

Decision on applications for resource consents under the Resource Management Act 1991



Discretionary activity

Application number: BUN60390224 (council reference)
LUC60390225 (s9 land use consent)
DIS60390226 (s15 discharge permit)

Applicant: Kiwi Property Holdings No.2 Limited

Site address: 133, 139, 155, 173 and 189 Fitzgerald Road, 120 Flanagan Road, 61 and 97 Brookfield Road, Drury

Legal description: Lot 2 DP 57466, Lot 3 DP 57466, Lot 4 DP 57466, Lot 5 DP 57466, Part Lot 2 DP 24854, Lot 1 DP 101367, Lot 1 DP 165262, 1/6 share Lot 10 DP 165262

Proposal:

To undertake land modification activities across the subject sites 133 Fitzgerald Road, 120 Flanagan Road, 61 and 97 Brookfield Road, Drury to prepare the land for a future development.

Resource consents are required for the following reasons:

Land use consent (s9) – LUC60390225

Auckland Unitary Plan (Operative in part)

Regional Land Use

Chapter E11 – Land Disturbance (Regional)

- Earthworks over an area of 64,495m² are proposed, and as the subject site is within the Sediment Control Protection Area consent is required as a **restricted discretionary activity** in accordance with E11.4.1 (A9).

District land use

Chapter E12 – Land Disturbance (District)

- Earthworks of a volume of approximately 9,500m³ of cut to fill (19,000m³) and 10,500 of imported fill, across an area of 48,700m² are proposed and consent is therefore required in accordance with E12.4.1 as **restricted discretionary activities** for earthworks greater than 2,500m² E12.4.1 (A6) and 2,500m³ E12.4.1 (A10).

Chapter E25 Noise and Vibration

- Construction noise is anticipated to exceed the permitted standards in E25.6.27 for up to two weeks by up to 7dB L_{Aeq} above the 70dB L_{Aeq} limit, and as such consent is required in as a **restricted discretionary activity** in accordance with E25.4.1 (A2) for activities that do not comply with a permitted activity standard.

Chapter E36 – Natural Hazards and Flooding

- Reducing the capacity of any part of an overland flow path requires consent as **restricted discretionary activities** in accordance with E36.4.1 (A41).

National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (“NES CS”)

- As a HAIL activity has occurred on the site, and no detailed site investigation has been provided that covers the whole site, consent is required as a **discretionary activity** in accordance with regulation 11 of the NES:CS.

Discharge of contaminants (s15) – DIS60390226

Auckland Unitary Plan – Operative in Part (AUP OP)

Regional Land Use

Chapter E30 – Contaminated Land

- As no detailed site investigation has been provided for the whole site, and the detailed site investigation for part of the land shows that contaminants exceed background levels, it cannot be demonstrated that the proposal meets the controlled activity standards, consent as a **discretionary activity** is therefore required in accordance with E30.4.1 (A7).

Decision

I have read the application, supporting documents, and the report and recommendations on the application for resource consent. I am satisfied that I have adequate information to consider the matters required by the Resource Management Act 1991 (RMA) and make a decision under delegated authority on the application.

Acting under delegated authority, under sections 104, 104D, and Part 2 of the RMA, the resource consent is **GRANTED**.

Reasons

The reasons for this decision are:

1. In accordance with an assessment under ss104(1)(a) and (ab) of the RMA, the actual and potential effects from the proposal will be acceptable as:
 - a. In the context of the receiving environment, (and the proposal to reinstate the land for rural production purposes should plan change 48 and the fast track consent not be approved), the land disturbance works (including finished levels) are of a nature and scale that are considered to be generally consistent with the underlying future urban zoning and the rural activities that occur in that zone, and are not anticipated to have any adverse character and amenity effects on the surrounding environment.
 - b. Land disturbance works can be managed in accordance with best practice land management to ensure that any effects associated with silt and sediment and geotechnical risk/stability are less than minor;
 - c. The land disturbance works can be carried out in a manner that will ensure that should the fast track consent and private plan change not be granted, that the productive capacity of the soils is managed appropriately to enable the reinstatement of the land for rural production activities in line with the underlying Future Urban Zoning, and as such any adverse effects on Prime Soils will be less than minor;
 - d. Site works can be managed in accordance with best practice to mitigate any risk of contaminant discharge on the environment, and ensure that any adverse effects on human health are less than minor;
 - e. Any adverse flooding effects associated with the increase in flows to the 1 %AEP are of scale and nature that any adverse effects are considered to be less than minor.
 - f. Noise and vibration associated with the earthworks can be managed effectively to ensure that any adverse effects are appropriately mitigated so that they are less than minor.
 - g. Having undertaken consultation with Mana Whenua, cultural monitoring conditions have been developed in partnership/consultation and are proposed by the applicant on an *Augier* basis.
 - h. In terms of positive effects, the land modification works will prepare the site for future development generally in a timely manner should the private plan change and fast track consent be granted, and this is considered to be an appropriate and efficient use of the land from a resource management perspective.
 - i. With reference to s104(1)(ab), there are no specific offsetting or environmental compensation measures proposed or agreed to by the applicant to ensure positive effects on the environment and/or within the relevant matters of discretion.
2. In accordance with an assessment under s104(1)(b) of the RMA, the proposal is consistent with the relevant statutory documents. In particular:
 - a. The proposal is considered to be consistent with the anticipated outcomes of the NES CS with the adverse effects of contamination able to be managed appropriately.

- b. The land disturbance activities can be managed to ensure that the outcomes of the proposal are consistent with the anticipated outcomes of the New Zealand Coastal Policy Statement and National Policy Statement for Freshwater Management and the management of effects on water bodies is appropriate;
- c. The proposed land disturbance works and management of the overland flow path are considered to be generally consistent with the direction of the Auckland Unitary Plan (Operative in Part) and in particular:
 - i. The proposal is considered to be acceptable in the context of the anticipated outcomes of the Plan for the Future Urban Zone (including in the event that the site requires reinstatement).
 - ii. Works can be managed in accordance with best practice land and contamination management to ensure that any adverse effects are acceptable and appropriate in the context of the site and surrounding environment.
 - iii. The proposal has demonstrated that appropriate provision has been made for the management of overland flows in association with the land disturbance works and is therefore consistent with the outcomes of the plan with respect to managing natural hazards across the region.
- 3. In accordance with an assessment under s104(1)(c) of the RMA, no other matters are considered relevant.
- 4. Having considered the nature and scale of the effects associated with the proposed discharges of contaminants to land, the discharges are considered appropriate with respect to s105 and in particular:
 - a. The applicant has given regard to the nature of potential discharges and sensitive areas of the receiving environment, and provided sufficient detail to confirm that the adverse effects can be managed so that they are acceptable;
 - b. The applicant has proposed best practice contamination land management to ensure that effects of contaminants are managed in the most efficient and effective way for the environment.
 - c. Given the nature of the proposal, no alternatives are practical.
- 5. There are no reasons with respect to the provisions of s107 that restrict the granting of consent.
- 6. In the context of these, restricted discretionary, and discretionary activity applications for land use and discharge consents, where the relevant objectives and policies and other relevant provisions in the relevant statutory documents were prepared having regard to Part 2 of the RMA, they capture all relevant planning considerations and contain a coherent set of policies designed to achieve clear environmental outcomes. They also provide a clear framework for assessing all relevant potential effects and there is no need to go beyond these provisions and look to Part 2 in making this decision as an assessment against Part 2 would not add anything to the evaluative exercise.

7. Overall, the proposal is considered to be generally consistent with the AUP (OP) and NES:CS, and the outcomes anticipated for Future Urban Zone, and management of land disturbance, contamination and natural hazards across the region. Any actual or potential adverse effects are assessed to be acceptable in the context of the receiving environment, and management techniques that form part of the application.

Furthermore, the application is considered to meet the relevant tests of the RMA, and can be considered to provide an efficient use of an existing land resource. For these reasons the proposal is considered to be acceptable from a resource management perspective.

Conditions

Under sections 108 and 108AA of the RMA, I recommend that these consents are subject to the following conditions:

General conditions

These conditions apply to all resource consents.

1. These consents shall be carried out in accordance with the documents and drawings and all supporting additional information submitted with the application, detailed below, and all referenced by the council as resource consent numbers LUC60390225 and DIS60390266 (BUN60390224).
 - Application Form and Assessment of Environmental Effects prepared by Andrew Miller of Barker and Associates dated 5 November 2021.

Report title and reference	Author	Rev	Dated
510611-000-MEM-CC-0003 Drury – Earthworks Resource Consent Report	Aurecon	6	1 Mar 2022
510611 Drury Centre Erosion and Sediment Control Adaptive Management Plan	Aurecon	1	1 Mar 2022
510611 Drury Centre Geotechnical Investigation Report	Aurecon	1	7 May 2021
510611-0100-REP-KF-0003 Detailed Site Investigation	Aurecon	2	20 May 2021
510611-0100-REP-KF-0004 Contaminated Site Management Plan (CSMP) and Remediation Action Plan (RAP)	Aurecon	5	23 Feb 2022
RP 0120210253 Drury Earthworks Noise and Vibration Assessment	Marshall Day	1	3 Jun 2021

Drawing title and reference	Author	Rev	Dated
510611-0100-Drg-Cc-0001 Existing Site Layout Plan	Aurecon	B	29 Oct 2021

510611-0100-Drg-Cc-0002 Cut And Fill Layout Plan	Aurecon	C	10 Dec 2021
510611-0100-Drg-Cc-0003 Design Contour Layout Plan	Aurecon	C	10 Dec 2021
510611-0100-Skt-Cc-0005 Erosion And Sediment Control Plan Starting Sequence Stage 1 Sheet 1 Of 3	Aurecon	B	15 Dec 2021
510611-0100-Skt-Cc-0006 Erosion And Sediment Control Plan Sequencing Second Stage Sheet 2 Of 3	Aurecon	B	15 Dec 2021
510611-0100-Skt-Cc-0007 Erosion And Sediment Control Plan Sequencing Final Stage Sheet 3 Of 3	Aurecon	B	15 Dec 2021
510611-0100-SKT-CC-0008 Erosion And Sediment Control Plan 'Close Up' Of Areas	Aurecon	A	15 Dec 2021
510611-0100-DRG-CC-0011 Erosion And Sediment Control Details Sheet 1	Aurecon	B	29 Oct 2021
510611-0100-DRG-CC-0012 Erosion And Sediment Control Details Sheet 2	Aurecon	B	29 Oct 2021
510611-0100-Drg-Cc-0021 Transmission Powerline Plan And Sections	Aurecon	C	13 Dec 2021
510611-0100-Drg-Ut-0030 Existing Utilities Layout Plan - Sheet 1	Aurecon	B	29 Oct 2021

Other additional information	Author	Rev	Dated
Letters and emails from Andrew Miller to Auckland Council	Barker and Associates	-	13.12.2021
			16.12.2021
			21.12.2021
			23.02.2022
			07.03.2022
			06.04.2022

Lapsing of Consents

2. Under section 125 of the RMA, these consents lapse five years after the date they is/are granted unless:
 - a. The consents are given effect to; or
 - b. The council extends the period after which the consents lapse.

Monitoring Deposit

3. The consent holder must pay the council an initial consent compliance monitoring charge of \$1,010 (inclusive of GST), plus any further monitoring charge or charges to recover the actual and reasonable costs incurred to ensure compliance with the conditions attached to these consents.

Advice note:

The initial monitoring deposit is to cover the cost of inspecting the site, carrying out tests, reviewing conditions, updating files, etc., all being work to ensure compliance with the resource consents. In order to recover actual and reasonable costs, monitoring of conditions, in excess of those covered by the deposit, must be charged at the relevant hourly rate applicable at the time. The consent holder will be advised of the further monitoring charge. Only after all conditions of the resource consents have been met, will the council issue a letter confirming compliance on request of the consent holder.

Consent Duration

4. LUC60390225 and DIS60390226 expire 5 years following the granting of consent unless it has lapsed, been surrendered or been cancelled at an earlier date pursuant to the RMA.

Pre-commencement Conditions

Pre-commencement Meeting

5. Prior to the commencement of earthworks on the site, the consent holder must hold a pre-start meeting that:
 - a. is located on the subject site;
 - b. is scheduled not less than ten days before the anticipated commencement of earthworks;
 - c. includes representation from the Council;
 - d. includes representation from the contractors who will undertake the works;
 - e. includes Mana Whenua representation to carry out cultural ceremonies and cultural inductions required by the consent conditions and as agreed to between mana whenua and the consent holder;
6. All parties, including representatives of Mana whenua must be given at least ten working days' notice by the consent holder of the meeting and reasonable endeavours must be made to accommodate their attendance.
7. The meeting must discuss the cultural induction and monitoring conditions, the erosion and sediment control measures, cut and fill management plan, scope of works through the various stages, and must ensure all relevant parties are aware of and familiar with the necessary conditions of this consent.

8. The following information must be made available at the pre-start meeting:
- a. Timeframes for key stages of the works authorised under this consent;
 - b. Resource consent conditions;
 - c. Contaminated Site Management Plan and Remedial Action Plan
 - d. Finalised Traffic Management Plan
 - e. The certified Erosion and Sediment Control Plan
 - f. Adaptive Management Plan; and,
 - g. Chemical Treatment Management Plan.
 - h. Any cultural monitoring and induction material supplied to the consent holder by or on behalf of Mana Whenua.

Advice Notes:

To arrange the pre-start meeting please contact Council on monitoring@aucklandcouncilgovt.nz, or 09 301 01 01. The conditions of consent should be discussed at this meeting. All additional information required by Council should be provided 2 days prior to the meeting.

This condition does not limit the consent holder from beginning initial site works such as tree removal and the construction of erosion and sediment control measures.

The consent holder has engaged with Mana Whenua and agreed to cultural initiating and monitoring as part of their partnership. The consent holder is encouraged to facilitate the necessary arrangements to enable Mana Whenua representatives to be party to the pre-commencement meeting.

Management Plans

Traffic Management Plan to be provided

9. Prior to the commencement of bulk earthworks on the subject site, a finalised Traffic Management Plan (TMP) must be prepared, and address the control of the movement of earthmoving vehicles to and from the site. The TMP must be submitted to the council. No bulk earthworks on the subject site may commence until confirmation is provided from the council that the TMP is satisfactory, and any required measures referred to in that plan have been put in place.

Advice Note:

The Traffic Management Plan should contain sufficient detail to address the following matters: the safe and efficient movement of the travelling public, restrict hours of vehicle movements to protect amenity of surrounding environment, heavy vehicle routes and access.

It is the responsibility of the applicant to seek approval for the Traffic Management Plan from Auckland Transport. Please contact Auckland Transport on (09) 355 3553 and review www.beforeudig.co.nz before you begin works.

This condition does not limit the consent holder from beginning initial site works such as tree removal and the construction of erosion and sediment control measures.

Construction Management Plan to be provided

10. Prior to commencement of earthwork on the site, the Consent Holder shall submit a Construction Management Plan (CMP) for the approval of the Auckland Council.

The CMP shall include specific details with regard to avoiding, remedying or mitigating adverse effects on the environment of Earthworks and the management of all works associated with each stage of development as follows:

- a) Details of the Site Manager, including 24-hour contact details (telephone, email and postal address);
- b) The location of a large notice board on the site visible from a public place that clearly identifies the name, telephone number, email and address for service of the Site Manager;
- c) Measures to maintain the site in a tidy condition in terms of the storage and disposal of rubbish, unloading and storage of building materials and similar construction activities;
- d) Measures to stockpile unearthed tree stumps/logs, preferably away from public roads and reserves, and their disposal;
- e) Ingress and egress to and from the site for vehicles and construction machinery during the Works period;
- f) Proposed hours of work on the site (noting the working hours authorised by this consent); and
- g) Procedures for ensuring that the owners and/ or occupants in the immediate vicinity of the construction area are given prior notice of the commencement of construction activities and are informed about the expected duration of works and potential effects of the works (e.g. noise associated with construction activities).
- h) Temporary protection measures that will be installed to ensure that there shall be no damage to public roads, footpaths, berms, kerbs, drains, reserves or other public assets as a result of the earthworks and construction activities.
- i) Any other details of the intended works programme.

The approved CMP shall be implemented for the duration of the entire works period.

Advice Note:

It is acknowledged that the Construction Management Plan and Traffic Management Plan may be contained in the same or separate documents. This condition does not limit the consent holder from beginning initial site works such as tree removal and the construction of erosion and sediment control measures.

Construction noise and vibration management plan to be provided

11. The consent holder must submit a Construction Noise and Vibration Management Plan (CNVMP) based on the acoustic assessment dated 03/06/2021 by Marshall Day Acoustics (referenced in Condition 1) for certification prior to the commencement of works. The objective of the CNVMP is to set out the Best Practicable Option for the management of noise and vibration effects. The CNVMP must be prepared with reference to Annex E, New Zealand Standard NZS6803:1999 Acoustics – Construction noise and Appendix B in DIN 4150-3:1999 Structural Vibration – Part 3 Effects of vibration on structures and, must address the following matters: -
 - a. Details for providing written advice of the works to affected receivers
 - b. Neighbour consultation and engagement procedures including identification of any special needs of those receivers
 - c. The construction noise and vibration limits for the project
 - d. A brief description of the construction methodologies and equipment to be used
 - e. The limitations on working days and hours
 - f. Requirements and specifications for acoustically effective barriers on and/or within site boundaries and additional localised screening around individual noisy machinery
 - g. Minimum separation distances for compliance (mitigated and unmitigated)
 - h. A procedure for responding to any noise and vibration complaints
 - i. A procedure for noise and vibration monitoring during the works and applying any corrective actions that may be required
 - j. Details of practicable noise and vibration mitigation measures to be applied during the various stages of the construction period
 - k. Procedures for ensuring that all contractors and operators on site are aware of the requirement to minimise noise and vibration effects as far as practicable on neighbouring sites.
12. The CNVMP must be submitted to the Council for certification a minimum of ten (10) working days prior to commencement of the bulk earthworks. Bulk earthworks shall not commence until certification has been received in writing from the Council.

Advice Note:

This condition does not limit the consent holder from beginning initial site works such as tree removal and the construction of erosion and sediment control measures.

13. Any subsequent amendment of the certified CNVMP which comprises material changes to proposed construction methodology shall also be prepared by a suitably qualified and experienced acoustic specialist. Amendments shall be tracked and the revised CNVMP submitted to the Council for certification.
14. The construction works shall be carried out in accordance with the certified CNVMP and a copy of the certified CNVMP shall be made available to authorised Council staff during monitoring inspections.

Chemical Treatment Management Plan to be provided

15. Prior to the commencement of land disturbance at the site, a Chemical Treatment Management Plan (CTMP) must be prepared by an appropriately qualified and experienced person and submitted to Council. No earthworks activity on the subject site(s) must commence until written certification is provided by Council that the CTMP meets the requirements of GD05, and the measures referred to in that plan for the site's impoundment devices have been put in place.

The CTMP must include as a minimum:

- a. Specific design details of a chemical treatment system based on a rainfall activated methodology for any impoundment devices (including the Sediment Retention Ponds and Decanting Earth Bunds);
- b. Monitoring, maintenance (including post storm) and contingency programme (including a record sheet);
- c. Details of optimum dosage (including assumptions);
- d. Results of initial chemical treatment trial;
- e. A spill contingency plan; and
- f. Details of the person or bodies that will hold responsibility for long term operation and maintenance of the chemical treatment system and the organisational structure which will support this system.

Advice Note:

In the event that minor amendments to the CTMP are required, any such amendments must be limited to the scope of this consent. Any amendments which affect the performance of the CTMP may require an application to be made in accordance with section 127 of the RMA. Any minor amendments must be provided to Council prior to implementation to confirm that they are within the scope of this consent. For the avoidance of doubt, chemical treatment is required for any impoundment devices except for silt fences.

This condition does not limit the consent holder from beginning initial site works such as tree removal and the construction of erosion and sediment control measures.

Finalised Contaminated Site Management Plan and Remediation Action Plan to be provided

16. The consent holder must submit a final for construction Contaminated Site Management Plan (CSMP) and Remediation Action Plan (RAP) to the council for certification when notifying council of the start of bulk earthworks. The CSMP and RAP must be substantially in accordance with the CSMP and RAP by Aurecon, dated Feb 2022 (rev5) and contain the key project details, a process for dealing with unexpected encounter with a landfill, and points of contact. Any variations to the CSMP/RAP shall be submitted to the Council for certification that it appropriately manages actual and potential soil contamination effects and is within the scope of this consent.

Settlement Monitoring Plan to be provided

17. A Settlement Monitoring Plan (SETMP) for consolidation settlement due to placement of fill must be submitted to the Council for review and approval prior to commencement of bulk earthworks occurring onsite. The SETMP must be prepared by a suitably qualified geotechnical engineering professional. Any proposed amendment to the SETMP must also be submitted to the Council for written certification. The SETMP must include, as a minimum, the following information:
 - a. A monitoring location plan showing the layout and type of all settlement monitoring stations within the fill areas.
 - b. The timing and frequency of survey of the settlement monitoring stations.
 - c. Define the settlement criteria to be met on completion of earthworks.

Noise Conditions

Construction noise limits

18. Except where provided for in the finalised CNVMP, construction works on the site must be designed and conducted to not exceed the noise standards specified in AUP (OP) Table E25.6.27.1 subject to E25.6.27 (4) where levels are decreased by 5 dB, when measured 1m from the most exposed façade of any building that is occupied during the works. Noise from construction work activity must be measured and assessed in accordance with the requirements of New Zealand Standard NZS 6803:1999 Acoustics – Construction noise.

Neighbour consultation

19. The consent holder must advise in writing the occupants of all properties located within 50m of the extent of the earthworks. The advice must be provided no less than two (2) weeks prior to the bulk earthworks commencing. The written advice must set out an overview of the works, the expected duration and working hours, mitigation measures, expected levels of noise and vibration, a contact phone number for any complaints, and the name of the site manager.

Advice Note:

This condition does not limit the consent holder from beginning initial site works such as tree removal and the construction of erosion and sediment control measures.

Reinstatement of site / Prime Soils Conditions

Reinstatement condition

20. Should the bulk earthworks progress across the site, but private plan change 48 and the fast-track application not be approved, then the consent holder must reinstate the land for rural production purposes.

Advice Note:

This condition is offered by the applicant on an Augier Basis

21. To protect the prime soils (in the event should the site require reinstatement) the works shall be carried out to ensure that:
 - a. Where possible, handling of topsoil is undertaken in dry conditions to minimise soil compaction
 - b. Stockpile areas for topsoil and subsoil materials are separately designated.
22. Should the reinstatement of the site be required, the consent holder must submit a soil restoration methodology by a suitably qualified soil expert. The reinstatement of the site for rural production purposes required by the conditions of this consent must be carried out in accordance with this methodology.

Cultural Conditions

Cultural conditions are offered by the applicant on an Augier basis.

Cultural inductions

23. Prior to the commencement of earthworks (or at other times to be agreed with representatives), cultural inductions must be provided to the workers involved in earthworks/topsoil stripping associated with this application, including those involved in the establishment of earthworks controls. A register of the cultural inductions undertaken must be collated and provided to the Council and respective Mana Whenua representatives upon request.
24. The consent holder must provide a minimum of ten working days' notice to representatives of Mana Whenua of the dates for any cultural inductions.

Advice Note:

"Earthworks" includes both topsoil stripping and/or bulk earthworks

Cultural monitoring – Mana Whenua

25. Provision must be made by the consent holder for Mana Whenua representatives to undertake cultural monitoring, karakia, placement of tohu, and/or other such cultural ceremonies on the site, associated with the following milestones:
 - a. Pre-start meeting;
 - b. Prior to construction of earthworks control measures;
 - c. Prior to commencement of bulk earthworks;
 - d. During bulk earthworks when deemed appropriate by Mana Whenua;
 - e. Immediately prior to completion of bulk earthworks across the site; and
 - f. At other times as agreed between the consent holder and Mana Whenua.
26. The consent holder shall provide a minimum of ten working days' notice to representatives of Mana Whenua of the anticipated dates for the above milestones.

Advice Note:

The consent holder will engage with Mana Whenua on an on-going basis to agree on appropriate timing and staging of any additional cultural monitoring, karakia and/or other cultural ceremonies as guided by Mana Whenua. This may also include the placement of tohu or other items on the site as guided by Mana Whenua.

Engineering Conditions**Ensure stability of the site/neighbouring sites.**

27. All earthworks must be managed to ensure that they do not lead to any uncontrolled instability or collapse affecting either the site or adversely affecting any neighbouring properties. In the event that such collapse or instability does occur, it must immediately be rectified.

Geotechnical supervision and certification

28. All earthworks and any slope stability works must be supervised by a suitably qualified geotechnical engineering professional (who is familiar with Geotechnical Investigation Report by Aurecon (reference: 510611, revision: 1, dated: 7 May 2021)). In supervising the works, the suitably qualified geotechnical engineering professional must ensure that they are constructed and otherwise completed in accordance with the engineering plans and geotechnical recommendations, relevant engineering codes of practice and detailed plans forming part of the application. The supervising engineer's contact details must be provided in writing to the Council at least two weeks prior to bulk earthworks commencing on site.
29. All earthworks must follow the recommendations of Geotechnical Investigation Report by Aurecon (reference: 510611, revision: 1, dated: 7 May 2021). The consent holder must provide verification in writing from an engineer to the Council, that the recommendations of the Geotechnical Investigation Report by Aurecon (reference: 510611, revision: 1, dated: 7 May 2021) have been implemented on site. This must be provided no later than 20 working days after works have been completed. All details in the written statement must be to the satisfaction of the Council.
30. Prior to the commencement of any cut and filling works 3 m in height or greater, the consent holder must provide detailed slope stability analyses to the Council. Detailed slope stability analyses must be undertaken by a qualified geotechnical engineering professional. This must be required to ensure stability is maintained throughout the civil works stage of the development. The detailed slope stability analyses must be provided in writing to the satisfaction of the Council at least two weeks prior to any cut and filling works 3 m in height or greater commencing on site.
31. Within 20 working days from the completion of earthworks, a Geotechnical Completion Report (including a statement of professional opinion for the suitability of the site for the intended development) signed by the Chartered Professional Geotechnical Engineer or Chartered Engineering Geologist must be provided to the Council. The Geotechnical Completion Report must include (but not to be limited to):

- a. Earthworks operations (e.g. fill compaction, geogrid reinforced slopes, shear keys etc)
- b. Testing
- c. Inspections
- d. Results of settlement monitoring

The Geotechnical Completion Report must also confirm soil expansivity, foundation requirements, settlement criteria defined in the SETMP (as required by the conditions of this consent) has been met and the works are undertaken in accordance with Conditions of this consent. The Geotechnical Completion Report must be to the satisfaction of the Council.

Earthworks Specific Conditions (LUC60390225)

Adaptive Management Plan

- 32. All earthworks must be undertaken in accordance with the Adaptive Management Plan as referred to in the conditions of this consent, and any subsequent revisions of the Adaptive Management Plan certified by the Council.
- 33. All monitoring and management measures as detailed within the approved Adaptive Management Plan and any subsequent revisions, must be implemented on an ongoing basis throughout the duration of all earthworks activities.
- 34. An earthworks area that has been stabilised as a result of a trigger level exceedance as defined by and required by the Adaptive Management Plan must only be re-opened on the written approval of the Council.
- 35. Any proposed revisions to the Adaptive Management Plan must be submitted to the Council for written approval prior to formalising and implementing the revised Adaptive Management Plan.
- 36. Council may request that the AMP be updated to address inefficiencies or significant adverse effects identified during monitoring. If a request is made, the revised plan must be submitted to the Council within 14 working days of the request for written approval prior to implementation.

Advice Note:

The AMP is a live document and updates are expected to address unforeseen circumstances or changes in the earthworks methodology as the site responds through its adaptive monitoring regime to ensure sediment discharges are minimised and the potential for significant adverse effects are avoided. The consent holder must make available, all monitoring results and data as required by the AMP within 48 hours upon request from Auckland Council.

Earthworks specific conditions

- 37. Earthworks on the site must be staged in accordance with the application documents such that no more than 14 hectares are disturbed at any one time, and must be sequenced to

minimise the discharge of sediments to groundwater or surface water in accordance with the approved finalised Site-Specific Erosion and Sediment Control Plan.

38. For the avoidance of doubt, the site's Decanting Earth Bund (No 3) located in Catchment A3 must be designed to ensure that it:
 - a. has a three percent storage capacity, being at least 3m³ of impoundment volume for every 100m² of contributing catchment;
 - b. has an 10% volume Forebay with a geotextile cover spreader bar;
 - c. must not be used to treat any areas larger than 3,000m²;
 - d. be constructed to a 3:1 to 5:1 length-to-width ratio and have a rectangular shape;
 - e. have a T/bar floating decant which decants at a rate of 3 litres per second, per hectare of contributing catchment.
39. The Sediment Retention Pond, Decanting Earth Bunds and any other authorised impoundment devices utilised as part of the earthworks, must be chemically treated in accordance with the approved Chemical Treatment Management Plan (CTMP).
40. Erosion and sediment control measures must be constructed and maintained in general accordance with Auckland Council Guidance Document GD05; *Erosion and Sediment Control Guidelines for Land Disturbing Activities in the Auckland Region* and any amendments to this document, except where a higher standard is detailed in the documents referred to in conditions above, in which case the higher standard shall apply.
41. Within ten (10) working days following implementation and completion of the specific erosion and sediment control works required by the conditions of this consent, and prior to the commencement of bulk earthworks activity on the subject site, a suitably qualified and experienced person must provide written certification to Council that the erosion and sediment control measures have been constructed and completed in accordance with the approved finalised Site-Specific Erosion and Sediment Control Plan and Chemical Treatment Management Plan. Written certification must be in the form of a report or any other form acceptable to the Council.

Certified controls must include the Sediment Retention Ponds, Decanting Earth Bunds Clean Water Diversions, Dirty Water Diversions, Super Silt Fences, Silt Fences and stabilised entranceways. Information supplied if applicable, must include:

- a. Contributing catchment area;
 - b. Size of structure (dimensions of structure);
 - c. Position of inlets/outlets; and
 - d. Stabilisation of the structure.
42. The operational effectiveness and efficiency of all erosion and sediment control measures specifically required as a condition of resource or by the Erosion and Sediment Control Plan must be maintained throughout the duration of earthworks activity, or until the site is permanently stabilised against erosion.

Advice Note:

As a guide, maintenance of the erosion and sediment control measures must seek to ensure that the accumulated sediment be removed from sediment retention devices prior to reaching 20% of its storage capacity. Sediment removed from treatment devices must be placed on stable ground where it cannot re-enter the device or be washed into any watercourse.

Where maintenance work is required to ensure the effectiveness of these erosion and sediment control measures, the record should include the date, time and details on the nature of any maintenance. The site manager (or equivalent) will need to ensure regular inspections of these measures, and particularly within 24 hours after any rainstorm event. Where it is identified that erosion and sediment control measure have become ineffective and maintenance is required, Council must be contacted (email monitoring@aucklandcouncil.govt.nz).

43. All perimeter controls must be operational before earthworks commence. All 'clean water' runoff from stabilised surfaces including catchment areas above the site itself must be diverted away from earthworks areas via a stabilised system, so as to prevent surface erosion.
44. Earthworks must be managed to minimise the deposition of earth, mud, dirt or other debris on any road or footpath resulting from earthworks activity on the subject site. In the event that such deposition does occur, it must immediately be removed. In no instance must roads or footpaths be washed down with water without appropriate erosion and sediment control measures in place to prevent contamination of the storm water drainage system, watercourses or receiving waters.

Advice Note:

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

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

In no circumstances should the washing of deposited materials into drains be advised or otherwise condoned. It is recommended that you discuss any potential measures with Council's monitoring officer who may be able to provide further guidance on the most appropriate approach to take. Please contact Council for more details. Alternatively, please refer to Auckland Council Guideline Document 005, Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region, June 2016 (GD05).

45. Prior to the removal of any erosion and sediment control devices specifically required as a condition of resource consent, or diversion of completed areas to a Clean Water Diversion,

written certification must be provided to Council by a suitably qualified and experienced person to confirm that all areas of bare earth have been permanently stabilised against erosion in accordance with GD05.

46. The site must be progressively stabilised against erosion at all stages of the earthworks activity and must be sequenced to minimise the discharge of contaminants to groundwater or surface water in accordance with the approved Erosion and Sediment Control Plan.

Advice Note:

Earthworks should be progressively stabilised against erosion during all stages of the earthwork activity. Interim stabilisation measures may include:

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

It is recommended that you discuss any potential measures with Council's monitoring officer who may be able to provide further guidance on the most appropriate approach to take. Please contact Council for more details. Alternatively, please refer to Auckland Council Guideline Document 005, Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region, June 2016 (GD05).

47. Immediately upon abandonment or completion of earthworks on the subject site all areas of bare earth associated with the works must be permanently stabilised against erosion.

Advice Note:

Measures may include:

- *The use of mulching or natural fibre matting.*
- *Top-soiling, grassing and mulching of otherwise bare areas of earth.*
- *Aggregate or vegetative cover that has obtained a density of more than 80% of a normal pasture sward.*

The on-going monitoring of these measures is the responsibility of the consent holder. It is recommended that you discuss any potential measures with Council's monitoring officer who will guide you on the most appropriate approach to take. Please contact Council for more details. Alternatively, please refer to Auckland Council Guidance Document 005, Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region, June 2016 (GD05).

Seasonal Restriction

48. No earthworks on the subject site must be undertaken between 01 May and 30 September in any year, without the submission of a 'Request for winter works' for approval to Council. All requests must be renewed annually prior to the approval expiring and no works must occur until written approval has been received from Council. All winter works will be re-assessed monthly or as required to ensure that adverse effects are not occurring in the

receiving environment and approval may be revoked by Council upon written notice to the consent holder

Contamination Conditions LUC60390225 (NES:CS) and DIS60390226 (AUP:OP)

Notification of works

49. The Team Leader, Compliance Monitoring, Auckland Council (the council), must be informed, in writing, at least ten working days prior to the start date of the bulk earthworks authorised by this consent.

Management of contamination

50. The consent holder must engage a Suitably Qualified and Experienced soil contamination Practitioner (SQEP) to oversee any works involving the disturbance of potentially contaminated material and ensure the procedures and control measures in the certified CSMP/RAP are adhered to throughout these works.
51. All land disturbance works must be managed to minimise any discharge of debris, soil, silt, sediment or sediment-laden water from beyond the subject site to either land, stormwater drainage systems, watercourses or receiving waters.
52. Erosion and sediment control must be installed in accordance with the Auckland Council Guideline Document Titled Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region (GD005) (2016). The excavation areas shall be dampened during the day to suppress the generation of dust during the works. Filter cloths or cover mats shall be installed over the stormwater cesspits in the vicinity of the excavation areas. Vehicles will be inspected prior to leaving works area and wheels brushed/cleaned, as required, to avoid the potential for sediment to leave the site on vehicle tyres and enter the existing stormwater system.

Advice Note:

Discharge from the site includes the disposal of water (e.g., perched groundwater or collected stormwater) from excavations.

53. Any perched groundwater, or surface water encountered within the excavation area requiring removal must be considered potentially contaminated, and shall either be:
 - a. disposed of by a licenced liquid waste contractor; or
 - b. pumped to sewer, providing the relevant permits are obtained; or
 - c. discharged to the site's stormwater system or surface waters provided testing demonstrates compliance with the Australian and New Zealand Environment Conservation Council (ANZECC) Guidelines for Fresh and Marine Water Quality (2000) for protection of 95 percent of freshwater species and the water is free from petroleum hydrocarbons.
 - d. Discharged back to the surface of groundwater, subject to meeting relevant quality standards.

54. The soil disturbance activities shall not result in any airborne and deposited dust beyond the property boundary of the site that is determined to be noxious, objectionable or offensive. Good practice measures, such as those described the Good Practice Guide for Assessing and Managing Dust, Ministry for the Environment (2016) shall always be adopted.
55. Excavated impacted soil from remediation area shall be disposed of at a disposal site, which is authorised by Council to accept the relevant levels of contamination. Copies of the disposal dockets shall be retained and included into the Site Validation Report required by the conditions of this consent.
56. In the event of the accidental discovery of contamination during earthworks which has not been previously identified, including asbestos material, the consent holder shall immediately cease the works in the vicinity of the contamination, notify the Council, and engage a Suitably Qualified and Experienced soil contamination Practitioner (SQEP) to assess the situation (including possible sampling and testing) and decide on the best option for managing the material.
57. The consent holder shall ensure that the contamination level of any imported is suitable for its intended future use as demonstrated by a SQEP.

Reporting

58. The consent holder shall, within three months following the completion of earthworks, provide to the satisfaction of the council a Site Validation Report.
59. The Site Validation Report shall include, but not be limited to:
 - a. confirmation of performance of earthworks being conducted in accordance with approved plans and consent conditions
 - b. details and results of any testing and/or monitoring undertaken including tests of imported fill and validation samples, landfill gas monitoring and interpretation of the results in the context of the NESCS and AUP OP Permitted Activity Soil Acceptance Criteria and other applicable guidelines/standards
 - c. any unexpected contamination identified during excavation and response actions
 - d. volume of soil excavated from the site and disposed off-site and landfill receipts
 - e. any complaints received and response during remediation works
 - f. a long-term monitoring and management plan, if required.

Advice notes

1. *Any reference to number of days within this decision refers to working days as defined in s2 of the RMA.*
2. *For the purpose of compliance with the conditions of consent, “the council” refers to the council’s monitoring inspector unless otherwise specified. Please email monitoring@aucklandcouncil.govt.nz to identify your allocated officer.*
3. *For more information on the resource consent process with Auckland Council see the council’s website: www.aucklandcouncil.govt.nz. General information on resource*

consents, including making an application to vary or cancel consent conditions can be found on the Ministry for the Environment's website: www.mfe.govt.nz.

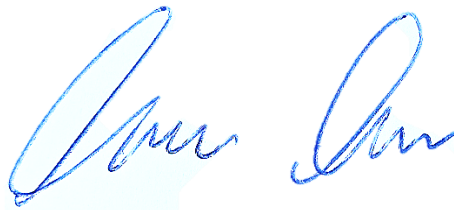
4. *If you disagree with any of the above conditions, and/or disagree with the additional charges relating to the processing of the application(s), you have a right of objection pursuant to sections 357A and/or 357B of the Resource Management Act 1991. Any objection must be made in writing to the council within 15 working days of your receipt of this decision (for s357A) or receipt of the council invoice (for s357B).*
5. *The consent holder is responsible for obtaining all other necessary consents, permits, and licences, including those under the Building Act 2004, and the Heritage New Zealand Pouhere Taonga Act 2014. This consent does not remove the need to comply with all other applicable Acts (including the Property Law Act 2007 and the Health and Safety at Work Act 2015), regulations, relevant Bylaws, and rules of law. This consent does not constitute building consent approval. Please check whether a building consent is required under the Building Act 2004.*

Delegated decision maker:

Name: Jonathan Begg

Title: Principal Project Lead, Resource Consents

Signed:



Date: 13 April 2022

Resource Consent Notice of Works Starting

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

Site address:				
AREA (please tick the box)	Auckland CBD ☐	Auckland Isthmus ☐	Hauraki Gulf Islands ☐	Waitakere ☐
Manukau ☐	Rodney ☐	North Shore ☐	Papakura ☐	Franklin ☐
Resource consent number:			Associated building consent:	
Expected start date of work:			Expected duration of work:	

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

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

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

SAVE \$\$\$ minimise monitoring costs!

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

REV	DATE	REVISION DETAILS	APPROVED	SCALE	SIZE	FOR CONSENT NOT FOR CONSTRUCTION	PROJECT	KIWI PROPERTY - DRURY										
C	2021-12-10	ISSUED FOR CONSENT: REVISED CONTENT	W.NEL	AS SHOWN	A1	DATE 2021-12-10 W.NEL	TITLE	COVER SHEET										
B	2021-10-29	ISSUED FOR CONSENT	W.NEL	DRAWN D.SANTOS														
A	2021-05-21	ISSUED FOR CONSENT	W.NEL	DESIGNED J.A.VORSTER														
				REVIEWED														
				J.A.VORSTER														
								DRAWING No.	PROJECT No.	AREA	TYPE	DISC	NUMBER	REV				
								510611	-	0100	-	DRG	-	CC	-	0000	-	C

- NOTE:
1. BOUNDARY POSITIONS, ROAD WIDTHS AND AREAS ARE INDICATIVE ONLY AND ARE SUBJECT TO SURVEY.
 2. THIS PLAN HAS BEEN PREPARED FOR THE PURPOSE OF FIRST STAGE APPROVAL UNDER THE COVID RECOVERY (FAST TRACK CONSENTING) ACT 2020.
 3. HORIZONTAL DATUM: NZGD2000 MOUNT EDEN.

AREAS:
DEVELOPMENT AREA = 261 870 m²

LEGEND

- CADASTRAL BOUNDARIES
- PROPOSED DEVELOPMENT BOUNDARY
- EXISTING COUNTOURS



20 0 40 80m
SCALE 1:2000

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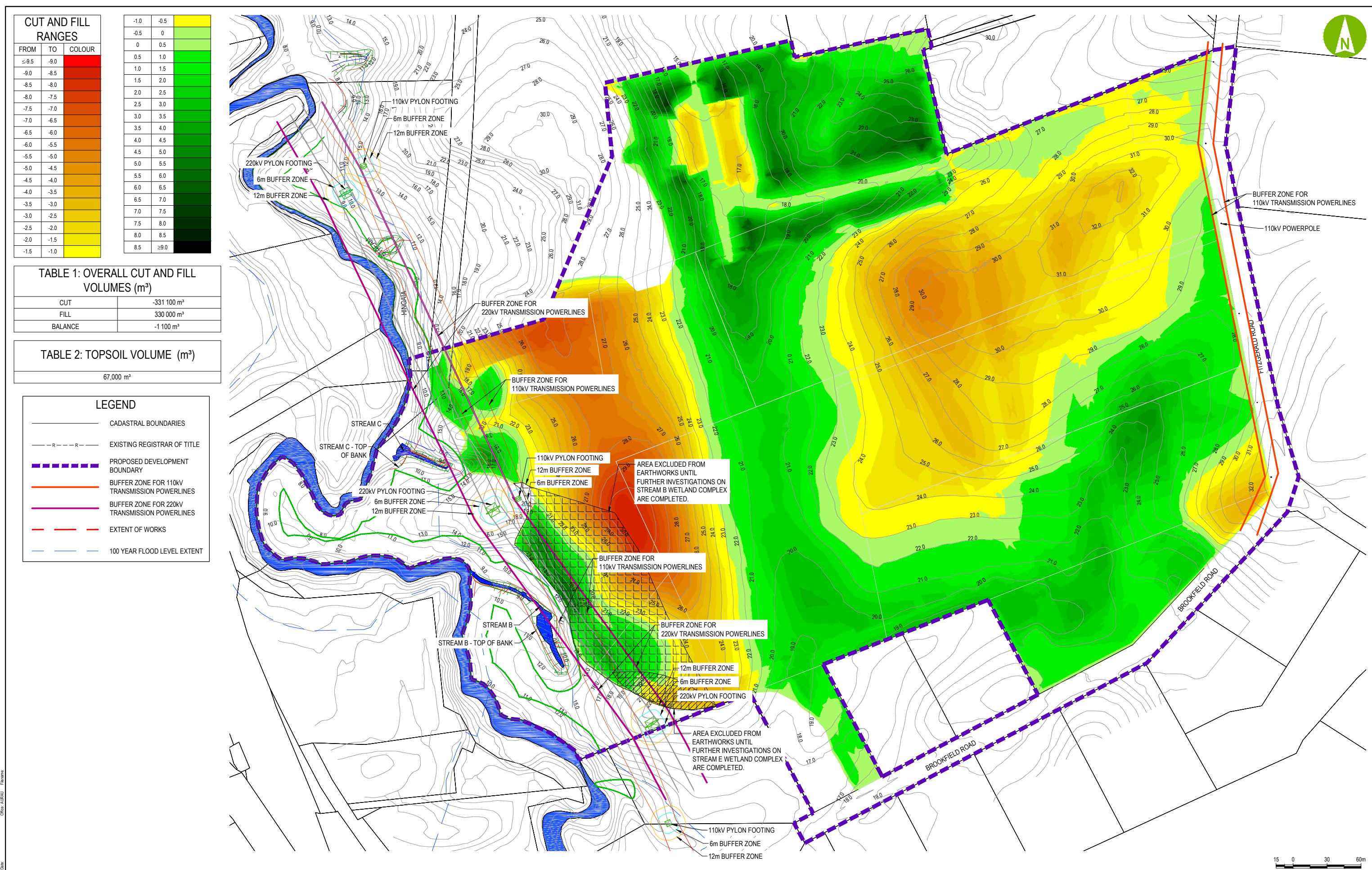


REV	DATE	REVISION DETAILS	APPROVED
A	21.05.21	ISSUED FOR CONSENT	W.NEL
B	29.10.21	ISSUED FOR CONSENT	W.NEL

SCALE	SIZE
AS SHOWN	A1
DRAWN	M.KAUR
DESIGNED	J.A.VORSTER
REVIEWED	W.NEL

FOR CONSENT	NOT FOR CONSTRUCTION
APPROVED	DATE
W.NEL	29.10.2021

PROJECT	KIWI PROPERTY - DRURY				
TITLE	EXISTING SITE CONTOURS PLAN				
DRAWING No.	510611	WBS	0100	TYPE	DRG
				DISC	CC
				NUMBER	0001
				REV	B



LEGEND

CADASTRAL BOUNDARIES

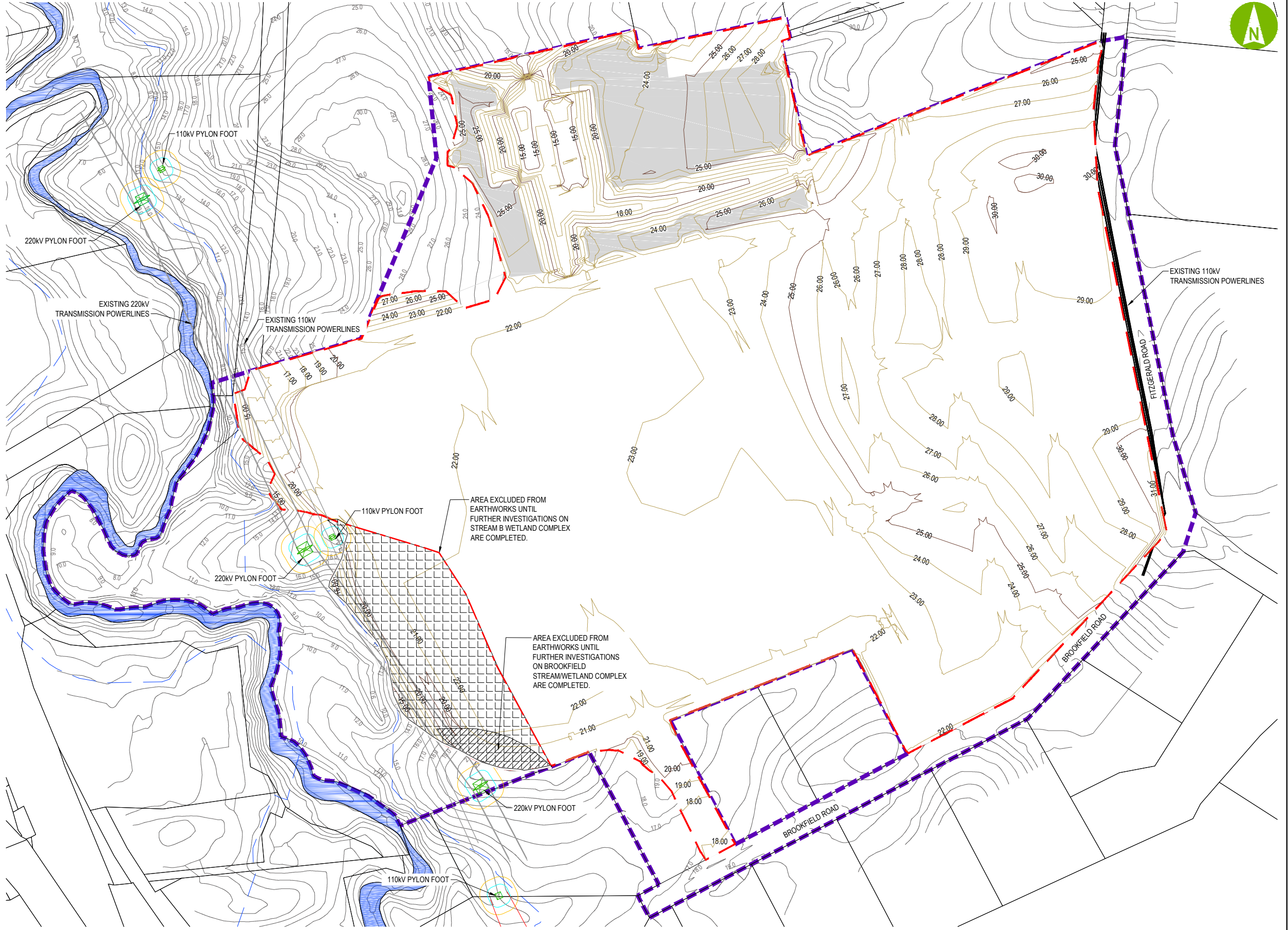
PROPOSED DEVELOPMENT BOUNDARY

PROPOSED MAJOR CONTOUR 5m INTERVALS

PROPOSED MINOR CONTOUR 1m INTERVALS

EXTENT OF WORKS

100 YEAR FLOOD LEVEL EXTENT



NOTES

1. PROPOSED CONTOURS ARE DRAFT ONLY.



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CLIENT

REV	DATE	REVISION DETAILS	APPROVED
C	2021-12-10	STREAM B WETLAND AFFECTED AREA INCLUDED	W.NEL
B	2021-10-29	ISSUED FOR CONSENT	W.NEL
A	2021-05-21	ISSUED FOR CONSENT	W.NEL

SCALE	SIZE
1:1500	A1

DRAWN

D.SANTOS

DESIGNED

J.WARLICH-KOOLE

REVIEWED

J.A.VORSTER

FOR CONSENT

NOT FOR CONSTRUCTION

APPROVED

DATE

2021-12-10

W.NEL

PROJECT

TI

TITLE

DESIGN CONTOUR LAYOUT PLAN

DRAWING No.

510611

PROJECT No.

510611

AREA

0100

TYPE

DRG

DISC

CC

NUMBER

0003

REV

C

KIWI PROPERTY - DRURY

Auckland Council | Approved Resource Consent Plan | BUN60390224 | 13/04/2022 | Page 4 of 12

LEGEND

SITE BOUNDARY

CATCHMENTS

CULVERT CROSSING

EXISTING OVERLAND FLOW PATH

DIRTY WATER DIVERSION SWALE

CLEAN WATER DIVERSION SWALE

EXISTING DRAIN TO BE PROTECTED

PROPOSED SILT/SUPER SILT FENCE

STABILISED CONSTRUCTION ENTRANCEWAY WITH SHAKER RAMP

SRP

SEDIMENT RETENTION POND

SLOPE DIRECTION OF EXISTING GROUND

OUTLET STRUCTURE

DECANTING EARTH BUND

LINING TO CHANNELS OR CHECK DAMS

FLOW DIRECTION OF PROPOSED SURFACE

EXISTING CONTOUR

DISTURBED AREA

STABILIZED AREA

STARTING STAGE EARTHWORKS		STAGE 2 EARTHWORKS		FINAL STAGE EARTHWORKS	
SEASON 2021/2		SEASON 2022/3		SEASON 2023/4	
SRP	CATCHMENT	AREA (ha)	CATCHMENT	AREA (ha)	CATCHMENT
SRP 1	A11	4.75	A9	4.70	A9
SRP 2	-	-	-	-	-
SRP 3	-	-	A3	-	A3
SRP 4	-	-	A10	2.87	A10
SRP 5	A4 & A5	4.80	A4	2.20	A4 & A6
SRP 6	A8	4.20	A8	4.10	A7
STAGE AREA TOTAL		13.8	STAGE AREA TOTAL	13.9	STAGE AREA TOTAL

TABLE				
POND	POND SIZING: MAX CATCHMENT SIZE (Ha)	AREA (A²)	LENGTH (m)	WIDTH (m)
SRP1	4.8	1200	60	20
SRP5	4.8	1200	60	20
SRP6	4.2	1200	60	20
DEB1 & 2	0.29	75	15	5

SIZING IN COMPLIANCE WITH GD05 F1.0 STRUCTURAL APPROACHES WITH 5:1 RATIO FOR SRP.

- PROPOSED PLAN IS INDICATIVE ONLY. CONTRACTOR TO SUBMIT EROSION AND SEDIMENT PLAN INCORPORATING PROPOSED CONSTRUCTION METHODOLOGY AND STAGING FOR REVIEW PRIOR TO COMMENCING CONSTRUCTION.
- ALL EROSION AND SEDIMENT CONTROL DEVICES HAVE BEEN SELECTED BASED ON THE ARC GD05 GUIDANCE DOCUMENT.
- CADASTRAL BOUNDARIES SHOWN HAVE BEEN SOURCED FROM LANDONLINE XML DATA AND ARE SUBJECT TO SURVEY DATUM: AUCKLAND VERTICAL DATUM (MSL) 1946
- SITE TO BE STABILISED ON COMPLETION.
- NUMBER OF STABILISED ENTRANCES IS INDICATIVE. ACTUAL NUMBER TO BE DETERMINE ON SITE AND AGREED WITH ENGINEER AND AUCKLAND COUNCIL.
- ALL SEDIMENT RETENTION DEVICES TO BE CHEMICALLY TREATED AS PER THE RECOMMENDATIONS CONTAINED IN GD05.
- SEDIMENT BASINS INDICATIVE SIZE ONLY.
- CONTRACTOR TO CONFIRM LOCATION OF SITE OFFICE AND PROPOSED STOCKPILE LOCATIONS.
- REFER TO DRAWINGS 510611-0100-DRG-CC-1100,1101 & 1102 FOR EROSION AND SEDIMENT CONTROL DETAILS.
- SEQUENCING IS DEPENDENT ON CONTRACTOR APPROACH, THEREFORE INDICATIVE ONLY

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REV	DATE	REVISION DETAILS	APPROVED
A	06.12.21	ISSUED FOR INFORMATION	W.NEL
B	15.12.21	COMMENTS ADDRESSED	W.NEL

SCALE	SIZE
1:1500	A1
DRAWN	
M.KAUR	
DESIGNED	
J.TUCKER	
REVIEWED	
J.A.VORSTER	

FOR INFORMATION NOT FOR CONSTRUCTION	
APPROVED	
DATE	
06.12.21	
W.NEL	

PROJECT	KIWI PROPERTY - DRURY				
TITLE	EROSION AND SEDIMENT CONTROL PLAN STARTING SEQUENCE SHEET 1 OF 3				
DRAWING No.	510611	WBS	0100	TYPE	SKT
PROJECT No.	510611	DISC	CC	NUMBER	0005
REV	B				

Auckland Council | Approved Resource Consent Plan | BUN60390224 | 13/04/2022 | Page 5 of 12

LEGEND

- SITE BOUNDARY
- CATCHMENTS
- CULVERT CROSSING
- EXISTING OVERLAND FLOW PATH
- DIRTY WATER DIVERSION SWALE
- CLEAN WATER DIVERSION SWALE
- EXISTING DRAIN TO BE PROTECTED
- PROPOSED SILT/SUPER SILT FENCE
- STABILISED CONSTRUCTION ENTRANCEWAY WITH SHAKER RAMP
- SEDIMENT RETENTION POND
- SLOPE DIRECTION OF EXISTING GROUND
- OUTLET STRUCTURE
- DECANTING EARTH BUND
- LINING TO CHANNELS OR CHECK DAMS
- FLOW DIRECTION OF SURFACE
- EXISTING CONTOUR

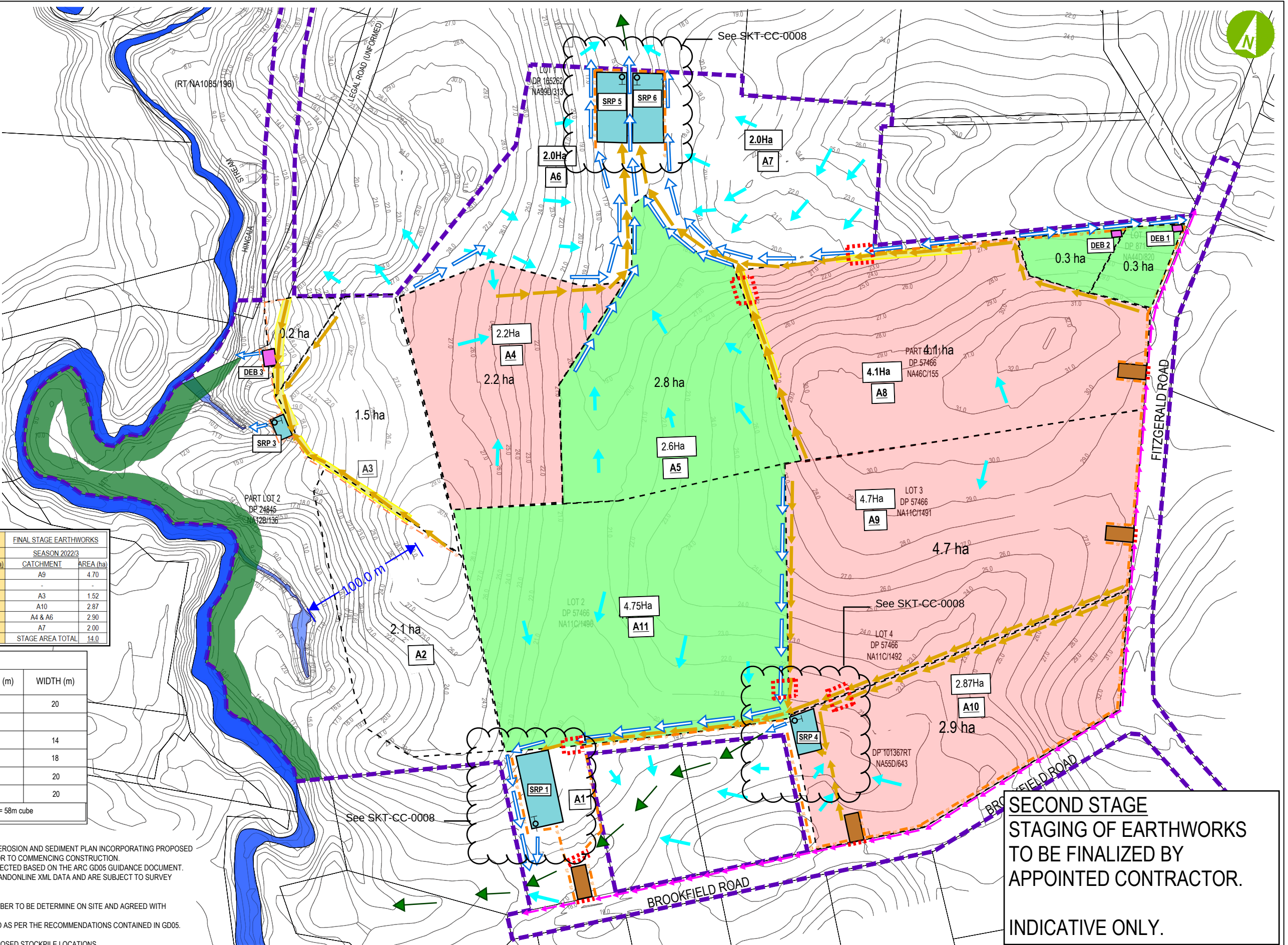
DISTURBED AREA

STABILIZED AREA

STARTING STAGE EARTHWORKS			STAGE 2 EARTHWORKS		FINAL STAGE EARTHWORKS	
SEASON 2021/2			SEASON 2022/3		SEASON 2023/4	
SRP	CATCHMENT	AREA (ha)	CATCHMENT	AREA (ha)	CATCHMENT	AREA (ha)
SRP 1	A11	4.75	A9	4.70	A9	4.70
SRP 2	-	-	-	-	-	-
SRP 3	-	-	A3	-	A3	1.52
SRP 4	-	-	A10	2.87	A10	2.87
SRP 5	A4 & A5	4.80	A4	2.20	A4 & A6	2.90
SRP 6	A8	4.20	A8	4.10	A7	2.00
STAGE AREA TOTAL		13.8	STAGE AREA TOTAL		STAGE AREA TOTAL	
					14.0	

TABLE				
POND	POND SIZING: MAX CATCHMENT SIZE (Ha)	AREA (A²)	LENGTH (m)	WIDTH (m)
SRP1	4.8	1200	60	20
SRP2	0.0	0.0		
SRP3	1.6	588	42	14
SRP4	2.9	972	54	18
SRP5	4.8	1200	60	20
SRP6	4.2	1200	60	20
DEB 1, 2 & 3	0.29	Volume required = 58m cube		

- PROPOSED PLAN IS INDICATIVE ONLY. CONTRACTOR TO SUBMIT EROSION AND SEDIMENT PLAN INCORPORATING PROPOSED CONSTRUCTION METHODOLOGY AND STAGING FOR REVIEW PRIOR TO COMMENCING CONSTRUCTION.
- ALL EROSION AND SEDIMENT CONTROL DEVICES HAVE BEEN SELECTED BASED ON THE ARC GD05 GUIDANCE DOCUMENT.
- CADASTRAL BOUNDARIES SHOWN HAVE BEEN SOURCED FROM LANDONLINE XML DATA AND ARE SUBJECT TO SURVEY DATUM: AUCKLAND VERTICAL DATUM (MSL) 1946
- SITE TO BE STABILISED ON COMPLETION.
- NUMBER OF STABILISED ENTRANCES IS INDICATIVE. ACTUAL NUMBER TO BE DETERMINE ON SITE AND AGREED WITH ENGINEER AND AUCKLAND COUNCIL.
- ALL SEDIMENT RETENTION DEVICES TO BE CHEMICALLY TREATED AS PER THE RECOMMENDATIONS CONTAINED IN GD05.
- SEDIMENT BASINS INDICATIVE SIZE ONLY.
- CONTRACTOR TO CONFIRM LOCATION OF SITE OFFICE AND PROPOSED STOCKPILE LOCATIONS.
- REFER TO DRAWINGS 510611-0100-DRG-CC-1100, 1101 & 1102 FOR EROSION AND SEDIMENT CONTROL DETAILS.
- SEQUENCING IS DEPENDENT ON CONTRACTOR APPROACH, THEREFORE INDICATIVE ONLY



REV	DATE	REVISION DETAILS	APPROVED
A	06.12.21	ISSUED FOR INFORMATION	W.NEL
B	15.12.21	COMMENTS ADDRESSED	W.NEL

SCALE	SIZE
1:1500	A1
DRAWN	M.KAUR
DESIGNED	J.TUCKER
REVIEWED	J.A.VORSTER

FOR INFORMATION NOT FOR CONSTRUCTION
APPROVED
DATE
06.12.21
W.NEL

PROJECT	KIWI PROPERTY - DRURY				
TITLE	EROSION AND SEDIMENT CONTROL PLAN SEQUENCING SECOND STAGE SHEET 2 OFF 3				
DRAWING No.	510611	WBS	0100	TYPE	SKT
		DISC	CC	NUMBER	0006
		REV	A		

LEGEND

- SITE BOUNDARY
- CATCHMENTS
- CULVERT CROSSING
- EXISTING OVERLAND FLOW PATH
- DIRTY WATER DIVERSION SWALE
- CLEAN WATER DIVERSION SWALE
- EXISTING DRAIN TO BE PROTECTED
- PROPOSED SILT/SUPER SILT FENCE
- STABILISED CONSTRUCTION ENTRANCEWAY WITH SHAKER RAMP
- SRP
- SEDIMENT RETENTION POND
- SLOPE DIRECTION OF EXISTING GROUND
- OUTLET STRUCTURE
- DECANTING EARTH BUND
- LINING TO CHANNELS OR CHECK DAMS
- FLOW DIRECTION OF SURFACE
- EXISTING CONTOUR
- DISTURBED AREA
- STABILIZED AREA

STARTING STAGE EARTHWORKS		STAGE 2 EARTHWORKS		FINAL STAGE EARTHWORKS	
SRP	CATCHMENT	AREA (ha)	CATCHMENT	AREA (ha)	CATCHMENT
SRP 1	A11	4.75	A9	4.70	A9
SRP 2	-	-	-	-	-
SRP 3	-	-	A3	-	A3
SRP 4	-	-	A10	2.87	A3
SRP 5	A4 & A5	4.80	A4	2.20	A4 & A6
SRP 6	A8	4.20	A8	4.10	A7
STAGE AREA TOTAL		13.8	STAGE AREA TOTAL		14.0

TABLE				
POND	POND SIZING: MAX CATCHMENT SIZE (Ha)	AREA (A²)	LENGTH (m)	WIDTH (m)
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DEB 1, 2 & 3	0.29	Volume required = 58m cube		

SIZING IN COMPLIANCE WITH GD05 F1.0 STRUCTURAL APPROACHES WITH 5:1 RATIO FOR SRP.

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- SEQUENCING IS DEPENDENT ON CONTRACTOR APPROACH, THEREFORE INDICATIVE ONLY



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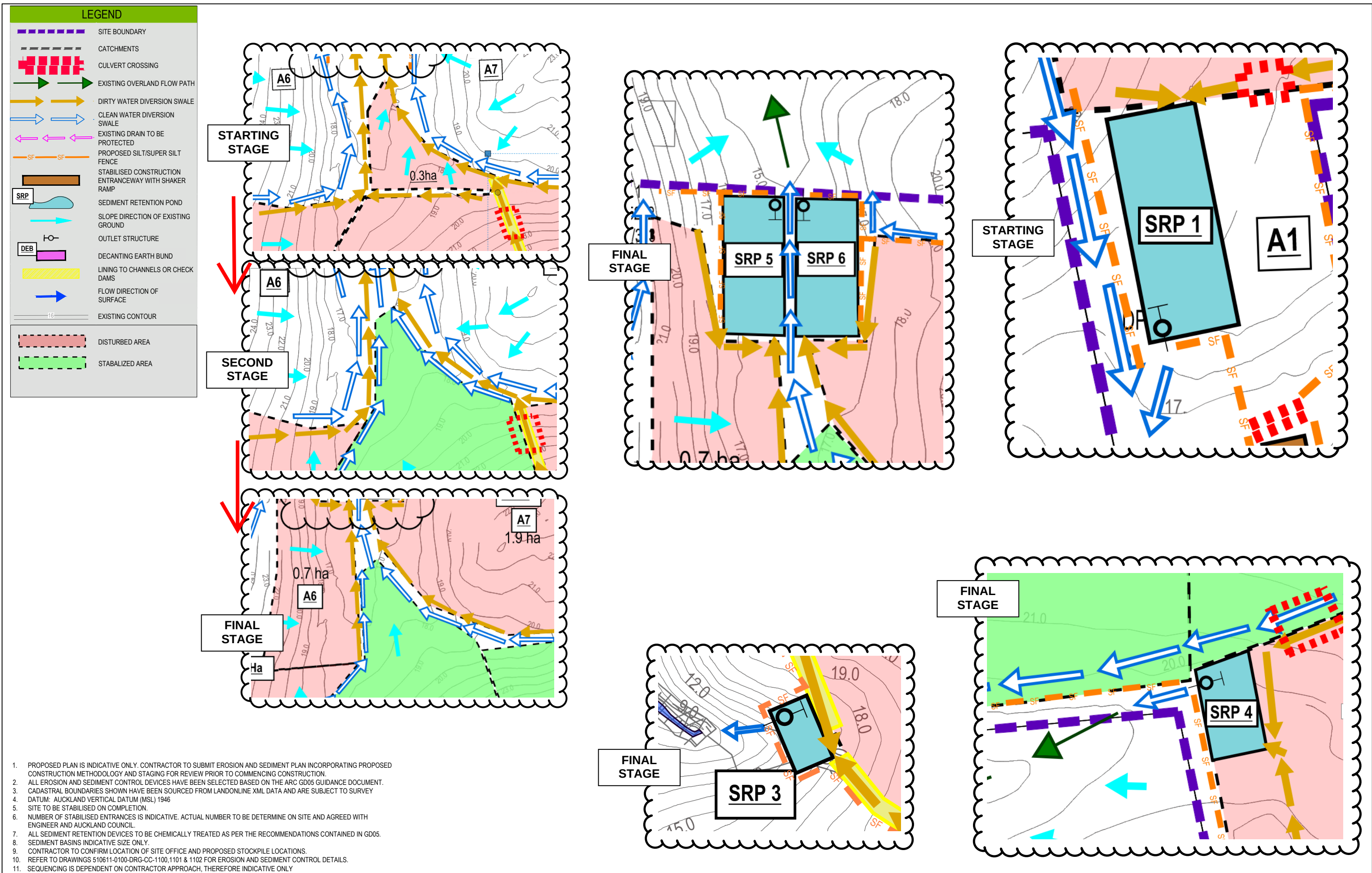


REV	DATE	REVISION DETAILS	APPROVED	SCALE	SIZE
A	06.12.21	ISSUED FOR INFORMATION	W.NEL	1:1500	A1
B	15.12.21	COMMENTS ADDRESSED	W.NEL		

DRAWN	M.KAUR
DESIGNED	J.TUCKER
REVIEWED	J.A.VORSTER

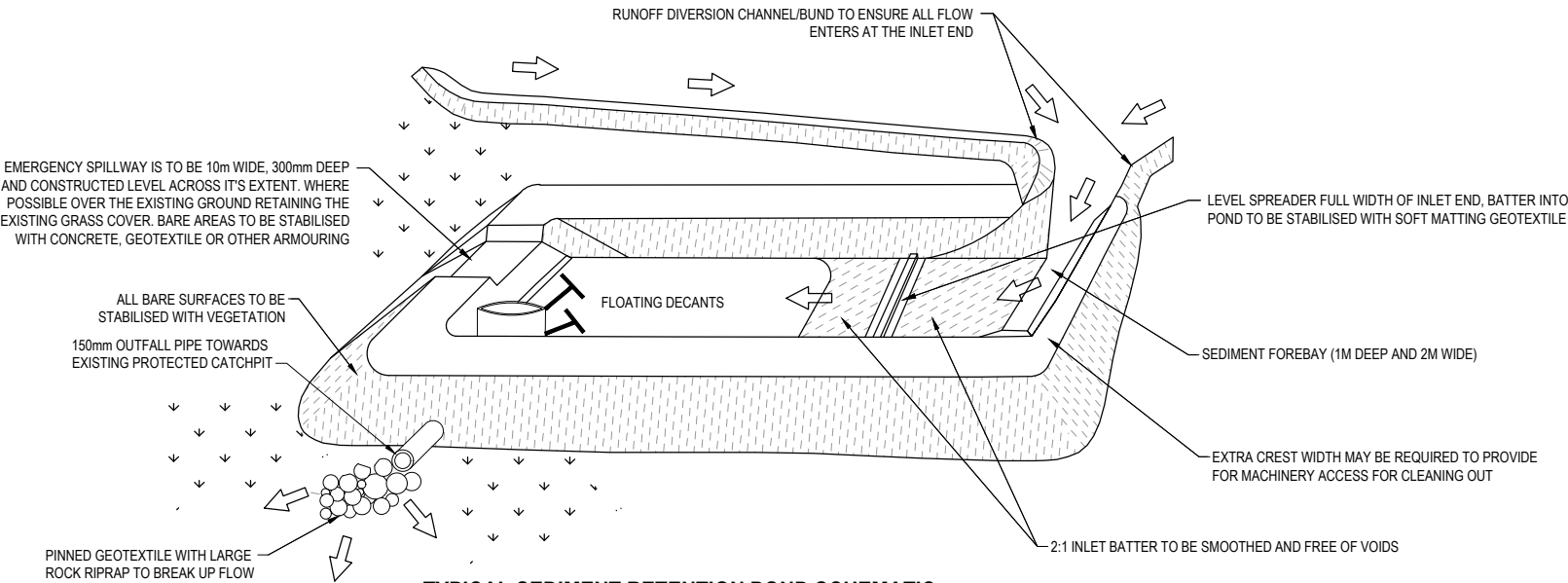
FOR INFORMATION NOT FOR CONSTRUCTION	APPROVED	DATE	06.12.21
W.NEL			

PROJECT	KIWI PROPERTY - DRURY												
TITLE	EROSION AND SEDIMENT CONTROL PLAN SEQUENCING FINAL STAGE SHEET 3 OFF 3												
DRAWING No.	510611	PROJECT No.	510611	WBS	0100	TYPE	SKT	DISC	CC	NUMBER	0007	REV	A



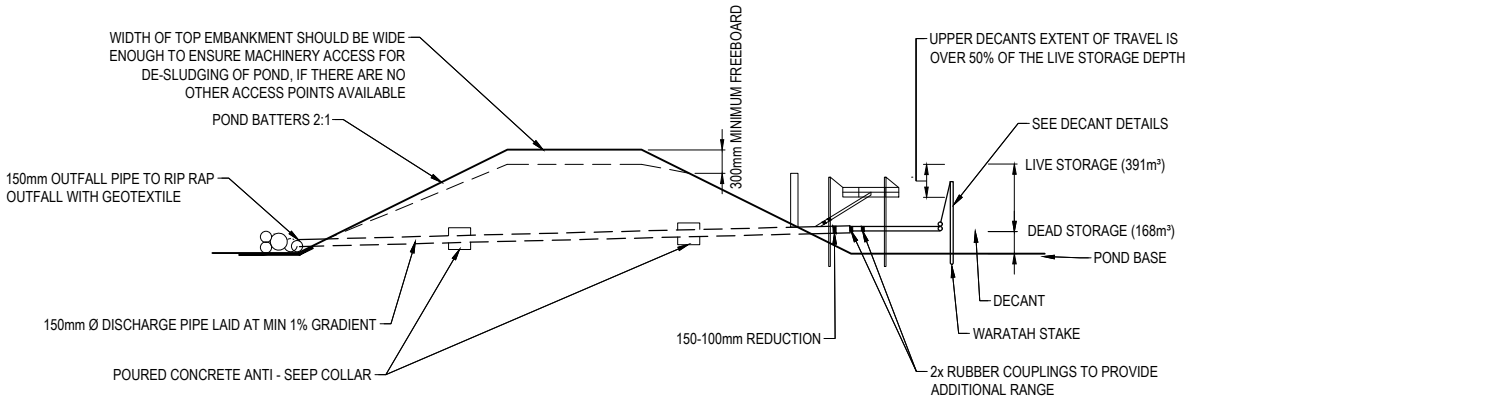
1. PROPOSED PLAN IS INDICATIVE ONLY. CONTRACTOR TO SUBMIT EROSION AND SEDIMENT PLAN INCORPORATING PROPOSED CONSTRUCTION METHODOLOGY AND STAGING FOR REVIEW PRIOR TO COMMENCING CONSTRUCTION.
2. ALL EROSION AND SEDIMENT CONTROL DEVICES HAVE BEEN SELECTED BASED ON THE ARC GD05 GUIDANCE DOCUMENT.
3. CADASTRAL BOUNDARIES SHOWN HAVE BEEN SOURCED FROM LANDONLINE XML DATA AND ARE SUBJECT TO SURVEY
4. DATUM: AUCKLAND VERTICAL DATUM (MSL) 1946
5. SITE TO BE STABILISED ON COMPLETION.
6. NUMBER OF STABILISED ENTRANCES IS INDICATIVE. ACTUAL NUMBER TO BE DETERMINE ON SITE AND AGREED WITH ENGINEER AND AUCKLAND COUNCIL.
7. ALL SEDIMENT RETENTION DEVICES TO BE CHEMICALLY TREATED AS PER THE RECOMMENDATIONS CONTAINED IN GD05.
8. SEDIMENT BASINS INDICATIVE SIZE ONLY.
9. CONTRACTOR TO CONFIRM LOCATION OF SITE OFFICE AND PROPOSED STOCKPILE LOCATIONS.
10. REFER TO DRAWINGS 510611-0100-DRG-CC-1100, 1101 & 1102 FOR EROSION AND SEDIMENT CONTROL DETAILS.
11. SEQUENCING IS DEPENDENT ON CONTRACTOR APPROACH, THEREFORE INDICATIVE ONLY

REV	DATE	REVISION DETAILS	APPROVED	SCALE	SIZE	FOR INFORMATION NOT FOR CONSTRUCTION	PROJECT	TI	PROJECT No.	WBS	TYPE	DISC	NUMBER	REV
A	15.12.21	ISSUED FOR INFORMATION	W.NEL	1:1500	A1	APPROVED	KIWI PROPERTY - DRURY	EROSION AND SEDIMENT CONTROL PLAN "CLOSE-UP" OF AREAS	510611	0100	SKT	CC	0008	A
						DATE 15.12.21								
						W.NEL								



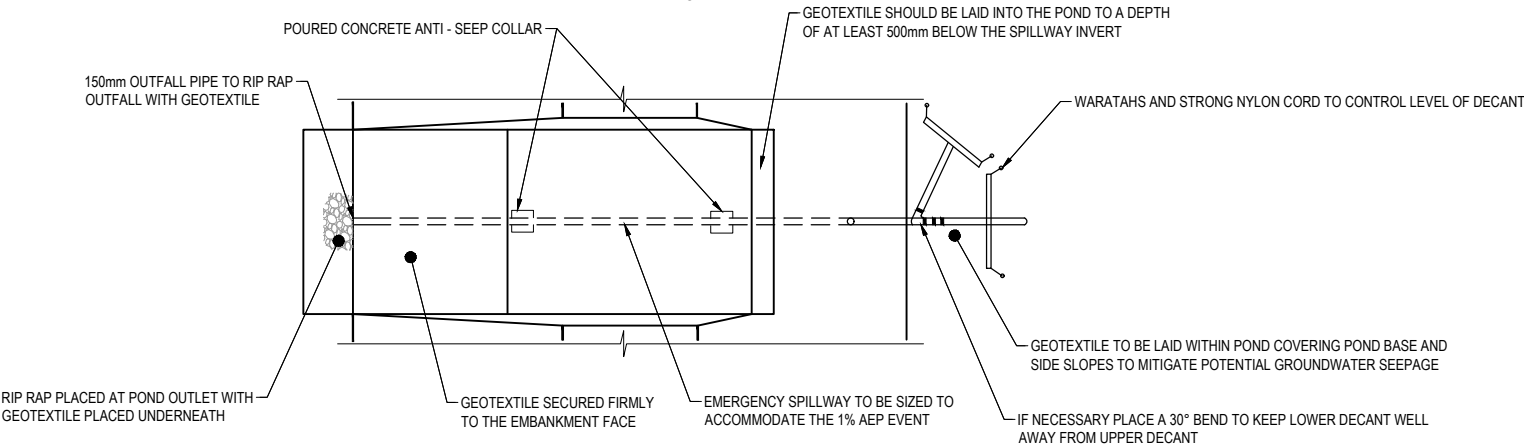
TYPICAL SEDIMENT RETENTION POND SCHEMATIC
(REFER TO GD05 SECTION F1.1)

NTS.



INDICATIVE CROSS SECTION
SEDIMENT RETENTION POND(REFER TO GD05 SECTION F1.1)

NTS.

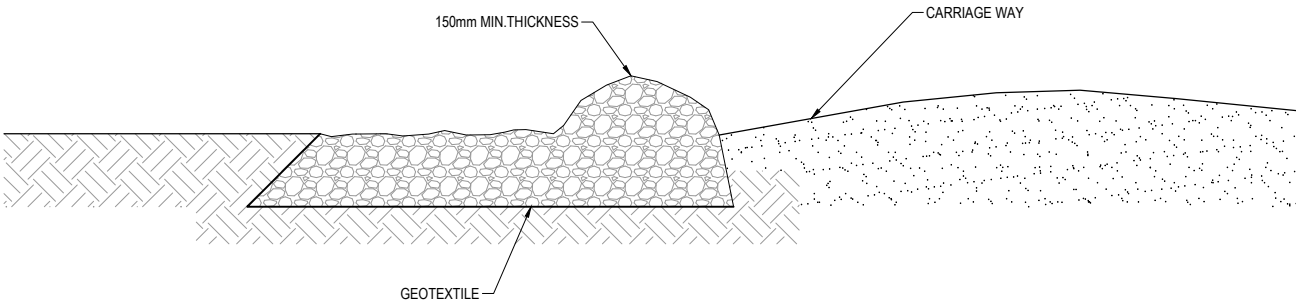
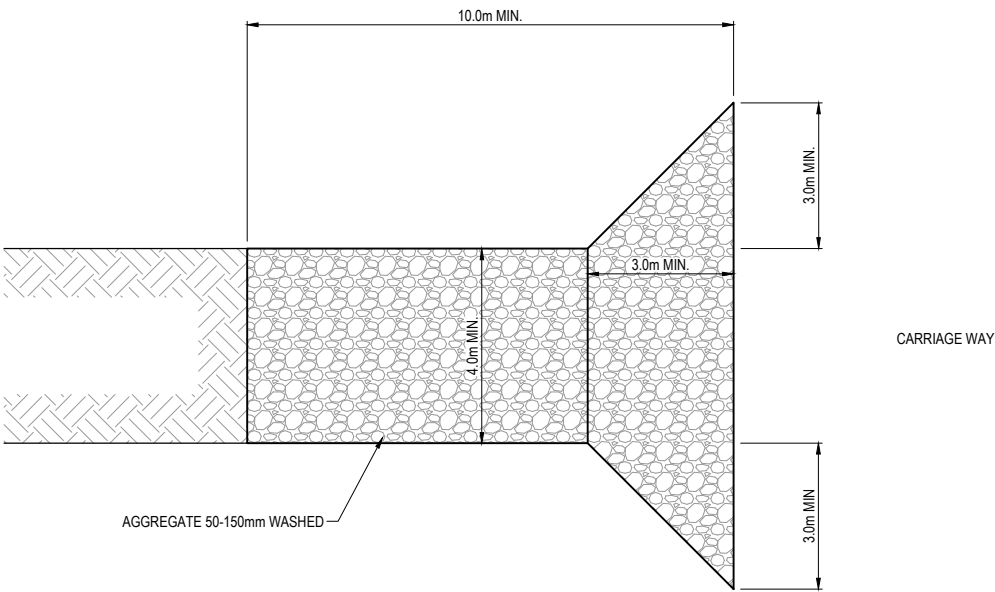


INDICATIVE PLAN DETAIL
SEDIMENT RETENTION POND FOR 1.5 TO 3 ha CATCHMENT (REFER TO GD05 SECTION F1.1)

NTS.

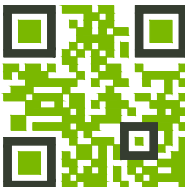
DESIGN PARAMETER	SPECIFICATION
AGGREGATE SIZE	50 - 150 mm WASHED AGGREGATE
MINIMUM THICKNESS	150mm
MINIMUM LENGTH	10m
MINIMUM WIDTH	4m

STABILISED ENTRANCEWAY SPECIFICATIONS



STABILISED CONSTRUCTION ENTRANCE
(REFER TO GD05 SECTION E2.6)

1:75



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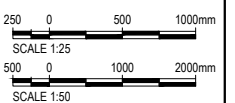
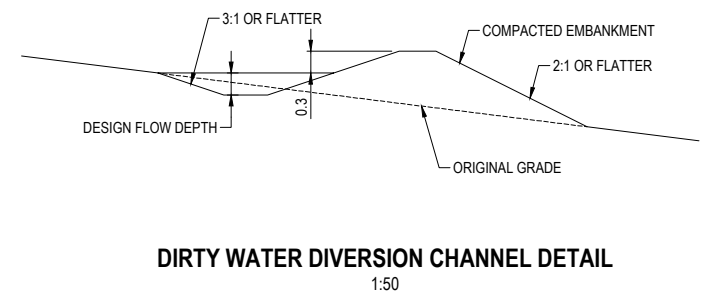
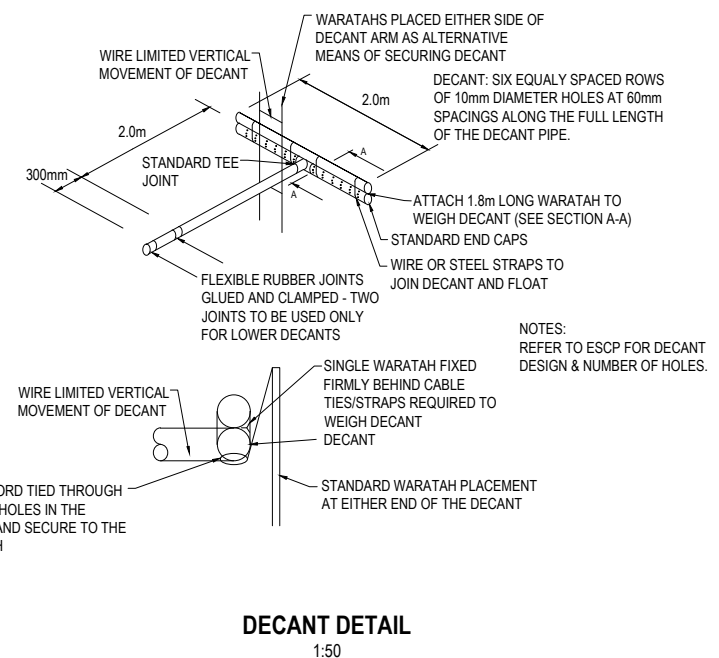
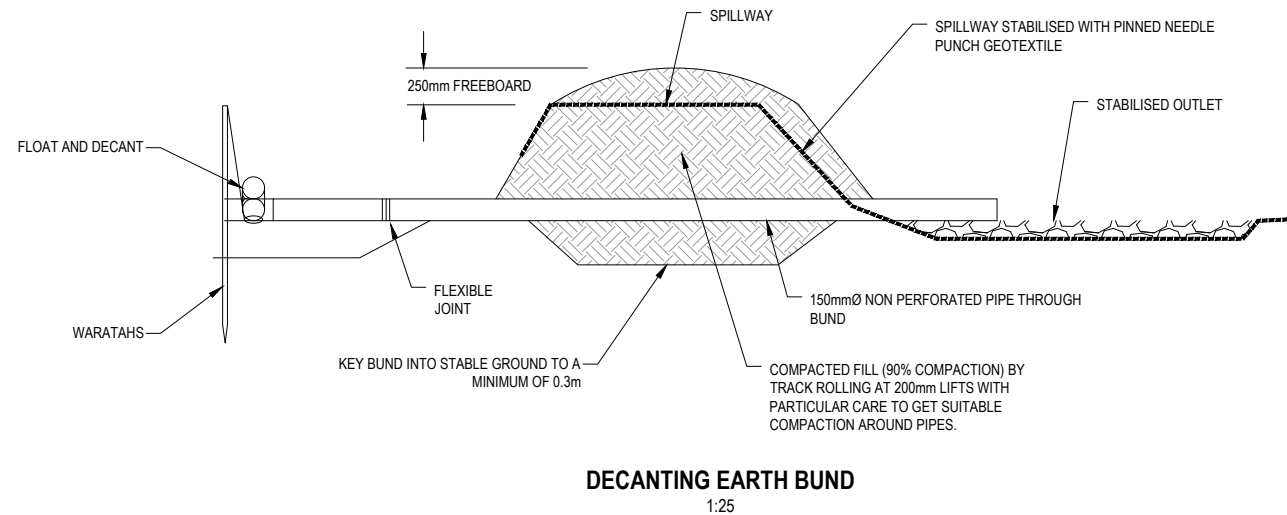
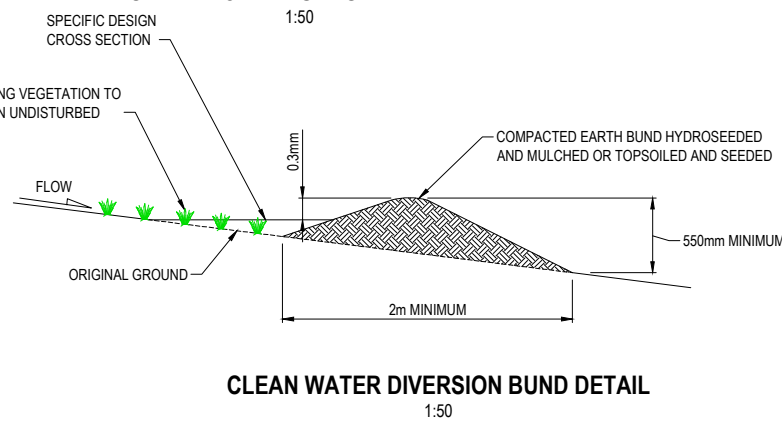
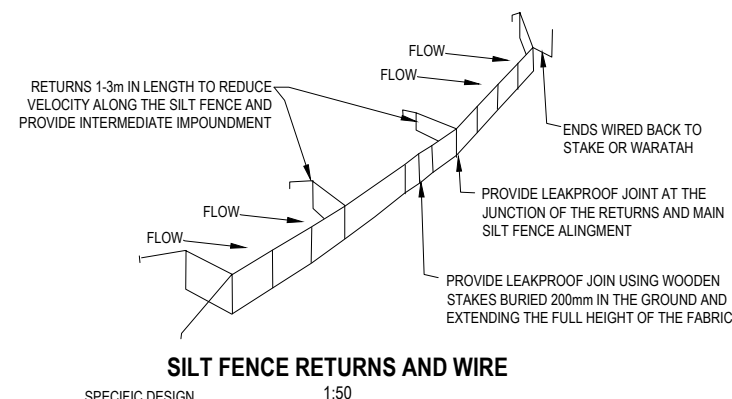
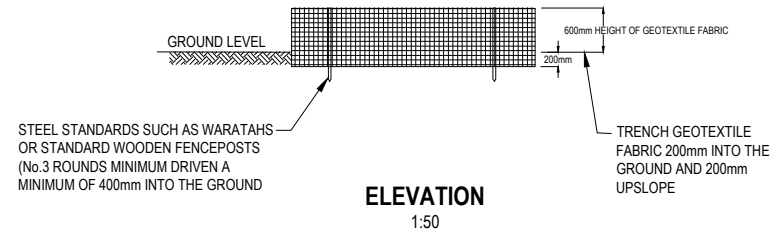
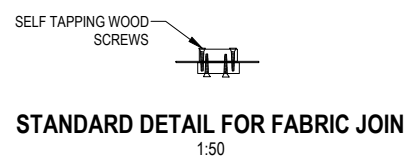
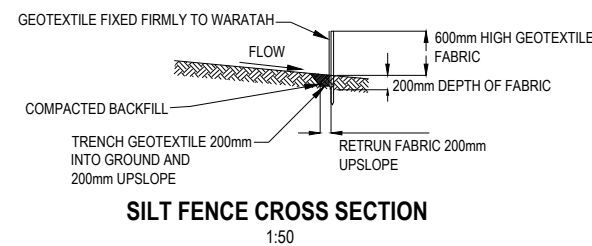
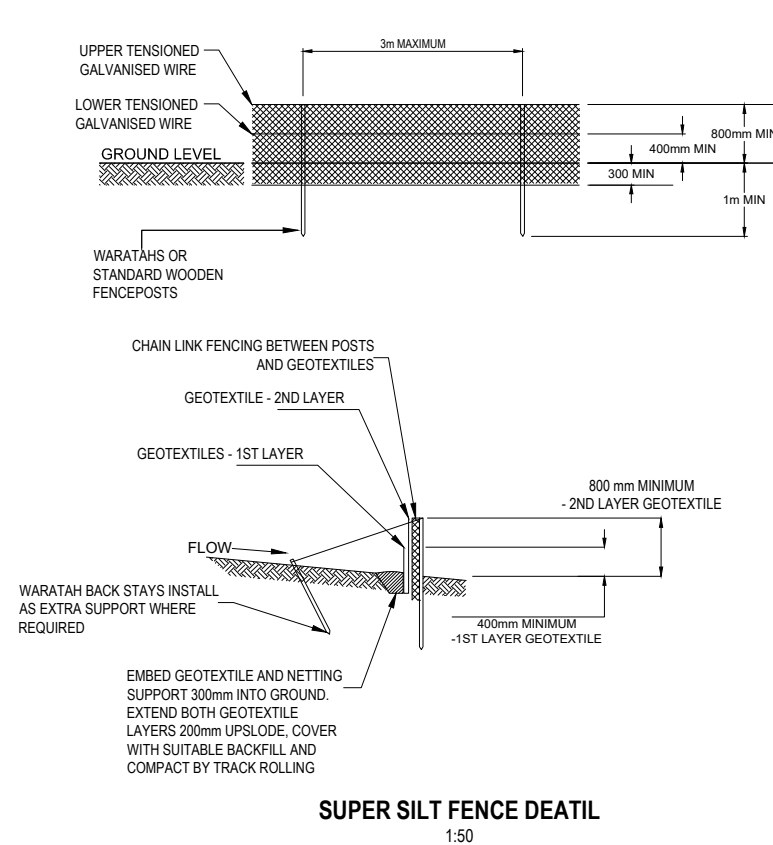


REV	DATE	REVISION DETAILS	APPROVED
B	2021-10-29	ISSUED FOR CONSENT	W.NEL
A	2021-05-21	ISSUED FOR CONSENT	W.NEL

SCALE	SIZE
AS SHOWN	A1
DRAWN	M.KAUR
DESIGNED	J.TUCKER
REVIEWED	J.A.VORSTER

FOR CONSENT NOT FOR CONSTRUCTION
APPROVED
DATE
29.10.2021
W.NEL

PROJECT	KIWI PROPERTY - DRURY
TITLE	EROSION AND SEDIMENT CONTROL DETAILS
SHEET 1	
DRAWING No.	510611
AREA	0100
TYPE	DRG
DISC	CC
NUMBER	0011
REV	B



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REV	DATE	REVISION DETAILS	APPROVED
B	2021-10-29	ISSUED FOR CONSENT	W.NEL
A	2021-05-20	ISSUED FOR CONSENT	W.NEL

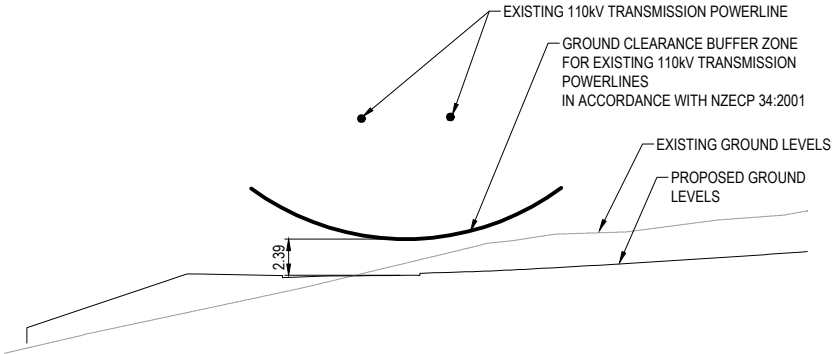
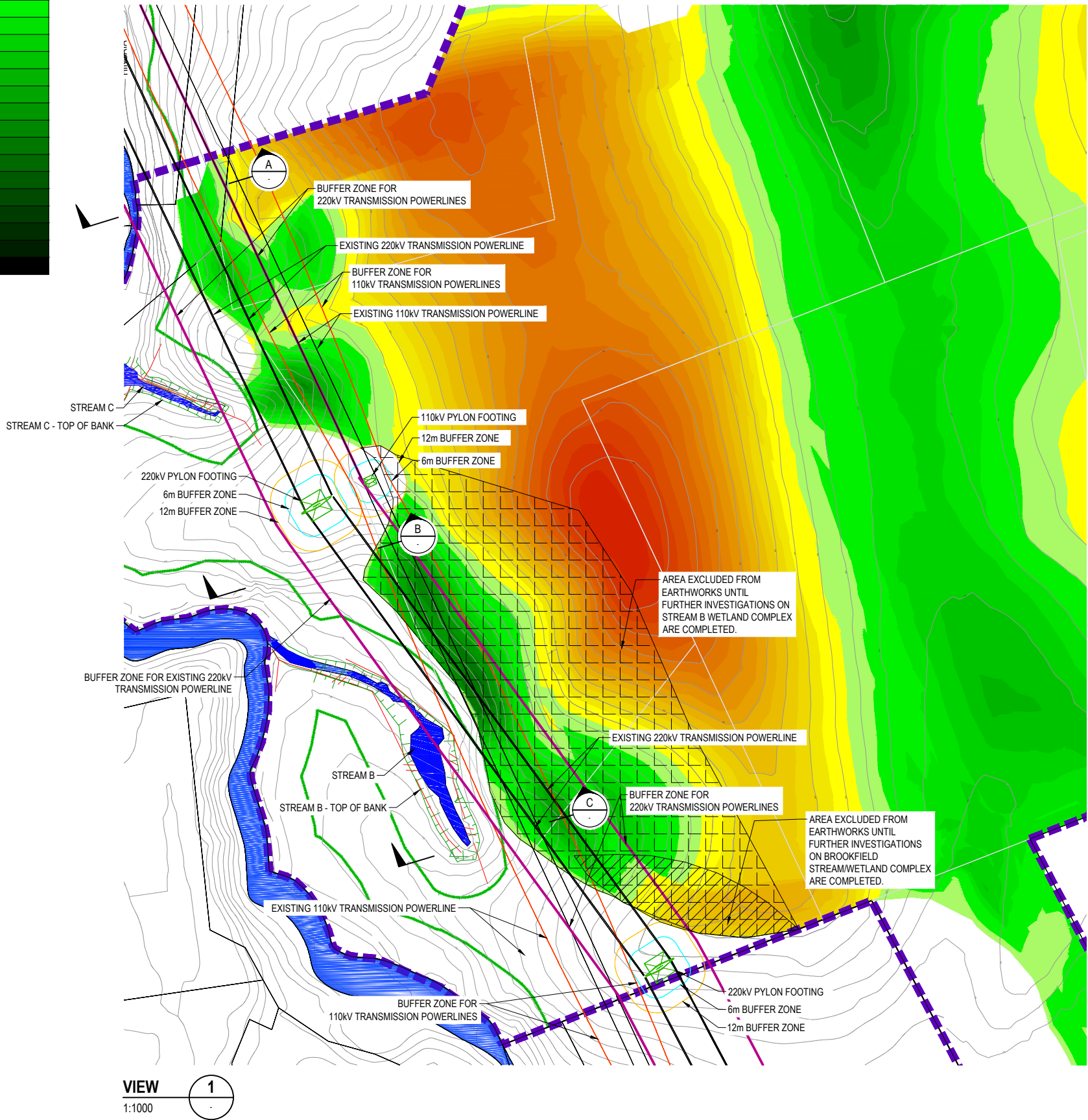
SCALE	SIZE
AS SHOWN	A1
DRAWN	M.KAUR
DESIGNED	J.TUCKER
REVIEWED	J.A.VORSTER

FOR CONSENT	NOT FOR CONSTRUCTION
APPROVED	DATE
W.NEL	29.10.2021

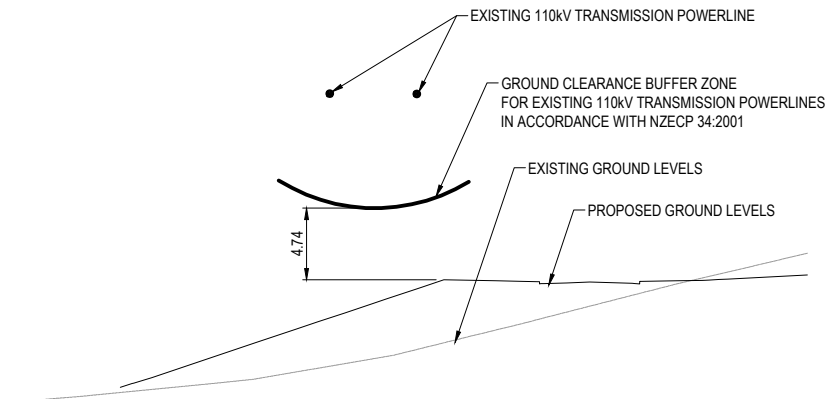
PROJECT	KIWI PROPERTY - DRURY
TITLE	EROSION AND SEDIMENT CONTROL DETAILS
SHEET 2	
DRAWING No.	510611
PROJECT No.	0100
AREA	DRG
TYPE	CC
DISC	0012
NUMBER	B

CUT AND FILL RANGES		
FROM	TO	COLOUR
≤-9.5	-9.0	
-9.0	-8.5	
-8.5	-8.0	
-8.0	-7.5	
-7.5	-7.0	
-7.0	-6.5	
-6.5	-6.0	
-6.0	-5.5	
-5.5	-5.0	
-5.0	-4.5	
-4.5	-4.0	
-4.0	-3.5	
-3.5	-3.0	
-3.0	-2.5	
-2.5	-2.0	
-2.0	-1.5	
-1.5	-1.0	

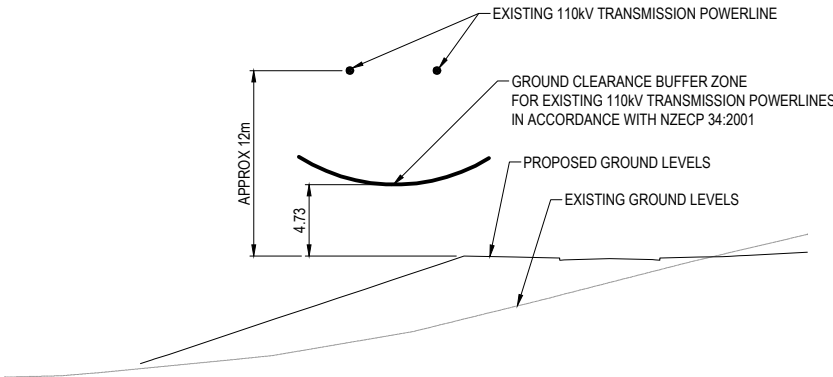
-1.0	-0.5	
-0.5	0	
0	0.5	
0.5	1.0	
1.0	1.5	
1.5	2.0	
2.0	2.5	
2.5	3.0	
3.0	3.5	
3.5	4.0	
4.0	4.5	
4.5	5.0	
5.0	5.5	
5.5	6.0	
6.0	6.5	
6.5	7.0	
7.0	7.5	
7.5	8.0	
8.0	8.5	
8.5	≥9.0	



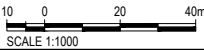
SECTION A
1:250



SECTION B
1:250



SECTION C
1:250



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REV	DATE	REVISION DETAILS	APPROVED
C	2021-12-13	STREAM B WETLAND AFFECTED AREA INCLUDED	W.NEL
B	2021-10-29	ISSUED FOR CONSENT	W.NEL
A	2021-05-21	ISSUED FOR CONSENT	W.NEL

SCALE	1:1000	SIZE	A1
DRAWN	D.SANTOS	DESIGNED	J.WARLICH-KOOLE
REVIEWED	J.A.VORSTER		

FOR CONSENT NOT FOR CONSTRUCTION	
APPROVED	DATE
W.NEL	2020-12-13

PROJECT	KIWI PROPERTY - DRURY				
TITLE	TRANSMISSION POWERLINE PLAN AND SECTIONS				
DRAWING No.	PROJECT No.	AREA	TYPE	DISC	NUMBER
510611	0100	DRG	CC	0021	REV C

