Beachlands South Fast-track

Auckland Council Specialist Memo

Annexure B:

Regional Earthworks

Matthew Byrne

07 October 2026

1.0 APPLICATION DESCRIPTION

Application and property details

Fast-Track project name:	Beachlands South
Fast-Track application number:	FTAA-2606-1256
Council reference number:	BUN60467962

2.0 Technical Specialist Memo - Earthworks & Erosion and Sediment Control

To:	Brooke Dales – Lead Planner Adonica Giborees – Principal Project Lead
From:	Matthew Byrne – Erosion & Sediment Control Consultant to Earth, Streams and Trees Team
Qualifications & Relevant Experience:	I hold the qualifications of: Bachelor of Environmental Studies and have over 22 years of experience in the field of earthworks and streamworks assessment, and earthworks and streamworks environmental compliance monitoring. I am a member of the International Erosion and Sediment Control Association (Australasia). I have prepared expert evidence and technical assessments for resource consent applications, plan changes, notices of requirement for designation and fast-track applications, and have appeared as an expert witness before consent authorities and the Environment Court on multiple occasions.
Preparation in Accordance with the Code of Conduct:	I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.

Signature:	
Date:	7 October 2026

3.0 Executive Summary

The following memorandum assesses the applicant's proposal to undertake approximately 1,344,000m^3 of earthworks over 118.6 ha, associated with a large-scale, staged urban development at Beachlands South, Auckland. Cut to fill earthworks are required to prepare the land for the development of approximately 2,000 dwellings, commercial and community facilities, schools, and supporting infrastructure.

Erosion and sediment control (ESC) will be achieved by constructing ESC measures in accordance with best practice that will meet or exceed the guidance contained in Auckland Council's Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region, June 2016 (GD05).

The following ESC measures are proposed:

- Sediment retention ponds (SRPs) are proposed as the primary method of treatment for sediment laden runoff generated during the earthworks. Areas that cannot drain to an SRP because of site grades or are not large enough to require construction of an SRP, will be treated by decanting earth bunds (DEBs).
- SRPs and DEBs will be chemically treated with provision of a chemical treatment management plan (ChTMP) ahead of earthworks commencing.
- Standard silt fences (SF), super silt fences (SSF), clean-water diversion bunds (CWD), dirty-water diversion bunds (DWD), and stabilised construction entrances/access ways (SCE) are proposed.
- Progressive stabilisation and monitoring and maintenance of all ESC measures throughout the duration of earthworks is proposed.
- Enhanced ESC will be achieved by the implementation of an Erosion and Sediment Control Adaptive Management Plan (ESCAMP) throughout the duration that earthworks are undertaken. Provision of an ESCAMP has been proposed through conditions of consent.

The application documents include a set of indicative erosion and sediment control plans (ESCPs) designed to demonstrate that the earthworks can be completed in accordance with best practice and

GD05, and with the necessary controls and staging strategy outlined in the Beachlands South Precinct Plan.

The applicant concludes that adverse land disturbance effects will be no more than minor, subject to the implementation of the proposed ESC methodology and the preparation and certification of final ESCPs, a ChTMP, and an ESCAMP prior to earthworks commencing.

Overall, I support the applicant's proposal subject to the Expert Panel's consideration of what I consider are relevant Beachlands South Precinct Plan provisions, and subject to the addition of a recommended Review Condition relating to the applicant's requested 25-year expiry date for the earthworks permit. Details regarding these matters are provided in Sections 6.5 and 9 respectively.

4.0 Documents Reviewed

The following documents have been reviewed in preparing this memorandum:

- BEACHLANDS SOUTH, Fast-track Approval Substantive Application, Assessment of Environmental Effects and Statutory Analysis, dated 26 June 2026, by UNIO Environmental. (AEE)
- Beachlands South Fast Track, Infrastructure Report, including Earthworks and Erosion and Sediment Control Plans, dated 24th June 2026, by Harrison Grierson.
- DRAFT PROPOSED CONDITIONS, BEACHLANDS SOUTH FAST TRACK APPLICATION, dated 26 June 2026.
- S67 Response Table, undated, by Unio Environmental.
- Beachlands South Fast Track, Ecological Impact Assessment, Version 3, dated 10 September 2026, by Viridis Environmental Consultants.
- Auckland Unitary Plan, I458 Beachlands South Precinct, Standard I458.6.11 and Precinct Plan 7: Earthworks Catchments.

5.0 Additional Reasons for Consent Not included in AEE / Incorrect Reasons for Consent

Section 7.2 of the AEE identifies the reasons for consent relating to earthworks under chapter E11 of the Auckland Unitary Plan (AUP). The applicant has identified that consent for earthworks under rule E11.4.1 (A5) is required, however, this is incorrect. Consent under E11.4.1 (A8) and (A9) is required and the applicant has correctly identified these rules as reasons for consent.

6.0 Specialist Assessment

6.1 - Site Description & Existing Environment

Section 5 of the applicant's AEE contains a description of the site and its surrounding area. I have accepted and adopted these descriptions during completion of my assessment below.

Potential sediment discharges associated with the earthworks, will be overland to unnamed permanent, intermittent and modified natural watercourses, and natural inland wetlands located on the site, which in turn discharge to the coastal marine area of Waikōpua Creek to the southwest of the site, and to the wider Whitford Embayment, west of the site. These coastal marine areas form part of the Tamaki Strait and the wider Hauraki Gulf.

6.2 – Relevant Background Information

Five (5) catchments are identified within the Beachlands South Precinct, mapped in Precinct Plan 7 under the Auckland Unitary Plan (AUP), and the proposed earthworks will be undertaken across six (6) stages within these 5 catchments. The earthworks have been proposed to generally comply with Precinct Plan 7's limits that require open area restrictions and construction sequencing.

The relevant Precinct Plan 7 provisions are stated at I458.6.11 and they limit the maximum disturbed area to 20 ha cumulatively across five (5) precinct plan catchments at any one time, limit earthworks comprising disturbed and stabilised areas to 15 ha within each catchment during any single earthworks season, and limit the maximum disturbed area exposed within each catchment to 5 ha at any one time.

Earthworks at the site have commenced under a separate resource consent, granted by the Auckland Council in December of 2025, and are not dependent on the current Fast-Track application being approved. The current Fast-Track application seeks approval for the remaining, much larger earthworks programme across the wider development area as detailed above.

The two programmes are intended to form one coordinated development sequence. The consented Stage 1 works establish the first development area, whilst the proposed Fast-Track works extend earthworks and infrastructure progressively into the later stages.

Accordingly, Stage 1 is not separate from the overall project in a physical or development sense, but it is separate in consenting terms: Stage 1 already has consent, whereas the current Fast-Track application seeks the approvals needed to complete the balance of the development.

6.3 - Assessment of Effects on the Environment - Earthworks

The potential environmental effects of the proposed earthworks are primarily associated with erosion of exposed surfaces at the site and the subsequent sedimentation of the receiving environment, being unnamed freshwater tributaries of the CMA and ultimately, the CMA of Waikōpua Creek, the wider Whitford Embayment, and the Hauraki Gulf.

Sediment can degrade aquatic values such as water quality, smother habitat for aquatic fauna within these receiving environments, and directly impact aquatic fauna by blocking their breathing apparatus. The applicant has stated that the project will utilise ESC measures, intended to meet GD05 and, in several material respects, exceed its baseline guidance, to help ensure the earthworks are appropriately managed.

6.4 – Earthworks and ESC

- Approximately 756,000m^3 of cut and 588,000m^3 of fill over approximately 118.6ha are proposed.
- Earthworks have been proposed across 6 Stages and include eighty-three (83) ESC device catchments.
- Thirty-five (35) SRPs and forty-eight (48) DEBs have been proposed as the main method of sediment control.
- SRPs will be constructed based on 3.75% criteria, having 3.75m^3 of impoundment volume for every 100m^2 of contributing catchment, and a maximum catchment of 4 ha per SRP. These criteria exceed the baseline guidance contained in GD05.
- Chemical treatment of all SRPs and DEBs has been proposed. A draft ChTMP has been included as have conditions of consent that require a final ChTMP to be provided ahead of earthworks commencing, which must include bench testing of not only standard chemicals such as poly aluminium chloride (PAC), but also of organic flocculants.
- An ESCAMP has been proposed to monitor the performance of the ESC measures and the receiving environment, and to trigger corrective management responses where sediment discharges may cause unexpected adverse sediment related effects.
- The application documents include a set of indicative erosion and sediment control plans (ESCPs) in accordance with GD05. The location of all SRPs, DEBs, CWDs, DWDs, SF, SSF, and SCEs are shown on the indicative plans.
- Non-structural ESC measures include progressive stabilisation of earthworks areas as they reach the desired gradients, and regular monitoring and maintenance of all controls in accordance with the guidance contained in GD05.

The application proposes an ESC regime that is generally consistent with GD05 and includes enhanced measures that exceed the minimum GD05 guidance, particularly increased SRP sizing, reduced pond catchments, universal chemical treatment, exposed area limits and adaptive monitoring and management.

The ESCPs have been designed to demonstrate that the earthworks can be completed in accordance with best practice and GD05, and with the necessary controls and staging strategy outlined in the Beachlands South Precinct Plan. The provision of final ESCPs, specific to each stage of earthworks, has been proposed as a condition of consent as has the provision of a final ChTMP, and an ESCAMP.

Regarding the provision of final ESCPs, this is not uncommon, particularly given the significant area of earthworks proposed. Provision of finalised ESCPs allows the indicative controls to be refined to reflect

detailed staging and changes to the earthworks methodology and site conditions, provided any changes remain within the scope of the consent and achieve an equivalent or higher level of ESC performance.

Regardless, the indicative ESCPs propose a range of ESC measures in accordance with GD05, and it is the applicant's intention that the final ESCPs will specify the exact controls required, having regard to the earthworks' volume and area for the relevant season in which they are proposed, and having regard to any staging that is proposed.

Overall, I support the applicant's earthworks and ESC methodology. I support their proposal to provide finalised ESCPs for any given area of the site ahead of earthworks commencing and I also support their proposal to provide a final ChTMP ahead of earthworks commencing. These measures are recognised as industry best practice measures and will help ensure that potential sediment related effects are managed appropriately.

Provision of an ESCAMP ahead of earthworks commencing and the implementation of that plan throughout the duration of earthworks at the site is also supported. The purpose of the ESCAMP is to monitor the performance of the ESC measures and receiving environments, and to trigger corrective management responses where sediment discharges may cause unexpected adverse sediment related effects. Implementation of an ESCAMP for an earthworks operation of this nature is considered best practice and will help ensure that the potential sediment related effects of the proposal are appropriately managed.

6.5 – Precinct Plan Provisions

As noted above, the applicant proposes through condition 43, to limit exposed bulk earthworks areas to 20 ha across the project and 15 ha within each catchment at any one time. However, these proposed limits do not accurately reflect provision **I458.6.11** of Precinct Plan 7, which distinguishes between cumulative disturbed area, the total area of earthworks undertaken during an earthworks season, and the disturbed area exposed at any one time. The operative provision establishes the following three separate limits:

- 20 ha maximum disturbed area, cumulatively across all Precinct Plan 7 catchments at any one time.
- 15 ha of earthworks, comprising disturbed and stabilised areas, within each catchment over a single earthworks season.
- 5 ha maximum exposed area within each catchment at any one time.

The applicant's proposed conditions of consent, specifically, proposed condition [43] suggests that the open area limits apply to bulk earthworks only and not to overall earthworks, regardless of whether they are "bulk earthworks" or general earthworks (i.e., any earthworks and/or land disturbance). Proposed condition 43 states:

> The maximum area of exposed earth associated with bulk earthworks at any one time throughout the duration of the project when exercising this consent must be no greater than 20 hectares across the Project and 15 hectares within each catchment.

Advice note: This limit applies to "bulk" earthworks only and not to "post-construction" subdivision or development related earthworks.

I draw the Expert Panel's attention to the advice note under proposed condition 43, which states that the condition applies only to bulk earthworks and not to post-construction subdivision or development-related earthworks. In my view, this limitation is inconsistent with Standard I458.6.11 of the Beachlands South Precinct provisions, which applies to earthworks generally and is not expressly limited to bulk earthworks or to any particular consent or stage of development.

Standard I458.6.11 is titled "**Earthworks**", and its stated purpose is *"to minimise sediment runoff and manage discharge effects on the receiving environment"*. Consistent with that purpose, the standard regulates earthworks by reference to the extent and condition of the land disturbed, rather than to the particular type or stage of earthworks being undertaken.

Specifically, Standard I458.6.11 provides that:

- the maximum disturbed area across all catchments identified in Precinct Plan 7 must not exceed 20 ha cumulatively at any one time;
- no more than 15 ha of earthworks, comprising disturbed and stabilised areas, may be undertaken within each catchment during any single earthworks season; and
- the maximum disturbed area within each catchment must not exceed 5 ha exposed at any one time.

The use of the terms "all catchments", "cumulatively" and "at any one time", together with the absence of any express limitation to bulk earthworks, indicates that these restrictions apply to all earthworks within the relevant Precinct Plan 7 catchments, including subsequent civil, subdivision and development-related earthworks where they contribute to the disturbed, exposed or seasonal earthworks area.

On this basis, I recommend that proposed condition [43] be amended so that it accurately reflects each of the limits in Standard I458.6.11 and does not restrict the application of those limits to bulk earthworks.

6.6 – Timing & Seasonal Restriction

Consented earthworks commenced at the site in January 2026. This initial bulk-earthworks programme is expected to continue through 2028, followed and partly overlapped by civil construction over approximately five years. Further bulk, civil and secondary building-related earthworks will then occur progressively as the remaining stages are developed, with the overall construction programme extending to approximately 2039–2041. Based on my experience, I consider these timeframes to be reasonable.

The applicant has proposed a seasonal restriction for the earthworks which is consistent with the requirements of the existing Stage 1 earthworks permit. The intention of this condition is to minimise the overall duration that bare earth is exposed, and to reduce the potential effects of sedimentation on the receiving environment during Auckland's wetter winter months. I support the applicant's proposal in this regard.

6.7 – Conclusion

Regarding the proposed earthworks, the applicant considers that the implementation of best practice ESC measures will appropriately manage potential sediment-related effects, and that the effects will be less than minor. Based on my assessment of the applicant's proposal, I concur with their assessment, subject to the works being undertaken in accordance with the application documents, all supporting technical information and proposed consent conditions, including the additional recommendations set out below.

7.0 Section 67 Information Gap

I have identified that there are no section 67 information gaps.

8.0 Recommendation

The AEE and its accompanying earthworks and ESC related documents state that proposed ESC measures will ensure the proper management of any potential sediment related effects and that any resulting effects will be less than minor. An assessment of the technical aspects of the earthworks and sediment control methodology has been undertaken, and I support the applicant's proposed earthworks and ESC related measures.

Notwithstanding this support, I have recommended an amendment to the applicant's proposed condition number 43, the relevant matters for which are discussed in section 6.5 above. I have also recommended the inclusion of an additional Review Condition, the details of which are discussed in Section 9, below.

9.0 Proposed / Amended Conditions

I consider the applicant's proposed earthworks and ESC related conditions to be appropriate. However, I have recommended an amendment to proposed condition 43.

I have also recommended an additional condition relating to the applicant's proposed 25-year expiry date for the earthworks permit. The applicant has suggested that a Review Condition for the earthworks permit is unnecessary due to the proposed staging of the works. However, earthworks staging is not relevant to the intention of a Review Condition. Simply put, a Review Condition allows for the earthworks permit to be reviewed should it be determined that the ESC measures proposed in the application documents no longer represent best practice.

In Table 1, below, my recommended amendment to Proposed Condition 43 is shown as being ~~struck through~~, whilst my recommended additional condition is underlined.

Table 1 –Recommended Amendment & Additional Condition

	Existing Proposed Condition – ~~struck through~~	**Recommended Amendment- underlined**
[43]	~~The maximum area of exposed earth associated with bulk earthworks at any one time throughout the duration of the project when exercising this consent must be no greater than 20 hectares across the Project and 15 hectares within each catchment.~~ ~~*Advice note: This limit applies to "bulk" earthworks only and not to "post-construction" subdivision or development related earthworks.*~~	The Consent Holder must undertake all earthworks authorised by this consent so that: a. the maximum disturbed area across all catchments identified in Precinct Plan 7 does not exceed 20 ha cumulatively at any one time; b. no more than 15 ha of earthworks, comprising disturbed and stabilised areas, is undertaken within each catchment during any single earthworks season from 1 October to 30 April; and c. the maximum disturbed area within each catchment does not exceed 5 ha exposed at any one time. *Advice note: For the purposes of clauses (a) and (c), areas of completed earthworks that have been stabilised are no longer considered disturbed areas. Clause (b) applies to the total area of earthworks undertaken within the relevant catchment during an earthworks season, including both disturbed and stabilised areas. The limits apply irrespective of whether the works comprise bulk, civil, subdivision or development-related earthworks.*
	Recommended Additional Condition	
[XX]	**Review Condition** The Council may, within one month following each anniversary of commencement of this consent, serve notice on the Consent Holder under section 128(1) of the Resource	

	Management Act 1991, of its intention to review the conditions of resource consent LUC60467963 for the following purposes: (a) To deal with any significant adverse effects on the environment arising from the exercise of the consent which was not foreseen at the time the application was considered and which is appropriate to deal with at the time of the review. (b) To consider the adequacy of conditions which prevent nuisance and adverse effects beyond the boundary of the Site, particularly if regular or frequent complaints have been received and validated by an enforcement officer. (c) To consider developments in erosion and sediment control technology and management practices that would enable practical reductions in the discharge of sediment to the receiving environment. Or, the consent may be reviewed by the Council at any time, if it is found that the information made available to the Council in the application contained inaccuracies which materially influenced the decision and the effects of the exercise of the consent are such that it is necessary to apply more appropriate conditions.