwater within the overland flow path defined on the survey plan as area subject to land covenants.

(i) All owners must comply with Council's private stormwater disposal standards.

(j) Any buildings erected on all lots shall comply with such specific restrictions that arise as a consequence of recommendations in the Geotechnical Completion Report and Certification, or, when the completed subdivisional works are at variance with the "Standards for Engineering Design and Construction".

(k) Unless otherwise approved by Council, all stormwater from buildings and paved areas on all lots shall be collected and disposed of in accordance with the Engineering and Infrastructure Report prepared by Airey Consultants Ltd 11712-01 November 2015. The rainwater tank to provide the extended detention volume and to provide the 10mm retention shall be installed at the same time as the erection of any buildings or creation of impermeable surfaces on the sites and shall thereafter be maintained to the specified capacity and standard in perpetuity.

(l) If installed, any stability enhancing counterfort drains on or adjacent to affected lots shall be protected by the owner(s) in perpetuity. Any construction that intercepts the drains shall maintain the integrity of the pipe and drainage medium, and shall reinstate the surface seal above the drainage medium.

(m) Any dwelling constructed or altered on the Lots identified below must be designed, constructed and maintained to achieve a design noise level of 40 dB $L_{Aeq(24h)}$ inside all habitable spaces:

Lots subject to acoustic controls	56, 58, 60 – 89, 90 – 97, 166 – 174, 181,

	185 – 189, 221 – 230, 279 – 282, 285, 287 – 292, 321 – 323, 329, 333 and 334. 8 – 13, 21, 22, 33, 163, 170, 171, 178, 182, 186, 217, 226, 227, 278, 279, 318, 330, and 331

Advice Note:

The lots identified for treatment are based on barrier mitigation being installed in accordance with the report prepared by Hegley Acoustics "Proposed Grand View Estate Subdivision, Hall Farm West, Assessment of Road Traffic Noise", dated December 2015.

(n) If windows must be closed to achieve the design noise level in condition 116(m), the building must be designed, constructed and maintained with a ventilation and cooling system. For habitable spaces the system must achieve the following:

- Ventilation must be provided to meet Clause G4 of the New Zealand Building Code. At the same time the sound of the system must not exceed 30 dB $L_{eq(30s)}$ when measured 1m away from any grille or diffuser.

- The occupant must be able to control the ventilation rate in increments up to a high air flow setting that provides at least 6 air changes per hour. At the same time the sound of the system must not exceed 35 dB $L_{eq(30s)}$ when measured 1m away from any grille or diffuser.

- The system must provide cooling that is controllable by the occupant and can maintain the temperature at no greater than 25°C. At the same time, the sound of the system must not exceed 35 dB $L_{eq(30s)}$ when measured 1m away from any grille or diffuser .

(o) A design report prepared by an acoustic specialist must be submitted to the Team Leader demonstrating compliance with the acoustic requirements of conditions 116 (m) and (n), prior to construction or alteration of any dwelling. The design must take into account future permitted use of the state highway; for existing roads this is achieved by the addition of 3 dB to existing measured or predicted levels by estimating road-traffic noise ten years from completion or alteration of the dwelling.

(p) The use and development of the lots shall be subject to the conditions identified in Table 1 – Land use and development consent notices below.

TABLE 1 – LAND USE AND DEVELOPMENT CONSENT NOTICES

Note: Capitalised letters in the following table refer to the specific consent notices set out below.

Applicable Lots/Areas	Land Use	Built form	Guidelines	Restrictions	Exclusions
Lots 259, 260, 268 to 334, 359 to 380, 386 to 389, 413 to 501 and 571 to 575	A	E	K	-	N, O
Lots 243 to 258, 261 to 267, 335 to 358, 381 to 385 and 390 to 412	A	F	K	-	
Lots 123 to 242 and 502 to 570	A	G	K	-	
Lots 1 to 92 and 110 to 122	A	H	K	-	
Area within Stages 1J &1K	B	I	K	-	
Lot 581	C	J	K	-	
Lot 582	D	I	K	-	
Lots 110-122	-	-	-	L	
Lots 1 to 575	-	-	-	M	

A. One dwelling per lot, “Accessory Activities” and “Accessory Buildings” (as defined in Chapter J AUP).

B. All land use activities identified in Table H12.4.1 Neighbourhood Centre Zone AUP as permitted activities (excluding (A39) to (A46) – Industry and mana whenua), and including a community centre and appurtenant parking and public open space.

C. All land use activities identified in Table H7.9.1 Open Space – Community Zone AUP as permitted activities.

D. Use of the Lot is limited to public carparking and “Accessory Activities” and “Accessory Buildings” (as defined in Chapter J AUP).

E. All buildings shall comply with the relevant standards for development in Section H3.6 (Single House Zone) AUP.

F. All buildings shall comply with the relevant standards for development in Section H4.6 (Mixed Housing Suburban Zone) AUP.

G. All buildings shall comply with the relevant standards for development in Section H5.6 (Mixed Housing Urban Zone) AUP.

H. All buildings shall comply with the relevant standards for development in Section H6.6 (Terrace Housing and Apartment Zone) AUP.

I. All buildings shall comply with the relevant standards for development in Section H12.6 (Neighbourhood Centre Zone) AUP.

J. All buildings shall comply with the relevant standards for development in Section H7.11 Open Space – Community Zone) AUP.

K. The design of any buildings on the lot shall take account of the design guidelines approved under condition 41. The lot owner shall obtain the approval of the Panel established under condition 110 for any building design and such approval shall be submitted to the Council with the lot owners application for building consent.

Where any conflict arises between the development standards that apply to the lot, as set out in Table 1 above, and the design guidelines, the relevant standards shall prevail.

L. There shall be no direct vehicle access onto Road 1 from the lot.

M. No mustelids, rodents, or cats shall be kept on the lot at any time. No more than two dogs shall be kept on the lot at any time. All dogs shall be spayed or neutered, microchipped or identifiable by collar, and kept securely contained on the lots at all times.

N. The consent notice requirements in A to J above will not apply if the owner of the lot obtains a resource consent allowing a different land use, built form or subdivision of the lot.

O. The consent notice requirements in A to J above will cease to apply and expire on the day that a zoning for the land that is not Future Urban zone in the AUP becomes operative for the lot.

(q) The owners of Lots 1 – 575 shall at all times when registered as proprietors of the lots:

- be and remain members of any legal entity set up by condition 40; and

- comply with the obligations applying to the lot owners as members of the legal entity, recognising that the legal entity is required to maintain, manage and operate the facilities on the common areas in accordance with all relevant resource and other consents and all statutory and regulatory requirements applying to the facilities from time to time.

(r) Subject to the terms of the approved CAMP, the titles to each of the Lots 1 - 575 will be subject to encumbrances granted in favour of the legal entity and Auckland Council (respectively). Such encumbrances will, without limitation, require the owners of each lot to be and remain members of the legal entity and to comply with the obligations of the entity in regard to the common areas. The form of these encumbrances is to be agreed in advance by Auckland Council's solicitors.

Conditions relating to DIS60048335 (wastewater overflow discharge)

117. Wastewater overflow discharges shall be managed in accordance with the conditions of discharge permit R/REG/2013/3743 (overflows to land and water) and R/REG/2013/3755 (overflows to the coastal marine area) held by Watercare Services Limited with the addition of Appendix 2.

Conditions relating to WAT60051016 (water take permit)

Authorised Quantities

118. Permit WAT60051016 shall expire 35 years from the date it has been granted unless it has been surrendered or cancelled at an earlier date pursuant to the Act**.**

119. The abstraction shall not exceed:

(a) 650 cubic metres per day.

(b) 159,000 cubic metres per year (for the period commencing 1 June and ending 31 May the following year).

Installation of Water Meter

120. A water meter shall be installed and maintained at the head of the production bore to the satisfaction of the Team Leader – Consents & Compliance, Water Allocation. The water meter and recording device/system shall:

(a) be fit for the purpose and water it is measuring;

(b) measure the volume of water taken, with an accuracy of +/- 5% of the actual volume taken;

(c) be tamper-proof and sealed; and

(d) be installed and maintained in accordance to the manufacturer’s specifications.

Verification of Water Meter/device accuracy

121. The water meter, and any device or system used to record water take volume, shall be verified insitu as accurate by a suitably qualified professional at the following times:

(a) Prior to exercise of this permit.

(b) Within 5 working days of the water meter being serviced or replaced.

(c) By 30 June of the fifth year from the commencement of consent, and thereafter at five yearly intervals.

122. The water meter, its verification and evidence of its accuracy shall be in accordance with the Resource Management (Measurement and Reporting of Water Takes) Regulations 2010 (or any equivalent regulations that may replace them) and a copy of verification shall be provided to the Team Leader – Water Allocation within 10 working days of the meter/devices being verified as accurate.

Water Meter Readings

123. A water meter reading shall be taken from the production bore at weekly intervals consistently at one of these times:

(a) Before pumping starts for the day.

(b) At the end of pumping for that day.

The time, date and water meter readings shall be recorded and supplied to the Council in accordance with the reporting condition below.

Advice Note:

If no water is taken during any period the current meter reading must still be recorded.

Water Level Readings

124. Groundwater levels in the production and monitoring bores shall be measured and recorded at fortnightly intervals during October, and between February-April each year. The water levels shall be measured from the top of the casing, and shall be recorded to the nearest centimetre. The bores should not be pumped for at least 24 hours prior to the water level measurement being taken.

The time and date of the water level reading shall be recorded and supplied to the council in accordance with the reporting condition below.

Water Quality

125. A water sample shall be taken from the production and monitoring bore before the exercise of this consent in the first year to establish a saline trigger level and monitor for saline water intrusion, and thereafter on an annual basis during the months of February, March, April and October each year.

126. The initial sample (i.e. the sample taken prior to the exercise of the consent) shall be analysed for the following parameters:

(a) Conductivity at 25°C (mS/m);

(b) Chloride (Cl);

(c) Sulphate (SO_4);

(d) Temperature of water at the head of the bore;

(e) pH;

(f) Potassium (K);

(g) Silica (SiO_2);

(h) Nitrate nitrogen (NO_3N);

(i) Total Alkalinity ($CaCO_3$);

(j) Calcium Hardness ($CaCO_3$);

(k) Sodium (Na);

(l) Boron (B);

And any other parameters required to obtain an ion balance for the sample of between 95% and 105%.

127. The periodic annual samples shall be analysed for the following parameters:

(a) Conductivity at 25° (mS/m).

(b) Chloride (Cl).

(c) Sulphate (SO_4).

128. Before the water is sampled, water shall be purged from the bore by pumping for sufficient time to allow the volume of water contained in the bore to be completely replaced three times by water from the aquifer. Records shall be kept of the length of time and approximate rate of pumping required to purge the bore and records shall be provided to the Team Leader – Water Allocation, on request. For the annual sampling, the samples should be collected towards the end of a day's pumping, during the peak maximum seasonal pumping. Samples shall be collected and analysed in accordance with "Standard Methods for the Examination of Water and Wastewater" (latest Edition), a joint publication of the American Public Health Association, Water Environmental Federation and the American Water Works Association, or the equivalent as approved in writing by the Team Leader – Water Allocation.

Saline intrusion

129. If any water quality sample exceeds 70mg/l of Chloride, then:

(a) The Team Leader – Water Allocation shall be notified as soon as possible and no later than 2 working days from receipt of the sample analysis.

(b) Sampling of the production and monitoring bores shall be undertaken weekly with the results reported to the Team Leader – Water Allocation within 5 working days of the sample being taken. The weekly monitoring and reporting shall continue until the saline intrusion issue is resolved in accordance with the condition "d" below.

(c) If the saline levels are still being exceeded 21 working days after the initial breach, then within 42 working days of the initial breach a Groundwater Exceedance Report prepared by a suitably qualified hydrogeological professional shall be submitted to the satisfaction of the Team Leader – Water Allocation. The Groundwater Exceedance Report shall assess the reasons for and significance of the exceedance in terms of saline intrusion of the aquifer and shall include a review of all available data, including groundwater levels, groundwater use and groundwater quality. The report shall recommend a programme of remedial actions and timeframes for these actions.

(d) All recommendations specified in the Groundwater Exceedance Report (if such is required), and any other actions directed by the Team Leader – Water Allocation, shall be implemented to the satisfaction of the Team Leader – Water Allocation and shall continue for as long as the groundwater monitoring is considered to be indicative of saline intrusion and/or on-going declining groundwater levels by the Team Leader – Water Allocation.

Water Reporting

130. The following information is to be entered, at the frequency and date specified, to the Council's Water Use Data Management System or to any replacement database identified in writing by the Team Leader – Water Allocation.

Information	Due Dates for reporting
Water meter reading including date	By the 15th day of March, June, September and December
Water level reading including time and date	By the end of the month of March, for that respective year*
Water quality including time and date	By the end of the month of March, for that respective year**

*****Preferably send water meter and water level information at the same reporting period

**If trigger levels breached for water quality, please send analysis with notification of breach.

Advice Note:

The web address for Council's on-line Water Use Data Management System is: http://maps.arc.govt.nz/hydrotel/cgi-bin/WUDMSWebServer.cgi/login

Please contact the Team Leader Consents and Compliance – Water Allocation to obtain your customer number and password. An on-line manual explaining how to enter and submit your readings is available at the web address specified above.

Environmental Monitoring Report

131. An environmental monitoring report shall be submitted to the satisfaction of the Team Leader – Water Allocation before the month of June 2020, 2025, 2030 and 2035. This report shall provide a summary and analysis of the water use, water level and water quality monitoring for the previous five years required by the conditions above. The report shall assess the effects of the water take on the aquifer and on other users of the aquifer and the efficient use of the water.

Water Management Plan

132. Prior to the exercise of the consent, a Water Supply Demand Management Plan (WSDMP) shall be prepared by the Consent Holder and submitted to the Team Leader – Water Allocation for approval. The WSDMP shall contain but not necessarily be limited to:

(a) Network efficiency plan.

(b) Water Conservation management plan in accordance with the requirements of the relevant plan provisions (currently Policy E.2.3.(4) of the AUP (OP)).

Review Condition

133. Pursuant to Section 128 of the RMA, the conditions of this consent may be reviewed by the Team Leader at the Consent Holder's cost:

(a) In June 2020 and subsequently at intervals of not less than five years thereafter in order to:

- Deal with any adverse effect on the environment which may arise or potentially arise from the exercise of this consent and which it is appropriate to deal with at a later stage.

- Vary the quantities, monitoring and reporting requirements and performance standards in order to take account of information, including the results of previous monitoring and changed environmental knowledge, on: water use efficiency; water availability, including alternative water sources; actual and potential water use; water flow and level regimes; water quality; and the relationship of Māori with water.

- In the case of a coastal, water or discharge permit, to provide compliance with rules in any regional plan relating to use of water, water or air quality etc. (refer section 128(1)(b) of the RMA) that have been made operative since the commencement of consent.

- In the case of a coastal, water or discharge permit, to provide compliance with any relevant National Environmental Standard that has been made since the commencement of consent.

- At any time, if it is found that the information made available to the Council in the application contained inaccuracies which materially influenced the decision and the effects of the exercise of the consent are such that it is necessary to apply a more appropriate condition.

Advice Note:

The Consent Holder is advised that water supplied for human consumption should meet the requirements of the Drinking Water Standards for New Zealand (2005), the Health Act 1956, as amended by the Health (Drinking Water) Amendment Act 2007 (HDWAA) and any other Ministry of Health requirements.

Advice notes

1. Please read the conditions of this resource consent carefully and make sure that you understand all the conditions that have been imposed before commencing the development.

2. Development contributions levied under the Local Government Act 2002 are payable in relation to this application. The Consent Holder will be advised of the development contributions payable separately from this resource consent decision. Further information about development contributions may be found on the Auckland Council website at www.aucklandcouncil.govt.nz.

3. Reports and limitations on the land regarding any features or characteristics of the land or works on the land, whether the subject of specific encumbrances on the land or not shall be discoverable as part of the Council's records.

4. The Consent Holder shall obtain all other necessary consents and permits, including those under the Building Act 2004, and the Heritage New Zealand Pouhere Taonga Act 2014. This consent does not remove the need to comply with all other applicable Acts (including the Property Law Act 2007), regulations, relevant Bylaws, and rules of law. This consent does not constitute building consent approval. Please check whether a building consent is required under the Building Act 2004. Please note that the approval of this resource consent, including consent conditions specified above, may affect a previously issued building consent for the same project, in which case a new building consent may be required.

5. The Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA) provides for the identification, protection, preservation and conservation of the historic and cultural heritage of New Zealand. Under s.2 of the HPA, an archaeological site is defined as a place associated with pre-1900 human activity where there may be evidence relation to history of New Zealand. All archaeological sites are protected under the provisions of the HNZPTA. It is an offence under this Act to destroy, damage or modify any archaeological site, whether or not the site is entered on the Heritage New Zealand Pouhere Taonga New Zealand Heritage List/Rārangi Kōrero, Historic Areas, Wahi Tapu and Wahi Tapu Areas. An authority is required for such work whether or not the land on which an archaeological site may be present is designated, or a resource, demolition or building consent has been granted, or the activity is permitted in a regional or district plan. It is the responsibility of the Consent Holder (Consent Holder) to consult with the HNZ about the requirements of the HNZPTA and to obtain the necessary authorities under the HNZPTA should these become necessary as a result of any activity associated with the proposed development. For information contact the HNZ Regional Archaeologist – Bev Parslow (09) 307 9923.

6. If required, the Consent Holder shall obtain a permit from the Department of Conservation to move any native lizards, skinks or geckos found on the property during development. The Department of Conservation will consult with iwi in determining whether a Wildlife Act Authority Application for a permit is granted.

7. The following shall be undertaken in accordance with the Cultural Impact Assessment received from Fiona McKenzie, Manuhiri Kaitiaki Charitable Trust dated November 2013:

a) Prior to works commencing Ngāti Manuhiri shall be given the opportunity to perform a sod turning or blessing ceremony to acknowledge the place and to protect those working on the development. This could be in conjunction with, or in addition to, a pre-construction site meeting.

b) Environmentally sustainable or recyclable materials and products can contribute to good cultural and environmental outcomes and should be used wherever practicable. For example consider natural floccing products.

c) That recognition of the cultural values associated with the area be incorporated into the subdivision. Ngāti Manuhiri shall be given the opportunity to put forward traditional names for the new roading and/or track network and/or reserves as a means to reflect their cultural footprint as Mana Whenua.

d) Considerable riparian and infill planting is proposed for the subdivision. Details of any sub-contract planting (fencing, weeding or other) work shall be made available to Ngāti Manuhiri in good time to allow for the preparation of a tender. Such opportunities allow the Trust to provide employment to rangatahi (young people).

e) Consideration shall be given to establishing a Pā Harakeke and to commissioning a cultural marker (pou) or sculpture within the development.

8. A copy of this consent should be held on site at all times during the establishment and construction phase of the activity. The Consent Holder is requested to notify council, in writing, of their intention to begin works, a minimum of seven days prior to commencement. Such notification should be sent to the Compliance Administrator, Orewa Service Centre, at ResourceConsentAdmin@aucklandcouncil.govt.nz and include the following details:

- name and telephone number of the project manager and the site owner;
- site address to which the consent relates;
- activity to which the consent relates; and
- expected duration of works.

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

10. The granting of this resource consent does not in any way allow the Consent Holder to enter and construct drainage within neighbouring property, without first obtaining the agreement of all owners and occupiers of said land to undertake the proposed works. Any negotiation or agreement is the full responsibility of the Consent Holder, and is a private agreement that does not involve council. Should any disputes arise between the private parties, these are civil matters which can be taken to independent mediation or disputes tribunal for resolution. It is recommended that the private agreement be legally documented to avoid disputes arising. To obtain sign-off for the resource consent, the services described by the conditions above are required to be in place to the satisfaction of council.

11. Compliance with the consent conditions will be monitored by council (in accordance with section 35(1)(2)(d) of the RMA). The initial monitoring charge is to cover the cost of inspecting the site, carrying out tests, reviewing conditions, updating files, etc, all being work to ensure compliance with the resource consent. In order to recover actual and reasonable costs, inspections, in excess of those covered by the base fee paid, shall be charged at the relevant hourly rate applicable at the time. Only after all conditions of the resource consent have been met, will council issue a letter on request of the Consent Holder.

12. Ongoing inspections of the covenanted area will be carried out from time to time by council ecologists. These inspections will assess how the covenant is being managed and if the consent conditions are complied with. A report will be produced for the landowner to assist them in the management of the covenant. The inspections are charged at a rate in accordance with the council's schedule of fees.

13. Copies of the approved Weed and Pest Animal Control Plan shall be held at the offices of the council, 50 Centreway Road, Orewa, 0931.

14. A list of all current pest plants and animals can be found in the Auckland Regional Pest Management Strategy (ARPS 2007-2012 or any successive ARPS), available from council, which includes all plants identified in the National Pest Plant Accord (MAF).

15. Any activity pertaining to maintenance of covenant areas, including any required or ancillary structure(s), i.e. culvert or fish passage, may require lodgement for a Resource Consent.

16. Where significant weed and animal populations persist, the Consent Holder may wish to consider Local Landcare Groups, or the employment of a professional contractor to assist with the ongoing management of the protected area.

17. If the ownership or control of the site is to change, the Consent Holder is advised that this consent to divert and discharge stormwater should be transferred to the new owner or operator by notifying Auckland Council on prescribed form.

18. The Consent Holder is advised that any noxious, dangerous, offensive or objectionable odours beyond the property boundary as a result of the treatment and storage of wastewater, or if the number of people serviced by the wastewater plant exceeds 1000 people (municipal sewage), an air discharge consent may be required under Rule 4.5.1(a) of the Auckland Council Regional Plan (Air, Land and Water).

19. Any administrative charge fixed in accordance with Section 36(1) of the Resource Management Act 1991 and any additional charge required pursuant to Section 36(3) of the Act in respect of this consent shall be paid to Auckland Council.

20. The Resource Consent Holder is advised that groundwater supplied for human consumption should meet the requirements of the Drinking Water Standards for New Zealand (2005), and any other Ministry of Health requirements, such as those contained in the Health (Drinking Water) Amendment Act 2007.

Appendix 1

Drawing No.	Rev/Reference	Title	Prepared by	Date
712/1		Road Access off Northern Motorway Interchange	Traffic Solutions Ltd	9 August 2016
SK80	Rev E	Road Layout Plan – Indicative Rtn Station (Access Road Option)	Airey Consultants Ltd	June 2017
100	Rev B	Proposed Site Plan and Aerial Photograph	Airey Consultants Ltd	May 2017
101	Rev B	Proposed Staging Plan	Airey Consultants Ltd	May 2017
200	Rev B	Proposed Finished Contour Plan	Airey Consultants Ltd	May 2017
201	Rev B	Proposed Cut-Fill Plan	Airey Consultants Ltd	May 2017
205	Rev B	Proposed Slope Analysis Plan Slopes Greater Than 1 in 3	Airey Consultants Ltd	May 2017
210	Rev B	Stage 1 – Earthworks & Sediment Control Plan	Airey Consultants Ltd	May 2017
220	Rev B	Stage 2 – Earthworks & Sediment Control Plan	Airey Consultants Ltd	May 2017
230	Rev B	Stage 3 – Earthworks & Sediment Control Plan	Airey Consultants Ltd	May 2017

240	Rev B	Stage 4 – Earthworks & Sediment Control Plan	Airey Consultants Ltd	May 2017
250	Rev B	Stage 5 – Earthworks & Sediment Control Plan	Airey Consultants Ltd	May 2017
260	Rev B	Stage 6 – Earthworks & Sediment Control Plan	Airey Consultants Ltd	May 2017
270	Rev B	Stage 7 – Earthworks & Sediment Control Plan	Airey Consultants Ltd	May 2017
280	Rev B	Stage 8 – Earthworks & Sediment Control Plan	Airey Consultants Ltd	May 2017
SK89	Rev A	Proposed Road Layout Plan	Airey Consultants Ltd	June 2017
SK90	Rev C	Road Layout Plan – Sheet 1 of 5 (Revised Stage 1)	Airey Consultants Ltd	June 2017
SK91	Rev A	Road Layout Plan – Sheet 2 of 5	Airey Consultants Ltd	June 2017
SK92	Rev A	Road Layout Plan – Sheet 3 of 5	Airey Consultants Ltd	June 2017
SK93	Rev A	Road Layout Plan – Sheet 4 of 5	Airey Consultants Ltd	June 2017

SK94	Rev A	Road Layout Plan – Sheet 5 of 5	Airey Consultants Ltd	June 2017
310	Rev E	Stage 1 – Footpath Enabling Plan	Airey Consultants Ltd	May 2017
311	Rev C	Stage 1 – Road Enabling Plan	Airey Consultants Ltd	May 2017
311-1	Rev C	Stage 1 – Road Enabling Plan (Arterial Road Option)	Airey Consultants Ltd	May 2017
312	Rev C	Stage 1 – Completed Road Plan	Airey Consultants Ltd	May 2017
312-1	Rev C	Stage 1 – Completed Road Plan (Arterial Road Option)	Airey Consultants Ltd	May 2017
313	Rev A	Stage 1 – Road 1 Long Section	Airey Consultants Ltd	25 May 2017
313-1	Rev A	Stage 1 – Road 1 Longsection 10% Max Grade Option	Airey Consultants Ltd	6 October 2016
313-2	Rev A	Stage 1 – Road 1 Longsection 8% Max Grade Option	Airey Consultants Ltd	6 October 2016
314	Rev B	Stage 1 – Road 1A Long Section	Airey Consultants Ltd	25 May 2017
315	Rev B	Stage 1 – Road 10, 11 & 12 Long Sections	Airey Consultants Ltd	25 May 2017

316	Rev A	Stage 1 – Road 13 Long Section	Airey Consultants Ltd	25 May 2017
320	Rev B	Stage 2 – Road Enabling Plan	Airey Consultants Ltd	May 2017
321	Rev B	Stage 2 – Completed Road Plan	Airey Consultants Ltd	May 2017
322	Rev A	Stage 2 – Road 1A Long Section	Airey Consultants Ltd	25 May 2017
323	Rev B	Stage 2 – Road 20 & 21 Long Section	Airey Consultants Ltd	25 May 2017
324	Rev B	Stage 2 – Road 21 Long Section	Airey Consultants Ltd	25 May 2017
325	Rev A	Stage 2 – Road 22 & Access 23 Long Section	Airey Consultants Ltd	25 May 2017
330	Rev B	Stage 3 – Road Enabling Plan	Airey Consultants Ltd	May 2017
331	Rev B	Stage 3 – Completed Road Plan	Airey Consultants Ltd	May 2017
332	Rev A	Stage 3 – Road 1 & 40 Long Sections	Airey Consultants Ltd	25 May 2017
333	Rev A	Stage 3 – Road 50 & Access 30 Long Sections	Airey Consultants Ltd	25 May 2017
340	Rev B	Stage 4 – Road Enabling Plan	Airey Consultants Ltd	May 2017
341	Rev B	Stage 4 – Completed Road Plan	Airey Consultants Ltd	May 2017

342	Rev A	Stage 4 – Road 40 Long Section	Airey Consultants Ltd	25 May 2017
343	Rev A	Stage 4 – Road 40 & 41 Long Sections	Airey Consultants Ltd	25 May 2017
344	Rev A	Stage 4 – Road 42 & 43 Long Sections	Airey Consultants Ltd	25 May 2017
350	Rev B	Stage 5 – Road Enabling Plan	Airey Consultants Ltd	May 2017
351	Rev B	Stage 5 – Completed Road Plan	Airey Consultants Ltd	May 2017
352	Rev A	Stage 5 – Road 1 Long Section	Airey Consultants Ltd	25 May 2017
353	Rev B	Stage 5 – Road 50 Long Section	Airey Consultants Ltd	25 May 2017
354	Rev A	Stage 5 – Access 51, 52 & 53 Long Sections	Airey Consultants Ltd	25 May 2017
360	Rev B	Stage 6 – Road Enabling Plan	Airey Consultants Ltd	May 2017
361	Rev B	Stage 6 – Completed Road Plan	Airey Consultants Ltd	May 2017
362	Rev A	Stage 6 – Road 1 Long Section	Airey Consultants Ltd	25 May 2017
363	Rev A	Stage 6 – Road 1 & 60 Long Sections	Airey Consultants Ltd	25 May 2017
364	Rev A	Stage 6 – Road 61 & 62 Long Sections	Airey Consultants Ltd	25 May 2017

370	Rev B	Stage 7 – Road Enabling Plan	Airey Consultants Ltd	May 2017
371	Rev B	Stage 7 – Completed Road Plan	Airey Consultants Ltd	May 2017
372	Rev A	Stage 7 – Road 60 Long Section	Airey Consultants Ltd	25 May 2017
373	Rev A	Stage 7 – Road 70 & 71 Long Sections	Airey Consultants Ltd	25 May 2017
400	Rev C	Proposed Stormwater Layout & Flood Plan	Airey Consultants Ltd	May 2017
401	Rev A	Wetland 1 Details	Airey Consultants Ltd	October 2015
402	Rev A	Wetland 2 Details	Airey Consultants Ltd	October 2015
403	Rev A	Wetland 3 Details	Airey Consultants Ltd	October 2015
404	Rev A	Wetland 4 Details	Airey Consultants Ltd	October 2015
405	Rev A	Wetland 5 Details	Airey Consultants Ltd	October 2015
406	Rev A	Proposed Raingarden Typical Details	Airey Consultants Ltd	25 May 2017
407	Rev A	Arch Bridge Typical Detail	Airey Consultants Ltd	25 May 2017
410	Rev C	Stage 1 – Stormwater Enabling Plan	Airey Consultants Ltd	25 May 2017
410-1	Rev C	Stage 1 – Stormwater Enabling Plan	Airey Consultants Ltd	25 May 2017

		(Arterial Road Option)		
411	Rev C	Stage 1 – Completed Stormwater Plan	Airey Consultants Ltd	25 May 2017
411-1	Rev C	Stage 1 – Completed Stormwater Plan (Arterial Road Option)	Airey Consultants Ltd	25 May 2017
420	Rev B	Stage 2 – Stormwater Enabling Plan	Airey Consultants Ltd	25 May 2017
421	Rev B	Stage 2 – Completed Stormwater Plan	Airey Consultants Ltd	25 May 2017
430	Rev B	Stage 3 – Stormwater Enabling Plan	Airey Consultants Ltd	25 May 2017
431	Rev B	Stage 3 – Completed Stormwater Plan	Airey Consultants Ltd	25 May 2017
440	Rev B	Stage 4 – Stormwater Enabling Plan	Airey Consultants Ltd	25 May 2017
441	Rev B	Stage 4 – Completed Stormwater Plan	Airey Consultants Ltd	25 May 2017
450	Rev B	Stage 5 – Stormwater Enabling Plan	Airey Consultants Ltd	25 May 2017
451	Rev B	Stage 5 – Completed Stormwater	Airey Consultants Ltd	25 May 2017

		Plan		
460	Rev B	Stage 6 – Stormwater Enabling Plan	Airey Consultants Ltd	25 May 2017
461	Rev B	Stage 6 – Completed Stormwater Plan	Airey Consultants Ltd	25 May 2017
470	Rev B	Stage 7 – Stormwater Enabling Plan	Airey Consultants Ltd	25 May 2017
471	Rev B	Stage 7 – Completed Stormwater Plan	Airey Consultants Ltd	25 May 2017
480	Rev B	Stage 8 – Stormwater Enabling Plan	Airey Consultants Ltd	25 May 2017
481	Rev B	Stage 8 – Completed Stormwater Plan	Airey Consultants Ltd	25 May 2017
500	Rev B	Proposed Wastewater Layout Plan	Airey Consultants Ltd	May 2017
501	Rev A	Preliminary Wastewater Pump Station Layout Plans Typical Cross Section	Airey Consultants Ltd	May 2017
510	Rev B	Stage 1 – Wastewater Enabling Plan – Sheet 1 of 2	Airey Consultants Ltd	25 May 2017
511	Rev C	Stage 1 – Wastewater Enabling Plan –	Airey Consultants Ltd	25 May 2017

		Sheet 2 of 2		
511-1	Rev C	Stage 1 – Wastewater Enabling Plan Sheet 2 of 2 (Arterial Road Option)	Airey Consultants Ltd	25 May 2017
512	Rev C	Stage 1 – Completed Wastewater Plan	Airey Consultants Ltd	25 May 2017
512-1	Rev C	Stage 1 – Completed Wastewater Plan (Arterial Road Option)	Airey Consultants Ltd	25 May 2017
520	Rev B	Stage 2 – Wastewater Enabling Plan	Airey Consultants Ltd	25 May 2017
521	Rev B	Stage 2 – Completed Wastewater Plan	Airey Consultants Ltd	25 May 2017
530	Rev B	Stage 3 – Wastewater Enabling Plan	Airey Consultants Ltd	25 May 2017
531	Rev B	Stage 3 – Completed Wastewater Plan	Airey Consultants Ltd	25 May 2017
540	Rev B	Stage 4 – Wastewater Enabling Plan	Airey Consultants Ltd	25 May 2017
541	Rev B	Stage 4 – Completed Wastewater Plan	Airey Consultants Ltd	25 May 2017
550	Rev B	Stage 5 – Wastewater	Airey	25 May 2017

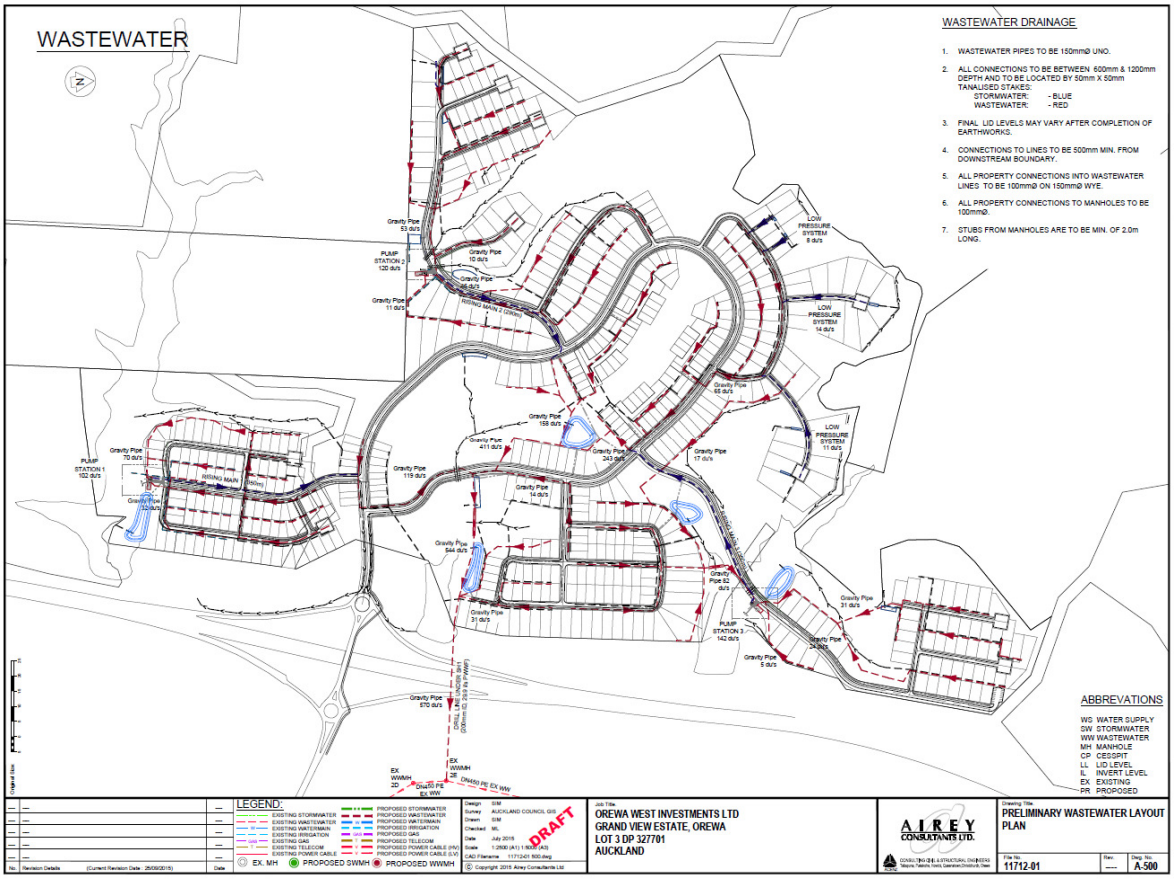
		Enabling Plan	Consultants Ltd	
551	Rev B	Stage 5 – Completed Wastewater Plan	Airey Consultants Ltd	25 May 2017
560	Rev B	Stage 6 – Wastewater Enabling Plan	Airey Consultants Ltd	25 May 2017
561	Rev B	Stage 6 – Completed Wastewater Plan	Airey Consultants Ltd	25 May 2017
570	Rev B	Stage 7 – Wastewater Enabling Plan	Airey Consultants Ltd	25 May 2017
571	Rev B	Stage 7 – Completed Wastewater Plan	Airey Consultants Ltd	25 May 2017
580	Rev B	Stage 8 – Wastewater Enabling Plan	Airey Consultants Ltd	25 May 2017
581	Rev B	Stage 8 – Completed Wastewater Plan	Airey Consultants Ltd	25 May 2017
Ref 5970		Scheme Plan A of Subdivision Staging	Hampson & Associates Ltd	29 May 2017
Ref 5970		Scheme Plan B of Multi-Lot Staging	Hampson & Associates Ltd	29 May 2017
S1	Sheet 1	Stage 1 Scheme Plan	Hampson & Associates Ltd	16 October 2015
S1	Sheet 2	Stage 1 Scheme Plan	Hampson & Associates Ltd	16 October 2015

S2	Sheet 1	Stage 2 Scheme Plan	Hampson & Associates Ltd	16 October 2015
S2	Sheet 2	Stage 2 Scheme Plan	Hampson & Associates Ltd	17 September 2015
S3	Sheet 1	Stage 3 Scheme Plan	Hampson & Associates Ltd	16 October 2015
S3	Sheet 2	Stage 3 Scheme Plan	Hampson & Associates Ltd	17 September 2015
S4	Sheet 1	Stage 4 Scheme Plan	Hampson & Associates Ltd	16 October 2015
S4	Sheet 2	Stage 4 Scheme Plan	Hampson & Associates Ltd	17 September 2015
S5	Sheet	Stage 5 Scheme Plan	Hampson & Associates Ltd	16 October 2015
S5	Sheet 2	Stage 5 Scheme Plan	Hampson & Associates Ltd	17 September 2015
S6	Sheet 1	Stage 6 Scheme Plan	Hampson & Associates Ltd	16 October 2015
S6	Sheet 2	Stage 6 Scheme Plan	Hampson & Associates Ltd	17 September 2015
S7	Sheet 1	Stage 7 Scheme Plan	Hampson & Associates Ltd	27 October 2015
S7	Sheet 2	Stage 7 Scheme Plan	Hampson & Associates Ltd	27 September 2015
S8	Sheet 1	Stage 8 Scheme Plan	Hampson & Associates Ltd	27 October 2015
S8	Sheet 2	Stage 8 Scheme Plan	Hampson & Associates Ltd	17 September 2015
Figure 8		Proposed Character Areas	Boffa Miskell Limited	29 May 2017
Figure 9	Revision 1	Concept Structure Plan	Boffa Miskell Limited	30 June 2017

Figure 11		Revegetation and Open Space Concept	Boffa Miskell Limited	29 May 2017
	Revision 1	Detailed Stage 1: Proposed Land Uses	Boffa Miskell Limited	30 June 2017
	Revision 1	Detailed Stage 1: Indicative Areas for Integrated Residential Development	Boffa Miskell Limited	30 June 2017

Appendix 2

Wastewater Pumping Station Concept Design Report Three Wastewater Pump Stations Grand View Estate File 11712-01 September 2015.



WASTEWATER PUMPING STATION CONCEPT DESIGN REPORT
FOR THREE WASTEWATER PUMP STATIONS
GRAND VIEW ESTATE, OREWA

FILE - 11712-01

September 2015

This report has been prepared solely for the benefit of the Grand View Estate. No Liability is accepted by this company or any employee or sub-consultant of this company with respect to its use by any other person.

This disclaimer shall apply notwithstanding that the report may be made available to other persons for an application for permission or approval or to fulfil a legal requirement.

Quality Assurance Statement	
Grand View Estate **Concept Design Report for three Wastewater Pumping Stations.**	**Prepared by:** Pieter Stellingwerf
	Reviewed by:
Project Manager: Michael Lee	**Approved for issue by:** Michael Lee

Revision Schedule					
Rev. No.	Date	Description	Prepared by	Reviewed by	Approved by

`

TABLE OF CONTENTS

1 INTRODUCTION

1.1. A wastewater reticulation network will be developed on the site by the applicant to service the development and comply with the standards required by Watercare's *Water and Wastewater Code of Practice for Land Development and Subdivision*. The proposed reticulation network will gravity feed into the Watercare's existing network at Grand Drive in the vicinity of the Aran Drive intersection.

1.2. Due to the steep and incised topography of the Grand View Estate property, three pumping stations are necessary. These pumping will service the lower areas of the development and pump up to the gravity portion of the network.

1.3. This report sets out the concept design for the three Pumping Stations to service the lower areas of the residential development at Grand View Estate, Orewa. This concept design refers to Watercare's *working draft DP-06 Standard for Local Network Wastewater Pumping Station Design and Construction.*

1.4. This report has been prepared to outline the concept design for inclusion with a resource consent for the development of the site. Following approval of the concept design a Final Design will be submitted which will incorporate the full design & drawing details.

2 DESIGN PARAMETERS

2.1. These three pumping systems are to be constructed to service the low lying portions of the Hall Farm West Development and pump the wastewater effluent into the gravity portions of the development.

2.2. The flows based on the scheme plan have been calculated using Watercare's Water and Wastewater Code of Practice for Land Development and Subdivision.

DAILY FLOW DESIGN	**Pump Station No.1**	**Pump Station No.2**	**Pump Station No.3**	
ADWF (av. dry weather flow)	225	225	225	l/p/d
PWWF (Peak wet weather flow)	1500	1500	1500	l/p/d
Persons per lot	3	3	3	
Number of lots	102	120	142	
ADWF	**0.80**	**0.94**	**1.11**	l/s
PWWF	**5.23**	**6.15**	**7.27**	l/s

2.3. It is proposed to incorporate the storage into a separate off-line storage tank to be located adjacent to the pumping station and connected to the receiving manhole on the incoming wastewater line, prior to the wetwell.

3 RISING MAINS

3.1 The rising mains will be located within the future road reserves of the development and connected to a receiving manhole on the gravity network as shown on Preliminary Wastewater Layout Plan 11712-01 drawing A-500 **Appendix 1.**

3.2 The proposed rising mains will be 110mmø outside diameter (OD) (89.3mmø inside diameter (ID)), PE100, SDR11, PN16 pressure pipeline (see **Appendix 1** for calculations) which will convey the wastewater from the pump stations to the connection in the gravity wastewater network.

	Pump Station No.1	**Pump Station No.2**	**Pump Station No.3**	
Rising Main Diameter (OD)	110	110	110	mm
Rising Main Diameter (OD)	89	89	89	mm
Rising Main Length	350	290	350	mm

3.3 The rising mains will rise throughout the entire length and do not require automatic air release valves to be located at pipeline high points.

4 PUMP STATION

4.1 **Appendix 2** shows the general location and layout of the pumping station sites.

4.2 It is proposed to have a single fiber reinforced plastic (fiberglass or FRP) pump station that has one wetwell with integrated valve chamber as supplied by Pump & Valve or Maskell. The depth would be approximately 4.5m below ground level. The pump chamber will be sitting just slightly above ground level to prevent stormwater entering the wetwell.

4.3 The pump station will be delivered to site built up ready to be installed by the Civil Contractor.

Access

4.4 Access to each of the pump stations will be directly off the roading network and will allow for maintenance vehicles to the site.

4.5 This access will be designed to allow small trucks, utes and cars to back up to the pump station and electrical cabinet.

4.6 Access to the adjacent storage tank will be by lids located at either end of the tank.

Electrical Cabinets

4.7 An electrical cabinet will be constructed at each pumping station location to meet Watercare's standards and will include the following:

- A pump station control panel mounted in an outdoor control box will be constructed including two soft start drives and radio telemetry equipment.
- The control panel shall be mounted on concrete plinths adjacent to the pump station lids. This includes all level control equipment and will be installed by Watercare approved pump station specialist electricians.
- Backup Generator connection - allowance of lugs within the switchboard will be made to provide for the connection of a backup Generator in emergency situations.

Landscaping

4.8 Landscaping planting will also be used to make the site as unobtrusive as possible to minimise the visual impact of the pump station and to tie in to the surroundings.

5 PUMPING SYSTEMS

General

5.1 **Appendix 1** illustrates the proposed layout of the pumping system.

5.2 The final reticulation layout has yet to be finalized. The layout of the station and the location of the receiving manhole will allow the flexibility required to ensure all future pipe networks will be able to be connected through a gravity system direct to the receiving manhole. The receiving manhole will provide a single incoming pipe.

5.3 The pump station will use conventional submersible pumps located in a wetwell/valve chamber arrangement.

Pumps

5.4 Two pumps will be installed in each pump chamber. They will operate in an alternating Duty/Standby mode.

5.5 It is proposed to install:-

- The PWWF capacity of the station is to be met by one single pump. A second standby pump will be installed to take over should the duty pump fail to pump the required flow due to blockage or breakage.
- Two Flygt submersible pumps are proposed and will be located in the wetwell.
- The proposed pumps will have duty points of:-

	Pump Station No.1	**Pump Station No.2**	**Pump Station No.3**	
Total Head Required	41.5	34.1	42.6	m
Pump Station Duty	5.2	6.1	7.3	l/sec

- The final pumps and capacities will be confirmed in the final design.

Pipework

5.6 Pump station pipework to be standard epoxy coated steel, ductile iron or stainless steel pipes and fittings.

5.7 In the wetwell shall be a riser from each submersible pump. From here it will travel straight up, through the valve chamber floor and with a flanged elbow into the simple valve configuration including an Isolation valve and a Check valve for each pump. After these valves, it shall connect to a flanged tee joining the two lines into a common main ready for connection on to the 110mmø OD rising main.

Valves

5.8 The following will be used for the pump station:

- Isolation valves.
- Check Valves.

6 INFRASTRUCTURE

6.1 The wetwells and pump/valve chambers shall be manufactured from FRP. The wetwell shall be 2.0m internal diameter with an internal depth of 4.5m. (to be verified in final design).

6.2 The reasons for this integral pump/valve chamber are:-

- reduced overall footprint,
- the pump station can be completely fitted out with all pipework before delivery to site. Included in this chamber shall be an inlet stub fibreglassed into the wetwell wall for easy connection onsite utilizing a standard gibault pipe joiner.

6.3 The opening to the wetwell shall include lids to Watercare standards to allow access for maintenance operations.

6.4 The interior of both these chambers shall be pigmented white by using white resin for the first two layers. This is to be white for:-

- excellent light reflection properties and
- ease of cleaning for the maintenance operators.

6.5 The wetwell shall incorporate circumferential stiffening ribs for below ground installation for nominated depth and lifting holes to facilitate installation. These tanks shall be installed with a concrete bedding ring ballast in accordance with the Suppliers recommendation, to resist hydrostatic pressure of at least 4.5m of ground water. The asset life of these chambers shall be 100 years as requested by the Watercare standards.

7 STORAGE TANK

7.1 The storage tank is to be constructed as an off line storage tank and will be located adjacent to the receiving manhole as shown on the attached plans Preliminary Wastewater Pump Stations 1 – 3 Layout Plans & Typical Cross Section 11712-01 Drawing A-501 **Appendix 2**.

7.2 Both Auckland Council (AC) & the Proposed Auckland Unitary Plan (PAUP) require 4 hours average dry weather flow (ADWF) storage. Watercare's working draft DP-06 Standard for Local Network Wastewater Pumping Station Design and Construction requires 8 hours ADWF storage.

7.3 The PAUP – Policy C.5.15.21 identifies an overflow frequency target of reducing wet weather outflows to no more than two events per discharge location per annum by 2040. We have evaluated the storage requirements based on the more conservative figure of 8 hours ADWF, to ensure this proposal will be well under that target & to assist Watercare achieve the overall target in the Auckland Plan.

7.4 The size of the storage tank has therefore been designed to meet Watercare's working draft standards. The design parameter of 8 hours ADWF has been incorporated into the design of the storage volume. The tanks will be approx. 2.0m in diameter and vary from approx. 8.2m to 9.3m in length. However should this storage volume requirement be reduced to meet the AC & PAUP standards, we will re-evaluate the storage based on the final required storage time.

	Pump Station No.1	**Pump Station No.2**	**Pump Station No.3**	
Storage Required (8 hrs ADWF)	**23.0**	**27.0**	**32.0**	m^3

8 ELECTRICAL AND CONTROL

Switchboard and Telemetry

8.5 The switchboard will comprise of a free standing electrical cabinet and telemetry system will be designed to meet Watercare's requirements and be located adjacent to the wet well.

8.6 The other electrical and control equipment will be located in the electrical cabinet adjacent to the wet well.

8.7 The telemetry system will be used to monitor the pump station to meet Watercare requirements.

Level Sensors

8.8 An ultrasonic transducer will be fitted in the Pump Well. It will feed into the same controller which will convey the levels to the pump station PLC and telemetry system.

8.9 Separate float switches will be used for separate low level, high level and overflow level alarms in the Pump Well. The float switches are connected to the battery backup supply which feeds the telemetry system to ensure alarms are able to be set out in case of power failure at the suite..

Generator Connection

8.10 A generator connection will be incorporated into the switchboard design. This will allow a generator to be easily connected should the local power supply fail.

9 VENTILATION

9.11 The natural air flow from the wastewater network will flow into the wetwell and out of the vent pipe. Allowance will be made to install a McBerns odour filter at the pump station site.

10 OVERFLOWS

10.1 The wastewater system is designed to meet Watercare's Water and Wastewater Code of Practice for Land Development and Subdivision Code and as such will be constructed to minimise stormwater ingress/infiltration and cater for peak wet weather flows. Overflow discharges will therefore only happen in extreme circumstances.

10.2 The pump stations have been designed to meet Watercare's working draft DP-06 Standard for Local Network Wastewater Pumping Station Design and Construction and as such will include a telemetry alarm warning system along with back-up facilities, procedures and contractor's protocols. The pump station will be constructed with 8 hours ADWF storage, which is above the required storage as outlined in the

AC & PAUP. Overflow discharges will therefore only happen in extreme circumstances.

10.3 In the unusual situation where an overflow may occur, the overflow point from the pump station and network will be located in the receiving manhole, which is located prior to the pumping station and storage tank. The overflow level will be set to only operate once the storage at the site has been filled to capacity.

10.4 The overflow will have a primary screened filter such as a baffle plate or “Orenco” filter in this manhole prior to discharging to ground. The baffle plate or “Orenco” filter will remove the solids from the wastewater, prior to overflowing to the land.

10.5 The overflow from the pump station and network will be piped from the receiving manhole and discharge to a dispersal trench on the ground below the pump station site (as shown on the Preliminary Wastewater Pump Stations 1 – 3 Layout Plans & Typical Cross Section 11712-01 Drawing A-501 Appendix 2). The effluent will then disperse to ground prior soaking into the soils.

11 APPENDICES

Appendix 1 – Preliminary Wastewater Layout Plan 11712-01 Drawing A-500

Appendix 2 – Preliminary Wastewater Pump Stations 1 - 3 Layout Plans & Typical Cross Section, 11712-01 Drawing A-501

Appendix 3 – Pump Station Calculations and Pump Selection Curves

Dave Serjeant

Chairperson

7 August 2017