

SAL LAND LTD.

Proposed Managed Fill Ararimu Road, Papakura

landscape assessment

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Prepared by	Simon Cocker Landscape Architect <i>Principal SCLA</i>	
Reviewed by	Simon Cocker Landscape Architect <i>Principal SCLA</i>	
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1.0 INTRODUCTION

Simon Cocker Landscape Architecture have been engaged by SAL Land Ltd. to undertake a landscape assessment for a Managed Fill facility at 1618 Ararimu Road, Papakura (the Site - refer to [Figure 1](#)). The Site (identified as Lot 2 DP 166299 and Lot 8 DP 3697811) has an area of 1,9223.5m², and the filling extent will cover a total area of approximately 100,000m², with a maximum fill height of 45.2m.

This assessment will include a description of the site, the characteristics of the proposal and an analysis of the landscape, identification of any affected parties or individuals, and an assessment of the landscape, (including visual amenity) effects of the activity.

The site is located within the Rural – Rural Production Zone within which managed fill operations require consent as a non-complying activity. Consent is sought under the following rules of relevance:

- Rule E3.4.1(A19) – Diversion of a river or stream to a new course and associated disturbance and sediment discharge as a discretionary activity;
- Rule E3.4.1 (A49) – New reclamation or drainage, including filling over a piped stream, as a non-complying activity;
- Rule E11.4.1(A8) – Earthworks exceeding 2,500 m² where the land has a slope equal to or greater than 10 degrees as a restricted discretionary activity;
- Rule E11.4.1(A9) – Earthworks exceeding 2,500 m² within the Sediment Control Protection Area as a restricted discretionary activity;
- Rule E12.4.1 (A6) – Earthworks exceeding 2,500 m² as a restricted discretionary activity;
- Rule E12.4.1(A10) – Earthworks exceeding 2,500 m³ as a restricted discretionary activity;
- Rule H19.8.1(A66) – Managed fills in the Rural – Rural Production Zone as a discretionary activity

The information provided under this assessment has been supplemented following the s92 request from Council. This includes memoranda dated 26 August 2024, and 27 September 2024. The figures contained in Appendix 1 reflect the updates referenced in the memoranda.

Assessment methodology

The assessment has been prepared by a Registered Landscape Architect with reference to the Te Tangi a te Manu (Aotearoa New Zealand Landscape Guidelines)¹. The assessment methodology is detailed in [Appendix 2](#). In addition, this report has been prepared in accordance with the NZILA (New Zealand Institute of Landscape Architects) Code of Conduct².

Effects Ratings and Definitions

The significance of effects identified in this assessment are based on a seven-point scale which includes very low; low; moderate-low; moderate, moderate-high, high, and very high. For the purpose of this assessment, low-moderate equates to minor in RMA terminology.

Desktop study and site visits

In conducting this assessment, a desktop study was completed which included a review of the relevant information relating to the landscape and visual aspects of the project. This information included:

- The Auckland Unitary Plan;
- Williamson Water and Land Advisory. Assessment of Environmental Effects October 2023;

¹ https://nzila.co.nz/media/uploads/2022_09/Te_Tangi_a_te_Manu_Version_01_2022_.pdf

² Contained in Appendix 1 of: http://www.nzila.co.nz/media/50906/registered_membership_guide_final.pdf

- Williamson Water and Land Advisory, Water Management Plan. 15 September 2023;
- Williamson Water and Land Advisory, Erosion and Sediment Control Plan. 7 September 2023;
- Williamson Water and Land Advisory. Fill Management Plan. October 2023;
- Civix. Infrastructure Report. 10/10/2023;
- Civix. Cut Fill plan set 3000 – 3007 03/09/24;
- Civix ESCP plan set 3400 – 3505 21/08/24;
- Civix Stormwater plan set. 5000 – 52100. 03/09/24
- WWLA Site layout plan. Rev 4.
- TPC. Proposed earth-fill site Transport Assessment. September 2023;
- RMA Ecology. Ecological Effects Assessment. October 2023;
- JR Fairweather, S Swaffield, Boffa Miskell and Stephen Brown Landscape Architecture. Auckland Regional Landscape Assessment for Auckland Regional Council. July 2006.
- Aerial photography, Waikato District Council and Auckland Council GIS mapping, and Google Earth.

A visit was undertaken on the late afternoon of 23 March 2023 and 18 June 2023. The weather conditions during the first visit were overcast with light winds, and during the second visit were sunny with cloudy intervals.

2.0 THE PROPOSAL

The proposal is illustrated in Figures 2a – 2c, and 3a – 3j. The Fill Management Plan describes the proposal as follows:

The filling operation is expected to accommodate approximately 1.56 million cubic metres of material across two gullies. Filling will occur across both gullies simultaneously following formation of sediment ponds in the northern extent of the fill footprint. An approximately 50 m wide zone of topsoil will be stripped (the northern ‘lobes’) and stockpiled first. Fill will then be placed within the first stage. At completion of the stage, the stripped topsoil will be used to provide a growing medium across the filled area, and the next 50 m wide zone of topsoil will be stripped from above the stage. A new pond will be built on the preceding stage (now stabilised) and the process repeated. This will continue, with an estimated one stage per earthworks season, through to completion of the fill.

Development will occur almost exclusively on the southern half of the site, with the northern half only being subject to road and culvert improvements, wetland offsetting, riparian and visual screen planting. The existing entrance and first 70 m of the accessway will be disestablished, including removal of the existing culvert, and a new entrance constructed approximately 70 m east of the current crossing. The new site access road will cross the stream, via a new culvert, before veering southwest to connect with the existing accessway.

The site office, parking area and incoming truck checkpoint will be located approximately 400 m from the northern boundary of the site, immediately to the north of the fill area. Existing drainage constructed by the previous landowner will be deconstructed with improved drainage reconstructed as necessary for site operations.

The body of the Site is set back from the road and is accessed via a narrower ‘leg’ (refer to Figure 2a). The Site has a total area of 19,223.5m².

There is an elevation difference of approximately 78m between the road frontage and southern ridge crest which define the northern and southern extremes of the Site. The southern ridge has an elevation of some 200m, and this rises to a high point of around 223m on the ridge crest to the west of the south western corner of the Site.

A portion of the neighbouring site has been leased and will be used for proposed scope of the development.

Fill site preparation will commence at the start of 2023-2024 earthworks season subject to resource consent being granted, with erosion and sediment control establishment, site access formation, wetland offset planting and

construction of site facilities such as a portacom/ toilets. The existing overland flow will be piped to the specifications of the civil engineer so as to prevent future erosion of the overlying soils.

Before filling commences, the original topsoil will be stripped back and stockpiled on site. Once filling in each stage is complete, at least 500 mm of topsoil will be placed on top of finished areas and the surface revegetated in order to minimise the amount of exposed soil at any one time. Temporary stabilisation measures may also be employed such as mulch or geotextile placement.

It is expected that the site will be able to start receiving fill from early 2024, with initial fill to be placed in the base of both gullies, moving up toward the south as filling progresses. Contours will be designed to match the landscape in the east, west and south. The expected duration of filling is 16 years.

Filling is expected to occur year-round in future years, although volumes are likely to decrease in winter as earthworks sites are less active and surplus soil disposal generally decreases.

Access

The site office, parking area and incoming truck checkpoint will be located approximately 400 m from the northern boundary of the site, immediately to the north of the fill area.

The current access to the site is located at the western end of the site along Ararimu Road. There is another vehicle crossing and power pole in close proximity to the existing vehicle access. It is proposed the vehicle crossing will be relocated due east. This relocation allows the accessway to be upgraded to serve the purpose of having heavy vehicle discharging materials to the managed fill. The proposed accessway for the site will be 6m in width, running approximately parallel to the western boundary.

Proposed managed fill

The proposed filling covers an area of some 100,000m², with a maximum fill depth of around 45m (heights ranging between RL184m – RL198m). The angle of the front face will be 1v:3H. The approximate volume of fill will be 1.56 million m³ (refer to [Figure 2a](#)).

The proposed fill management area will include three gullies. The managed fill will be constructed over six stages (refer to [Figures 3a – 3f](#)). The location of the three gullies are shown on [Figure 4](#).

Within each stage the following sequence of works will occur:

1. Erosion and sediment control measures will be established including a sediment pond at the lowest point of the filling stage area.
2. Vegetation will be stripped and processed and stockpiled for reuse in landscaping.
3. The natural topsoil will be stripped back and stockpiled beside the fill area.
4. Foundation stripping will be undertaken to remove unsuitable materials such as soft or organic soils.
5. The underdrainage materials will be installed.
6. A blinding layer of hardfill will be placed over the underdrainage materials.
7. Filling will commence starting with a compacted clay toe dam then progressing top down towards the toe compacting fill in layers using appropriate compaction equipment.
8. The final layers will be cohesive soils free of inclusions to ensure a tight compacted layer at least 1m (potentially up to 2m on steeper faces) thick.
9. Final contouring of the stage will occur once the fill has extended to the toe of the staged area. This will include forming any permanent watercourses alongside the filled area. Surface water flow to the existing drainage channels will be maintained downslope of the filling area, thus the permanent watercourse development will also be staged.

10. Topsoil will be placed over the compacted top layer and seeded with pasture grasses. Native riparian plantings along the formed watercourse will also occur. Where necessary, riprap or similar may be installed to prevent scouring.

Temporary stabilisation measures may be employed such as mulch or geotextile placement. Erosion and sediment control measures will remain until stabilisation is complete.

It is understood that the maximum area that will be 'open' at any one time will be 2ha. After which topsoil will be placed over the compacted top layer and seeded with pasture grasses, or planted with native revegetation.

Figures 3g – 3i comprise a series of cross sections through the proposed managed fill. The sections include a number of cross sections demonstrating the relationship of dwellings within neighbouring properties to the managed fill.

Traffic

Based on the site accommodating 1.56 million m³ of fill over the next 10-15 years, the site is estimated to receive approximately 104,000-156,000 m³ per annum. Based on an average single body truck fill volume of 6 m³ approximately 17,350-26,000 trucks can be anticipated each year to the site, or 58-87 trucks per working day (Monday-Saturday, ~300 days per year). Over an approximate 10-hour operation day (Monday-Saturday), this equates to 6-9 trucks each hour, or 12-18 truck movements (split equally between in-out of the site) each hour, on average.

The Traffic Assessment determines that:

With the existing traffic volumes on Ararimu Road being relatively low (299 daily vehicles, with 37 peak hour vehicles), truck traffic to/from the site are forecast to be able to turn freely with minimal delay/queuing along Ararimu Road or within the site's access. As well, the vehicle traffic associated with the site can be accommodated within the surrounding road environment with less than minor effects.

Landscape Mitigation

As noted above, within the first planting season following the commencement of operations on Site, mitigation planting will be undertaken within the mid part of the Site to the north of the Stage 2 managed fill footprint. The eastern-most area of planting will encompass the I1 and P2 streams (as identified in the Ecology report). These plantings will also encompass the wetland areas associated with the P2 watercourse, and will comprise locally appropriate native species, planted as revegetation grade stock at a density that will ensure canopy closure within 3 – 5 years. These plantings are intended to buffer the works from neighbours to the north, north east and north west, and to establish a robust framework of vegetation that will enhance the natural patterns of the landscape (refer to Figures 2a, 2b and 2c). These figures also illustrate the areas proposed for ecological mitigation planting and protection.

Extending along the western boundary of the property traversed by the access, a 240m buffer strip of native revegetation planting is proposed to screen views of activity on the access from occupants of 1616 Ararimu Road.

The indicative plant schedule, is included below.

Dryland planting

Botanical name	Common name	%	Grade	Comments
<i>Coprosma robusta</i>	karamu	25	50C	Throughout wetter areas – 1.4m
<i>Dacrycarpus dacrydiodes</i>	kahikatea	5	2L	Throughout wetter areas – 5.0m
<i>Kunzea robusta</i>	kānuka	30	50C	Throughout dry areas – 1.4m
<i>Leptospermum scoparium</i>	mānuka	20	50C	Throughout wetter areas – 1.4
<i>Podocarpus totara</i>	tōtara	5	2L	Throughout dry areas – 5.0m
<i>Phormium tenax</i>	harakeke	15	50C	Throughout wetter areas – 1.4m

Planting shall not occur beneath powerlines and setbacks shall comply with Transpower requirements.

Riparian planting

Botanical name	Common name	% wetland, and channel edge	% riparian margins	Grade	Comments
<i>Austroderia fulvida</i>	toetoe	10			
<i>Carex geminata</i>	Rautahi	25		0.5L	Plant in wet ground @ 800mm ctrs
<i>Carex virgata</i>	Pūrei	25		0.5L	Plant in wet ground @ 800mm ctrs
<i>Cyperus ustulatus</i>	Upoko-Tangata	20		0.5L	Plant in wet ground @ 800mm ctrs
<i>Coprosma robusta</i>	karamu		10	50C	Plant in dry / intermittently wet ground @ 1.4m ctrs
<i>Hoheria populnea</i>	houhere		10	0.5L	Plant in dry ground @ 1.4m ctrs
<i>Leptospermum scoparium</i>	mānuka		20	50C	Plant in dry / intermittently wet ground @ 1.4m ctrs
<i>Melicytus ramiflorus</i>	māhoe		10	0.5L	Plant in dry / intermittently wet ground @ 1.4m ctrs
<i>Myrsine australis</i>	māpou		10	0.5L	Plant in dry ground @ 1.4m ctrs
<i>Phormium tenax</i>	harakeke	20		50C	Plant in dry / intermittently wet ground @ 1.4m ctrs.5m
<i>Veronica stricta</i>	koromiko		10	50C	Plant in dry ground @ 1.4m ctrs

Riparian planting (enrichment planting (yr 3))

Botanical name	Common name	% riparian margins	Grade	Comments
<i>Dacrycarpus dacrydiodes</i>	kahikaktea	10	1L	Plant @ 5.0m ctrs
<i>Podocarpus totara</i>	totara	10	1L	Plant @ 5.0m ctrs
<i>Schefflera digitata</i>	pate	20	1L	Plant @ 5.0m ctrs
<i>Podocarpus totara</i>	tōtara	10	2L	Plant @ 5.0m ctrs
<i>Schefflera digitata</i>	pate	10	1L	Plant @ 3.0m ctrs
<i>Sophora microphylla</i>	kowhai	10	2L	Plant @ 5.0m ctrs

Boundary screen planting

Botanical name	Common name	%	Grade	Comments
<i>Phormium tenax</i>	harakeke	50	1L	Plant @ 1.0m ctrs as double staggered row
<i>Pittosporum crassifolium</i>	karo	50	1L	Plant @ 1.4m ctrs as double staggered row

Table 1. Plant schedule.

Bund screens

The proposal seeks to limit the visibility of activity associated with construction of the managed fill by – at the commencement of each phase of filling – creating a screening bund at the northern extreme of the area of fill, and then ‘infilling’ behind the bund (noting that the maximum working area open at any one time will be 2ha). In this way, although individuals will have the potential to gain views of the completed, and grassed landform, and (potentially) of activity on the access road, work associated with the placement and compaction of fill will be hidden. The proposed screening bund is not shown on the sections contained on Figures 3g – 3i (23017 02 10 to 23017 02 12) (due to the scale of the drawing), but Figure 3j (23017 02 13) illustrates this approach. It is noted that the addition ‘sub-stages’ shown on this figure are conceptual only and serve to illustrate how, during each stage, each ‘lift’ will be screened by the creation of a new screening bund.

Stockpiles

The location of topsoil stockpiles is shown on the Civix ESCP plans. The stockpiles will be greater than 3m in height to maintain soil structure and integrity, and the estimated stockpiles volumes considering an average of 300mm depth of topsoil will be as follows:

- Stage 1: 4,850m³
- Stage 2: 6,587m³
- Stage 3: 2,661m³
- Stage 4: 2,321m³
- Stage 5: 2,362m³

- Stage 6: 9,454m³

Future Land Use

On completion of filling, the final landform shall be topsoiled and grassed, and the retired accessways and ponds shall be remediated and planted. The proposed planting for these areas shall mirror the approach proposed above.

It is recommended that if the works were to be abandoned early / prior to completion of the fill level being reached, a condition of consent be included that requires that the finished slopes/gradients are to be completed and topsoiled such that they merge with, and are (in terms of their scale, form and character), are consistent with the contextual landscape. This finished landform shall be grassed.

Following filling it is expected that rural or rural residential use will continue, in keeping with the surrounding landscape. Geotechnical approval will be required prior to any construction of houses or large sheds within the filled area.

3.0 EXISTING ENVIRONMENT

3.1 Landscape character

Located on Ararimu Road, some 17km to the north east of Pukekohe, the subject Site is located within the Hunua foothills; a rolling, mainly pastoral landscape, which is influenced by the presence of scattered rural residential properties (refer to [photo 1](#)). Some 2km to the east, the slopes of the Hunua Ranges rise steeply and dramatically, dominating the landscape (refer to [photo 2](#)). The Site is separated from the Ranges by the broad and flat Wairoa River valley; identified on [Plate 1](#) below as 'Happy Valley'.

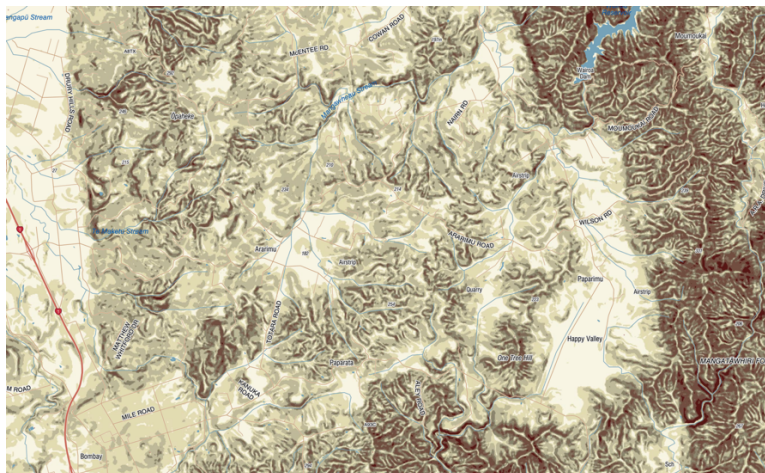


Plate 1: Landform

As can be seen from [Plate 2](#) below, the Hunua Ranges are underlain by sedimentary rock (Waipara Group Sandstone and Siltstone) and whilst the Wairoa River valley is geologically characterised by river deposits, the sedimentary geology, and its associated dissected hill country topography extends to the east for some 7km as far as the volcanic geology associated with the South Auckland Volcanic Field around Bombay (refer to [Plates 2 and 3](#)). As can be seen from [Plate 2](#), the landscape between the Ranges and the volcanic geology to the west is punctuated with volcanic extrusions.

These include Otau, some 1.5 km to the north which is described (in the NZ Inventory of Outstanding natural Features) as a small volcanic centre on the Moumoukai Fault which lies approximately 3.5 km north west of Paparimu township³. Some 1 km to the south, Paparata cone (identified on [Plate 1](#) as 'Peach Hill'), is a small steep sided scoria cone associated

³ <https://naturemaps.nz/maps/#/viewer/openlayers/484>

with a lava flow to the south. It is located at the end of Stuart Road, off Paparata Road, and approximately 4.5 km south east of Ararimu township.

Plate 3 below, also identifies a cone feature (Ararimu) situated some 4.5km to the west of the Site, near the junction of Sinclair and Ararimu Roads.

The South Auckland (sometimes called Franklin) Volcanic Field contains at least 84 volcanoes that erupted over a span of about a million years, between 1.6 and 0.5 myrs ago. This field stretches from Papakura in the north to Pukekawa in the south, on the south side of the Waikato River, and from the Hunua Falls in the east almost to Waiuku and Port Waikato in the west – an area of nearly 300 km².

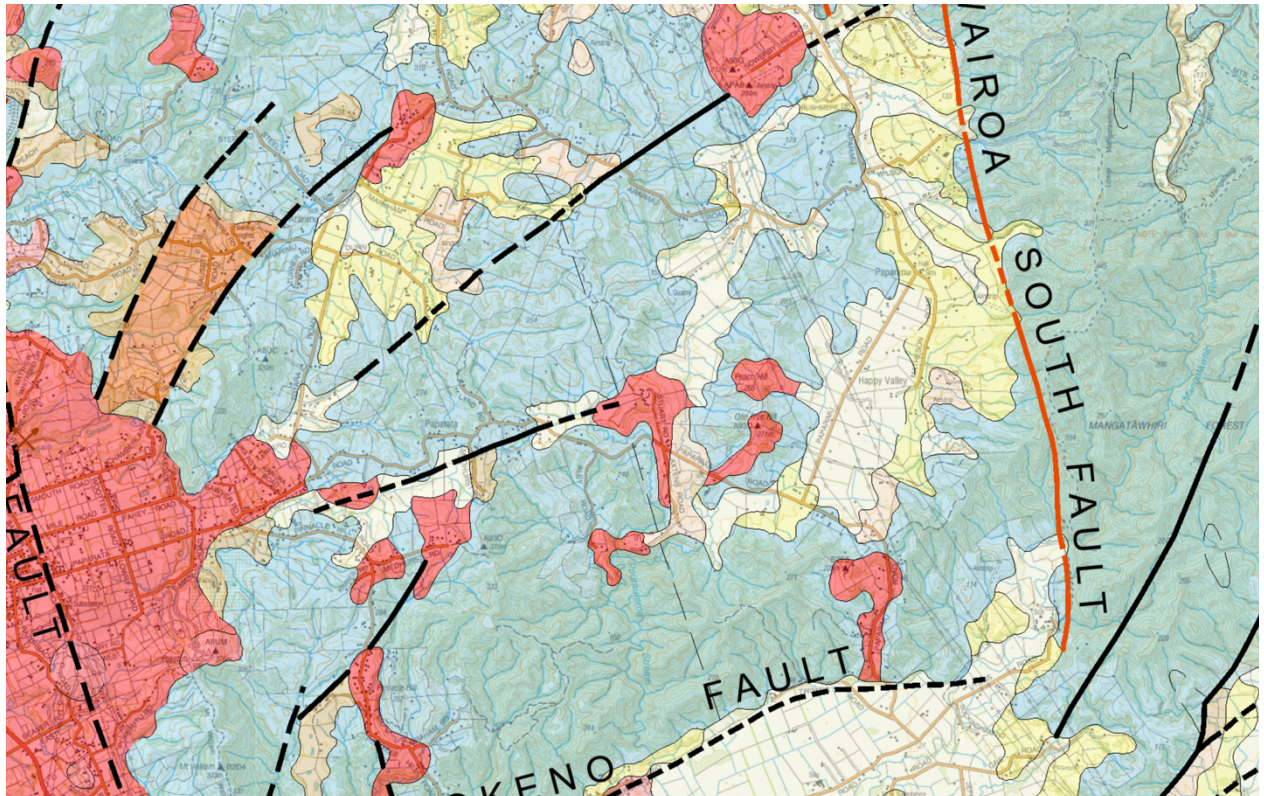


Plate 2: Geology

Many of the volcanoes in the north eastern part of the South Auckland Field, erupted along fault lines (e.g. Wairoa and Drury faults) through the greywacke uplands of the western Hunua Ranges. Being at a higher elevation, these flows and scoria cones have been subjected to more erosion than those that form the low divide between the Manukau and Waikato lowlands. Local to the Site, the volcanic elements within the landscape are not readily evident to the casual observer. The Geotechnical Assessment report describes the geology associated with the immediate context of the Site. It explains that the Site is underlain by Waipapa Group greywacke and that, within the low-lying northern 'leg' of the Site, the greywacke is overlain by Holocene alluvium comprising sand, silt, mud and clay.

As is illustrated by photos 1 and 2, within the vicinity of the Site, and to the west, the landscape is characterised by a rolling and gentle topography which rises to a maximum height of some 250m. The natural patterns of the landscape are strengthened by native vegetation which has been retained, or more frequently has regenerated on the steeper slopes, and within stream gullies. Frequently, riparian vegetation emphasises the alignment of watercourses and where vegetation reflects the topographical patterns, it lends the landscape a greater legibility. These natural vegetative patterns are overlain by vegetation patterns that correspond to human imposed boundaries such as property and paddock boundaries, and the wider landscape is punctuated by small forestry blocks and woodlots. This reflects the smaller landholdings associated with rural residential and lifestyle blocks. As can be seen from photo 1, to the west,

these patterns impart a relatively fine grain to the landscape, whilst where holdings are larger, pastoral land use prevails and the landscape assumes a larger scale (refer to [photos 2, 3 and 4](#)).

The rural character of the Ararimu Road valley is strongly influenced by the presence of a number of powerlines that – aligned north – south – dominate the landscape. These lines are identified as BHL-WHN-A (400kv), OTA-WKM-A (220kv), and OTA-WKM-B (220kv). The former two bisect the western edge of the Site, whilst the third follows an alignment to the west of the other two (refer to [photo 5](#)).

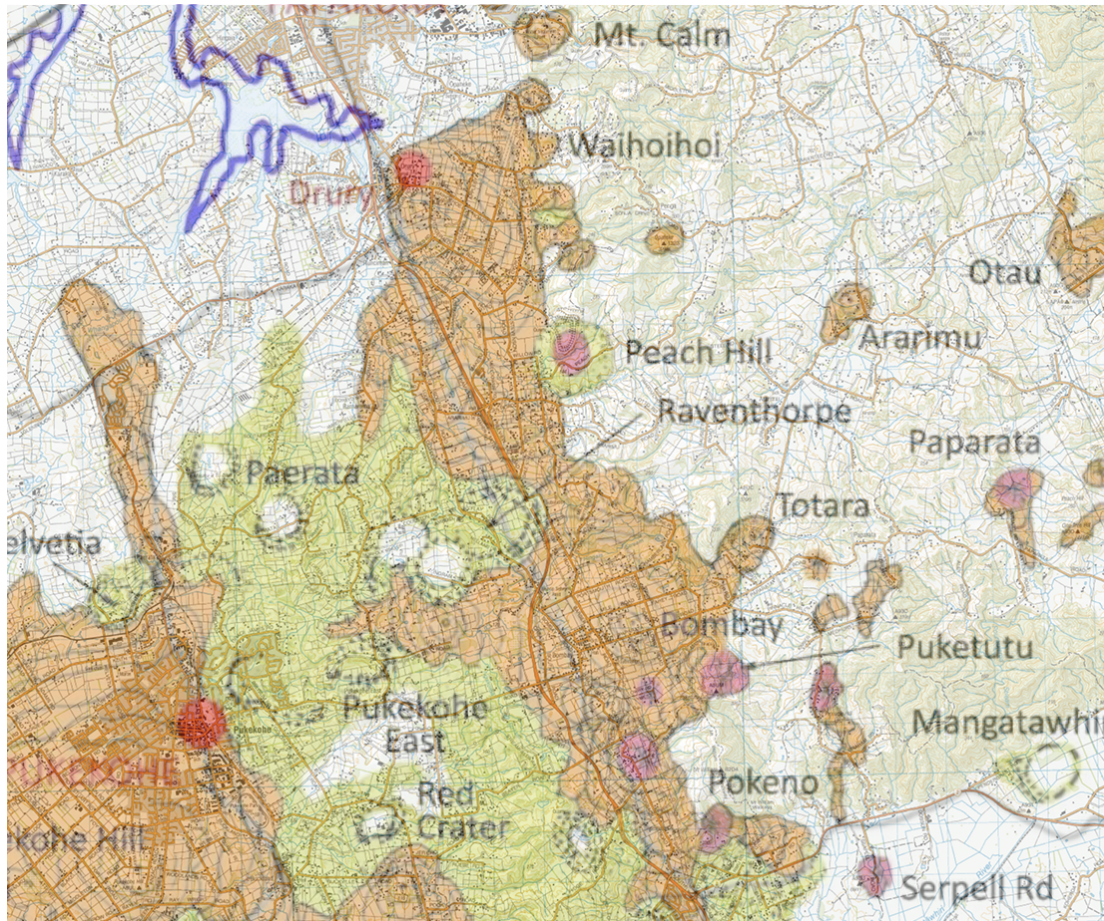


Plate 3: Map of the South Auckland Volcanic Field. Adapted from Briggs et al. (1994) and Nemeth et al. (2012). From Hayward (2017) *Out of the Ocean into the Fire*, p. 208. The Site is off the image at right.

The Site occupies a small catchment, comprising three gullies which extend into the southern half of the site. Within these, three headwater streams/ overland flow paths flow from south to north where they join another tributary that flows east to west across the northern end of the site.

There are two permanent streams on site, Identified as streams P1 and P2 in the Ecological report (visible in [photo 2](#)). There is one intermittent stream, (Stream I1). This is located at the foot of the western gully and flows into an area of wetland (Wetlands W5 and W6) and on into Stream P2. The majority of the site is vegetated with pasture grasses, which have been grazed until recently.

A stand of planted pine trees abuts the south eastern property boundary within a small gully. It is understood that the plantation was planted in the mid-1990s (refer to [photos 3, 4, 5 and 6](#)). At the margins of the plantation the understorey is predominantly Chinese privet (*Ligustrum sinense*). Native understorey species are more common and abundant within the body of the plantation, and include mapou (*Myrsine australis*), karamu (*Coprosma robusta*), hangehange (*Geniostoma rupestre*), and ponga (*Alsophila tricolor*). Ground level plants include native ferns such as hound's tongue (*Zealandia pustulata* subsp. *pustulata*), shining spleenwort (*Asplenium oblongifolium*) and sickle spleenwort (*Asplenium polyodon*).

At the centre of the plantation, at the bottom of the gully, ephemeral flow paths begin to emerge and there is a greater diversity of native tree and shrub species as a result of a reduced density of pine trees in this area. In addition to the native species listed above, mamaku (*Sphaeropteris medullaris*), mahoe (*Melicactus ramiflorus*), cabbage tree (*Cordyline australis*), marble leaf (*Carpodetus serratus*), rough tree fern (*Dicksonia squarrosa*) and *Coprosma rotundifolia* are also present.

The Site contains a number of wetland areas, identified in the ecological report as W1 – W8. Wetlands 1 – 5 and 7 are largely vegetated with exotic wetland species. Wetland W6 is located at the eastern boundary of the site along Stream P2. It extends into the neighbouring property, merging with Wetland P7. Wetlands W7 and W8 are both on the neighbouring property and are linear wetlands along gully bottoms; both are grazed and trampled by stock (refer to [photo 6](#)).

Wetland W6 has a canopy and/ or sub-canopy of willow (*Salix* sp.), and a ground layer of obligate wetland species including purei (*Carex secta*) and sharp spike sedge (*Eleocharis acuta*), and facultative wetland species including swamp kiokio (*Blenchnum minus*). Where Wetland W6 extends into the pine plantation, there is a gap in the pine canopy and the same suite of wetland species is present as in the rest of the wetland.

Wetland W8 (which will be unaffected by the footprint of the managed foll) includes a number of facultative wetland species soft rush, jointed rush, giant rush (*Juncus pallidus*), giant umbrella sedge (*Cyperus ustulatus*) and spearwort, with clumps of purei (*Carex secta*).

3.2 Statutory Matters

The full policy framework is set out in the Assessment of Environmental Effects.

Auckland Unitary Plan

Clean and managed fills require consent under the Rural Production zone as a non-complying activity. There are also a suite of resource consents required for the construction works, including:

- Rule E3.4.1 (A49) – New reclamation or drainage, including filling over a piped stream, as a non-complying activity;
- Rule E11.4.1(A8) – Earthworks exceeding 2,500 m² where the land has a slope equal to or greater than 10 degrees as a restricted discretionary activity;
- Rule E11.4.1(A9) – Earthworks exceeding 2,500 m² within the Sediment Control Protection Area as a restricted discretionary activity;
- Rule E12.4.1 (A6) – Earthworks exceeding 2,500 m² as a restricted discretionary activity;
- Rule E12.4.1(A10) – Earthworks exceeding 2,500 m³ as a restricted discretionary activity;
- Rule H19.8.1(A66) – Managed fills in the Rural – Rural Production Zone as a discretionary activity.

The provisions of the rural production zone are fairly enabling of managed fills, acknowledging that this activity is keeping with the purpose of the zone. See the following provisions:

H19.2.3: Objectives – rural character, amenity and biodiversity values

- (1) *The character, amenity values and biodiversity values of rural areas are maintained or enhanced while accommodating the localised character of different parts of these areas and the dynamic nature of rural production activities.*
- (2) *Areas of significant indigenous biodiversity are protected and enhanced. Policies – rural character, amenity and biodiversity values*

H19.2.4: Policies – rural character, amenity and biodiversity values

- (1) *Manage the effects of rural activities to achieve a character, scale, intensity*
- (2) *and location that is in keeping with rural character, amenity and biodiversity values, including recognising the following characteristics:*
 - a. *predominantly working rural environment;*
 - b. *fewer buildings of an urban scale, nature and design, other than dwellings and their accessory buildings and buildings accessory to farming; and*
 - c. *a general absence of infrastructure which is of an urban type and scale.*
- (3) *Recognise the following are typical features of the Rural – Rural Production Zone, Rural – Mixed Rural Zone and Rural – Rural Coastal Zone and will generally not give rise to issues of reverse sensitivity in these zones:*
 - a. *the presence of large numbers of farmed animals and extensive areas of plant, vine or fruit crops, plantation forests and farm forests;*
 - b. *noise, odour, dust, traffic and visual effects associated with use of the land for farming, horticulture, forestry, mineral extraction and managed fills;*
 - c. *the presence of existing mineral extraction activities on sites zoned as Special Purpose – Quarry Zone;*
 - d. *accessory buildings dot the landscape, particularly where farming activities are the dominant activity; and*
 - e. *activities which provide for the relationship of Mana Whenua to their ancestral land and taonga.*

B9.2.1 Objective (3) – Rural production and other activities that support rural communities are enabled while the character, amenity, landscape and biodiversity values of rural areas, including the coastal environment, are maintained.

E3.2 Objective (3) – Significant residual adverse effects on lakes, rivers, streams or wetlands that cannot be avoided, remedied or mitigated are offset where this will promote the purpose of the Resource Management Act 1991

E3.3 Policy (2) – Manage the effects of activities of activities in, on, under or over the beds of lakes, rivers, streams or wetlands outside the overlays identified in Policy E3.3(1) by:

- (a) *Avoiding where practicable or otherwise remedying or mitigating any adverse effects on lakes, rivers, streams or wetlands; and*
- (b) *Where appropriate, restoring and enhancing the lake, river, stream or wetland.*

E11.2 Objective (1) – Land disturbance is undertaken in a manner that protects the safety of people and avoids, remedies or mitigates adverse effects on the environment.

E11.3 Policy (2) – Manage land disturbance to:

- (a) *Retain soil and sediment on the land by the use of best practicable options for sediment and erosion control appropriate to the nature and scale of the activity;*
- (b) *Manage the amount of land being disturbed at any one time, particularly where the soil type, topography and location is likely to result in increased sediment runoff or discharge;*
- (c) *Avoid, remedy or mitigate adverse effects on accidentally discovered material; and*

Maintain the cultural and spiritual values of Mana Whenua in terms of land and water quality, preservation of wāhi tapu and kaimoana gathering.

E13.2 Objective (1) – Managed fills, managed fills and landfills are site, designed and operated so that adverse effects on the environment, are avoided, remedied or mitigated.

E13.3 Policy (1) – Avoid significant adverse effects and remedy or mitigate other adverse effects of managed fills, managed fills and landfills on lakes, rivers, streams, wetlands, groundwater and the coastal marine area.

E15.3 Policy (3) – Encourage the offsetting of any significant residual adverse effects on indigenous vegetation and biodiversity values that cannot be avoided, remedied or mitigated, through protection, restoration and enhancement measures, having regard to Policy E15.3(4) below and Appendix 8 Biodiversity Offsetting.

E15.3 Policy (4) – Protect, restore, and enhance biodiversity when undertaking new use and development through any of the following:

...

(b) Requiring legal protection, ecological restoration and active management techniques in areas set aside for the purpose of mitigating or offsetting adverse effects on indigenous biodiversity.

H19.3.3 Policy (1) – Provide for a range of existing and new rural production, rural industry and rural commercial activities and recognise their role in determining the zone’s rural character and amenity values.

3.3 Visual Catchment

Figure 4 demonstrates how on a broad scale, the Site is contained on its southern, south eastern and eastern sides by a ridge which is – at its south western end – defined by One Tree Hill and Peach Hill.

Across the valley to the north west, north and north east the rising hills slopes preclude more distant views from these directions. At a Site level, a northerly trending ridge encloses the proposed managed fill on its western side, and screens views of the proposed landform from the south west and west. Views to the proposed landform are however, possible from locations within the valley landscape and from the lower hill slopes to the north, north west and north east (refer to photos 5, and 7 - 11). This includes longer views from elevated locations to the north west from a distance of some 1,600m as represented by photo 12.

Views from locations to the north east and east are curtailed by the ridge landform, but more proximate dwellings, located to the north, on the ridge flanks and associated landform offer views to the proposed managed fill (refer to photo 2).

Specific view locations, both residential and public are detailed in Table 2 below.

Receptor	Description	Separation Distance	Elevation
Proximate dwellings located to the north west, north and north east of the managed fill			
1616 Ararimu Road	Single storey dwelling set back some 180m from Ararimu Road and oriented to east / north east. The dwelling is constructed on a low ridge and elevated some 5 – 10m above , oriented toward, and separated by some 110m from the Site access. A narrow strip of riparian vegetation within this property provides some limited buffering between the dwelling and access. Views toward the south and south west managed fill are partially obscured by vegetation and accessory buildings to the south east of the main dwelling	300m	136m
1628A Ararimu Road	Dwelling within 1.2 ha property located to the east of the Site access. Dwelling situated on the west facing slope of a low spur, and is oriented to the west. The property, and dwelling is contained on its western, south western and southern boundary by riparian vegetation of some scale and this precludes views particularly to the south where the vegetation is taller and denser.	233m	130m
1628B Ararimu Road	Two storey dwelling on 6.5ha property constructed on a south westerly angled slope close to the crest of a westerly trending spur. Outdoor living areas are located to the north and north west side of the dwelling, but views in these directions are restricted by the landform whilst the building affords longer views to the north west, west and across the valley to the south west, and south toward the Site. The western and southern boundaries of the property are bounded by a tall (12m+) evergreen shelterbelt although views over the top of the shelterbelt are possible to the crest of the ridge on the southern edge of the Site.	180m	160m
Users of Ararimu Road			
	When approaching from the north east, views of the Site when traveling along the road are precluded by landform and vegetation until the receptor has passed the entrance to 1646. Glimpse views are then afforded through vegetation to the south over a distance of some 500m to the footprint of the proposed managed fill. From the Site entrance to the entrance to 1587, direct views (with some limited fragmentation by vegetation) are possible to the footprint of the managed fill and range in distance between 500 – 700m. Views from the road to the north west are affected by the north westerly trending ridge on the west side of the Site, and this landform tends to screen the valley floor and mid ridge flanks within the managed fill footprint. Beyond the Aitken Road junction, the Site is screened by roadside vegetation and landform until the section of road beyond 1467 where the road climbs to the west and (when traveling east) affords elevated views along its axis toward the Site from a distance of some 2km.	Various	Various
Dwellings located on the ridge slopes and low hills to the north east			
1678 Ararimu Road	Single storey dwelling constructed on a small knoll, contained on its western, northern and eastern sides by vegetation. Oriented to the west and south west, the dwelling is contained by tree and shrub vegetation on its southern side.	650m	159m

1689A Ararimu Road	Single storey dwelling principally oriented to the north and north east, with swimming pool and outdoor living areas located on these northerly sides. Buildings and vegetation restrict views to the south and south west.	1689m	167m
1646 Ararimu Road	Single storey dwelling constructed on the crest of a south westerly trending spur, and principally oriented to the north west, north and north east, with swimming pool and outdoor living areas located on these northerly sides. Access, accessory building and parking areas occupy the southern side of the dwelling (this being the outlook toward the Site). Landform obscures views of much of the Site, although the westerly (east facing) ridge flank is visible.	500m	138m
1646A Ararimu Road	.Single storey dwelling, and single storey minor unit. The former is constructed on a westerly trending spur, but views to the north appear to be restricted by vegetation which wraps around the northern quadrant. The outlook to the south is unobscured. Views to the north from the latter are afforded across a gully, whilst views to the south are curtailed by an accessory building. Views into the Site are restricted by the shelterbelt on the western boundary of 1628B, but the western and south ridges within the Site are visible over these trees.	370m	138m
Dwellings located on the rolling landscape to the north west			
(Including)	Dwellings located within the rolling landscape to the north west, separated from the subject Site by distances of between 500 – 1,400m. These dwellings are set within a vegetated rural residential landscape and tend to be predominantly single storey which are form the most part, oriented to take advantage of the northerly, north westerly or north easterly aspect. These properties offer the potential for a variety of views to the proposed fill area, dependant on vegetation and intervening topography. Some (like the dwellings within 1508 and 1536 Ararimu Road, and 23 and 31 Aitken Road) offer very limited views of the northern edge of the fill area (the former two on Ararimu Road), or no views (the latter two on Aitken Road). The dwelling at 11 Downs Road offers views to the Stage 2 fill area, whilst the more distant dwelling within 41 Downs Road offers views of the northern portion of Stage 2, and the entirety of Stage 1.		
1536 Ararimu Road		1km	132m
1535 Ararimu Road		1.1km	132m
1578 Ararimu Road		585m	132m
1508 Ararimu Road		1.3km	150m
1491 Ararimu Road		1.7km	178m
1474 Ararimu Road		1.4km	170m
23 Aitken Road		500m	160m
23A Aitken Road		680m	140m
31 Aitken Road		840m	135m
11 Downs Road		1.2km	140m
41 Downs Road		1.5km	140m

Table 2: Potential affected individuals

4.0 IDENTIFIED LANDSCAPE VALUES

Landscape values

The Site is not overlain by any Natural Heritage overlays within the Auckland Unitary Plan.

The Auckland Regional Landscape Assessment (ARLA) was undertaken in 2006. Prepared under an assessment regime that differs from that employed today but whilst recognising the difference in methodology, the findings of the ARLA are helpful in gaining an understanding of values. Two areas of elevated landscape value are identified within relatively close proximity to the subject Site (refer to [Plate 4](#) below). A minimum of some 2km to the west, Area 59 (West Ramarama & Bombay) is described as being within the Hill Country landscape type, with relatively high relief, significant areas of maturing vegetation and only low levels of built modification (houses).

The ARLA adds that the area comprises rolling terrain on the fringes of the Bombay Hills with large pockets of remnant broadleaf forest among pasture, horticulture and rural residential development, and some forest on steep escarpments.

A minimum of some 1.5km to the east of the Site, Area 61 (Pinnacle Hill) is identified as being within the Hill Country landscape type. This area includes the Mt William forest area and is described as having relatively high relief with significant areas of maturing vegetation and only low levels of built modification (houses).

In addition, the ARLA further described the area as

“Elevated hill country with intact cover of remnant indigenous vegetation. Areas of less established indigenous regeneration and pine excluded. Includes pastoral foothills where there is a low density development. Extends to lowland pastoral fringe near State Highway 2 and includes riparian and lowland kahikatea forest. Interplay of indigenous forest remnants and pasture, reinforcing topography.”

Area 62 is located to the east of the Site and is identified as being within the Hill Country landscape type with relatively high relief and significant areas of maturing vegetation and intact mature indigenous forest on steep hill country and around water catchment lakes, extending down to the coastal margins of the Firth of Thames and some stream corridors.

The area includes pastoral toe slopes where the interplay of intact mature indigenous forest and forest remnants with pasture, reinforce topography.

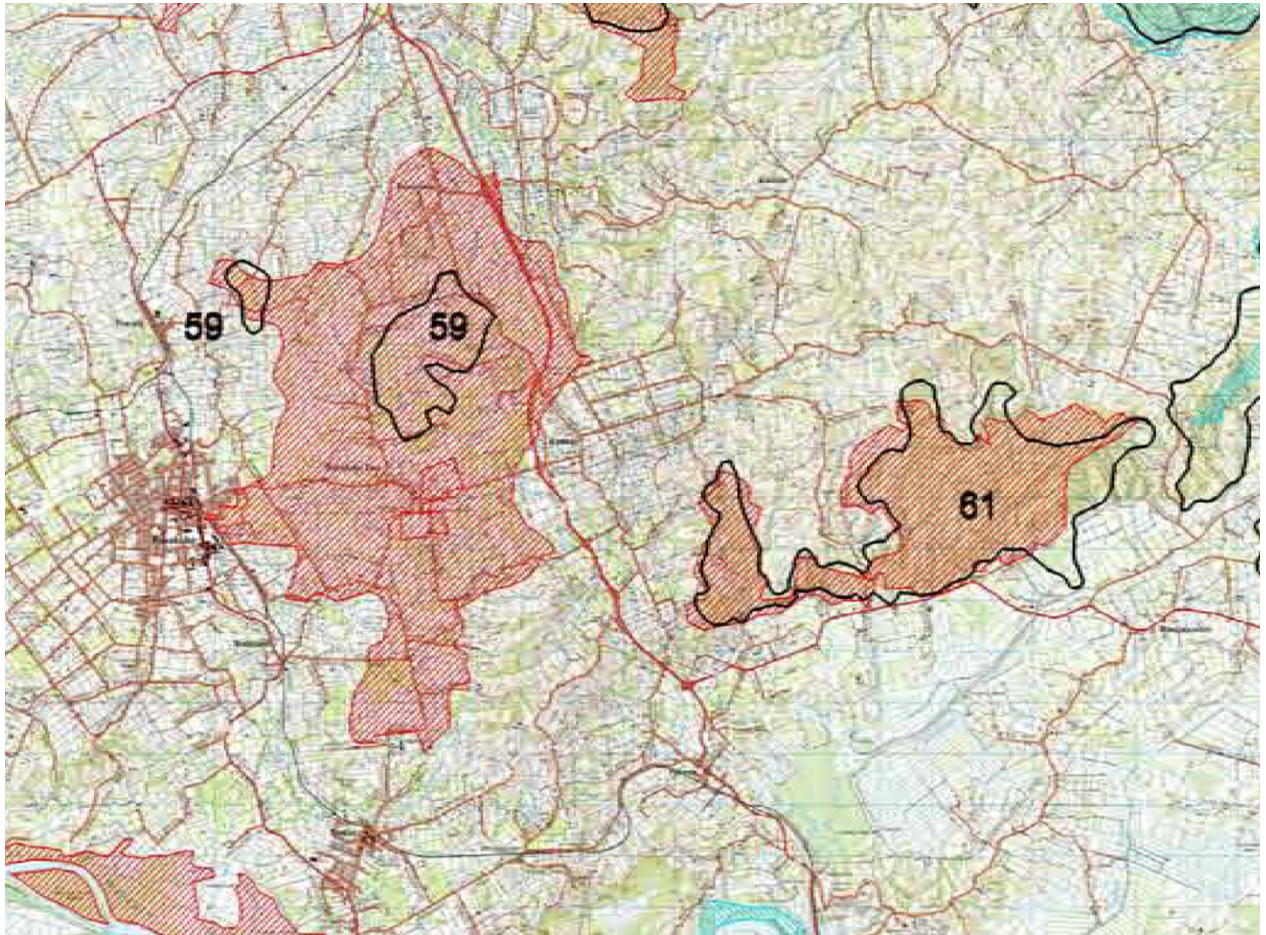


Plate 4: Excerpt from Auckland Regional Landscape Assessment (2006)

None of the above areas encompass the subject Site. When the landscape is assessed against the attributes set out as Table 4 in Appendix 3 it is apparent that the landscape quality is at most, 'Ordinary'. It displays a distinguishable landscape structure, characteristic patterns of landform and land cover often masked by landuse, together with some features worthy of conservation, and some detracting features.

Ecological (Biotic) Values

The ecological values are summarized in section 4 of the Ecological report, as follows:

- *There are three permanent streams, one intermittent stream, and a braided overland flowpath (ephemeral stream) on site, which range from poor to moderate condition.*
- *Eight areas of wetland have been identified on site, which support a mix of native and exotic wetland plant species. The wetlands are of poor to moderate ecological quality, depending on the proportion of exotic plant species present and the degree to which livestock have access.*
- *There is a small pine plantation on site that supports a patchy, mixed native/ exotic understorey, that is most dense and species rich at the centre of the plantation. The understorey near the edges of the plantation is dominated by the exotic weed species Chinese privet.*
- *All plant species found on the site are 'Not Threatened' or are exotic.*
- *The site supports common native and exotic bird species, in low abundance.*
- *Native lizards are unlikely to be present within the development footprint due to the lack of suitable habitat. The area of native bush at the far south western end of the site, may provide habitat for native lizards, but it is not*

within the development footprint. Records from the national database indicate that the closest records of native lizards are some distance from the site.

- *The site may provide foraging, transit and roosting habitat for long-tailed bat, as suggested by the proximity to the site of a number of long-tailed bat records. The pine plantation may provide temporary roosting habitat, and the streams and wetlands are likely to support populations of flying insects, which in turn provide food for bats. The streams, wetlands and linear edge of the pine forest may provide routes along which bats transit from site to site.*
- *There are no scheduled Significant Ecological Areas on the site*

Archaeological and cultural values

A review of the NZ Archaeological Association 'ArchSite' database has been undertaken and there are no known archaeological features registered on the site.

The AEE states that:

The Applicant has provided the application documents to mana whenua, however no comments have been received as of yet.

However, at a broad level the following is noted:

- *A range of environmental management and mitigation measures are proposed in this application to ensure that potential adverse effects associated with the proposed works are appropriately managed;*
- *The proposed earthworks will be undertaken in accordance with best practice guidelines, including in accordance with Accidental Discovery Protocols; and*
- *Riparian planting along the wetland areas will provide ecological benefits*

A draft application was sent to the following mana whenua in October 2023 for comments:

- *Ngāi Tai ki Tāmaki Tribal Trust;*
- *Ngāti Maru Rūnanga Trust;*
- *Ngāti Tamaoho Trust;*
- *Te Ara Rangatu o Te Iwi o Ngāti Te Ata Waiohū;*
- *Te Ākitai Waiohū Iwi Authority; and*
- *Te Whakakitenga o Waikato Incorporated*

Comments have yet to be received on the application from Mana Whenua, however the Applicant will keep Council informed of any progress.

5.0 ASSESSMENT OF LANDSCAPE EFFECTS

Landscape effects are described in the methodology, contained in Appendix 2. In summary, landscape effects derive from changes in the physical landscape, which may give rise to changes in its character and how this is experienced. This may in turn affect the perceived value ascribed to the landscape and includes visual amenity effects under the ambit of 'experiential attributes'.

Change in a landscape does not, of itself, necessarily constitute an adverse landscape or natural character effect. Landscape is dynamic and is constantly changing over time in both subtle and more dramatic transformational ways, these changes are both natural and human induced. What is important in managing landscape change is that adverse effects are avoided or sufficiently mitigated to ameliorate the effects of the change in land use. The aim is to provide a

high amenity environment through appropriate design outcomes, including planting that can provide an adequate substitution for the currently experienced amenity.

5.1 Biophysical abiotic attributes

The key abiotic attributes of the site include the landform, its geology, and hydrology.

The Site, in terms of its topographical features, retains a legibility which informs of the alluvial formative processes and is characteristic of the dissected terrain of the Hunua foothills. A managed fill facility is proposed for the site, which will result in the filling of the main gully at the southern end of the site, the gully within the pine plantation and the gully to the west of the pine plantation. The proposal will have a total area of 100,073m² with a bulk total earthworks volume of 1,559,094.60m³ and a maximum fill height of 45.2m.

The Ecological report details that, within the managed fill area, Wetland W7 (2,108m²), and 35m of Streams E1 and I1 will be lost. With respect to Stream P2, and Wetlands W5 and W6, will be potentially affected by sediment discharge during earthworks and the operation of the managed fill. With respect to the access track realignment, Wetlands W1, W2 and W3, and Streams P1 and P2 will be potentially affected by earthworks and removal / construction of culverts.

Mitigation measures are proposed, and the level of effect, taking into account these proposed measures is assessed as being low or very low for all but the loss of Stream I1 (moderate), and the loss of Wetland 7 (High).

Measures are proposed to offset the loss of Stream I1, and the loss of Wetland 7

Whilst the adverse effects on the hydrology of the Site can be mitigated, or offset, the physical change in the landform resulting from the proposal will be marked change in the abiotic attributes of the Site. Notwithstanding this, the change will occur over a prolonged period and will be incremental, with the final landform being of a scale, and form that is consistent with the scale and form of the contextual topographical features. The completed landform will be largely indistinguishable from the surrounded pastured slopes and as such, it is the opinion of the author that the – although the proposal will result in a marked change in the abiotic attributes of the Site – within the context of the wider landscape, the change will be relatively small, with the shape, scale and character of the finished landform being consistent with the shape, scale and character of natural landforms within the wider landscape.

5.2 Biophysical biotic attributes

The biotic attributes of the Site are the living organisms which shape an ecosystem. The changes where they relate to the ecological values of the wetlands and streams are outline above. In addition to this, the proposal will necessitate the removal of the existing pine plantation (which has the potential to result in the loss of habitat for bats) and is identified as a potential moderate effect.

The Ecological report proposed a suite of mitigation and offsetting measures that will address the potential adverse effects identified, and it concludes that while there will be some permanent loss of intermittent stream and wetland, the proposal will provide net ecological gain

In addition, and in tandem with the ecological planting, revegetation planting proposed within this report, including riparian planting of the P2 and I1 watercourses, and the W6 wetland will also provide impart a positive biotic benefit

Consequently, the change in the biotic attributes of the proposal are considered to be small.

5.3 Experiential attributes

Experiential attributes comprise the interpretation of human experience of the landscape. This includes visible changes in the character of the landscape – its naturalness as well as its sense of wildness and remoteness including effects on natural darkness of the night sky.

The proposal will result in the progressive introduction of a new landform which will modify the existing terrain. Stage 1 will result in the infilling of the Eastern and Central gullies and the creation of a new northerly trending spur landform. Stage 2 will necessitate the infilling of the Western gully, and the creation of a new spur landform. Both spur landforms will extend from the main easterly trending ridge, and will be of a height and form that is consistent with the existing and natural landforms. The new landforms will be contained by existing landform on their southern, western and eastern sides, although views from public and private locations will be possible from viewpoints to the north west, north and north east. For the most part however, the visual catchment of the proposal is relatively contained, with a limited number of potentially affected individuals. Longer views are possible from elevated locations to the north west.

Filling will be implemented over a period of some 16 years and during this time the proposed fill areas will incrementally increase in height. The rapidity in the increase of the height is not known and can only be assumed.

The proposal seeks to limit the visibility of activity associated with construction of the managed fill by – at the commencement of each phase of filling – creating a screening bund at the northern extreme of the area of fill, and then ‘infilling’ behind’ the bund (noting that the maximum working area open at any one time will be 2ha). In this way, although individuals will have the potential to gain views of the completed, and grassed landform, and (potentially) of activity on the access road, work associated with the placement and compaction of fill will be hidden.

Topsoil stockpiles are proposed in varying locations depending on the Stage. These will be a maximum of 3m in height, and have the potential to be visible from within the wider landscape. Given the landscape contextual of views to these elements, and the separation distances associated with such views, it is considered that the stockpiles will represent relatively minor elements within the landscape, and will not detract from the experiential values of the landscape.


The landscape mitigation proposal includes the planting of areas of native vegetation to the north east and north west of the fill area. The former area of revegetation overlaps will an area proposed Ecological Effects Assessment for ecological mitigation plantings, and also link with existing native vegetation and will proposed ecological plantings further to the north and close to Ararimu Road. These plantings will, as they become established, assist with the integration of the new landform and reflecting, by strengthening existing vegetative patterns.

Initially, the early periods of the fill process will occur to an elevation which affords limited visibility to receptors within the surrounding landscape. Views from residential properties identified in [Table 2](#) above will be largely screened from these early periods (refer to [Figures 3g – 3i \(23017 02 10 to 23017 02 12\)](#)). Similarly, views of these early periods will be screened from public locations such as Ararimu Road by virtue of existing vegetation growing along the margins of the road, and between the potential receptors and the subject Site.

Turning to visual amenity effects, [Table 3](#) below replicates [Table 2](#) and details the assessed potential adverse construction and short term effect, and the potential long term effect of the proposal. Properties to the west and east of the Site tend to be screened from the western and eastern gullies by the containing ridges. Occupants of these dwellings will have the potential to gain views of activity during later periods of the Stages when the height of fill rises above the ridges, but this will be experienced intermittently, and for a short duration. The dwelling located adjacent to the western boundary will be screened by existing and proposed vegetation.

Occupants of dwellings within the southern quadrant will have the potential to gain views ‘into’ the gullies and therefore to the proposed works. Views of the activity will however, only be possible for more elevated properties, and will be fragmented by vegetation. It is anticipated that the level of effect experienced by these individuals will be (at most) temporary low to moderate adverse effects.

Receptor	Description	Construction / short term effect	Long term effect
Proximate dwellings located to the north west, north and north east of the managed fill			
1616 Ararimu Road. Representative photo - 5	Views to south largely buffered by existing vegetation, but dwelling oriented to the access and activity on the access will be clearly visible until the screen planting along the shared boundary becomes established (a period of some 3-5 years). Prior to Phase 4, views of activity within the fill areas will be	Moderate	Low to moderate

	screened by landform (refer to 23017_02_11). Over this period, the proposed mitigation planting will have established to an anticipated height of some 3 – 4m, and this will afford some softening of the fill works as they overtop the intervening landform during Stages 5 and 6. Where views to the proposed fill area are possible, filling activity will be screened by the proposed earthwork bund.		
1628A Ararimu Road Representative photo - 5	Views to the Stage 1 fill area are screened from this dwelling by existing vegetation, as are views to the access, although this vegetation comprises (mainly) willow. The existing willow will be replaced with native riparian species and this planting will, as it becomes established, buffer views to the access. Views to the proposed Stage 2 fill area are possible and the fill workings will be evident after Phase 2 (refer to 23017_02_10). The proposed mitigation planting will create a substantial vegetated foreground as it develops over a period of some 3 – 5 years Filling activity will be screened by the proposed earthwork bund	Stage 1. Low to moderate Stage 2. Initially very low, until the height of the fill area allows views over the intervening vegetation (after Phase 2).	Stage 1. Very low Stage 2. Low to moderate, once the height of the fill area allows views over the screening vegetation (after Phase 2). Once filling works are complete and the Site rehabilitated, the level of adverse effect will moderate to high positive, due to the established areas of revegetation planting.
1628B Ararimu Road	Views to the Stage 1 fill area are screened from this dwelling by existing vegetation (both the pine shelterbelt located on the boundary of 1628B, and established trees growing to the south of the dwelling – see below), as are views to the access. Views to the more elevated levels of the proposed Stage 2 fill area will be possible (refer to 23017_02_12). The proposed mitigation planting will create a substantial vegetated foreground as it develops over a period of some 3 – 5 years. If the existing shelterbelt and vegetation within the garden of this dwelling is discounted, the dwelling will offer relatively unimpeded views to the south east toward the proposed fill areas. The primary focus of views to the north and north west will be unaffected.  Filling activities will be screened by the proposed earthwork bund associated with each phase.	Stage 1. Very low Stage 2. Initially very low, until the height of the fill area allows views over the intervening vegetation. Discounting the existing vegetation within 1628B, the level of effect will be: Stage 1. Low to moderate Stage 2. Low.	Stage 1. Very low Stage 2. Low to moderate, once the height of the fill area allows views over the screening vegetation. Once filling works are complete and the Site rehabilitated, the level of adverse effect will moderate positive, due to the established areas of revegetation planting. Discounting the existing vegetation within 1628B, the level of effect will be: Stage 1. Low Stage 2. Moderate.
Users of Ararimu Road Representative photos – 5, 8, 9, 10, 12	When approaching from the north east, views of the Site when traveling along the road are precluded by landform and vegetation until the receptor has passed the entrance to 1646. Glimpse views are then afforded through vegetation to the south over a distance of some 500m to the footprint of the proposed managed fill. From the Site entrance to the entrance to 1587, direct views (with some limited fragmentation by vegetation) are possible to the footprint of the managed fill and range in distance between 500 – 700m. Views from the road to the north west are affected by the north westerly trending ridge on the west side of the Site, and this landform tends to screen the valley floor and mid ridge flanks within the managed fill footprint. Beyond the Aitken Road junction, the Site is screened by roadside vegetation and landform until the section of road beyond 1467 where the road climbs to the west and (when traveling east) affords elevated views along its axis toward the Site from a distance of some 2km.	Stage 1. Very low Stage 2. Initially very low, until the height of the fill area allows views over the intervening vegetation.	Stage 1. Very low Stage 2. At most low, once the height of the fill area allows views over the existing and proposed screening vegetation
Dwellings located on the ridge slopes and low hills to the north east			
1678 Ararimu Road Representative photo - 8	Single storey dwelling constructed on a small knoll, contained on its western, northern and eastern sides by vegetation. Oriented to the west and south west, the dwelling is contained by tree and shrub vegetation on its southern side. Views of the fill works will be screened by landform until around Phase 5 (refer to 23017_02_11) after which distant views of the fill areas will be	Stage 1. Very low Stage 2. Low.	Stage 1. Very low Stage 2. Low. Once filling works are complete and the Site rehabilitated, the level

	evident. Activity associated with the filling works will be screened by the proposed bunds associated with each phase.		of adverse effect will be nil.
1689A Ararimu Road Representative photo - 7	Single storey dwelling principally oriented to the north and north east, with swimming pool and outdoor living areas located on these northerly sides. Buildings and vegetation restrict views to the south and south west. Views of the fill works will be screened by landform until around Phase 5 (refer to 23017_02_10) after which distant views of the fill areas will be evident. Activity associated with the filling works will be screened by the proposed bunds associated with each phase. Activity associated with the filling works will be screened by the proposed bunds associated with each phase.	Stage 1. Very low Stage 2. Low.	Stage 1. Very low Stage 2. Low – Once filling works are complete and the Site rehabilitated, the level of adverse effect will be nil.
1646 Ararimu Road Representative photo - 8	Views to the Stage 1 fill area are screened from this dwelling by existing vegetation (pine shelterbelt), as are views to the access. Limited views from the dwelling to the more elevated levels of the proposed Stage 2 fill area will be possible, although much of the fill area will be screened by an accessory building. Notwithstanding the above, the filling works will be screened by landform until after Phase 5. After this, the fill areas will be distantly visible over the intervening landform. Activity associated with the filling works will be screened by the proposed bunds associated with each phase.	Stage 1. Very low Stage 2. Low	Stage 1. Very low Stage 2. Low – moderate. Once filling works are complete and the Site rehabilitated, the level of adverse effect will be nil.
1646A Ararimu Road Representative photo - 8	Views to the Stage 1 fill area are screened from this dwelling by existing vegetation (pine shelterbelt), as are views to the access. Direct views from the dwelling to the more elevated levels of the proposed Stage 2 fill area will be possible, although much of the fill area will be screened by an accessory building. Activity associated with the filling works will be screened by the proposed bunds associated with each phase.	Stage 1. Very low Stage 2. Low	Stage 1. Very low Stage 2. Moderate (post Phase 5). Once filling works are complete and the Site rehabilitated, the level of adverse effect will be nil.
Dwellings located on the rolling landscape to the north west			
(Including) 1536 Ararimu Road 1535 Ararimu Road 1578 Ararimu Road 1508 Ararimu Road 1491 Ararimu Road 1474 Ararimu Road 23 Aitken Road 23A Aitken Road 31 Aitken Road 11 Downs Road 41 Downs Road Representative photos – 9, 10, 11, 12	The existing pine tree plantation, which will be retained during the filling of the Stage 1 area, will screen activity from the majority of these individuals, with only glimpse views possible into the Eastern gully between the pine plantation and shelterbelt (refer to photo 13). The predominantly single storey dwellings associated with this group are for the most part, oriented to take advantage of the northerly, north westerly or north easterly aspect. The early fill works within Stage 2 will be screened by landform and vegetation, but as the elevation of the managed fill increases, then a variety of views of the new landform will be possible. Activity associated with the filling works will be screened by the proposed bunds associated with each phase.	Stage 1. Very low Stage 2. Low	Stage 1. Very low Stage 2. Low – moderate. Once filling works are complete and the Site rehabilitated, the level of adverse effect will be nil.

Table 3: Potential adverse visual amenity effects

5.4 Social, cultural, archaeological and associative attributes

Social, cultural and associative values are linked with individual's relationship with the landscape, their memories, the way they interact with and use the landscape and the historical evidence of that relationship. There is little to distinguish the subject Site from the surrounding pastured foothills and no known associative attributes are linked to the property.

Similarly, there are no known archaeological features registered on the site.

A copy of the application has been sent to the appropriate mana whenua groups and no comments have been received to date.

It is the opinion of the author therefore that the social, cultural and associative attributes of the landscape of the Site will only be affected to a very small degree.

5.5 Summary of landscape effects

In summary, any landscape effects would be limited to an existing area that has been previously modified (cleared of vegetation) and these changes have resulted in a lowering of the sensitivity of the Site in terms of its biotic attributes. Due to the filling of the three gully landforms, the proposal will result a moderate to high level of change within the subject property. Notwithstanding this, the change will occur over a prolonged period and will be incremental, with the final landform being of a scale, form and character that is consistent with the scale and form and character of the

contextual topographical features. For this reason, the completed landform will be largely indistinguishable from the surrounded pastured slopes and once completed, considered within the wider landscape, the change can be regarded as modest.

In addition, the adverse effects on the hydrology of the Site can be mitigated, or offset.

Similarly, the Ecology report determines that the adverse effect on the biotic attributes of the Site will be mitigated, or offset.

Within the wider context, the experiential attributes would be affected to a low level, but a small number of proximate individuals will experience an elevated temporary adverse visual amenity effect. Due to the staged phasing of the proposal, and the screening offered by the gully landforms of the operation when contained within these landforms (during the early periods of each stage), the adverse effects experienced by potentially affected individuals will be intermittent. Further, the proposed mitigation planting will, as it becomes established, offer screening for these individuals.

The social, cultural, archaeological and associative attributes of the site will not be affected.

Overall it is the opinion of the author that the potential adverse landscape effects will be temporary moderate to high during the fill operation, but on completion of the fill operation (an assumed 15 year period, based on the duration of the consent), the level of adverse effect will be low once the activity ceases and the finished landform is regressed.

6.0 AFFECT ON THE STATUTORY FRAMEWORK

The statutory matters where they relate to this assessment are set out in section 3.2. The key theses contained within the relevant objectives and policies are the maintenance of character, amenity values and biodiversity values of rural areas, the protection and enhancement of significant indigenous biodiversity. In addition, *E11.3 Policy (2) seeks to maintain the cultural and spiritual values of Mana Whenua in terms of land and water quality, preservation of wāhi tapu and kaimoana gathering*

H19.2.4: Policies – rural character, amenity and biodiversity values notes that rural zoned land includes – amongst other things – the following elements noise, odour, dust, traffic and visual effects associated with use of the land for farming, horticulture, forestry, mineral extraction and managed fills.

Quarries are a feature of the landscape locally, with two quarries operating on Ridge Road, to the south west. Notwithstanding this, the proposed managed fill will be generally visually contained, with its visibility largely confined to a defined area to the south and south west of the property, and this portion of the visual catchment will be contained by a westerly trending catchment boundary ridge. Only the latter periods of a number of the Stages will be visible outside of the confined visual catchment when these extend above the crests of the westerly and easterly containing ridges.

Although the proposal in its entirety will – in the relatively intimate landform associated with the visual catchment – be of some scale, the working areas will be limited to 2ha at any one time, and the completed areas will be grassed. As such, the growth of the managed fill will be perceived gradual and its scale appropriate to the scale of the contextual topography.

The proposal includes a significant area of revegetation planting which will both protect and enhance the existing wetland feature, assist with the integration of the proposed managed fill, and buffer the visibility of the managed fill from the south, south west and south east.

Within the existing environment, the proposal will maintain the character, amenity values and biodiversity values of the rural area, and the protection and enhancement of significant indigenous biodiversity. In addition, it will maintain the cultural and spiritual values of Mana Whenua.

Overall it is considered that the proposal is not inconsistent with the provisions of the Operative and Proposed District Plans, where these relate to landscape and visual matters.

7.0 CONCLUSION

The application seeks consent for a Managed Fill facility at 1618 Ararimu Road, Papakura (the Site - refer to [Figure 1](#)).

The Site (identified as Lot 2 DP 166299 and Lot 8 DP 3697811) has an area of 1,9223.5m², and the filling extent will cover a total area of approximately 100,000m², with a maximum fill height of 45.2m.

The filling operation is expected to accommodate approximately 1.56 million cubic metres of material across two gullies. Filling will occur across both gullies simultaneously following formation of sediment ponds in the northern extent of the fill footprint. An approximately 50 m wide zone of topsoil will be stripped (the northern 'lobes') and stockpiled first. Fill will then be placed within the first stage. At completion of the stage, the stripped topsoil will be used to provide a growing medium across the filled area, and the next 50 m wide zone of topsoil will be stripped from above the stage. A new pond will be built on the preceding stage (now stabilised) and the process repeated. This will continue, with an estimated one stage per earthworks season, through to completion of the fill.

Development will occur almost exclusively on the southern half of the site, with the northern half only being subject to road and culvert improvements, wetland offsetting, riparian and visual screen planting. The existing entrance and first 70 m of the accessway will be disestablished, including removal of the existing culvert, and a new entrance constructed approximately 70 m east of the current crossing. The new site access road will cross the stream, via a new culvert, before veering southwest to connect with the existing accessway.

The site office, parking area and incoming truck checkpoint will be located approximately 400 m from the northern boundary of the site, immediately to the north of the fill area. Existing drainage constructed by the previous landowner will be deconstructed with improved drainage reconstructed as necessary for site operations

Within the first planting season following the commencement of operations on Site, mitigation planting will be undertaken within the mid part of the Site to the north of the Stage 2 managed fill footprint. The eastern-most area of planting will encompass the I1 and P2 streams (as identified in the Ecology report). These plantings will also encompass the wetland areas associated with the P2 watercourse, and will comprise locally appropriate native species, planted as revegetation grade stock at a density that will ensure canopy closure within 3 – 5 years. These plantings are intended to buffer the works from neighbours to the north, north east and north west, and to establish a robust framework of vegetation that will enhance the natural patterns of the landscape.

Extending along the western boundary of the property traversed by the access, a 240m buffer strip of native revegetation planting is proposed to screen views of activity on the access from occupants of 1616 Ararimu Road

The proposal seeks to limit the visibility of activity associated with construction of the managed fill by – at the commencement of each phase of filling – creating a screening bund at the northern extreme of the area of fill, and then 'infilling' behind the bund (noting that the maximum working area open at any one time will be 2ha). In this way, although individuals will have the potential to gain views of the completed, and grassed landform, and (potentially) of activity on the access road, work associated with the placement and compaction of fill will be hidden.

Any landscape effects would be limited to an existing area that has been previously modified (cleared of vegetation) and these changes have resulted in a lowering of the sensitivity of the Site in terms of its biotic attributes. Whilst the adverse

effects on the hydrology of the Site can be mitigated, or offset, the physical change in the landform resulting from the proposal will be marked change in the abiotic attributes of the Site.

Notwithstanding this, the change will occur over a prolonged period and will be incremental, with the final landform being of a scale, and form that is consistent with the scale and form of the contextual topographical features. The completed landform will be largely indistinguishable from the surrounded pastured slopes and as such, it is considered that the change in the abiotic attributes of the landscape will be modest.

Within the wider context, the experiential attributes would be affected to a low level, but a small number of proximate individuals will experience an elevated temporary adverse visual amenity effect.

Due to the staged phasing of the proposal, and the screening offered by the gully landforms of the operation when contained within these landforms (during the early periods of each stage), the adverse effects experienced by potentially affected individuals will be intermittent. Early periods of the works will be largely screened from potential receptors by landform and vegetation. Further, the proposed mitigation planting will, as it becomes established, offer screening for these individuals.

In the longer term, following completion of fill works and rehabilitation of the Site, the long term level of effect will be nil or, for some individuals, positive due to the revegetation planting undertaken under the consent.

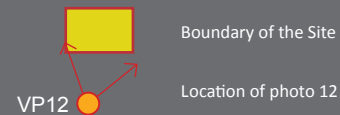
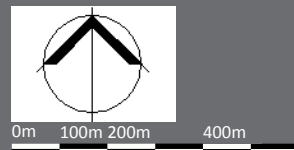
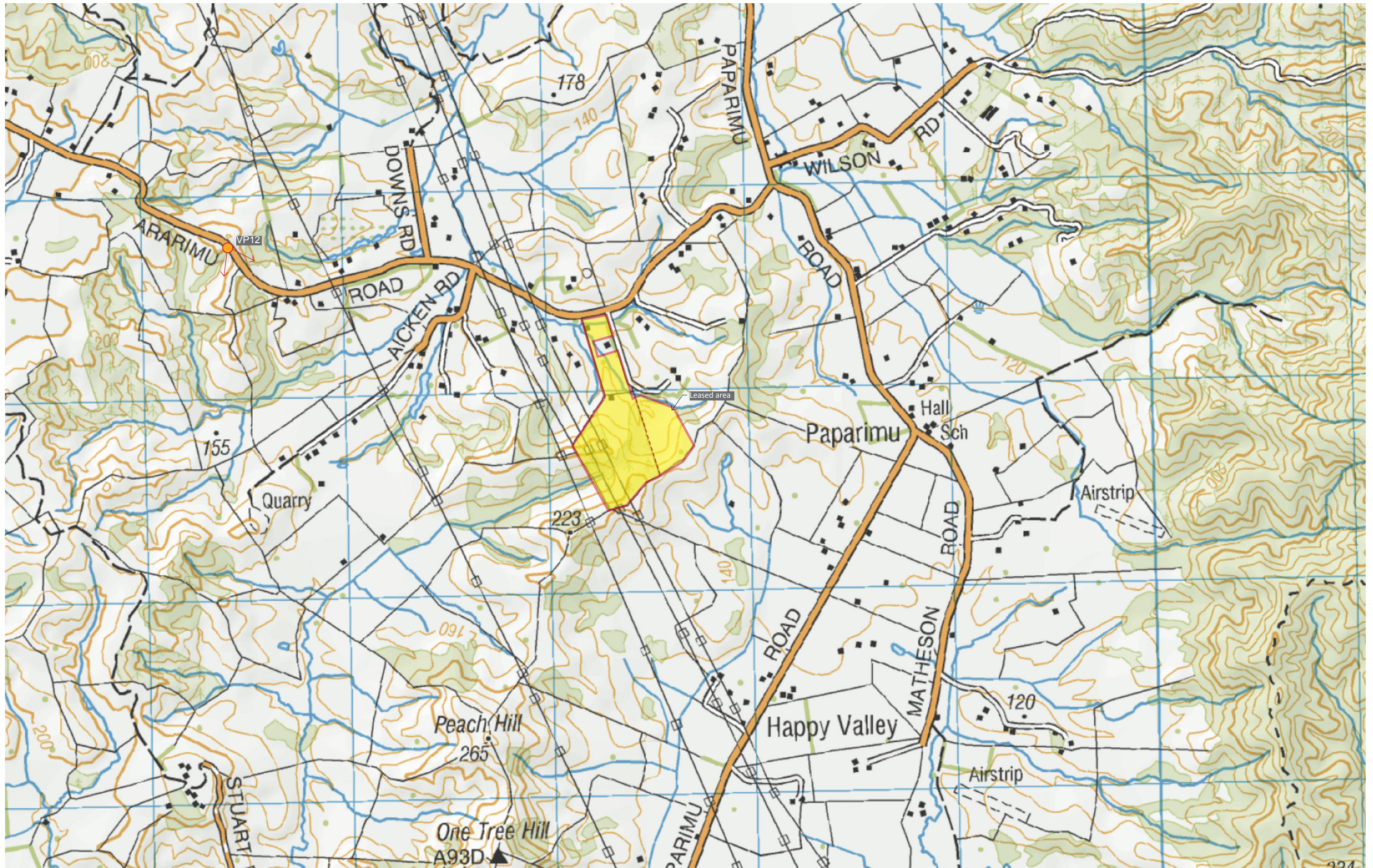
The social, cultural, archaeological and associative attributes of the site will not be affected.

Overall it is the opinion of the author that the potential adverse landscape effects will be temporary moderate to high during the fill operation, but on completion, the level of adverse effect will be low once the activity ceases. The proposal will be consistent with the provisions of the statutory instruments where they apply to the scope of this report, and the proposal is considered to be appropriate from a landscape and visual perspective.

Simon Cocker

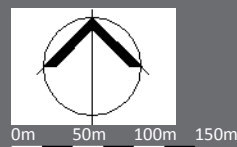
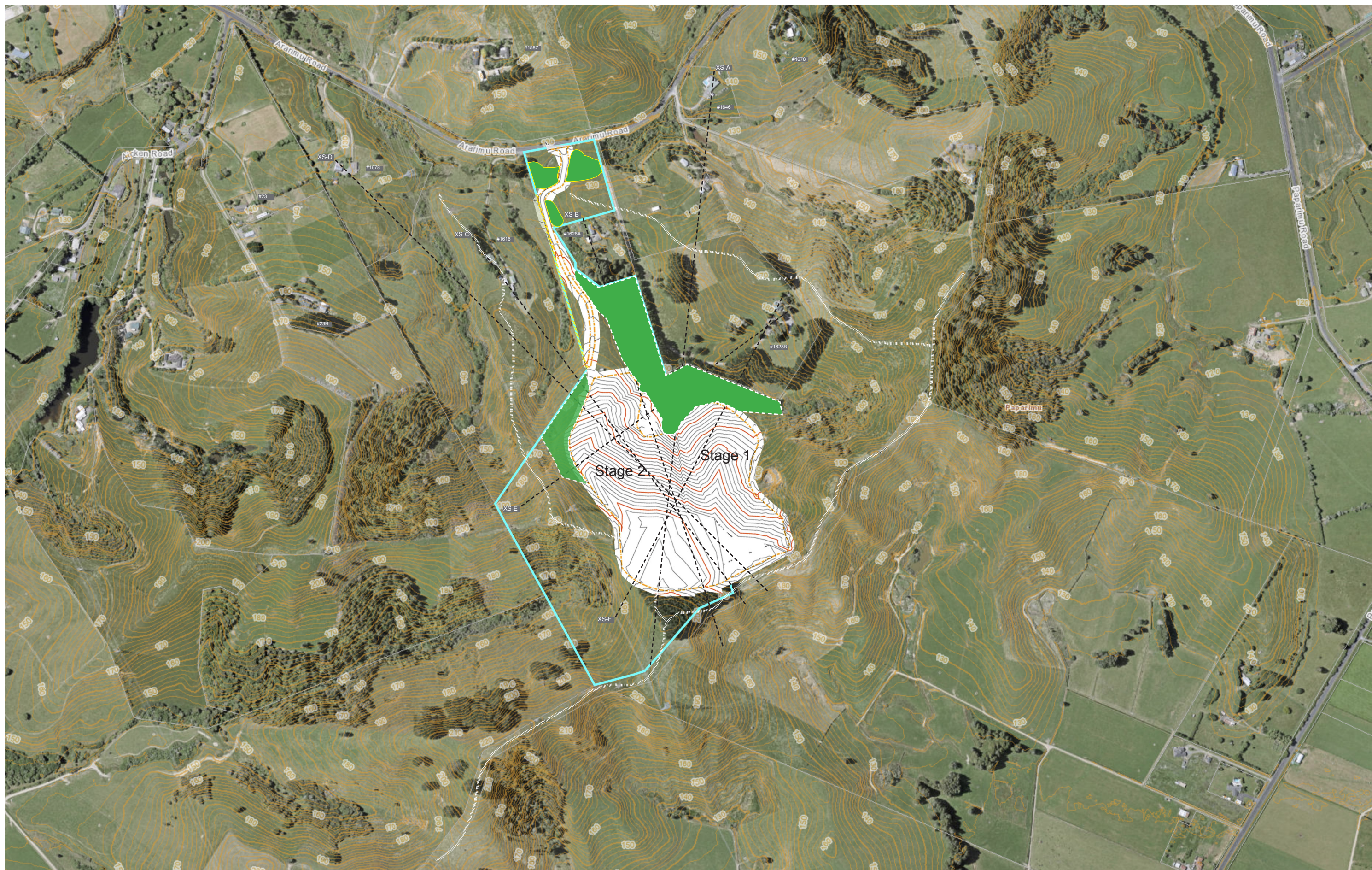


APPENDIX 1: Figures



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 1618 Ararimu Road, Papakura
 FIGURE 1 - Location of the Site
 23017_01_01





- Boundary
- - - - - Ridgeline
- Native revegetation planting
- - - - - Boundary screen planting

SB CIVIL LTD.
1618 Ararimu Road, Papakura
 FIGURE 2a: Proposal in Context
 23017_01_02





Dryland planting

Botanical name	Common name	%	Grade	Comments
<i>Coprosma robusta</i> *	karamū	25	50C	Throughout wetter areas – 1.4m
<i>Dacrycarpus dacrydiodes</i>	kahikatea	5	2L	Throughout wetter areas – 5.0m
<i>Kunzea robusta</i>	kānuka	30	50C	Throughout dry areas – 1.4m
<i>Leptospermum scoparium</i> *	mānuka	20	50C	Throughout wetter areas – 1.4
<i>Podocarpus totara</i>	tōtara	5	2L	Throughout dry areas – 5.0m
<i>Phormium tenax</i>	harakeke	15	50C	Throughout wetter areas – 1.4m

* Planting beneath powerlines to be restricted to these species

Riparian planting

Botanical name	Common name	% wetland, and channel edge	% riparian margins	Grade	Comments
<i>Austroderia fulvida</i>	toetoe	10			
<i>Carex geminata</i>	Rautahi	25		0.5L	Plant in wet ground @ 800mm ctrs
<i>Carex virgata</i>	Pūrei	25		0.5L	Plant in wet ground @ 800mm ctrs
<i>Cyperus ustulatus</i>	Upoko-Tangata	20		0.5L	Plant in wet ground @ 800mm ctrs
<i>Coprosma robusta</i>	karamu		10	50C	Plant in dry / intermittently wet ground @ 1.4m ctrs
<i>Hoheria populnea</i>	houhere		10	0.5L	Plant in dry ground @ 1.4m ctrs
<i>Leptospermum scoparium</i>	mānuka		20	50C	Plant in dry / intermittently wet ground @ 1.4m ctrs
<i>Melicytus ramiflorus</i>	māhoe		10	0.5L	Plant in dry / intermittently wet ground @ 1.4m ctrs
<i>Myrsine australis</i>	māpou		10	0.5L	Plant in dry ground @ 1.4m ctrs
<i>Phormium tenax</i>	harakeke	20		50C	Plant in dry / intermittently wet ground @ 1.4m ctrs.5m
<i>Veronica stricta</i>	koromiko		10	50C	Plant in dry ground @ 1.4m ctrs

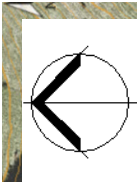
Riparian planting (enrichment planting (yr 3))

Botanical name	Common name	% riparian margins	Grade	Comments
<i>Dacrycarpus dacrydiodes</i>	kahikatea	10	1L	Plant @ 5.0m ctrs
<i>Podocarpus totara</i>	totara	10	1L	Plant @ 5.0m ctrs
<i>Schefflera digitata</i>	pate	20	1L	Plant @ 5.0m ctrs
<i>Podocarpus totara</i>	tōtara	10	2L	Plant @ 5.0m ctrs
<i>Schefflera digitata</i>	pate	10	1L	Plant @ 3.0m ctrs
<i>Sophora microphylla</i>	kowhai	10	2L	Plant @ 5.0m ctrs

Boundary screen planting

Botanical name	Common name	%	Grade	Comments
<i>Phormium tenax</i>	harakeke	50	1L	Plant @ 1.0m ctrs as double staggered row
<i>Pittosporum crassifolium</i>	karo	50	1L	Plant @ 1.4m ctrs as double staggered row





Dryland planting				
Botanical name	Common name	%	Grade	Comments
<i>Coprosma robusta</i> *	karamū	25	50C	Throughout wetter areas – 1.4m
<i>Dacrycarpus dacrydiodes</i>	kahikatea	5	2L	Throughout wetter areas – 5.0m
<i>Kunzea robusta</i>	kānuka	30	50C	Throughout dry areas – 1.4m
<i>Leptospermum scoparium</i> *	mānuka	20	50C	Throughout wetter areas – 1.4
<i>Podocarpus totara</i>	tōtara	5	2L	Throughout dry areas – 5.0m
<i>Phormium tenax</i>	harakeke	15	50C	Throughout wetter areas – 1.4m
* Planting beneath powerlines to be restricted to these species				

Riparian planting					
Botanical name	Common name	% wetland, and channel edge	% riparian margins	Grade	Comments
<i>Austroderia fulvida</i>	toetoe	10			
<i>Carex geminata</i>	Rautahi	25		0.5L	Plant in wet ground @ 800mm ctrs
<i>Carex virgata</i>	Pūrei	25		0.5L	Plant in wet ground @ 800mm ctrs
<i>Cyperus ustulatus</i>	Upoko-Tangata	20		0.5L	Plant in wet ground @ 800mm ctrs
<i>Coprosma robusta</i>	karamu		10	50C	Plant in dry / intermittently wet ground @ 1.4m ctrs
<i>Hoheria populnea</i>	houhere		10	0.5L	Plant in dry ground @ 1.4m ctrs
<i>Leptospermum scoparium</i>	mānuka		20	50C	Plant in dry / intermittently wet ground @ 1.4m ctrs
<i>Melicytus ramiflorus</i>	māhoe		10	0.5L	Plant in dry / intermittently wet ground @ 1.4m ctrs
<i>Myrsine australis</i>	māpou		10	0.5L	Plant in dry ground @ 1.4m ctrs
<i>Phormium tenax</i>	harakeke	20		50C	Plant in dry / intermittently wet ground @ 1.4m ctrs.5m
<i>Veronica stricta</i>	koromiko		10	50C	Plant in dry ground @ 1.4m ctrs

Riparian planting (enrichment planting (yr 3))				
Botanical name	Common name	% riparian margins	Grade	Comments
<i>Dacrycarpus dacrydiodes</i>	kahikaktea	10	1L	Plant @ 5.0m ctrs
<i>Podocarpus totara</i>	totara	10	1L	Plant @ 5.0m ctrs
<i>Schefflera digitata</i>	pate	20	1L	Plant @ 5.0m ctrs
<i>Podocarpus totara</i>	tōtara	10	2L	Plant @ 5.0m ctrs
<i>Schefflera digitata</i>	pate	10	1L	Plant @ 3.0m ctrs
<i>Sophora microphylla</i>	kowhai	10	2L	Plant @ 5.0m ctrs

Boundary screen planting				
Botanical name	Common name	%	Grade	Comments
<i>Phormium tenax</i>	harakeke	50	1L	Plant @ 1.0m ctrs as double staggered row
<i>Pittosporum crassifolium</i>	karo	50	1L	Plant @ 1.4m ctrs as double staggered row

Continued on Figure 2a

0m

15m

30m

Boundary

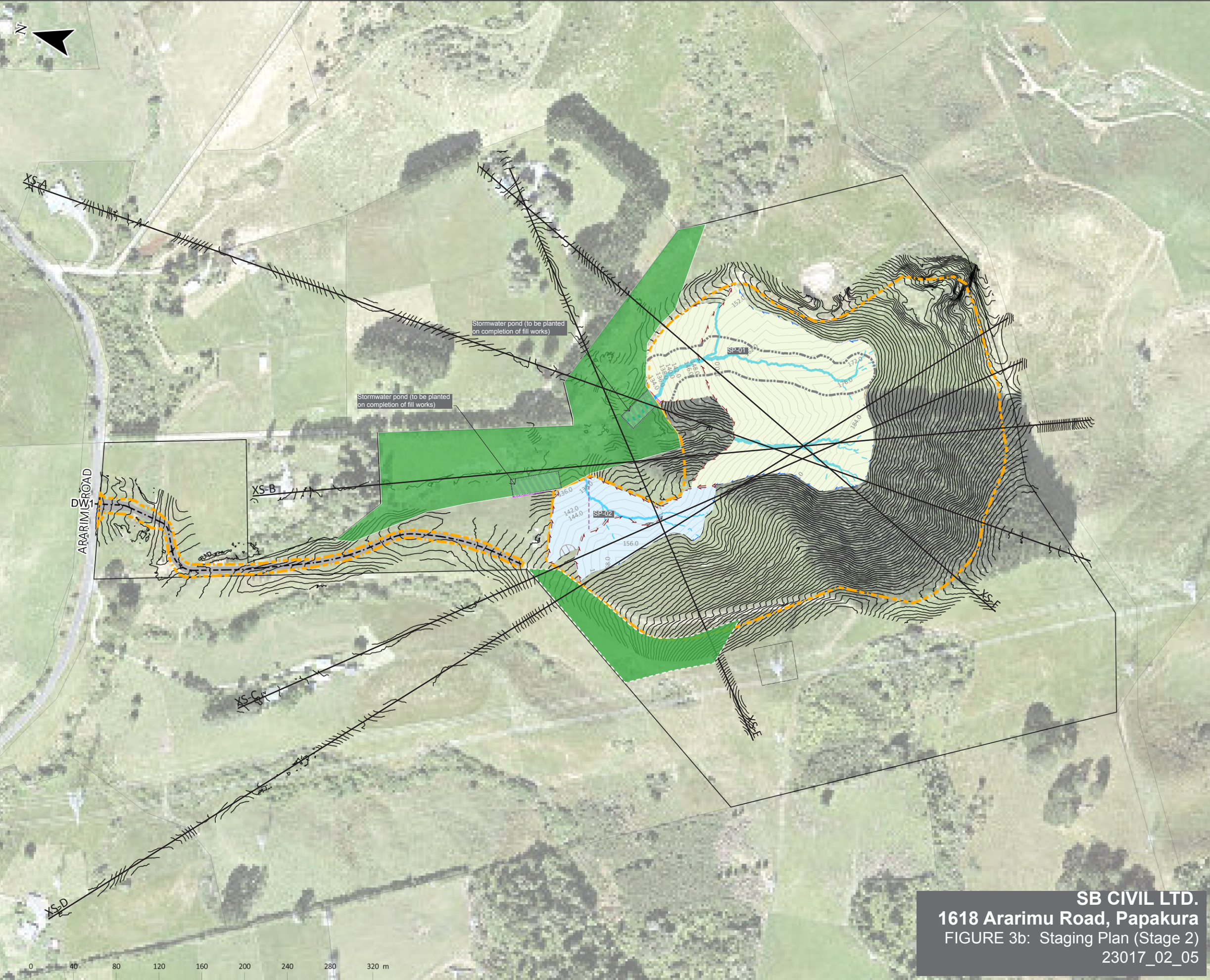
Access

Landscape mitigation planting:
Native revegetation planting (encompasses dryland and riparian planting areas.)

Boundary screen planting

Wetland and wetland buffer planting (refer to Ecology report)

Setbacks from powerlines to comply with Transpower's restrictions





- LEGEND:
- CONTOURS
 - KERB
 - RETAINING WALLS
 - ROADING LONGSECTIONS
 - BUILDINGS
 - PERMEABLE PAVEMENT
 - PRIVATE IMPERVIOUS
 - FOOTPATH
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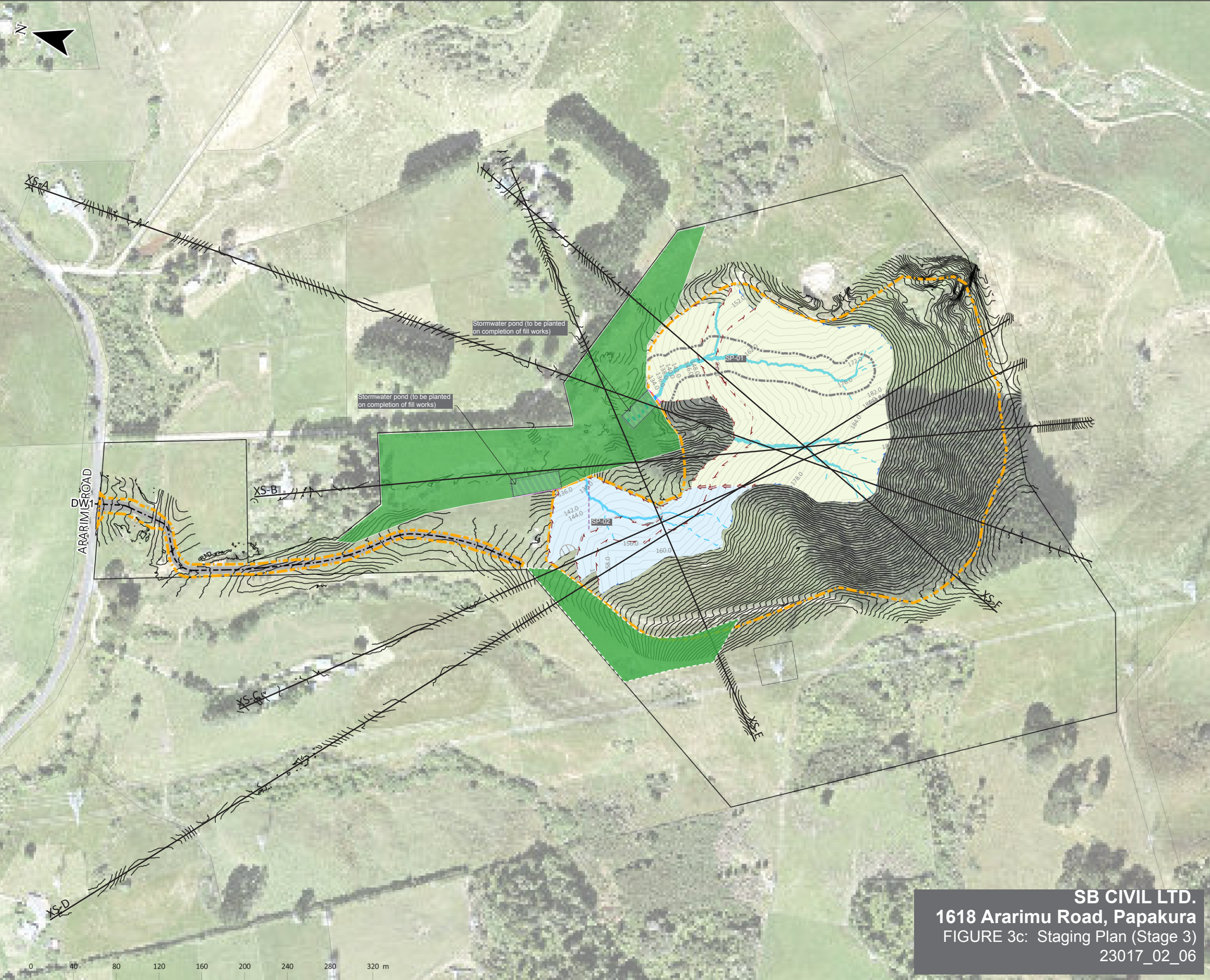
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4. LOT AREAS AND BOUNDARY DIMENSIONS ARE SUBJECT TO CONFIRMATION UPON FINAL LAND TRANSFER SURVEY.

IMAGERY CREDITS:
Auckland Council, CoLAB, LINZ, Auckland Council, CoLAB, Earthstar Geographics

SB CIVIL LTD.
1618 Ararimu Road, Papakura
FIGURE 3b: Staging Plan (Stage 2)
23017_02_05

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- LEGEND:
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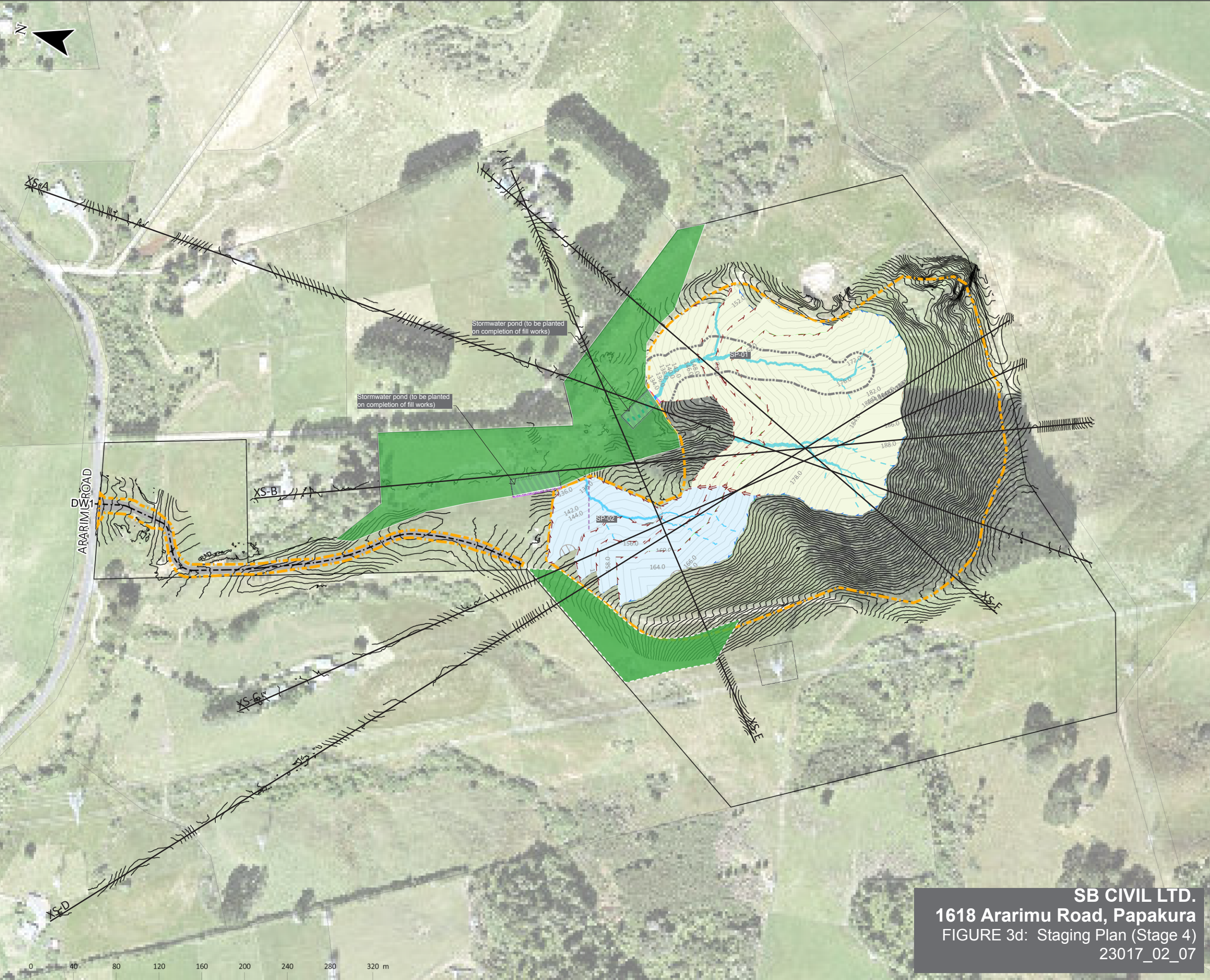
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IMAGERY CREDITS:
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1618 Ararimu Road, Papakura
FIGURE 3c: Staging Plan (Stage 3)
23017_02_06

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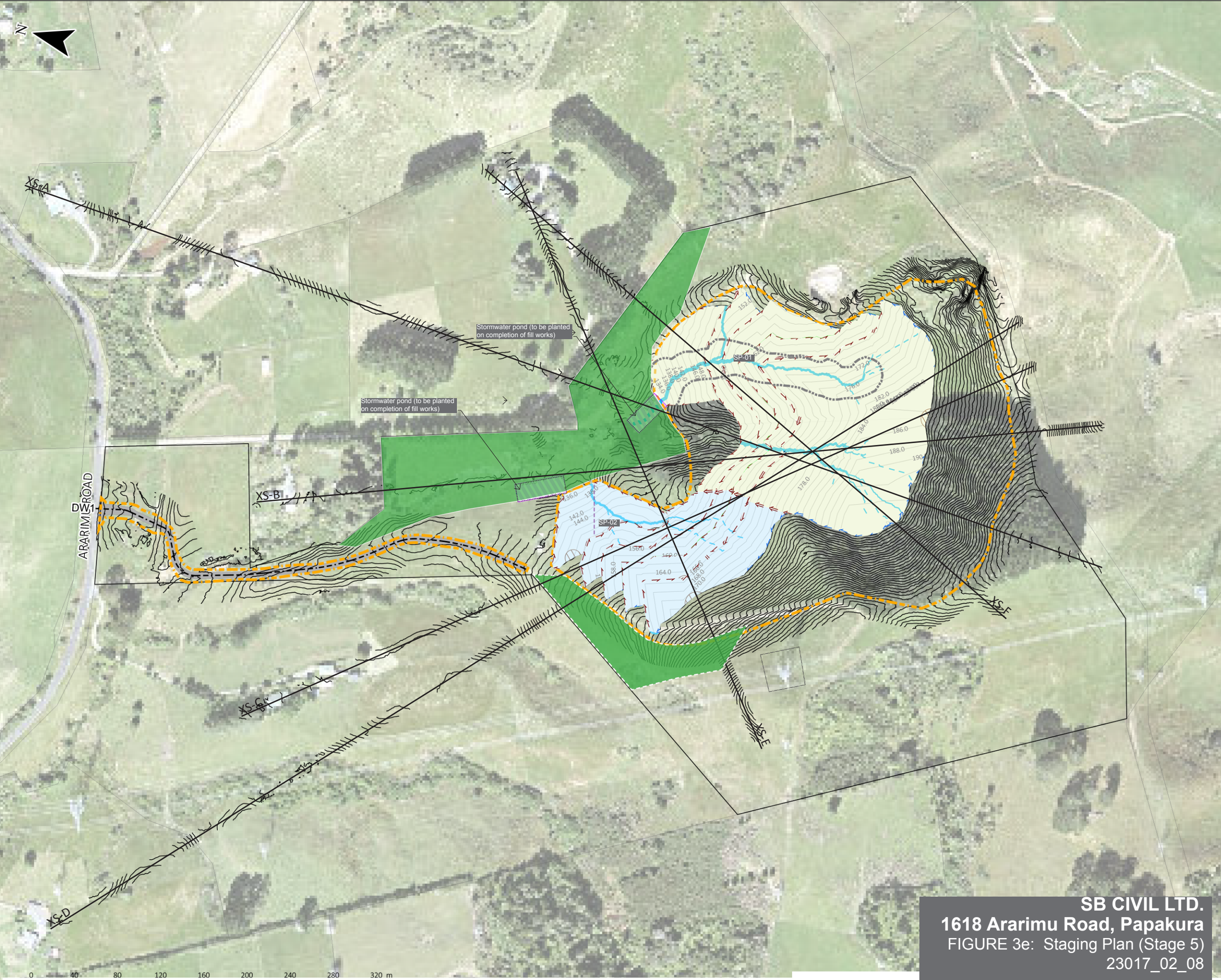
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4. LOT AREAS AND BOUNDARY DIMENSIONS ARE SUBJECT TO CONFIRMATION UPON FINAL LAND TRANSFER SURVEY.

IMAGERY CREDITS:
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1618 Ararimu Road, Papakura
FIGURE 3d: Staging Plan (Stage 4)
23017_02_07

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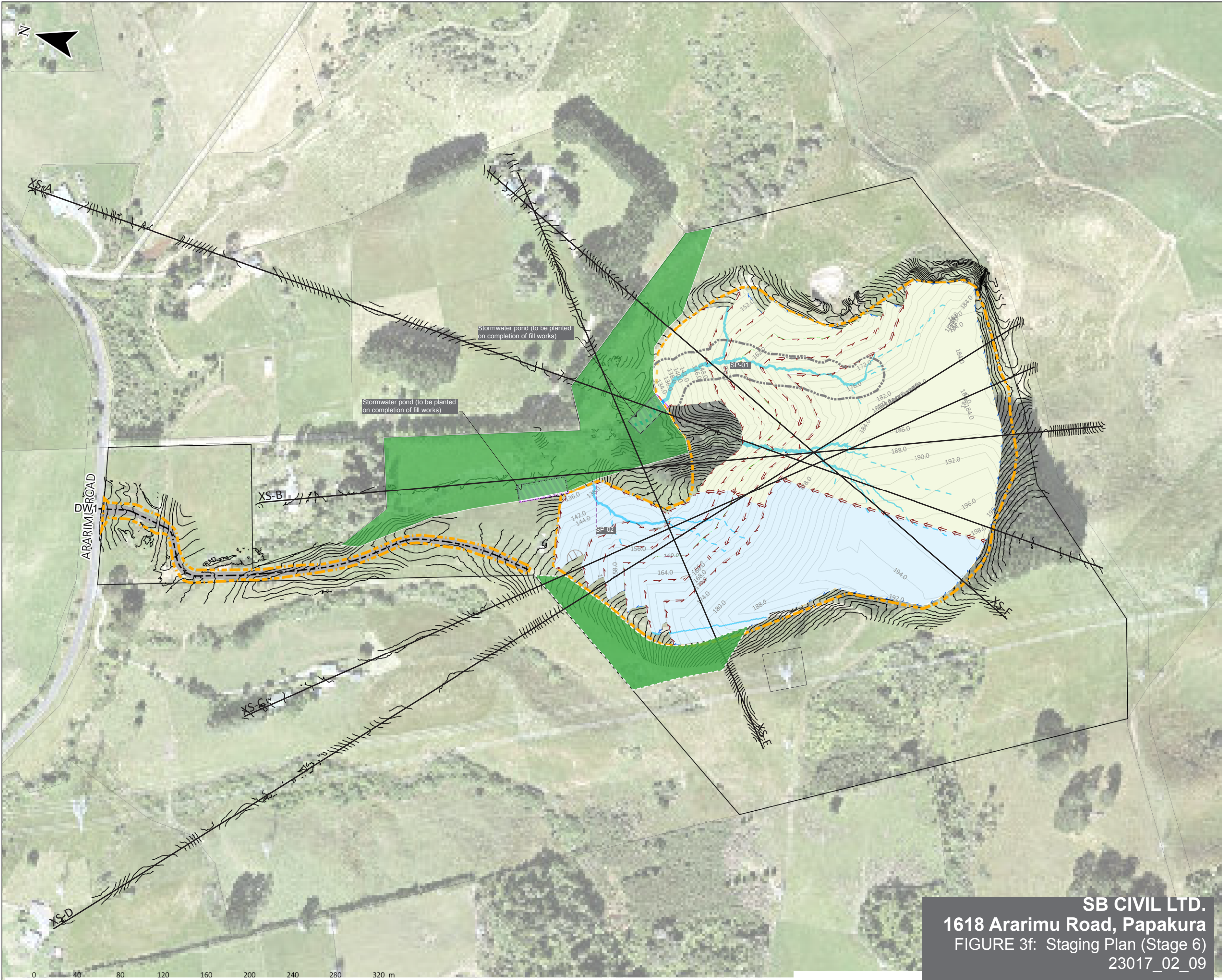
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1618 Ararimu Road, Papakura
FIGURE 3e: Staging Plan (Stage 5)
23017_02_08

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- LEGEND:
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 - NZ_Roads

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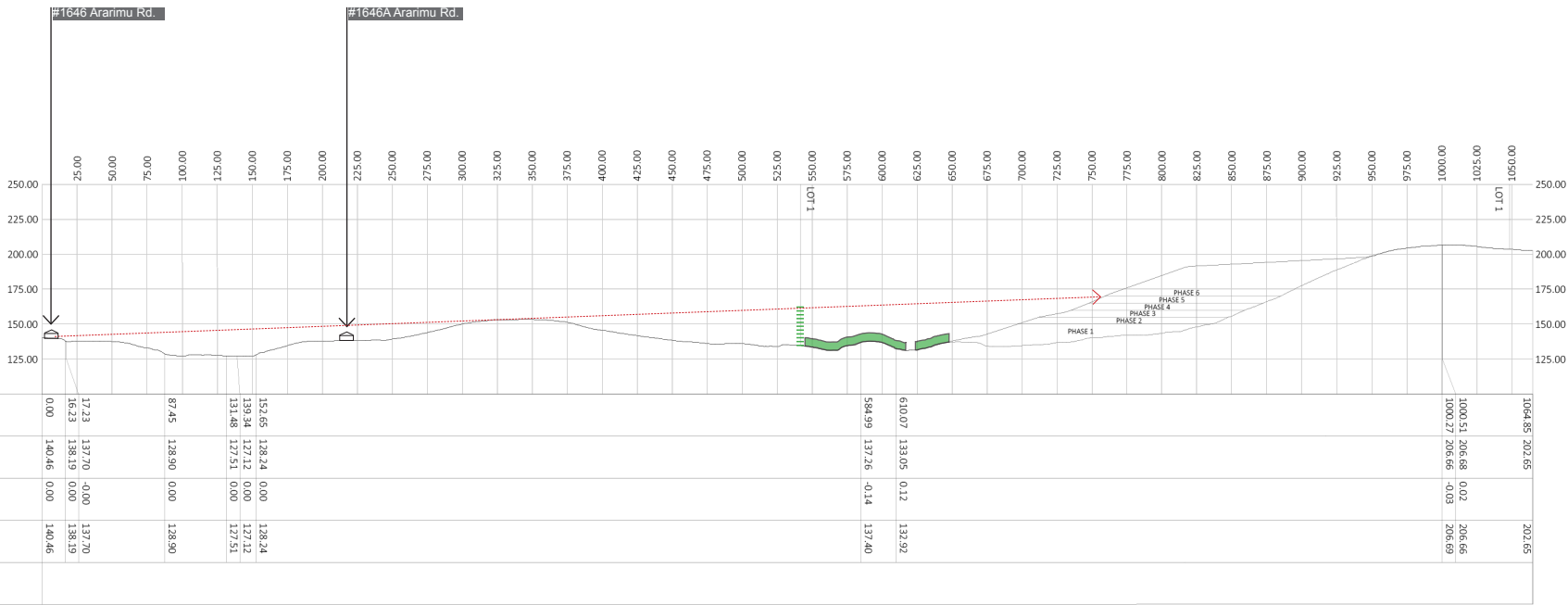
1. THE DRAWING IS IN NEW ZEALAND TRANSVERSE MERCATOR
2. WHERE HEIGHT TO BOUNDARY RELATIONSHIPS ARE REQUIRED, ADDITIONAL GROUND LEVELS MAY BE REQUIRED TO ENSURE COMPLIANCE.
3. CONTRACTOR IS REQUIRED TO LOCATE AND PROTECT ALL EXISTING SERVICES PRIOR TO COMMENCING ANY WORKS. NO EXCAVATION IS TO TAKE PLACE WITHOUT PERMISSION FROM THE RELEVANT SERVICE PROVIDER.
4. LOT AREAS AND BOUNDARY DIMENSIONS ARE SUBJECT TO CONFIRMATION UPON FINAL LAND TRANSFER SURVEY.

IMAGERY CREDITS:
Auckland Council, CoLAB, LINZ, Auckland Council, CoLAB, Earthstar Geographics

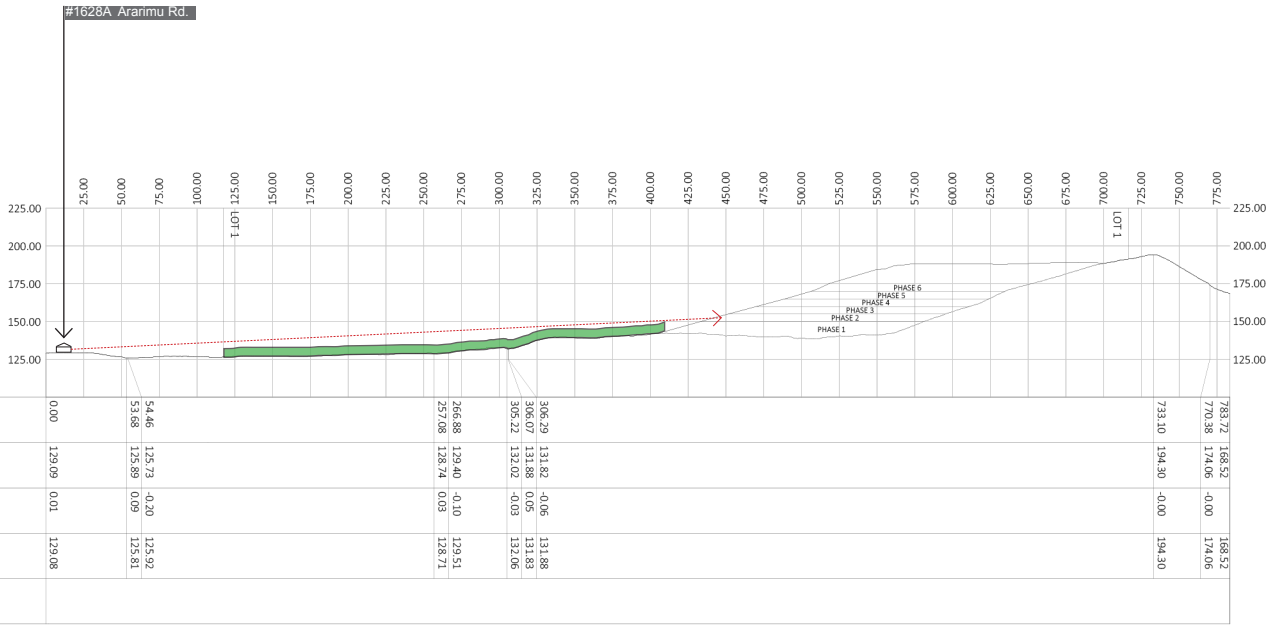
SB CIVIL LTD.
1618 Ararimu Road, Papakura
FIGURE 3f: Staging Plan (Stage 6)
23017_02_09

REV: DATE: DESCRIPTION: REV: REL: LOGO:		DES: REV: REL: SB		PROJECT:		TITLE:		STATUS:			
SCAN FOR 3D:		A 08/04/24 FOR S92 RESPONSE		CIVIX		1618 ARARIMU ROAD, PAKAKURA		GENERAL LAYOUT PLAN		FOR RESOURCE CONSENT	
										DRAWING NO:	
allsite.ai										20000	
										SCALE: SIZE: REVISION: DATE:	
										1:3,500 A3 A 08/04/24	
THIS DRAWING AND DESIGN IS THE PROPERTY OF CIVIX LIMITED. THIS DRAWING MAY NOT BE COPIED OR ALTERED WITHOUT WRITTEN APPROVAL FROM CIVIX LIMITED. NO LIABILITY IS ACCEPTED FOR UNAUTHORISED USE OF THIS DRAWING. LEVELS ARE IN TERMS OF LAND AND SURVEY DATUM. AREAS AND MEASUREMENTS ARE SUBJECT TO SURVEY											

LEGEND:
EXISTING SURFACE
PROPOSED SURFACE
NATIVE REVEGETATION PLANTING
EXISTING VEGETATION SCREEN



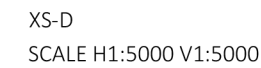
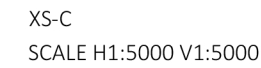
XS-A
SCALE H1:5000 V1:5000





XS-B
SCALE H1:5000 V1:5000

SB CIVIL LTD.
1618 Ararimu Road, Papakura
FIGURE 3g: Staging Plan Cross sections A and B
23017_02_10

EXISTING VEGETATION SCREEN



SB CIVIL LTD.
1618 Ararimu Road, Papakura
FIGURE 3h: Staging Plan Cross sections C and D
23017_02_11

-	-	-	DESIGNED:		PROJECT:	1618 ARARIMU ROAD, PAPA KURA	TITLE:	EARTHWORKS SECTIONS	STATUS:		
-	-	-	DF						FOR RESOURCE CONSENT		
-	-	-	DRAWN:						DRAWING NO:		
B	FOR S92 RESPONSE	DF	MO		PROJECT:	1618 ARARIMU ROAD, PAPA KURA	TITLE:	EARTHWORKS SECTIONS	32001		
A	FOR RESOURCE CONSENT	DF	RELEASED:						DRAWING NO:		
REVISION	AMENDMENT	BY	MO						SCALE & SIZE:		
									1:5,000	A3	B

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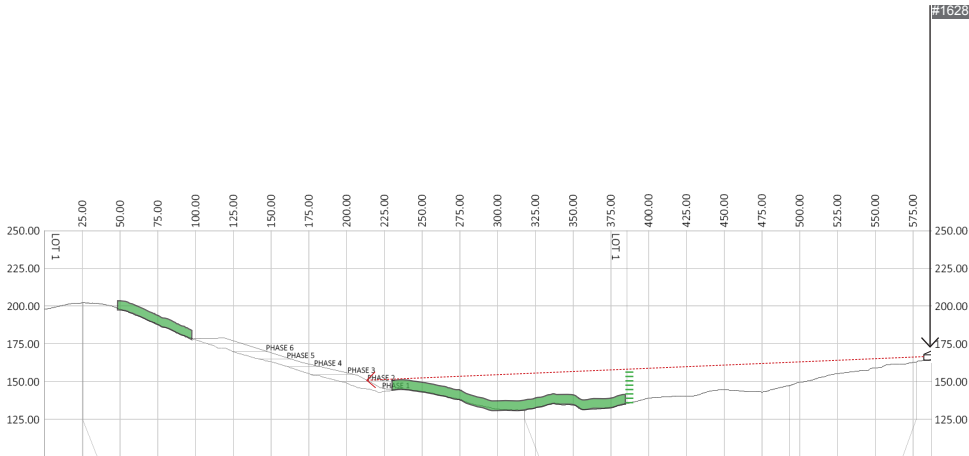
LEGEND:

EXISTING SURFACE

PROPOSED SURFACE

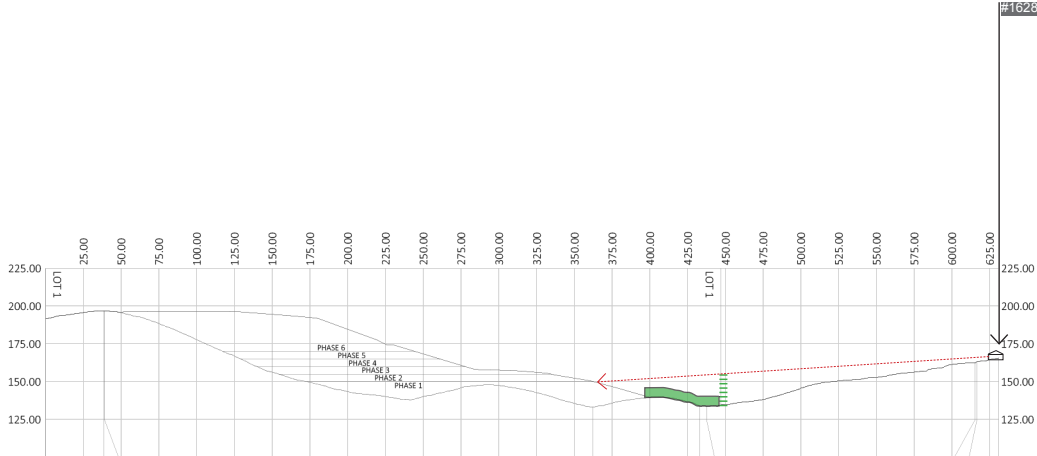
NATIVE REVEGETATION PLANTING

EXISTING VEGETATION SCREEN



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CUT(-) FILL(+) DEPTH						
EXISTING LEVEL						
DESCRIPTION						

XS-E
SCALE H1:5000 V1:5000



CHAINAGE	0.00	38.81	196.88	-0.01	196.89	
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CUT(-) FILL(+) DEPTH						
EXISTING LEVEL						
DESCRIPTION						

XS-F
SCALE H1:5000 V1:5000

SB CIVIL LTD.
1618 Ararimu Road, Papakura
FIGURE 3i: Staging Plan Cross sections E and F
23017_02_12

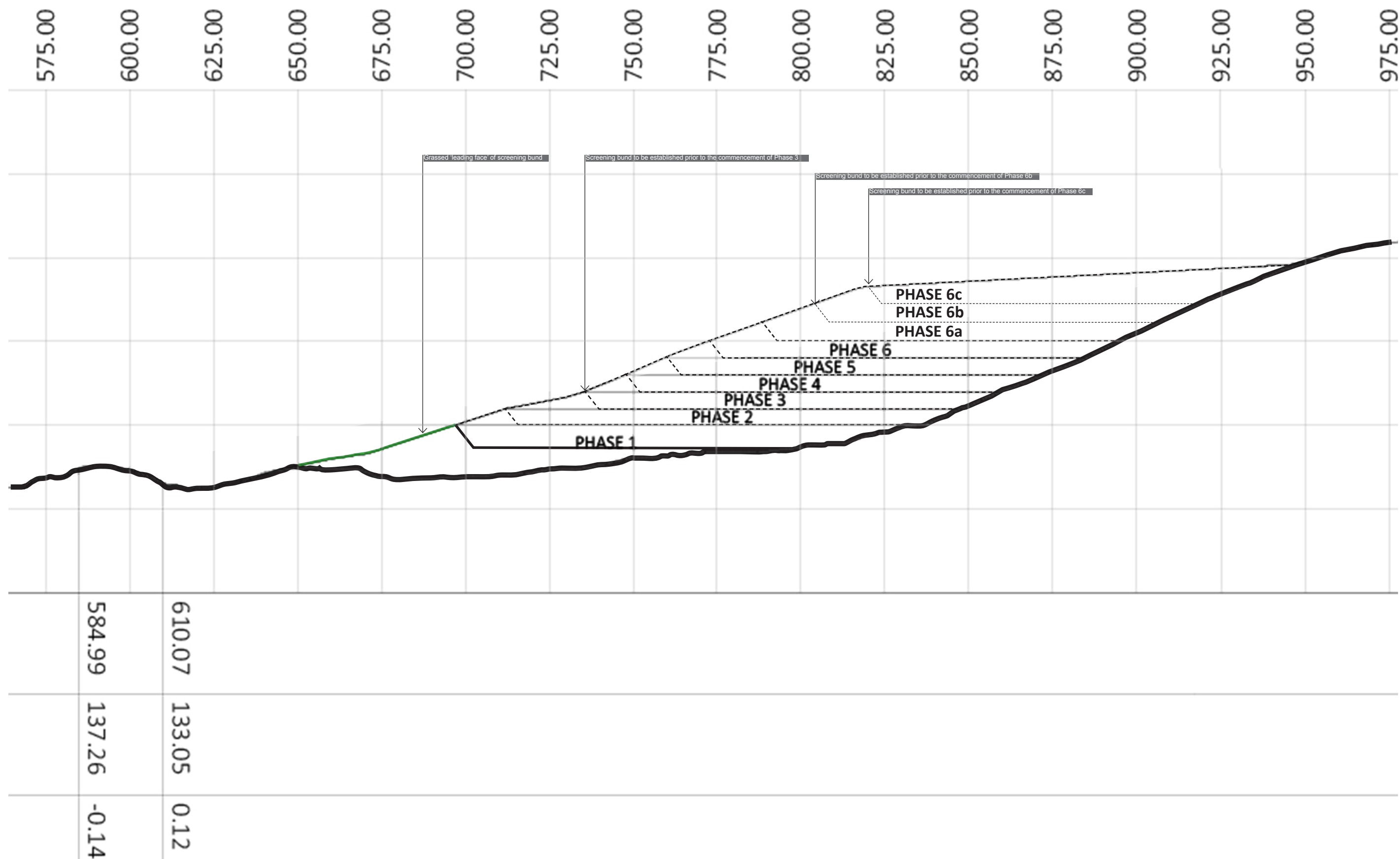
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A	FOR RESOURCE CONSENT	RELEASED:		
REVISION	AMENDMENT	BY	MO	

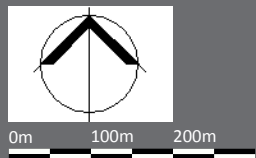
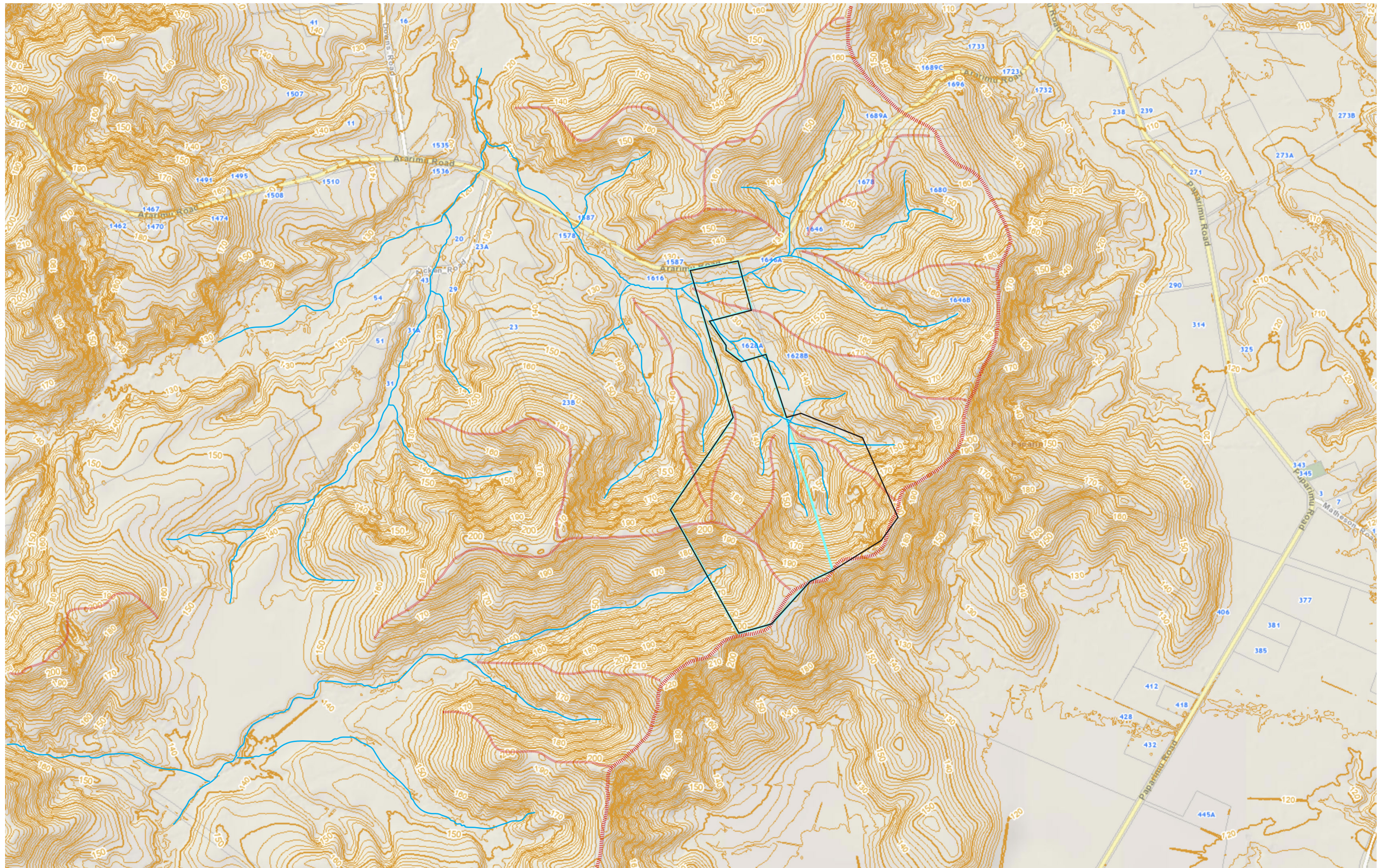


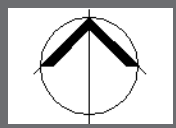
PROJECT:
1618 ARARIMU ROAD, PAKAKURA

TITLE:
EARTHWORKS SECTIONS

STATUS:	FOR RESOURCE CONSENT
DRAWING NO:	32002
SCALE & SIZE:	1:5,000 A3
REV:	B







VP3  Photo locations
 Site boundary

SB CIVIL LTD.
1618 Ararimu Road, Papakura
 FIGURE 5: Location of potentially affected properties and photo locations
 23017_01_11



Photo 1: View to north west from ridge at southern edge of the Site (pan 1 of 4)

Photo date - 23 March 2023

SB CIVIL LTD.
1618 Ararimu Road, Papakura
 Photos

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





Photo 2: View to north and north east t from ridge at southern edge of the Site (pan 2 of 4)

Photo date - 23 March 2023

SB CIVIL LTD.
1618 Ararimu Road, Papakura
 Photos

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





Photo 3: View to north east and east from ridge at southern edge of the Site (pan 3 of 4)

Photo date - 23 March 2023

SB CIVIL LTD.
1618 Ararimu Road, Papakura
Photos

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





Photo 4: View to east from ridge at southern edge of the Site (pan 4 of 4)

Photo date - 23 March 2023

SB CIVIL LTD.
1618 Ararimu Road, Papakura
Photos

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



Approximate extent of landfill



Photo 5: View south into Site from entrance

Photo date - 23 March 2023

SB CIVIL LTD.
1618 Ararimu Road, Papakura
Photos

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





Photo 6: north west along Eastern gully, showing Wetland 7

Photo date - 18 June 2023

SB CIVIL LTD.
1618 Ararimu Road, Papakura
Photos

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





Photo 7: View to Site from access to 1689A Ararimu Road

Photo date - 23 March 2023

SB CIVIL LTD.
1618 Ararimu Road, Papakura
Photos

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



Photo 8: View to to Site from accesses to #1646 Ararimu Road

Photo date - 23 March 2023

SB CIVIL LTD.
1618 Ararimu Road, Papakura
Photos

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



Photo 9: View to Site from Ararimu Road on boundary of #1616

Photo date - 23 March 2023

SB CIVIL LTD.
1618 Ararimu Road, Papakura
Photos

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





Photo 10: View to Site at entrance to #1578 Ararimu Road

Photo date - 23 March 2023

SB CIVIL LTD.
1618 Ararimu Road, Papakura
Photos

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



Photo 11: View to Site from entrance to 16 Downs Road

Photo date - 23 March 2023

SB CIVIL LTD.
1618 Ararimu Road, Papakura
Photos

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



Approximate extent of landfill

Photo 12: View to Site from Ararimu Road to the north west of #1462

Photo date - 23 March 2023

SB CIVIL LTD.
1618 Ararimu Road, Papakura
Photos

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





Photo 13: View to north west from southern Site boundary of the Eastern gully

Photo date - 18 June 2023

SB CIVIL LTD.
1618 Ararimu Road, Papakura
Photos

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

APPENDIX 2: Landscape and Visual Effects Assessment Methodology

Landscape and Visual Effects Assessment Methodology

Introduction

The landscape and visual effects assessment process provides a framework for assessing and identifying the nature and level of likely effects that may result from a proposed development. Such effects can occur in relation to changes to physical elements, the existing character of the landscape and the experience of it. In addition, the landscape assessment method may include an iterative design development processes which includes stakeholder involvement. The outcome of any assessment approach should seek to avoid, remedy or mitigate adverse effects. A separate assessment is required to assess changes in natural character in coastal areas and other waterbodies.

When undertaking landscape and visual effects assessments, it is important that a structured and consistent approach is used to ensure that findings are clear and objective. Judgement should always be based on skills and experience, and be supported by explicit evidence and reasoned argument.

While landscape and visual effects assessments are closely related, they form separate procedures. The assessment of the potential effect on the landscape forms the first step in this process and is carried out as an effect on an environmental resource (i.e. landscape elements, features and character). The assessment of visual effects considers how changes to the physical landscape affect the viewing audience. The types of effects can be summarised as follows:

Landscape effects:

Change in the physical landscape, which may change its characteristics or qualities.

Visual effects:

Change to views which may change the visual amenity experienced by people.

The policy context, existing landscape resource and locations from which a development or change is visible all inform the 'baseline' for landscape and visual effects assessments. To assess effects, the landscape must first be described, including an understanding of the key landscape characteristics and qualities. This process, known as landscape characterisation, is the basic tool for understanding landscape character and may involve subdividing the landscape into character areas or types. The condition of the landscape (i.e. the state of an individual area of landscape or landscape feature) should also be described alongside a judgement made on the value or importance of the potentially affected landscape.

This outline of the landscape and visual effects assessment methodology has been undertaken with reference to the Quality Planning Landscape Guidance Note¹ and its signposts to examples of best practice which include the UK guidelines for landscape and visual impact assessment² and Te Tangi a te Manu³.

Assessing landscape effects requires an understanding of the nature of the landscape resource and the magnitude of change which results from a proposed development to determine the overall level of landscape effects.

Nature of the landscape resource

Assessing the nature of the landscape resource considers both the susceptibility of an area of landscape to change and the value of the landscape. This will vary upon the following factors:

- Physical elements such as topography / hydrology / soils / vegetation;
- Existing land use;
- The pattern and scale of the landscape;
- Visual enclosure / openness of views and distribution of the viewing audience;

¹ <http://www.qualityplanning.org.nz/index.php/planning-tools/land/landscape>

² Landscape Institute and Institute of Environmental Management and Assessment (2013) Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3)

³ Te Tangi a te Manu (Aotearoa New Zealand Landscape Guidelines), NZILA July 2022.

- The zoning of the land and its associated anticipated level of development;
- The value or importance placed on the landscape, particularly those confirmed in statutory documents; and
- The scope for mitigation, appropriate to the existing landscape.

The susceptibility to change takes account of both the attributes of the receiving environment and the characteristics of the proposed development. It considers the ability of a specific type of change occurring without generating adverse effects and/or achievement of landscape planning policies and strategies.

Landscape value derives from the importance that people and communities, including tangata whenua, attach to particular landscapes and landscape attributes. This may include the classification of Outstanding Natural Landscape (RMA s.6(b)) based on important biophysical, sensory/ aesthetic and associative landscape attributes, which have potential to be affected by a proposed development.

Magnitude of Landscape Change

The magnitude of landscape change judges the amount of change that is likely to occur to existing areas of landscape, landscape features, or key landscape attributes. In undertaking this assessment, it is important that the size or scale of the change is considered within the geographical extent of the area influenced and the duration of change, including whether the change is reversible. In some situations, the loss /change or enhancement to existing landscape elements such as vegetation or earthworks should also be quantified.

When assessing the level of landscape effects, it is important to be clear about what factors have been considered when making professional judgements. This can include consideration of any benefits which result from a proposed development. Table 1 below helps to explain this process. The tabulating of effects is only intended to inform overall judgements.

Contributing factors		Higher	Lower
Nature of Landscape Resource	Susceptibility to change	The landscape context has limited existing landscape detractors which make it highly vulnerable to the type of change which would result from the proposed development.	The landscape context has many detractors and can easily accommodate the proposed development without undue consequences to landscape character.
	The value of the landscape	The landscape includes important biophysical, sensory and associative attributes. The landscape requires protection as a matter of national importance (ONF/L).	The landscape lacks any important biophysical, sensory or associative attributes. The landscape is of low or local importance.
Magnitude of Change	Size or scale	Total loss or addition of key features or elements. Major changes in the key characteristics of the landscape, including significant aesthetic or perceptual elements.	The majority of key features or elements are retained. Key characteristics of the landscape remain intact with limited aesthetic or perceptual change apparent.
	Geographical extent	Wider landscape scale.	Site scale, immediate setting.
	Duration and reversibility	Permanent. Long term (over 10 years).	Reversible. Short Term (0-5 years).

Table 1: Determining the level of landscape effects

Visual Effects

To assess the visual effects of a proposed development on a landscape, a visual baseline must first be defined. The visual 'baseline' forms a technical exercise which identifies the area where the development may be visible, the potential viewing audience, and the key representative public viewpoints from which visual effects are assessed.

The viewing audience comprises the individuals or groups of people occupying or using the properties, roads, footpaths and public open spaces that lie within the visual envelope or 'zone of visual influence' of the site and proposal. Where

possible, computer modelling can assist to determine the theoretical extent of visibility together with field work undertaken to confirm this. Where appropriate, key representative viewpoints should be agreed with the relevant local authority.

Nature of the viewing audience

The nature of the viewing audience is assessed in terms of the susceptibility of the viewing audience to change and the value attached to views. The susceptibility of the viewing audience is determined by assessing the occupation or activity of people experiencing the view at particular locations and the extent to which their interest or activity may be focused on views of the surrounding landscape. This relies on a landscape architect's judgement in respect of visual amenity and reaction of people who may be affected by a proposal. This should also recognise that people more susceptible to change generally include: residents at home, people engaged in outdoor recreation whose attention or interest is likely to be focused on the landscape and on particular views; visitors to heritage assets or other important visitor attractions; and communities where views contribute to the landscape setting.

The value or importance attached to particular views may be determined with respect to its popularity or numbers of people affected or reference to planning instruments such as viewshafts or view corridors.

Important viewpoints are also likely to appear in guide books or tourist maps and may include facilities provided for its enjoyment. There may also be references to this in literature or art, which also acknowledge a level of recognition and importance.

Magnitude of Visual Change

The assessment of visual effects also considers the potential magnitude of change which will result from views of a proposed development. This takes account of the size or scale of the effect, the geographical extent of views and the duration of visual change which may distinguish between temporary (often associated with construction) and permanent effects where relevant. Preparation of any simulations of visual change to assist this process should be guided by best practice as identified by the NZILA⁴.

When determining the overall level of visual effect, the nature of the viewing audience is considered together with the magnitude of change resulting from the proposed development. Table 2 has been prepared to help guide this process:

Contributing factors		Higher	Lower
Nature of Landscape Resource	Susceptibility to change	Views from dwellings and recreation areas where attention is typically focussed on the landscape..	Views from places of employment and other places where the focus is typically incidental to its landscape context. Views from transport corridors.
	The value of the landscape	Viewpoint is recognised by the community such as an important view shaft, identification on tourist maps or in art and literature. High visitor numbers.	Viewpoint is not typically recognised or valued by the community. Infrequent visitor numbers..
Magnitude of Change	Size or scale	Loss or addition of key features in the view. High degree of contrast with existing landscape elements (i.e. in terms of form scale, mass, line, height, colour and texture). Full view of the proposed development	Most key features of view retained. Low degree of contrast with existing landscape elements (i.e. in terms of form scale, mass, line, height, colour and texture). Glimpse / no view of the proposed development.
	Geographical extent	Front on views. Near distance views; Change visible across a wide area.	Oblique views. Long distance views. Small portion of change visible.
	Duration and reversibility	Permanent. Long term (over 15 years).	Transient / temporary. Short Term (0-5 years).

Nature of Effects

⁴ Best Practice Guide: Visual Simulations BPG 10.2, NZILA

In combination with assessing the level of effects, the landscape and visual effects assessment also considers the nature of effects in terms of whether this will be positive (beneficial) or negative (adverse) in the context within which it occurs. Neutral effects can also occur where landscape or visual change is benign.

It should also be noted that a change in a landscape does not, of itself, necessarily constitute an adverse landscape or visual effect. Landscape is dynamic and is constantly changing over time in both subtle and more dramatic transformational ways, these changes are both natural and human induced. What is important in managing landscape change is that adverse effects are avoided or sufficiently mitigated to ameliorate the effects of the change in land use. The aim is to provide a high amenity environment through appropriate design outcomes.

This assessment of the nature effects can be further guided by Table 3 set out below:

Nature of effect	Use and definition
Adverse (negative):	The proposed development would be out of scale with the landscape or at odds with the local pattern and landform which results in a reduction in landscape and / or visual amenity values
Neutral (benign):	The proposed development would complement (or blend in with) the scale, landform and pattern of the landscape maintaining existing landscape and / or visual amenity values
Beneficial (positive):	The proposed development would enhance the landscape and / or visual amenity through removal of restoration of existing degraded landscapes uses and / or addition of positive elements or features

Table 3: Determining the Nature of Effects

Cumulative Effects

During the scoping of an assessment, where appropriate, agreement should be reached with the relevant local authority as to the nature of cumulative effects to be assessed. This can include effects of the same type of development (e.g. wind farms) or the combined effect of all past, present and approved future development⁵ of varying types, taking account of both the permitted baseline and receiving environment. Cumulative effects can also be positive, negative or benign.

Cumulative Landscape Effects

Cumulative landscape effects can include additional or combined changes in components of the landscape and changes in the overall landscape character. The extent within which cumulative landscape effects are assessed can cover the entire landscape character area within which the proposal is located, or alternatively, the zone of visual influence from which the proposal can be observed.

Cumulative Visual Effects

Cumulative visual effects can occur in combination (seen together in the same view), in succession (where the observer needs to turn their head) or sequentially (with a time lapse between instances where proposals are visible when moving through a landscape). Further visualisations may be required to indicate the change in view compared with the appearance of the project on its own.

Determining the nature and level of cumulative landscape and visual effects should adopt the same approach as the project assessment in describing both the nature of the viewing audience and magnitude of change leading to a final judgement. Mitigation may require broader consideration which may extend beyond the geographical extent of the project being assessed.

Determining the Overall Level of Effects

The landscape and visual effects assessment concludes with an overall assessment of the likely level of landscape and visual effects. This step also takes account of the nature of effects and the effectiveness of any proposed mitigation.

⁵ The life of the statutory planning document or unimplemented resource consents

This step informs an overall judgement identifying what level of effects are likely to be generated as indicated in Table 4 below. This table which can be used to guide the level of landscape and visual effects uses an adapted seven-point scale derived from Te Tangi a te Manu (Aotearoa New Zealand Landscape Guidelines)

	Effect rating	Use and definition
More than minor	Very high	Total loss of key elements / features / characteristics, i.e. amounts to a complete change of landscape character
	High	Major modification or loss of most key elements / features / characteristics, i.e. little of the pre-development landscape character remains. Concise Oxford English Dictionary Definition High: adjective- Great in amount, value, size, or intensity
	Moderate to high	Modifications of several key elements / features / characteristics of the baseline, i.e. the pre-development landscape character remains evident but materially changed.
	Moderate	Partial loss of or modification to key elements / features / characteristics of the baseline, i.e. new elements may be prominent but not necessarily uncharacteristic within the receiving landscape. Concise Oxford English Dictionary Definition Moderate: adjective- average in amount, intensity, quality or degree
Minor	Moderate to low	Minor loss of or modification to one or more key elements / features / characteristics, i.e. new elements are not prominent or uncharacteristic within the receiving landscape.
	Low	No material loss of or modification to key elements / features / characteristics. i.e. modification or change is not uncharacteristic and absorbed within the receiving landscape. Concise Oxford English Dictionary Definition Low: adjective- 1. Below average in amount, extent, or intensity
Less than minor	Very low	Little or no loss of or modification to key elements/ features/ characteristics of the baseline, i.e. approximating a 'no change' situation.

Table 4: Determining the overall level of landscape and visual effects

Determination of “minor”

Decision makers determining whether a resource consent application should be notified must also assess whether the effect on a person is less than minor⁶ or an adverse effect on the environment is no more than minor⁷. Likewise, when assessing a non-complying activity, consent can only be granted if the s104D ‘gateway test’ is satisfied. This test requires the decision maker to be assured that the adverse effects of the activity on the environment will be ‘minor’ or not be contrary to the objectives and policies of the relevant planning documents.

These assessments will generally involve a broader consideration of the effects of the activity, beyond the landscape and visual effects. Through this broader consideration, guidance may be sought on whether the likely effects on the landscape resource or effects on a person are considered in relation to ‘minor’. It must also be stressed that more than minor effects on individual elements or viewpoints does not necessarily equate to more than minor effects on the wider landscape resource. In relation to this assessment, moderate-low level effects would generally equate to ‘minor’.

⁶ RMA, Section 95E

⁷ RMA Section 95D

APPENDIX 3: Effects ranking and descriptor

Determination of landscape quality		
Category	Criteria	Typical Example
High - Exceptional	Strong landscape structure, characteristics, patterns, balanced combination of landform and land cover	International or nationally recognised site – national park.
	Appropriate management for land use and land cover	
	Distinct features worthy of conservation	
	Sense of place	
	No detracting features	
High	Strong landscape structure, characteristics, patterns, balanced combination of landform and land cover	Nationally or regionally recognised site – national park
	Appropriate management for land use and land cover but potential scope for improvement.	
	Distinct features worthy of conservation	
	Sense of place	
	Occasional detracting features	
Good	Recognisable landscape structure, characteristics, patterns, balanced combination of landform and land cover still evident	Nationally, regionally recognised site all or great majority of area of local landscape importance
	Scope to improve management for land use and land cover	
	Some features worthy of conservation	
	Sense of place	
	Some detracting features	
Ordinary	Distinguishable landscape structure, characteristic patterns of landform and land cover often masked by landuse	
	Some features worthy of conservation	
	Some detracting features	
Poor	Weak landscape structure, characteristic patterns of landform and land cover often masked by landuse	
	Mixed land use evident	
	Lack of management and intervention has resulted in degradation	
	Frequent detracting features	
Very poor	Degraded landscape structure, characteristic patterns of landform and land cover are masked by landuse	
	Mixed land use dominates	
	Lack of management and intervention has resulted in degradation	
	Extensive detracting features	
Damaged landscape	Damaged landscape structure	
	Single land use	
	Disturbed or derelict land requires treatment	
	Detracting features dominate.	

Table 4 has been adapted for NZ conditions from an example of threshold criteria used by practitioners in the United Kingdom. The original document was prepared by Jeff Stevenson Associates and published in Guidelines for Landscape and Visual Assessment ("GLVIA") 3rd Edition. Landscape Institute (UK) and IEMA 2013.