

Report / Decision on a Non-notified Subdivision Consent Application

Sections 95A / 95B and 104 and 104C

Application Number: RMA/2021/1410
Applicant: Q T Bowen Ltd
Site address: 262 Highsted Rd
Legal description: Section 1 SO 523535
Zone: Residential New Neighbourhood (RNN)

Overlays and map notations: Christchurch International Airport Protection Surfaces
Flood Management Area
Liquefaction Management Area
Water Body Setback
Outline Development Plan

Activity status: Restricted Discretionary

Application: Subdivision

The proposal

I adopt the applicant's description under section 2 of their proposed works.

In summary the proposed subdivision will create 24 fee simple allotments, 2 roads to vest and 2 rights of way and will be completed in 3 stages.



Figure 1 Site Location

Description of site and existing environment

The application site and surrounding environment are described in section 1 of the AEE submitted with the application. I adopt the applicant's description and note the following additional points:

- The land immediately to the north and east is owned by the Christchurch City Council and is currently being developed as a stormwater facility/recreational area.
- A separate land use consent for NES, Earthworks and Geotechnical conditions has been issued under RMA/2021/1130.



Figure 2 Stormwater facility to the north shown.

Relevant rules and activity status F

Christchurch District Plan

The proposal requires subdivision consent for a restricted discretionary activity under the following rule(s):

Subdivision rules

The proposal requires subdivision consent for a restricted discretionary activity under the following rule(s):

Activity status rule	Standard not met	Reason	Matters of control or discretion	Notification clause
5.5.2 C1	-	Any subdivision which creates a vacant allotment within the Liquefaction Management Area is classified as a controlled activity under Chapter 5	Location, size and design of allotments, structures, roads, access, services or foundations as they relate to the liquefaction hazard; Timing, location, scale and nature of earthworks as they relate to the liquefaction hazard; and Liquefaction hazard remediation methods. Criteria in 5.5.2 C1 b.	Shall not be limited or publicly notified.
8.5.1.3 RD4		Subdivision within a Flood Management Area is classified as a restricted discretionary activity.	8.7.4 - General matters 8.8.7 - Flood Management Area	8.4.1.1
8.5.1.3 RD 2	8.6.11a The subdivision shall be in accordance with the ODP.	Rule 8.6.11a (c) Where the subdivision is not associated with comprehensive residential development the land subject to the subdivision application shall have a minimum area of 4	Rule 8.8.8 and 8.8.9.	c. In the instance of non-compliance with RD2 b., written approvals and

Activity status rule	Standard not met	Reason	Matters of control or discretion	Notification clause
		<p>hectares.</p> <p>The proposal is not associated with a comprehensive development and has a site area of approximately 1.4ha.</p> <p>Rule 8.6.11a (i) Any block containing residential allotments shall have a publicly accessible maximum perimeter length of 800m.</p> <p>The proposal at this time does not comply.</p>		either limited or public notification may apply.
8.5.1.3 RD 2	8.6.4 Roads	<p>Rule 8.10.3 All roads shall be laid out constructed and vested in accordance with appendix 8.10.3 and chapter 7. This requires the following;</p> <p>Local Road</p> <p>Legal Minimum width 16m</p> <p>Legal Maximum width 20m</p> <p>Minimum road width 7m</p> <p>Maximum 9m.</p> <p>Proposed road (lot 90) shall have a minimum legal width of approximately 12m for the first 27m and then shall increase to 13m for the balance of lot 90. The minimum formed width shall be 6m and one footpath measuring 1.5m shall be provided along with parking bays for the entire length of road where the width is 13m.</p>	iii. for Rule 8.6.4 - Roads: Rule 8.8.3;	No clause

Rule 8.4.1.1 specifies that any application for a controlled or restricted discretionary subdivision consent shall not be publicly or limited notified (except in relation to restricted discretionary applications seeking access on to a State Highway).

National Environmental Standard

The National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NES) controls subdivision of land and soil disturbance where an activity on the Hazardous Activities and Industries List (HAIL) is being carried out or is more likely than not to have been carried out.

In this case it is more likely than not that a HAIL activity is being or has been undertaken on the site. The applicant has submitted a detailed site investigation (DSI) stating that the soil contamination exceeds the applicable standard. Pursuant to Regulation 10(2) a restricted discretionary activity resource consent is required, with Council reserving discretion over the adequacy of the detailed site investigation, the suitability of the land for the activity, the approach to remediation, the adequacy of the site management plan, the transport, disposal and tracking of soil, the requirements for and conditions of a financial bond, the timing and nature of review conditions and the duration of the consent.

Expert advice has been received from Environmental Health Officer Agnes van der Erf. Ms van der Erf's comments are provided under the environment effects section of this report. It is further noted that matters relating to NES have been addressed under RMA/2021/1130, the land use consent attached to this subdivision.

Effects on the environment and adversely affected persons [Sections 95D, 95E and 104(1) (a)]

Subdivision

As a restricted discretionary activity the assessment of the effects of the subdivision is limited to the matters over which the Council has limited its discretion outlined in Chapter 8 of the Christchurch District Plan.

Land-use and Subdivision

As a restricted discretionary activity the assessment of the effects of the subdivision is limited to the matters over which the Council has limited its discretion outlined in Chapter 8 of the Christchurch District Plan. The assessment matters in Chapter 5, 6, 7, 8 and 9 of the Christchurch District Plan provide guidance as to the matters that require consideration. In my opinion the effects of this proposal relate to the following:

- ...Subdivision design;
- ...Natural Hazards
- ...Servicing and Infrastructure
- ...Outline Development Plan
- ...Natural and cultural values;

Subdivision design

The relevant matters are those within Rule 8.7.4.1 a. to r. I have turned my mind to these matters and having regard to the size, shape and orientation of the allotments, I consider that the lots proposed will be adequate to provide for intended variety of uses in accordance with the Residential New Neighbourhood zoning and will be compatible with the pattern of development within the site's vicinity.

Given the acceptance of the applicant to these proposed conditions of consent, I consider any effect of the subdivision design is to be less than minor.

Natural Hazards

Effects relating to natural hazards are addressed in the assessment of this report which addresses section 106. Effects associated with natural hazards are considered to be internal to the application site and primarily relate to specific foundation design being required for vacant sites.

Earthworks

A separate Earthworks consent (RMA/2021/1130) has been issued for this subdivision.

In general comments potential effects from earthworks activity relates to natural hazards, nuisance, and amenity. The applicant provided assessment in sections 2.4 & 8 of the AEE. Given the zoning of the land, the earthworks can be expected given that works are required for infrastructure, new access-ways, and drainage gradients. The matters for discretion relating to earthworks under 8.9.4 consider issues relating to nuisance, resources & assets, amenity, Indigenous biodiversity, natural character, and landscape features.

The application was reviewed by engineer Yvonne McDonald, Ms McDonald's comments are held under TRIM reference 21/1157713.

Ms McDonald recommends conditions to manage erosion and sediment, site run off, dust, filling / unloading of trucks under RMA/2021/1130. I consider these conditions will appropriately mitigate adverse nuisance effects on persons within adjoining properties and on the wider environment, such that they will be less than minor. I accept Ms McDonalds proposed conditions of consent and these were also accepted by the applicant under TRIM reference 21/1284897.

I am therefore satisfied that proposed earthworks are able to be appropriately managed on site through compliance with recommended conditions of consent. Any adverse effects from general earthwork activity would be temporary and less than minor.

Servicing and Infrastructure

Waste Water Mitigation

Expert advice was sought from Alison Tang Assistant Engineer for the Asset Planning Water & Waste from the three waters team for both Waste Water Mitigation and Supply of Water. A copy of her report is held under TRIM reference 21/657062.

Existing:

The existing house has a connection to the DN150 uPVC pressure rising main in Highsted Road. This will need to be decommissioned in accordance with the Construction Specification Standards at the main.

Proposed:

Sewer reticulation will be provided via a low pressure system that will connect to the existing DN63 on the western side of Highsted Road. Boundary kits will be placed directly outside each allotment within the 0.5m berm area. Individual dwellings will need to install the appropriate CCC approved holding tank and pump controllers as part of their building consent application. The appropriate sewer easements in favour of CCC will be registered on all titles that require them to allow access along the access lot.

I accept Ms Tang's comments that subject to conditions all allotments can be serviced to Council's reticulated system. I accept her recommended conditions of consent which have also been accepted by the applicant under TRIM reference 21/1577654.

Water Supply

Expert advice was sought from Alison Tang Assistant Engineer for the Asset Planning Water & Waste from the three waters team for both Waste Water Mitigation and Supply of Water. A copy of their report is held under TRIM reference 21/657062

Existing:

The lot is not currently connected to the water supply reticulation.

Proposed:

A new 1800D PE water-main will be installed along Road 1 (including the required fire hydrants) and will connect to the existing DN250 water-main within Highsted Road.

A new looped DN63 sub-main will be installed tapping into the existing proposed main located in Road 1. Individual water connections will be provided for within the ROW servicing Lots 19 and 20 which will be connected to this sub-main via water meters with the road reserve.

I accept Ms Tang's comments that subject to conditions all allotments can be serviced to Council's reticulated system. I accept her recommended conditions of consent which have also been accepted by the applicant under TRIM reference 21/1577654.

Stormwater

Expert advice was sought from Brian Norton a Senior Stormwater Planning Engineer from the three waters team. A copy of his report is held under TRIM reference 21/1208969.

Stormwater generated from all roofs, roads and hardstanding areas within all allotments shall be collected via channels, sumps, pipes or swales and discharged into the first flush sedimentation basin to be constructed by Council within 262R Highsted Road. If the permanent stormwater facility has not been commissioned at the time of s.224c certification, the consent holder may utilise a temporary combined first flush and detention basin.

The consent holder shall demonstrate that authorisation for the discharge of operational and construction phase stormwater has been obtained from Christchurch City Council, otherwise separate authorisation from Environment Canterbury shall be obtained.

The designer of the surface water management system shall provide a report which identifies all secondary flow paths proposed for storm events that exceed the capacity of the stormwater management system. All

secondary or emergency stormwater flow paths are to be identified and protected by an easement in favour of Christchurch City Council, if required.

Given the information provided by the applicant, expert advice received from Brian Norton and given the conditions of consent to be imposed have been accepted by the applicant, then for these reasons I consider any effects to be sufficiently mitigated or controlled and therefore to be less than minor.

Summary

In summary the site can be serviced to meet the needs of the proposed subdivision and conditions will be put in place which will look to facilitate this outcome. For this reason and given the information stated above I consider this site meets the required outcomes sought under section 8.7.4.3 (Servicing and Infrastructure) of the Operative District Plan.

Transport Networks

Under General Matters 8.7.4.4 Transport networks, the provision, location, design, safety and efficiency of any road, frontage road, access (including access for fire-fighting), pedestrian access way, service lane, cycle way/route/lane, corner rounding, intersections, landscaping or parking area including the formation and construction, is suited to the development it serves and is acceptable to the Council.

Pursuant to Rule 8.5.1.3 RD2 consent is required for a restricted discretionary activity as the proposal does not achieve compliance with rule 8.6.4: appendix 8.10.3 A *** means that a local residential road with a roadway width 7m or wider, but not greater than 9m is a controlled activity. A local residential road with a roadway width greater than 9m, but not greater than 12m is a restricted discretionary activity. A local residential road with a roadway width less than 7m or greater than 12m is a full discretionary activity.*

The road does not comply with the road width standards. Proposed road 1 (lot 90) shall have a minimum legal width of approximately 12m for the first 27m and then shall increase to 13m for the balance of lot 90. The minimum formed width shall be 6m and one footpath measuring 1.5m shall be provided along with parking bays for the entire length of road where the width is 13m.

8.8.3 Roads Matters of discretion;

1. *Whether the provision, location, design, safety and efficiency of any road, frontage road, corner rounding, intersections or landscaping, including the formation and construction, is suited to the development it serves.*
2. *Whether new roads or upgrades to existing roads are required, including in relation to any network utility, state highway or rail line.*
3. *Whether new roads are appropriately routed and integrate safely and efficiently with the existing road network.*
4. *Whether new or upgraded roads are satisfactorily designed and constructed, including providing a safe environment for road users and pedestrians, and are acceptable to the Council.*
5. *Whether subdivision layout and new or upgraded roads provide for public transport, cycling and walking, where appropriate, including access to reserves, facilities, commercial areas, and public transport facilities*

Expert advice was sought from Weng-Kei Chen a transport network planner with the Transport Unit. Mr Chen has not raised any issues relating to the proposal. In short Mr Chen did not highlight any matters of concern relating to safety or visibility at the proposed intersection nor raise any issues with the remainder of the site.

Therefore, in my opinion, I consider that the non-compliances to have less than minor adverse effects on the safety and efficiency of the transport network.

Waterway setback

The ODP under 8.10.19 D part 4 (b Stormwater), requires;

- a. *A sustainable stormwater management solution for the neighbourhood integrated alongside open space reserves*
- b. *Enhancement of the habitat and ecological values of the Styx River and its margins in association with stormwater management and provision of reserves and to give effect to the Styx River/Purakaunui Area Stormwater Management Plan.*

- c. Reconfiguration and enhancement of Highsted Stream to improve its capacity and functioning for stormwater management while ensuring habitat and ecological values are enhanced and developed*
- d. Natural springs (if any) to be identified and safeguarded at the time of subdivision.*

As stated above the applicant will be required to undertake some earthworks within the waterway set back. Given the proposal expert advice was sought from Emily Tredinnick a waterways ecologist with the Three Waters team as part of the earthworks consent (RMA/2021/1130). Ms Tredinnick has provided comments which are held on Councils Record system TRIM under record number 21/1552317.

I agree with the applicant's assessment that the swale along Highsted Road would be limited further by the need to install two new culverts if kept open, and because of the changes to the land and network in this area it is less likely to receive substantial runoff, which will leave it dry for most of the year. I do consider that good ESC measures should be implemented during construction to avoid sediment entering the receiving environment. A silt fence across the waterway could cause a bit of a nuisance/obstruct flows, I think it would be easier to ensure that either this work is done in dry weather and/or first.

My recommended condition is:

- *The piping of Gardiners Road Drain Branch No 1 shall only be undertaken during the summer months and when the forecast is for fine weather for seven consecutive days from the start of construction, to prevent the discharge of sediment downstream due to instream flows.*

The applicant has volunteered a condition of consent which will see the fencing of Lots 12 & 13 which are located on either side of the Local Purpose Utility Reserve, have open, pool-style fencing along the length of the reserve.

Any fencing constructed on the southern boundary of Lot 12 and the northern boundary of Lot 13 (i.e. the interface with Lot 93 (Local Purpose Utility Reserve), shall be comprised of a combination of pool-style fencing and paling fencing. This can be made up of the following:

- *Half pool-style fencing and half paling fencing; or*
- *Paling fencing along the frontage of any future outdoor living space, and the remainder being made up of pool style fencing;*
- *Or pool style fencing for the entire frontage.*

Therefore, I would recommend that a consent notice is placed on the sections along the northern boundary (Lots 12 & 13) for a partially open, pool-style fencing.

I accept Ms Tredinnick's comments and proposed condition by the applicant. I consider any effect to be less than minor.

Outline Development Plan

The relevant matters under the Outline Development Plan (ODP) for Upper Styx are those within Rule 8.10.27C and D. I have turned my mind to these matters and again having regard to the size, shape and orientation of the allotments, I consider that the lots will be adequate to provide for intended variety of uses in accordance with the desired outcomes of the ODP and will be compatible with the pattern of development within the site's vicinity.

Development Form and Design

Under the development form and design the ODP, the outline development plan considers the main features such as the Styx River and Highsted Stream, Tullet Park and its proximity to Styx Mill Conservation Reserve. Advantage can also be taken of existing trees and hedgerows to provide a sense of maturity and a connection with the past. It focuses on larger section sizes and or planter buffers on boundaries with existing sites or where the RNN abuts properties in the RS zone, to maintain an open and attractive interface with the Styx river corridor.

This site is not located adjacent to the Styx River or Highsted Stream, however is situated adjacent to a network waterway known as Gardiners Road Drain Branch No 1 (ID10708) which seems to have little to no upstream section, and discharges to Gardiners Waterway 200m downstream/north of the site. There is a proposed wetland facility to the north of this Site, and the already enhanced section of Gardiners Waterway will continue through to meet Styx Drain. This will likely sever the waterway down to 100m.

The applicant has provided for larger section sizes in the proposed development providing for sites between 431m² to 727m² giving an average allotment size of 540.9m². The surrounding area is largely rural in nature but zoned as RNN. Across the Highsted Rd to the west is a number of new RNN developments.

Development Requirements

Under the development requirements the ODP, the outline development plan considers the integration, open space, access & transport, stormwater, water, wastewater and staging of the proposal.

As discussed above the servicing of the site has been provided for and I consider this to be consistent with the requirements as set down under the ODP. In relation to point 1 Integration, the proposed site has provided for connectivity to the south for the neighbouring site.

The applicant has also provided for a continued road connection to the south which will end in a temporary cul-de-sac at this stage, until such time as Part RS 1600 to the south is ready for further development. A Local Purpose Utility Reserve to the east has also been provided for to enable pedestrian/cycle access to the stormwater reserve to the east. The stormwater reserve provides for a network of pathways through open space with connections to the north south east and west.

I therefore consider that the applicant has met with the expectations of the ODP and the requirement for a fully interconnected local road network with a high level of accessibility for people including opportunities for walking, cycling and public transport. Given the small nature of the site no other linkages are possible at this stage.

The site provides for stormwater infrastructure and can be provided with both water and sewer connections to the required outfalls.

In summary the overall development is consistent with all of the required development requirements of the ODP and is appropriate under the associated matters of discretion.

Natural and cultural values;

No areas of Cultural significance has been identified on site.

Consent Notices

A consent notice is proposed which has been accepted by the applicant and which relates to the following;

- Condition 25 Specific Foundation Design
- Condition 9 Fencing lots 21 to 25

The consent notice has been accepted under condition 8.7.4.7a of the district plan as a requirement for a condition to be complied with on a continuing basis.

I consider any adverse effect to be less than minor.

Contamination

Expert advice was sought from Ms Agnes van der Erf Environmental Health Officer as part of the underlying Earthworks consent under (RMA/2021/1130).

In summary:

Soil investigations completed for 262 Highsted Road showed the land had historically been used for orchards, berry farming and market gardening. These activities have left contaminants on the site with arsenic, lead, copper and mercury above background levels and arsenic levels in three areas above the residential soil contamination standards (10% produce). Earthworks consent RMA/2021/1130 provides for remediation of those areas (above residential SCS) by mixing with the 'clean' stockpiled soils to dilute contaminants so the site will be suitable for residential use.

A copy of Ms van der Erf's comments on RMA/2021/1130 are held on TRIM reference 21/611623.

I am satisfied that the site has been adequately assessed and conditions implemented on the earthworks consent to remediate the site.

Conclusion

I therefore based on the assessment above consider any effect to be less than minor and there are no affected parties.

Notification assessment [Sections 95A and 95B]

Sections 95A and 95B set out the steps that must be followed to determine whether public notified or limited notification of an application is required.

Public notification

- Step 1. The application does not meet any of the criteria for mandatory notification in section 95A (2).
- Step 2. Under section 95(A)(5)(b) the application must not be notified as the subdivision is a discretionary activity under the District Plan, is intended to be used solely or principally for residential purposes.
- Step 3. This step is not applicable as notification of the application is prevented by Step 2.
- Step 4. There are no special circumstances that warrant public notification (section 95A (9)).

Limited notification assessment

- Step 1. There are no affected groups or persons as outlined in section 95B (2) and (3).
- Step 2. There are no rules or NES preventing limited notification, and the application is not for a controlled activity land use consent under the District Plan (section 95B (6)).
- Step 3. As discussed above, no persons are considered to be affected under section 95E (sections 95B (7) and (8)).
- Step 4. There are no special circumstances that warrant notification to any other persons (section 95B (10)).

Conclusion on notification

There is no requirement for public or limited notification of this application.

There is no requirement for public or limited notification of this application. Recovery Plans and Regeneration Plans

Section 60(2) of the Greater Christchurch Regeneration Act 2016 requires that decisions and recommendation on resource consent applications are not inconsistent with Recovery Plans and Regeneration Plans. For restricted discretionary activities, Section 60(5) states that such plans are a matter over which discretion is restricted and that section 87A (3) of the RMA applies accordingly.

Excepting the Land Use Recovery Plan (LURP), none of the current Recovery Plans, nor the Cranford Regeneration Plan, are relevant to this application.

The LURP is relevant; however, the new District Plan provisions against which this consent has been assessed above, align with the LURP and accordingly no specific further consideration of the higher order documents is considered necessary.

Relevant objectives, policies, rules and other provisions of the District Plan [Section 104(1) (b) (vi)]

I adopt the applicant's assessment of the policies and objectives as set out in section 7 of their report.

Regard must be had to the relevant objectives and policies in the Christchurch District Plan. Of particular note, Chapter 3 contains a number of high level strategic objectives to guide the recovery and future development of

the City. Chapters 5, 6, 8, 9 and 14 include objectives and policies that are relevant to subdivision and development in the RNN.

In my opinion the application is consistent with the relevant objectives and policies, as the new allotments will be appropriately designed and serviced for the anticipated purpose enable the recovery of the City through development of identified Greenfield and intensification areas.

Relevant provisions of a National Environmental Standard, National Policy Statement, Regional Plan, Regional Policy Statement or Coastal Policy Statement [Section 104(1) (b)]

The NES for Assessing and Managing Contaminants in Soil to Protect Human Health is relevant to the application as a HAIL activity is being carried out or is more likely than not to have been carried out on the land. The relevant provisions are discussed in previous sections of this report.

This has however been addressed under RMA/2021/1130 (Earthworks consent).

For completeness, I note that the District Plan gives effect to the relevant provisions of higher order instruments referred to in s104(1)(b) and that being the case I have not referred to them in my report.

Any other matters which are relevant and reasonably necessary to determine the application [Section 104(1) (c)]

There are no other matters relevant to the consideration of this application.

Part 2 of the Resource Management Act 1991 [Section 104(1)]

The above considerations are subject to Part 2 of the Act which outlines its purpose and principles.

Taking guidance from recent case law¹, the District Plan is considered to be the mechanism by which Part 2 is given effect to in the Christchurch District. The Plan has recently been reviewed, and was competently prepared via an independent hearing and decision-making process in a manner that appropriately reflects the provisions of Part 2. Accordingly, no further assessment against Part 2 is considered necessary.

Section 106

s106 Consent authority may refuse subdivision consent in certain circumstances

- (1) *A consent authority may refuse to grant a subdivision consent, or may grant a subdivision consent subject to conditions, if it considers that—*
- (a) *there is a significant risk from natural hazards; or*
 - (b) *(repealed)*
 - (c) *sufficient provision has not been made for legal and physical access to each allotment to be created by the subdivision.*
- (1A) *For the purpose of subsection (1)(a), an assessment of the risk from natural hazards requires a combined assessment of—*
- (a) *the likelihood of natural hazards occurring (whether individually or in combination); and*
 - (b) *the material damage to land in respect of which the consent is sought, other land, or structures that would result from natural hazards; and*
 - (c) *any likely subsequent use of the land in respect of which the consent is sought that would accelerate, worsen, or result in material damage of the kind referred to in paragraph (b).*

This section of the Act is particularly relevant in relation to geotechnical concerns following the Canterbury earthquakes. The land is identified as being within the Liquefaction Management Area in the Christchurch District Plan and rule 5.5.2a applies (C1). The land is classified by CERA as Green zone.

¹ *R J Davidson Family Trust v Marlborough District Council* [2018] NZCA 316

The applicant has acknowledged that the land filling is intended in part to provide for mitigation for potential liquefaction risks for a future 21 lot subdivision, lodged under RMA/2021/1410. I have provided this advice under that application also. I have appended at the end the general Subdivision Quality Assurance and Design/Engineering report conditions, which may be most appropriate to RMA/2021/1410.

Coffey have undertaken a desktop review including of previous geotechnical investigations, site investigations to support a liquefaction analysis and the resulting Statement of Professional Opinion. The site investigation included two cone penetrometer tests to refusal at 16.4 or 15.2m bgl, and a sonic machine borehole to target 20m depth, four hand augers to a target 3.0m depth and associated shear vane and dynamic cone penetrometer tests, three 1.5-2.0m deep test pits. Adjacent (within 200m) deep investigations used included eight CPTs and two ECan boreholes. The subsoils found were 0.1-0.4m topsoil over 0.2-0.4m firm to stiff silt/clayey silt then a very soft to soft organic silt, with perched groundwater, varying between 0.1-0.9m thickness. Below this are interbedded loose to medium dense silt, sandy silt and silty sand, coarsening with depth then sandy gravel/gravelly sand indicated by refusal at varying depths. They classify the site as 'Class D – Deep or Soft soil' to NZS 1170.5.

Coffey state the New Zealand Geotechnical Database indicated groundwater at 0-1.0m bgl. Inflows were recorded at 0.3-0.6m bgl so Coffey have assumed a groundwater level for their liquefaction analysis of 0.5m bgl.

Under the Canterbury Earthquake Sequence (CES) Coffey found that there was no recorded ground damage on the site or in the surrounding area although the house experienced settlement damage and the homeowner observed liquefaction. Coffey analysed the CES events using the Bradley and Hughes (2012) procedures and determined that the site was not 'sufficiently tested' to a SLS level event, although they believe it was close to this level.

Coffey analysed the following design events, using the MBIE parameters and to their guidance, using the Boulanger and Idriss (2014) method and Geologismiki CLiq Software.

Table 1: Earthquake scenario and parameters for analysis

Earthquake scenario	Moment magnitude (M_w)	α_{max} (g)
SLS	7.5	0.13
	6.0	0.19
ULS	7.5	0.35

Coffey found the interbedded silt, sandy silt and silty sand is prone to liquefaction, with indicated settlements for the CPTs consistent with Technical Category 3 (TC) performance. These results were in those where the tested depth exceeded 10m but Coffey have inferred TC2 level performance for those that refused above 10m depth. Generally, Coffey have categorised the site as TC3. They state that, due to the lack of free faces, lateral spread is not considered a risk. I agree with this assessment.

Coffey undertook a section 106 assessment and found the natural hazard risks to be subsidence due to liquefaction and settlement due to overburden. They recommend that liquefaction mitigation is required to improve the technical classification of the land and that these earthworks be carried out at least six months before any residential construction, to allow for longer term static settlement. On RFI, the applicant has suggested a monitoring methodology condition, at earthworks completion. I have suggested conditions to require this liquefaction mitigation and suggest an amendment to their condition, to ensure settlement monitoring confirms static settlement has approached values that can be accommodated by their recommended foundation options.

Coffey recommend dewatering to facilitate the earthworks – this will require consent from ECan. I have suggested an advice note to highlight this.

The construction of the roading on the west side of Highsted Rd required the installation of subsoil drains. The invert level of these subsoils is approximately RL22.1m, which suggests subsoil drainage may be required on this side of the road. The applicant has confirmed that an operational discharge consent from ECan is being obtained, with provision for the outfall into the realigned Gardiners Drain on the north of the subdivision, with a subsoil system separate from the stormwater system.

They have also provided design parameters for the retaining wall.

I accept the advice provided to me regarding the risk of natural hazards, and conclude that there are no grounds to refuse consent under section 106(1)(a). In terms of section 106(1)(c) I am satisfied that adequate legal and physical access is provided to each allotment.

Recommendations

LAND USE CONSENT

- (A) That the application be processed on a **non-notified** basis in accordance with Sections 95A – 95E of the Resource Management Act 1991.
- (B) That the application **be granted** pursuant to Sections 104, 104C, 108 and 108AA of the Resource Management Act 1991, subject to the following condition:
 - 1. The development shall proceed in accordance with the information and plans submitted with the application.

SUBDIVISION CONSENT

- (A) That the application be processed on a **non-notified** basis in accordance with Sections 95A – 95E of the Resource Management Act 1991.
- (B) That the application **be granted** pursuant to Sections 104, 104C and 106 of the Resource Management Act 1991, subject to the following conditions imposed pursuant to Sections 108, 108AA and 220 of the Resource Management Act 1991:

1. Compliance with Application Information

The survey plan, when submitted to Council for certification, is to be substantially in accordance with the stamped approved application plan.

2. Staging

The subdivision may be carried out in stages as set out in Approved Plans page 1.

At each stage any balance land is to be left as a fully serviced allotment that retains the underlying credits, if any, for financial contributions.

3. Engineering General

3.1 Asset Design and Construction

All infrastructure assets to be vested in the Council are to be designed and constructed in accordance with the Christchurch City Council's Infrastructure Design Standard (the IDS) and the Construction Standard Specifications (the CSS).

3.2 Quality Assurance

The design and construction of all assets is to be subject to a project quality system in accordance with Part 3: Quality Assurance of the IDS.

A. Submit a Design Report, Engineering Plans, Erosion and Sedimentation Plans, Environmental Management Plan and Design Certificate complying with clause 3.3.2 to the Subdivision Engineers (Planning Team 1). The Design Report and engineering plans are to provide sufficient detail to confirm compliance with the requirements of the IDS and this consent.

B. Submit a Contract Quality Plan for review by the Council and an Engineer's Review Certificate complying with clause 3.3.3.

Physical works shall not commence until a Council Engineering Officer confirms that the above documentation has been received and accepted.

C. Submit an Engineer's Report and Completion Certificate complying with clause 3.3.4.

An Engineer's Report is a document specific to a project, which describes how the project was managed and administered in compliance with the IDS, the Construction Standard Specifications, the Contract Quality Plan and the resource consent or project brief. It provides background information to the release of the 224(c) certificate.

Note: Part 3 of the IDS sets out the Council's requirements for Quality Assurance. It provides a quality framework within which all assets must be designed and constructed. It also sets out the process for reporting to Council how the works are to be controlled, tested and inspected in order to prove compliance with the relevant standards. It is a requirement of this part of the IDS that certification is provided for design and construction as a pre-requisite for the release of the 224c certificate. The extent of the documentation required should reflect the complexity and/or size of the project.

In addition to the above, all infrastructure is to be designed to resist the effects associated with earthquake induced liquefied soils. All liquefaction hazard mitigation shall be designed for a 1 in 150 year return period serviceability limit seismic design event and a 1 in 500 year return period ultimate limit state seismic design event as defined in NZS1170.5.2004.

3.3 Traffic Management

An approved Traffic Management Plan (TMP) shall be implemented and no works are to commence until such time as the TMP has been installed. The TMP shall be prepared by an STMS accredited person and submitted to and approved by the Christchurch Transport Operation Centre – please refer to www.tmpforchch.co.nz

3.4 Survey Plan Requirements

The surveyor is to forward a copy of the title plan and survey plan to the Subdivision Planner (that issued the consent), Resource Consents & Building Policy Unit as soon as the plan has been lodged (or earlier if possible) for checking at Land Information New Zealand for entering into the Council GIS system.

3.5 Laterals for rear Lots

All private sewer and stormwater laterals (serving rear lots) shall be installed under a single global Building Consent by a Licensed Certifying Drain Layer and the Code Compliance Certificate forwarded to Council's Subdivision Team as part of the Sec 224c application.

3.6 CCTV Inspections

Pipeline CCTV inspections are to be carried out on all gravity pipelines in compliance with the Council Standard Specifications (CSS):
<https://www.ccc.govt.nz/consents-and-licences/construction-requirements/construction-standard-specifications/pipeline-cctv-inspections/>

3.7 Services As-Built Requirements

As-Built plans and data shall be provided for all above and below ground infrastructure and private work in compliance with the Infrastructure Design Standards (IDS):
<https://www.ccc.govt.nz/consents-and-licences/construction-requirements/infrastructure-design-standards/as-built-survey-and-data-requirements/>

Note: this includes RAMM and costing data

As-Built Plans are to be provided for any easements in gross over pipelines.
The plans are to show the position of the pipelines relative to the easements and boundaries.

4. Water Supply

- 4.1 The point of water supply for the subdivision shall be the DN250 PE100 water main in Highsted Road.
- 4.2 The water supply shall be designed by a suitably qualified person in accordance with the Infrastructure Design Standard and in general accordance with the NZ Fire Service Fire Fighting Water Supplies Code of Practice NZS 4509:2008, subject to Council engineering acceptance. Engineering drawings supported by hydraulic model outputs shall be sent to the Subdivisions Engineer for Engineering Acceptance by the Three Water & Waste Asset Planning Team prior to the commencement of any physical work.
- 4.3 All water mains and Sub mains for the subdivision shall be installed in road to be vested in Council.
- 4.4 DN180 PE100 water mains shall be extended along the full length of roads to vest and be terminated with temporary hydrants as per the requirements of the Infrastructure Design Standard.

- 4.5 The construction of Council vested water infrastructure shall be carried out by a Council approved water supply installer at the expense of the applicant.
- 4.6 All lots shall be served with a water supply to their boundary. Sub mains shall be installed to 1m past each lot boundary.
- 4.7 Each water supply lateral connection shall be installed with a dummy connection spacer rod in accordance with CSS Part 4, SD 403.
- 4.8. Any rear lot or lot within a Right of Way shall be serviced by its own DN32 lateral within a shared access. The water supply lateral connections shall be located within the property, immediately (less than 1.0m) behind the legal road boundary and within a shared access as shown in IDS Part 7, Figure 3.

If the water main is extended into the Right of Way, the water supply lateral connections shall be located in an area set aside within the Right of Way and as close as possible to the terminal fire hydrant. An easement for the right to convey water shall be created over the lateral in favour of the lot serviced by the lateral. Laterals shall be installed by a Licensed Certified Plumber and shall not cross the boundary of the net site area of other sites.

Advice Note: This will require a Building Consent.

5. Sewer

- 5.1 The subdivision shall be serviced by a Local Pressure Sewer System designed in accordance with Council's Infrastructure Design Standards and Construction Standard Specifications. Engineering drawings supported by hydraulic calculations shall be sent to the Subdivisions Engineer for Engineering Acceptance by the Three Water and Waste Planning Team prior to the commencement of any physical work.
- 5.2 The approved sanitary sewer outfall shall be the DN63 PE100 pressure sewer sub main in Highsted Road.
- 5.3 The consent holder shall put in place measures to enable the initial operation of the local pressure sewer system within and from the subdivision during the build phase, including (but not limited to) ensuring self-cleansing flow and limiting sewage retention time within the system when the design number of pressure sewer tanks are not yet in operation. These measures shall be reported to the Subdivisions Engineer prior to seeking section 224(c) certification.
- 5.4 Each lot shall have a Boundary Kit located within the legal road or Right of Way outside the boundary of the lot. The pressure lateral from the Boundary Kit is to extend at least 600mm into the net site of each lot.
- 5.5 Properties in a Right of Way shall be serviced by a single pressure main. An isolation valve shall be installed on the pressure main at the boundary of the Right of Way and the public road. Easements in gross shall be created over Pressure Sewer Systems in private Rights of Way.
- 5.6. Installation of the pressure sewer mains and boundary kits shall be carried out by a Council Authorised Drain layer (Pressure Sewer Reticulation).
- 5.7 The following conditions shall be recorded pursuant to Section 221 of the RMA in a consent notice registered on the titles of each residential Lot:
 - This property shall be served by a local pressure sewer unit comprising a pump and storage chamber which can accommodate at least 24 hours average dry weather flow to be supplied by either Aquatec or EcoFlow and installed by a Council Authorised Drain layer (Pressure Sewer Tanks) at building consent stage in accordance with the Requirements for Local Pressure Sewer Units specified under a Building Consent. The local pressure sewer unit will be supplied complete with an IOTA OneBox Control Panel.
 - Ownership and control of the local pressure pump, chamber, boundary kit and OneBox Control Panel shall be vested with Council. The property owner shall enter into a Deed with the Christchurch City Council, drafted in terms approved by the Christchurch City Council, vesting ownership in the system prior to Code Compliance Certificate being issued for a dwelling on the relevant site.

- The Council and its agents or contractors shall have the right of access to the property for the purpose of maintenance, monitoring or renewal of any part of the local pressure sewer system vested with Council.
- The property owner shall ensure that the local pressure sewer unit is connected at all times to an electricity supply and shall remain responsible for the cost of the electricity required to operate it.
- The property owner shall adhere to the user requirements of the local pressure sewer unit. In the event that the local pressure sewer unit is damaged as a result of a breach of this obligation, the Council may recover the costs of repair from the property owner.

Advice Note: This is an on-going condition and a consent notice will be issued under section 221 of the Act at the time of section 224(c) certificate.

6. Stormwater

- 6.1 The stormwater management system shall be comprised of channels, sumps, pipes and/or swales. In addition to the below conditions, the system shall meet the requirements of the CCC Waterways, Wetlands and Drainage Guide (WWDG 2003 including updates), the Infrastructure Design Standard (IDS 2018) and the Construction Standard Specifications (CSS 2018).
- 6.2 The consent holder shall demonstrate that authorisation for the discharge of operational and construction phase stormwater has been obtained from Christchurch City Council, otherwise separate authorisation from Environment Canterbury shall be obtained.
- 6.3 Unless otherwise approved by the Council Engineer, stormwater generated from all roofs, roads and hardstanding areas within all allotments shall be collected via channels, sumps, pipes or swales and discharged into the first flush sedimentation basin to be constructed by Council within 262R Highsted Road. If the permanent stormwater facility has not been commissioned at the time of s.224c certification, the consent holder may utilise a temporary combined first flush and detention basin.
- 6.4 The temporary basin shall:
- a. Be designed to hold 537 cubic metres of stormwater, at minimum
 - b. Have batter slopes of 1 vertical in 4 horizontal average, or flatter;
 - c. Be vegetated with an approved grass species mixture and/or landscape planting.
 - d. Have an average storage depth of 1 metre or less;
 - e. Discharge into Styx Drain via choked outlet designed to release the full storage volume of the basin over 96 hours.
- 6.5 Stormwater in excess of the temporary basin capacity shall discharge into Styx Drain via an overflow diversion designed to avoid scour and erosion.
- 6.6 The surface water management system shall be designed to ensure complete capture and conveyance of all stormwater runoff from the site and any upstream contributing catchment for all rainfall events up to and including the critical two percent annual exceedance probability storm. This will require internal reticulation and conveyance to meet Council's inundation standards as specified in the WWDG. A combination of primary and secondary conveyance systems may be used to ensure this level of service is achieved.
- 6.7 The primary stormwater reticulation network shall be designed to convey (at minimum) the critical twenty percent annual exceedance probability storm event. No flooding of private property shall occur during the critical ten percent annual exceedance probability storm event and no flooding of buildings shall occur during the critical two percent annual exceedance probability storm event.
- 6.8 The filling of land shall not cause adverse flooding effects on other land. The consent holder shall provide a report summarizing any effects such as disruption of overland flow caused by filling within the site, and identify all measures proposed to avoid, remedy or mitigate those effects. This report shall form part of the Engineering Design Report.
- 6.9 Any subsoil drainage is used to manage groundwater levels within the development shall be designed in accordance with WWDG Chapter 5. The outfall for any subsoil drainage shall be confirmed with the Council engineer.
- 6.10. Stormwater laterals are to be laid to at least 600mm inside the boundary of all lots at the subdivision stage. Unless otherwise approved by Council Engineers, the laterals are to be laid at

sufficient depth to ensure protection and adequate fall is available to serve the furthestmost part of the lot.

- 6.11 The consent holder shall submit an Engineering Design Report for acceptance by 3 Waters and Waste and Resource Consents Units. The Engineering Design Report shall demonstrate how the design will meet all of the applicable standards and shall contain all of the plans, specifications and calculations for the design and construction of all stormwater infrastructure and mitigation systems.
- 6.12 The designer of the surface water management system shall provide a report which identifies all overland flow paths proposed for storm events that exceed the capacity of the stormwater management and mitigation system. All overland stormwater flow paths are to be identified and protected by an easement in favour of Christchurch City Council, if required.
- 6.13 The consent holder shall provide easements in gross over all stormwater infrastructure or overland flow paths located outside of legal road or utility reserve areas.
- 6.14 The consent holder shall operate all stormwater infrastructure to vest into Council for at least 12 months following the issue of the Section 224(c) certificate, after such time Council may accept responsibility for operation and maintenance.
- 6.15 The consent holder shall provide as-built plans of the stormwater management systems and confirm that they have been constructed in accordance with the approved plans and comply with the IDS, particular Part 3: Quality Assurance and Part 12: As-Builts.
- 6.16 Erosion and Sedimentation Control
An Erosion and Sediment Control Plan (ESCP) is to be submitted for review as part of the design report. The ESCP is to include (but is not limited to):
 - Site description, i.e. topography, vegetation, soils etc.
 - Details of proposed activities.
 - A report including the method and time of monitoring to be undertaken.
 - A locality map.
 - Drawings showing the site, type and location of sediment control measures, onsite catchment boundaries and offsite sources of runoff.
 - Drawings and specifications showing the positions of all proposed mitigation areas with supporting calculations if appropriate.

The performance criteria for the ESCP, unless directed by Council through the engineering acceptance process, will be based on Environmental Canterbury's Erosion and Sediment Control Guidelines: <http://escscanterbury.co.nz/>

The ESCP is to be implemented on site during the subdivision construction phase and no works are to commence until such time as the ESCP has been accepted.

The ESCP is to be designed by a suitably qualified person and a design certificate supplied with the plan. (Use the certificate from Appendix IV of the CCC Infrastructure Design Standard Part 3)

Note: Pursuant to Section 128 of the Resource Management Act 1991 Council reserves the right, during the construction phase, to review this condition to impose further controls in respect to Sedimentation Control and Management

7. Minimum Levels & Filling

To be considered satisfactory for sewer and stormwater drainage minimum ground levels shall be based on a level of 100mm above the kerb at the street frontage and right of way, plus a grade of 1:300 to the rear boundary.

All filling exceeding 300mm above excavation level shall be in accordance with the Code of Practice for earth fill for residential purposes NZS 4431: 1989. A duly completed certificate in the form of Appendix A of NZS 4431 shall be submitted to the Council for all lots within the subdivision that contain filled ground, prior to the issue of a Section 224 Conditions Certificate.

The consent holder is to submit a report and calculations detailing any filling proposed against existing boundaries and the mitigation proposed to avoid adverse effects on adjoining properties.

The construction details of any retaining wall required to retain the fill are to be submitted to the Subdivisions Engineer for acceptance. The wall construction and materials are to be certified in addition to the NZS 4431 certification.

8. Allotment to Vest as Reserve

As agreed with the applicant Lot 93 is to be shown on the survey plan as Local Purpose Public Utility Reserve.

9. Fencing Lots 12 & 13

Fencing along the Local Purpose Public Utility Reserve is to remain 50% visible and the following consent notice will be attached to lots 12 & 13. The following consent notice pursuant to Section 221 of the Resource Management Act 1991 will be issued by the Council:

Consent Notice

Any fencing constructed on the southern boundary of Lot 12 and the northern boundary of Lot 13 (i.e. the interface with Lot 93 (Local Purpose Utility Reserve), shall be comprised of a combination of pool-style fencing and paling fencing. This can be made up of the following:

- A. *Half pool-style fencing and half paling fencing on each lot; or*
- B. *Paling fencing along the frontage of any future outdoor living space, and the remainder being made up of pool style fencing;*
- C. *Or pool style fencing for the entire frontage.*

10. New Road to Vest

The new roads, being lots 90 & 92, are to be formed and vested in the Council to the satisfaction of the Subdivision Engineer with underground wiring for electricity supply and telecommunications.

11. Street Lighting

Street lighting is to be installed in the new road(s) to vest in compliance with Part 11 (Lighting) of the Infrastructure Design Standard.

12. Engineering Plans

Engineering plans for the construction of the new roads, access to rear lots, street lighting, drainage, sediment control, water supply, earthworks, landscaping and tree planting shall be lodged with the Subdivisions Engineer and approved prior to the commencement of any physical works. All works are to be in accordance with Council's Infrastructure Design Standard.

Engineering works are to be installed in accordance with the approved plans.

13. Plans for Geodata Plot

As soon as practical after the Section 223 certificate has been issued the consent holder is to advise the handling officer that the digital dataset for the subdivision is available in Land online and can be used for creation of the parcels in Council's digital database.

14. As Built Plans

As built plans of stormwater retention/detention basins and swales are to be forwarded to the Subdivision Engineer together with capacity calculations to confirm that the works have been constructed in accordance with the engineering plan.

15. Filled Land

All filling exceeding 300mm above excavation level shall be in accordance with the Code of Practice for earth-fill for residential purposes NZS 4431:1989. A duly completed certificate in the form of Appendix A of NZS 4431 shall be submitted to Council for all lots within the subdivision that contain filled ground.

The construction details of the retaining wall required to retain fill are to be submitted to the Subdivisions Engineer for approval. The wall construction and materials are to be certified in addition to the NZS 4431 certification for fill.

The consent holder is to submit a report and calculations detailing filling proposed against existing boundaries and the mitigation proposed to avoid adverse effects on adjoining properties.

Advice Note: The applicant is advised that an engineering approval does not constitute a resource consent for earthworks against adjoining properties. Council reserves the right to require the consent holder to obtain a resource consent in accordance with Chapter 8.9 of the District Plan.

16. Telecommunications and Energy Supply

All lots shall have telecommunications and electrical supply laid to the net site area of each lot.

As-built plans and photographic evidence of the telecommunications and energy supply ducts or cables is to be supplied showing that the ducts or cables have been laid to the net area of each lot.

The consent holder is to provide a copy of the reticulation agreement letter from the telecommunications network operator and a letter from the electrical energy network operator, or their approved agent, to confirm capacity is available to adequately service the sites.

17. Right of Way Easements (Private Ways)

The rights of way easements as set out on the application plan shall be duly granted or reserved.

18. Service Easements

The service easements as set out on the application plan or required to protect services crossing other lots shall be duly granted or reserved.

Easements over adjoining land or in favour of adjoining land are to be shown in a schedule on the Land Transfer Plan. A solicitor's undertaking will be required to ensure that the easements are created on deposit of the plan.

19. Existing Easements over areas of Road to Vest

Any existing easements shown to extend over the road to vest are to be surrendered. The applicant is responsible to ensure these easements can be extinguish or surrendered where other parties have an interest.

20. Easements over Reserves

Any easements over land that is to vest in the Council as reserve are to be shown on the survey plan in a Schedule of Easements. A solicitors undertaking shall be provided to ensure that the easement is registered on the subject reserve at the time title is created. Easements

A section 223 certificate will not issue until such time as a section 239 certificate is issued by Council.

Advice Notes:

*The issue of a 239(2) will take a minimum of 2 weeks and early consultation on this process should be undertaken with Russel Wedge Team Leader Parks Policy & Advisory.
Russel.Wedge@ccc.govt.nz*

21. Existing easements under reserve to vest

If the Council requires the retention of existing easements over land that is to vest in the Council as Reserve a certificate pursuant to Section 239(2) of the Resource Management Act 1991 will be issued.

22. Easements in Gross

The legal instruments for easements in gross in favour of the Council are to be prepared by Council's consultant solicitor at the consent holder's cost. The consent holder's solicitor is to contact Anderson Lloyd Lawyers (Mike Kerr) requesting the preparation of the easement instruments. As built plans for the services covered by the easement are to be provided at Section 223 certification stage.

23. Road and/or Lane Names

The new roads are to be named.

A selection of names in order of preference is to be submitted for each new road. For historical purposes a brief explanation of the background for each submitted name is preferred. The names are to be in accordance with the Council's Policy on Naming of Roads and Rights of Way dated 2 November 1993.

The allocated names when approved are to be shown on the survey plan submitted for certification.

Advice Note: Road names are required to be approved by the Community Board. Community Board meetings are only held approximately once a fortnight, however Council Reports need to be completed two weeks prior to the meeting date. It would be in your interest to start the naming process early so that this process does not hold up this development as it can take up to six weeks. To request a road name, find the form and more information at <https://ccc.govt.nz/consents-and-licences/resource-consents/subdivision-consents/road-and-right-of-way-naming/>

The consent holder shall order and install the road's nameplates. The nameplates shall be designed and installed in accordance with the IDS and CSS.

The location of the nameplates shall be submitted to Council's Subdivision Engineer for approval prior to their installation.

Advice Note: Nameplates usually take six weeks to manufacture. The location of the nameplates can be submitted in a plan which identifies the road's landscaping and location of street lighting as required by this application. The consent holder is responsible for the cost of providing and installing the nameplates.

24. Public Utility Sites

Any public utility site and associated rights of way easements and/or service easements required by a network operator are approved provided that they are not within any reserves to vest in the Council.

25. Specific Foundation Design

That a consent notice in terms of Section 221 of the Resource Management Act be registered on the titles for all lots that are categorised in the Final Geotechnical Report as TC2 land.

"Any structure requiring a Building Consent, in terms of Building Act provisions, shall have specific foundation design by a suitably experienced chartered engineer or by an appropriately qualified geotechnical engineer. The design shall take into consideration the potential for liquefaction and associated effects (vertical settlement and lateral spread) appropriate for Technical Category 2 land and shall be investigated and designed in accordance with MBIE Guidelines 'Repairing and rebuilding houses affected by the Canterbury earthquakes' (3rd Edition 15 March 2017) or subsequent revisions."

Advice Note:

These requirements are contingent upon TC1 and TC2 land equivalence being achieved by the proposed earthworks and remediation works.

26. Reserve Landscape Plans

26.1 *Landscape Plans for Reserve Lot 93 is to be submitted to the Technical Design Services (Parks and Landscapes Team) for acceptance. All landscaping is to be carried out in accordance with the Accepted plan.*

26.2 *The Landscape Plans are to provide sufficient detail to confirm compliance with the requirements of the IDS, the CSS, and the WWDG: 2003. All landscaping required by this condition is to be carried out in accordance with the accepted plan(s) at the Consent Holder's expense, unless otherwise agreed.*

26.3 *The Consent holder shall maintain plants/trees on Reserve Lot 93 for the **24 months Establishment Period (Defects Maintenance)**, until a final inspection and acceptance of the landscaping by the relevant Council Unit. Acceptance shall be based upon the criteria outlined in the CSS, Part 7 Landscapes (current version).*

26.4 *The Consent Holder is to maintain an accurate and up-to-date monthly report on the condition of plants/trees and the works undertaken during the Establishment Period. The report shall be submitted to the Engineer within five days of the end of each month during the Establishment Period, if requested (Refer sample report: Landscape Construction Monthly Establishment Report, CSS, Part 7 Landscape (current version)).*

26.5 The relevant Council Unit staff may carry out an inspection of the reserve plants/trees after the first **6-12 months**, and a final inspection will be carried out at the end of the **24 month** Establishment Period (Defects Maintenance). Where it is not possible to determine the condition of plants/trees due to seasonal constraints (e.g. trees not being in full leaf) then the final inspection and final completion may be delayed until the condition of trees can be accurately determined.

26.6 The Consent holder shall enter into a separate bond with the Parks Unit (Policy and Advisory Team) to the value of 50% of the cost to replace and replant all plants/trees on reserves. The bond shall be held for the Establishment Period of a minimum of **24 months** and shall be extended by a further **12 - 24 months** for the replacement planting(s), as required (e.g. in a situation where 50% or more of the landscaping is not accepted). The bond shall be released after the plants and trees have been inspected and Accepted by the relevant Council Parks Operations staff.

26.7 Any replacement plantings and extended establishment period required due to plants/trees not being accepted are to be carried out at the Consent Holder's expense.

27. Street Tree Landscape Plans

27.1 Street tree landscape plans are to be submitted to the Technical Design Services (Parks and Landscapes Team) for acceptance. All landscaping is to be carried out in accordance with the Accepted plan.

27.2 The Landscape Plans are to provide sufficient detail to confirm compliance with the requirements of the IDS (current version) and the CSS (current version).

27.3 The Consent Holder shall maintain the street trees for the **24 months** Establishment Period (Defects Maintenance) until final inspection and acceptance of the trees by the relevant Council Unit. Acceptance shall be based upon the criteria outlined in the CSS, Part 7 Landscapes.

27.4 The Consent Holder is to maintain an accurate and up-to-date monthly report on the condition of the trees and the works undertaken during the Establishment Period (Defects Maintenance). The report shall be submitted to the Engineer within five days of the end of each month during the Establishment Period, if requested. (Refer sample report: Landscape Construction Monthly Establishment Report, CSS, Part 7 Landscape (current version).

27.5 The Team Leader Road Amenity & Asset Protection, or their nominee, may carry out an inspection of the trees after the first **6-12 months** and a final inspection will be carried out at the end of the **24 month** Establishment Period. Where it is not possible to determine the condition of trees due to seasonal constraints (e.g. trees not being in full leaf) then the final inspection and final completion may be delayed until the condition of trees can be accurately determined).

27.7 The Consent Holder shall enter into a separate bond with the Parks Unit (Policy and Advisory Team) to the value of 50% of the cost to supply, replant and establish all street trees. The bond shall be held for the Establishment Period of a minimum of **24 months** and shall be extended by a further **24 months** for the trees(s), if required (e.g. in a situation where 50% or more of the trees are not accepted). The bond shall be released after the trees have been Accepted by the Team Leader Road Amenity & Asset Protection or their nominee.

27.8 Any replacement plantings and extended establishment period required due to trees not being accepted are to be carried out at the Consent Holder's expense.

28. Final Completion / Handover (Reserves and Street Trees)

28.1 The Consent Holder shall submit, the required completion documentation in accordance with IDS Part 2:2.12 Completion of Land Development Works and the Quality Assurance System to provide evidence that the work is completed in accordance with the agreed standards and conditions of this consent. This is to be submitted, on completion of the **24 month** Establishment Period, prior to final inspection for formal handover to Council and release of the Establishment Bond.

29. As – Builts (Reserves and Street Trees)

29.1 The Consent Holder shall submit As-Built plans for any landscape improvements on land to be vested as reserve and for any street trees, in accordance with IDS, Part 12 As-Builts records and validated **before the s224 certificate is issued**.

30. Consent Notice

The following consent notice pursuant to Section 221 of the Resource Management Act 1991 will be issued by the Council:

Fencing Lots 12 & 13

Any fencing constructed on the southern boundary of Lot 12 and the northern boundary of Lot 13 (i.e. the interface with Lot 93 (Local Purpose Utility Reserve), shall be comprised of a combination of pool-style fencing and paling fencing. This can be made up of the following:

- A. *Half pool-style fencing and half paling fencing on each lot; or*
- B. *Paling fencing along the frontage of any future outdoor living space, and the remainder being made up of pool style fencing;*
- C. *Or pool style fencing for the entire frontage.*

Specific Foundation Design – All Lots categorised as TC2

That a consent notice in terms of Section 221 of the Resource Management Act be registered on the titles for all lots that are categorised in the Final Geotechnical Report as TC2 land.

“Any structure requiring a Building Consent, in terms of Building Act provisions, shall have specific foundation design by a suitably experienced chartered engineer or by an appropriately qualified geotechnical engineer. The design shall take into consideration the potential for liquefaction and associated effects (vertical settlement and lateral spread) appropriate for Technical Category 2 land and shall be investigated and designed in accordance with MBIE Guidelines ‘Repairing and rebuilding houses affected by the Canterbury earthquakes’ (3rd Edition 15 March 2017) or subsequent revisions.”

Advice Note:

These requirements are contingent upon TC1 and TC2 land equivalence being achieved by the proposed earthworks and remediation works.

This is an ongoing condition which will be secured by consent notice.

31. Goods and Services Taxation Information

The subdivision will result in non-monetary contributions to Council in the form of land and/or other infrastructure that will vest in Council. Council's GST assessment form is to be completed to enable Council to issue a Buyer Created Tax Invoice.

ADVICE NOTES FOR CONSENT HOLDERS, TO BE READ IN CONJUNCTION WITH THE DECISION

Please note Earthworks & Geotechnical conditions relating to this consent have been addressed on a separate land use consent RMA/2021/1130.

Your Rights of Objection

If you do not agree with the Council's decision on this resource consent application, the conditions, or any additional fees that have been charged, you may lodge an objection with the Council under Section 357 or 357B of the Resource Management Act 1991. You have 15 working days from the date you receive this letter within which to lodge your objection **to the decision**. Objections **to additional fees** must be received within 15 working days of the date on which you receive the invoice. Your objection must be in writing and should clearly explain the reasons for your objection.

Commencement of this consent

The commencement date for your resource consent is the date of this letter advising you of the Council's decision, unless you lodge an objection against the decision. The commencement date will then be the date on which the decision on the objection is determined.

Lapsing of this consent

This resource consent for subdivision will lapse 5 years after the date of commencement of consent (i.e. the date of this letter) unless it has been given effect to by the Council issuing a certificate pursuant to Section 223 of the Resource Management Act 1991.

Application may be made under Section 125 of the Resource Management Act 1991 to extend the duration of the resource consent, and this must be submitted and approved prior to the consent lapsing.

Lapsing of s223 Certification

The s223 certification will lapse 3 years after the date of issue, the Section 223 certificate will lapse (if that certified plan has not been deposited in accordance with Section 224 of the Resource Management Act 1991). The s223 certificate can be re-certified only if the subdivision consent has not lapsed.

Development Contributions

This proposal has been assessed for development contributions (DCs) under the provisions of the [Christchurch City Council Development Contributions Policy](#) (DCP). The proposal has been found to create additional demand on network and community infrastructure or reserves.

To help fund community facilities, the Local Government Act 2002 (LGA) allows a council to require development contributions if the effect of a development requires the council to provide new or upgraded infrastructure.

This Notice informs you of the DCs required by the Council for the development but is not a request for payment. An invoice will be issued by the Council when it requires payment of the DC's. Payment will be required before issue of a code compliance certificate for a building consent, commencement of the resource consent activity, issue of a section 224(c) certificate for a subdivision consent or authorisation of a service connection, whichever is first. An invoice can be issued earlier at your request. Council may also issue an invoice, at its discretion, if it considers the development is already utilising Council infrastructure for which DCs are being required.

Development contribution assessment summary

DEVELOPMENT CONTRIBUTIONS SUMMARY			PIM or Consent Ref:		RMA/2021/1410						
Customer Name	QT Bowen Ltd		ASSESSMENT								
Project Address	262 Highsted Road										
Assessment Date	19/05/2021										
Assessment Summary											
				HUE Credits							
				Current	Assessed	Discounts	Assessed HUE After Discount	Change	DC Rate (incl GST)	DC Charge (incl GST)	
Activity	Catchment	HUE A	HUE B	C	HUE D	HUE E	G	F= E x G			
Network Infrastructure											
Water supply	District-wide	1.00	21.00	0.0%	21.00	20.00	\$2,395.45	\$47,909.00			
Wastewater collection	District-wide	1.00	21.00	0.0%	21.00	20.00	\$6,349.15	\$126,983.00			
Wastewater treatment and disposal	District-wide	1.00	21.00	0.0%	21.00	20.00	\$2,904.90	\$58,098.00			
Stormwater & flood protection	Styx Greenfield	1.00	21.00	0.0%	21.00	20.00	\$8,139.70	\$162,794.00			
Road network	Greenfield	1.00	21.00	0.0%	21.00	20.00	\$3,315.45	\$66,309.00			
Active travel	District-wide	1.00	21.00	0.0%	21.00	20.00	\$425.50	\$8,510.00			
Public transport	District-wide	1.00	21.00	0.0%	21.00	20.00	\$717.60	\$14,352.00			
Total Community and Network Infrastructure								\$484,955.00			
Reserves											
Regional parks	District-wide	1.00	21.00			20.00		\$53,912.00			
Garden and heritage parks	District-wide	1.00	21.00			20.00		\$3,220.00			
Sports parks	District-wide	1.00	21.00			20.00		\$50,600.00			
Neighbourhood parks	Greenfield	1.00	21.00			20.00		\$190,716.00			
Total Reserve Contributions								\$298,448.00			
								GST 15%	\$102,183.00		
Total Development Contribution								\$783,403.00			

Where both a resource consent and building consent are required as part of the same development, a development contribution (DC) assessment will be undertaken for both consents. However the applicant need only pay for one assessment. As a result, the Council will only invoice in accordance with either the assessment on the resource consent or the assessment on the building consent, whichever is the lower of the two (after any corrections or reassessments undertaken in accordance with the DCP).

The DC assessment is valid for 24 months from the date the assessment is issued (usually with the consent). If the original assessment expires before payment is made, reassessment of the DCs required will be carried out at the same time the invoice is generated.

Reassessments will incorporate any increases to the development contribution requirement in line with the Producers Price Index (PPI) as described in Parts 2.9 and A.7.3 of the DCP. PPI adjustments will incorporate all years between the original application and the time the reassessment is carried out.

Reconsiderations and objections

Under section 199A of the Local Government Act 2002 you can request that the Council reconsider the required DC on the following grounds:

- the development contribution was incorrectly calculated or assessed under the DCP; or
- the Council incorrectly applied its DCP; or
- the information used to assess your development against the DCP, or the way the Council has recorded or used it when requiring a development contribution, was incomplete or contained errors.

A Request for Reconsideration form must be lodged with Council within 10 working days of receiving this DC Notice.

Under section 199C of the Local Government Act 2002 you can object to the assessed DC requirement on the following grounds:

- the development contribution was incorrectly calculated or assessed under the DCP; or
- the territorial authority incorrectly applied its DCP; or
- the information used to assess your development against the DCP, or the way the territorial authority has recorded or used it when requiring a development contribution, was incomplete or contained errors.

An Objection to DCs form must be lodged with the Council within 15 working days of receiving this DC Notice or a reconsidered assessment. A deposit of \$1,000.00 will be required to lodge an objection.

A form to request a reconsideration or lodge an objection can be found on our website. To request an invoice please contact a Development Contributions Assessor by phone on (03) 941-8999 or email developmentcontributions@ccc.govt.nz. Once an invoice has been issued payment is required within 30 days. Please quote the project number with all correspondence.

Further information regarding development contributions can be found on our website www.ccc.govt.nz or by contacting a Development Contributions Assessor on (03) 941-8999.

Council Site Characteristics Information

The Councils Site Characteristics Information on this site is as follows:

Development Constraint	Council records show there is a specific condition on the use of this site: Consent Notice
Development Constraint	Council records show there is a specific condition on the use of this site: Sanitary Sewer requirements
District Plan	Property or part of property within the Christchurch International Airport Protection Surfaces overlay which is operative.
District Plan	Property or part of property within the Liquefaction Management Area (LMA) Overlay which is operative.
District Plan	Property or part of property is within an Outline Development Plan area which is

	affected by specific provisions that are operative.
District Plan	This property or part of this property is close to at least one waterway with a setback within which District Plan rules apply to activities including buildings, earthworks, fences and impervious surfacing. Any part of the property within the setback will be affected by those rules.
District Plan Zone	Property or part of property within the Residential New Neighbourhood Zone which is operative.
ECan Requirement	There may be objectives, policies or rules in a regional plan or a regional bylaw that regulate land use and activities on this site. Please direct enquiries to Canterbury Regional Council (Environment Canterbury).
ECan Requirement	A resource consent or permit may also be required from the Canterbury Regional Council or other territorial authority, particularly with respect to water bodies managed by those authorities. Please refer to the relevant regional plan and any relevant bylaws, and contact the Christchurch City Council if you are uncertain which authority manages the water body in question.
Electoral Ward	Property located in Harewood Electoral Ward
Flooding Related	Property or part of property within the Flood Management Area (FMA) Overlay which is operative.
Flooding Related	This property, or parts of this property are predicted to be within the extent of a 1 in 50 year flood event. For new developments a minimum finished floor level may be required for flood limitation purposes under the Building Code. For more information please refer to (https://ccc.govt.nz/floorlevelmap) or phone 941 8999.
Flooding Related	This property is not in a tsunami evacuation zone. It is not necessary to evacuate in a long or strong earthquake or during an official Civil Defence tsunami warning. Residents may wish to offer to open their home to family or friends who need to evacuate from a tsunami zone, and should plan with potential guests to do so in advance. More information can be found at https://ccc.govt.nz/services/civil-defence/hazards/tsunami-evacuation-zones-and-routes/
Ground Characteristic	Christchurch City Council holds indicative information on liquefaction hazard for Christchurch. Information on liquefaction, including an interactive web tool, can be found on the Council website at ccc.govt.nz/liquefaction . Depending on the liquefaction potential of the area that the property is in, the Council may require

	site-specific investigations before granting future subdivision or building consent for the property.
Land Characteristic Other	Land Information New Zealand (LINZ) engaged Tonkin and Taylor to provide a Geotechnical Report on Ground Movements that occurred as a result of the Canterbury Earthquake Sequence. The report indicates this property may have been effected by a degree of earthquake induced subsidence. The report obtained by LINZ can be accessed on their website at https://www.linz.govt.nz and search Information for Canterbury Surveyors.
Utility Related	This property is in a local pressure sewer system catchment within the Christchurch wastewater network. If there is a house on the property, there will already be a wastewater pressure pump and tank. If a house is yet to be built, a new wastewater pressure pump and tank will need to be installed. General information about pressure sewer systems can be found on the Council website. More detailed information can be obtained by contacting Council Customer Services on 03 941 8999.

Health of Land

In the event that soils are found to have visible staining, odours and/or other conditions that indicate soil contamination, then work must cease until a Suitably Qualified and Experienced Practitioner (SQEP) engaged by the consent holder has assessed the matter and advised of the appropriate remediation and/or disposal options for these soils. The consent holder shall immediately notify the Council Attention: Team Leader Environmental Health, by way of email to rcmon@ccc.govt.nz. Any measures to manage the risk from potential soil contamination shall also be communicated to the Council prior to work re-commencing.

Archaeological Sites

This site may be an archaeological site as declared by Heritage New Zealand Pouhere Taonga. Under Section 43 of the Heritage New Zealand Pouhere Taonga Act 2014, an archaeological site may be any place that was associated with human activity in or after 1900, and provides or may be able to provide, through investigation by archaeological methods, significant evidence relating to the historical and cultural heritage of New Zealand. **Please contact Heritage New Zealand Pouhere Taonga on infosouthern@heritage.org.nz or (03) 357 9629 before commencing work on the land.**

Earthworks

Chapter 8, Rule 8.9 of the Christchurch District Plan refers to Earthworks and specifies the maximum permitted depth of excavation and fill. There is no exemption for subdivisions, therefore any excavating or filling exceeding this depth will require a further resource consent.

Allocated Street Numbers

The lots created by this subdivision have been allocated street addresses as per the provided street numbering plan. For any street number allocation enquiries please email streetnumbering@ccc.govt.nz

Lighting in Private Ways

The Council does not require lighting within private ways, nor will it accept the ongoing maintenance or running costs associated with lighting within the private way. Any proposal to light the private way shall include a method of payment of the ongoing costs by the benefiting owners.

Monitoring

The Council will require payment of its administrative charges in relation to monitoring of conditions, as authorised by the provisions of section 36 of the Resource Management Act 1991. The current monitoring charges are:

- (i) A monitoring programme administration fee of \$102.00 to cover the cost of setting up the monitoring programme; and
- (ii) A monitoring fee of \$116.80 for the first monitoring inspection to ensure compliance with the conditions of this consent; and
- (iii) Time charged at an hourly rate if more than one inspection, or additional monitoring activities (including those relating to non-compliance with conditions), are required.

The monitoring programme administration fee and initial inspection fee / documentation fee / inspection fees will be charged to the applicant with the consent processing costs. Any additional monitoring time will be invoiced to the consent holder when the monitoring is carried out, at the hourly rate specified in the applicable Annual Plan Schedule of Fees and Charges.

Reported and recommended by: John James Planner

Date: 9th of November 2021

Decision

That the above recommendations be adopted for the reasons outlined in the report.

Delegated officer:



Paul Lowe
Team Leader Planning
10/11/2021 10:08 AM