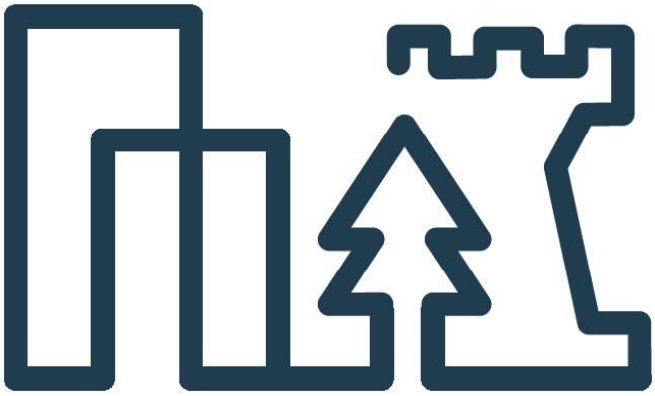
James Gladwin - BSc (Hons) Environmental Science, PgDip in Soil Science, CEnvP.

James is a Suitably Qualified and Experience Practitioner (SQEP). With 15+ years of experience in contaminated land covering a wide range of sites and contamination types, James has an excellent understanding of the investigation and remediation of contaminated land in accordance with the National Environmental Standards for Contaminated Land (NESCS) and the Contaminated Land Management Guidelines (CLMG).

James is a certified environmental practitioner (CEnvP) and has provided a wide range of contaminated land services to an array of clients. Key clients include the District and City Councils of the Bay of Plenty, the Bay of Plenty Regional Council, Christchurch City Council, Gisborne City Council, New Plymouth District Council, and the NZ Transport Agency. He has been a panel member that provided technical review and guidance for the development of contaminated sites. He has also provided technical reviews for contaminated land investigations completed by third parties. James currently sits on the Bay of Plenty Regional Council Environmental Panel and is a permanent member of ALGA.

James worked on the Kopeopeo Canal Remediation Project, providing independent technical analysis for dioxin contamination in soils, sediment, water, and air. He monitored and reported on the effectiveness of the dredge trial within resource consent requirements. This provided proof that the remediation methods were effective and practical so that the full-scale remediation of the canal could be completed. James continued to provide technical input through the remediation stage of the project.

APPENDIX 14: LANDSCAPE AND VISUAL ASSESSMENT REPORT



FINAL

Gisborne District Council

Waipaoa Stopbank Improvements

Landscape and Visual Effects Assessment

Te Karaka

30 March 2026

2-S5743.00

Waipaoa Stopbank Improvements Landscape and Visual Effects Assessment

Te Karaka

Gisborne District Council

WSP
Gisborne
Hardy Lane
wsp.com/nz

REV	DATE	DETAILS
A	20/03/2026	Issued to GDC
B	30/03/2026	Revised and Issued to GDC

	NAME	DATE	SIGNATURE
Prepared by:	Stefan Steyn	04/03/2026	
Reviewed by:	Andrew King	04/03/2026	
Approved by:	Pete Sims	20/03/2026	

TABLE OF CONTENTS

1 INTRODUCTION

WSP has been engaged by Gisborne District Council (GDC) to undertake a high-level desktop based landscape and visual effects assessment to assess the effects of the proposed Waipaoa Stopbank Improvements and associated road improvements at Te Karaka (refer Figure 1). This desktop report provides the results of this assessment.

This desktop assessment has been prepared in general accordance with 'Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines', Tuia Pito Ora New Zealand Institute of Landscape Architects, July 2022 (**TTatM**).

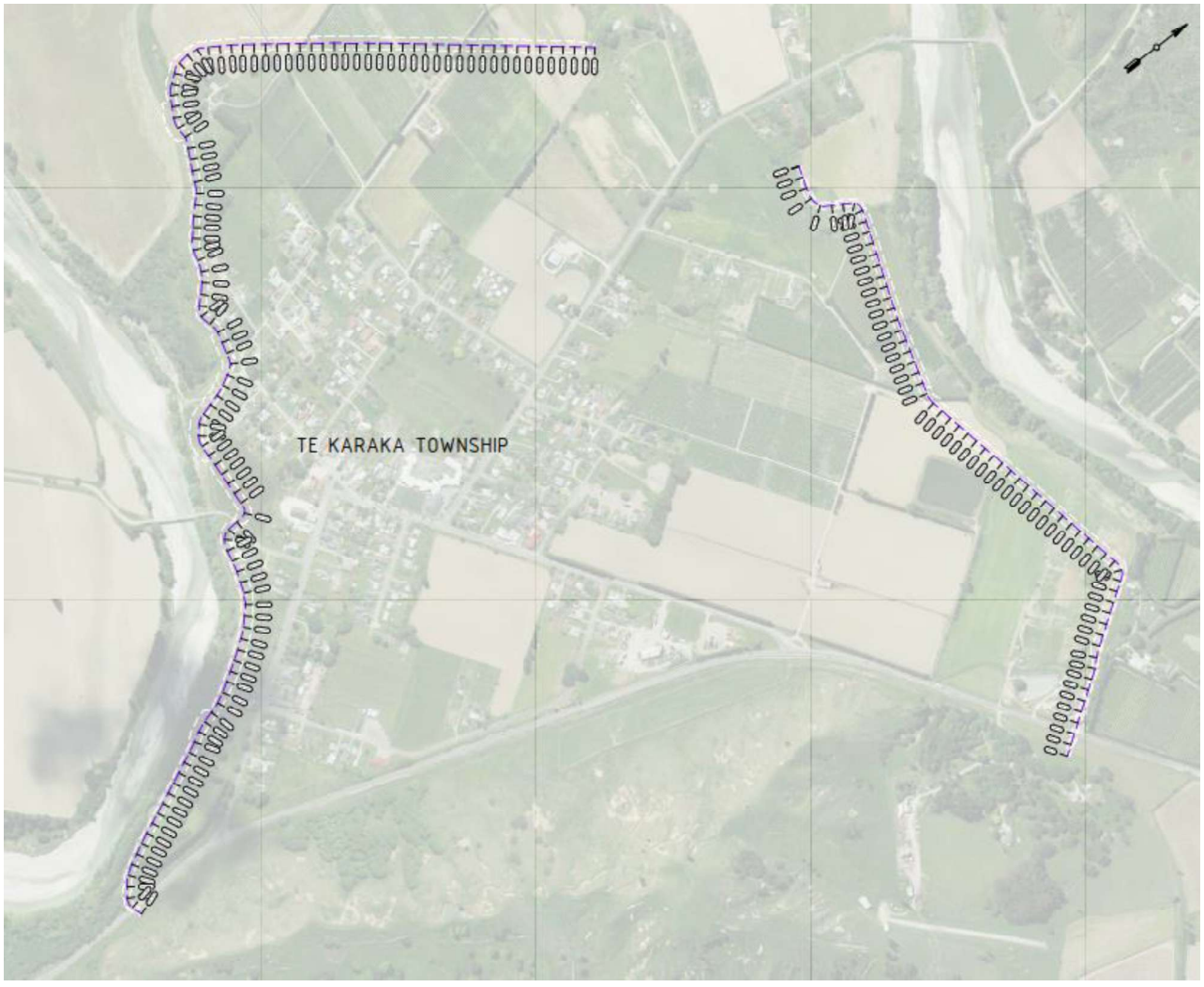


Figure 1: The Project at Te Karaka

2 THE PROPOSAL

The project is located at Te Karaka, Gisborne (refer Figure 2). The proposal is to raise and widen the existing stopbank alignment on the riverside face of the existing stopbank by approximately 2 m. This will include a standard 4 metre crest width, with 2:1 batters, approximately 600 mm of freeboard. The project will also

involve construction of a new stopbank, raised approximately 4.5 m above existing ground levels, broadly following the alignment of the existing stopbank but locally offset inland (refer Figure 3).

Construction works associated with the stopbank upgrade are anticipated to include:

- Removal and stripping of topsoil and vegetation from the area of stopbank to be upgraded (crest and riverward batter slopes);
- Removal and stripping of topsoil and vegetation from borrow pits located within the floodable berm adjacent to the stopbank;
- Construction of a working platform by benching into the side of the existing stopbank to allow new borrow material to key into the existing structure;
- Placement and compaction of borrow material in layers to achieve the required width and height;
- Shaping of batters and redistribution of excess cut material; and
- Full renewal of existing culverts through the stopbank.

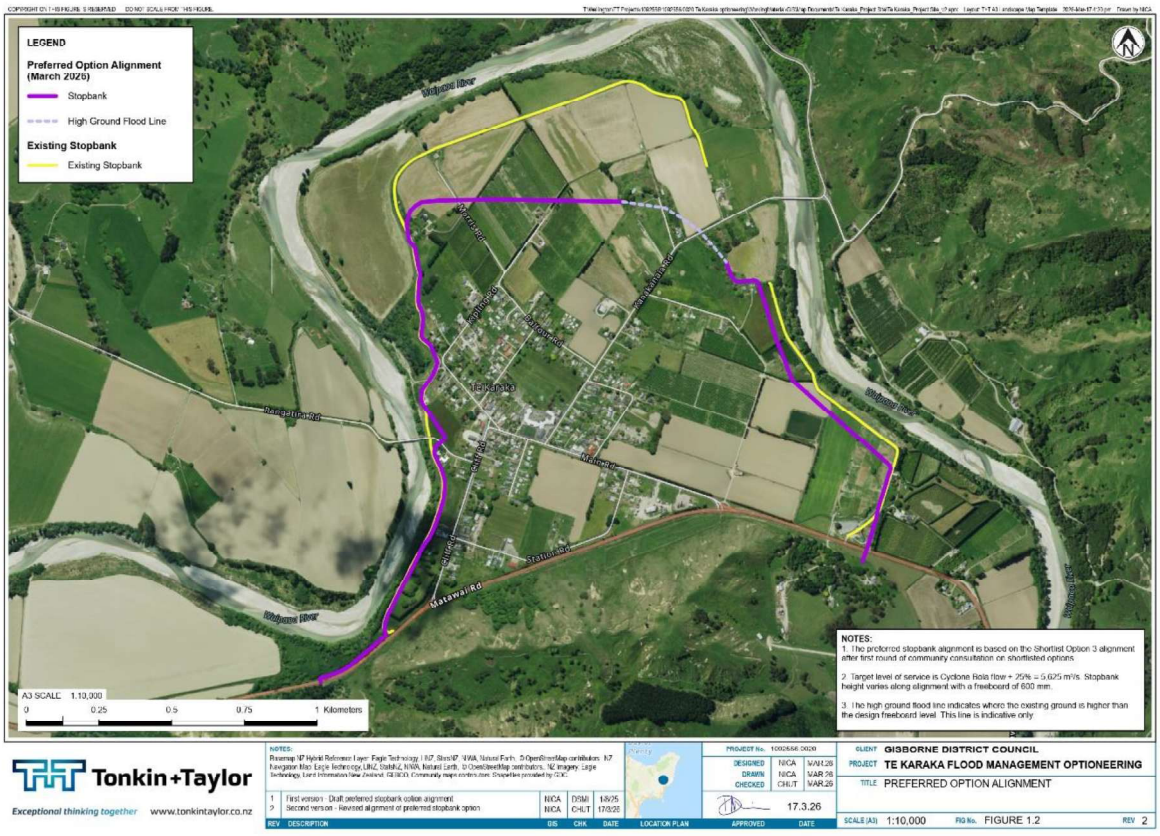


Figure 2: The proposed stopbank alignment (purple line) and existing stopbank alignment (yellow line)

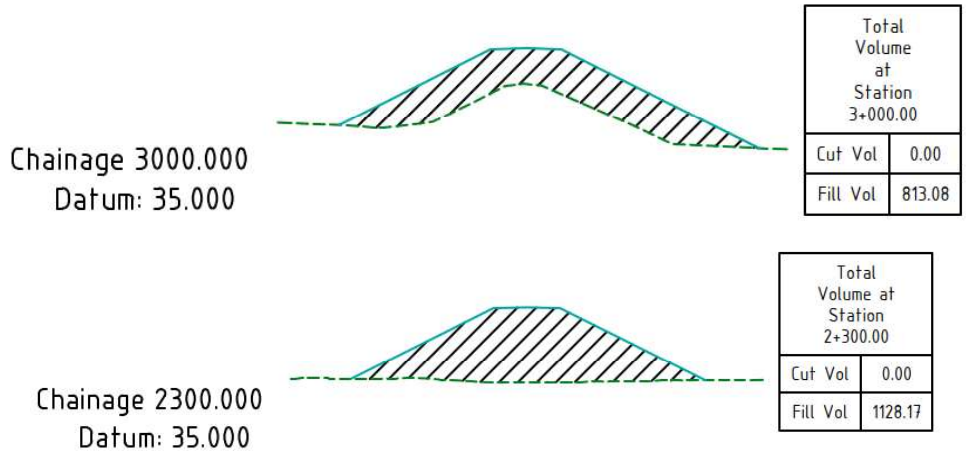


Figure 3: The proposed stopbank widening at the existing crest (top section) and where the alignment is in a new location (bottom section).

3 RELEVANT STATUTORY AND NON-STATUTORY PROVISIONS

3.1 TAIRĀWHITI RESOURCE MANAGEMENT PLAN

Te Karaka is in the Rural General zone and there are no TRMP[1] Landscape Overlays (Outstanding Landscapes, Protection Management Areas, or Urban Ridgelines) identified within or in proximity to the project area.

Rural General Zone (Landscape & Amenity) summary of key provisions:

- **Rural Character & Amenity**: Development must maintain rural qualities like open space, natural quiet, and low building density.
- **Natural & Scenic Values**: Development must avoid, remedy, or mitigate effects on significant landscapes, indigenous vegetation, and cultural sites. Special protections apply to Outstanding Natural Features and Landscapes.
- **Design & Scale Controls**: Buildings must be low-profile, well-set back, and designed to blend with the landscape. Site coverage is limited to preserve openness.
- **Screening Requirements**: Unsightly structures must be screened with planting or fencing. Shelterbelts are regulated to protect sunlight and views.
- **Urban Containment**: Urban-style development is restricted. Rural Residential and Lifestyle zones act as buffers, with large lot sizes to retain semi-rural character. Productive land is protected from subdivision.
- **Reverse Sensitivity**: New uses must not compromise existing rural activities. Setbacks and buffers are required to prevent conflicts with farming or forestry.

[1] Tairāwhiti Resource Management Plan, 2015.

4 METHODOLOGY

The landscape methodology used for this LVA follows the concepts and principles outlined in (**TTatM**).

The following seven-point scale is used to describe effects (Table 1). The conversion to RMA terminology is shown in brackets:

Very Low (Less than minor effects)	**Low** (Minor to less than minor effects)	**Moderate-Low** (Minor effects)	**Moderate** (More than minor effects)	**Moderate-High** (More than minor effects)	**High** (Significant effects)	**Very High** (Significant effects)

Table 1: Effects rating table

Preparation of this LVA included the collection of baseline information through desktop studies and collation of planning information.

5 ASSESSMENT OF LANDSCAPE AND VISUAL EFFECTS

5.1 THE LANDSCAPE CONTEXT

Te Karaka is characterised by a contained rural valley landscape, where flat alluvial landforms, pastoral and horticultural landcover, and low-density rural settlement patterns combine to create a coherent and legible landscape.

An existing stopbank structure is evident along sections of the Waipaoa River corridor, broadly following the river alignment and delineating the active river channel from the surrounding productive valley floor. This engineered landform introduces a subtle but continuous linear feature within the landscape, reflecting flood management measures while also reinforcing the separation between the river system and adjacent agricultural land.

The productive valley floor is strongly defined by a geometric pattern of agricultural and horticultural activities, with paddocks and lots clearly articulated by shelterbelt planting, hedges, and farm boundary vegetation. These linear vegetative elements provide visual structure, wind protection, and a strong sense of order across the landscape. As a result of the established presence of this stopbank, such engineered flood protection structures are perceived as an expected and accepted element within the landscape, consistent with the modified character of the river corridor and its long-standing relationship with surrounding agricultural land uses.

The river corridor and enclosing hill country remain key defining elements of the area. Together, the productive farmland, structured field patterns, and compact rural settlement reinforce Te Karaka's identity as an agriculturally based township embedded within a distinctive and well-defined rural landscape.

5.2 THE VISUAL CATCHMENT AND VIEWING AUDIENCE

The visual catchment is generally contained and defined by:

- The Waipaoa River corridor and willow planting along the river margins to the east, north, and west; and
- State Highway 2 and rising hill slopes to the south.

The viewing audience comprises:

- Residential properties at the eastern edge of Te Karaka and along Cliff Road, Library Road, and Kipling Road (refer Figure 4);
- Rural properties and farm dwellings scattered throughout the wider rural landscape, including the Springdale Grove area and Atawhai Park (refer Figure 5); and
- Motorists travelling on State Highway 2 and local roads.

Figure 4: View east from Cliff Road toward the existing stopbank.

Figure 5: View east from Kanakanaia Road toward the proposed stopbanks site in the background.

5.3 EFFECTS ON LANDSCAPE CHARACTER VALUES DURING CONSTRUCTION AND OPERATION

The physical changes to the landscape arising from the proposal include:

- Raising the existing stopbank approximately 2 m higher than the existing stopbank,
- Construction of a new stopbank raised approximately 4.5 m above existing ground levels, broadly following the alignment of the existing stopbank but locally offset inland (refer Figure 2 and Figure 3),
- Raising of State Highway 2 at two locations, as well as Rangatira Road, to align with the proposed stopbank levels; and
- Demolishing the old stopbank where the alignment has changed and returning the land to its current land use.

5.3.1 EFFECTS DURING CONSTRUCTION

Construction activities will result in temporary changes to the landscape character through temporary stockpiles, site fencing, and construction traffic. However, the construction footprint will be relatively limited, and works will be undertaken incrementally along the stopbank alignment, reducing the extent of the disturbance.

Most land affected during construction is already within a modified rural environment associated with flood protection and productive land uses. The proposed roading modifications will occur largely within existing road corridors, which are already highly modified in character.

The removal of sections of the existing stopbank during construction will similarly result in temporary landscape effects, with affected land progressively reinstated and returned to its current productive use, thereby re-establishing existing land use patterns and landscape structure.

While construction activities will temporarily interrupt existing landform patterns and land use, these effects will be short-term and reversible. Overall, the landscape character effects during construction are assessed as **Low Adverse**, noting that these effects are temporary in nature.

5.3.2 EFFECTS DURING OPERATION

The existing landscape is valued for its rural productive character, ordered orchard and paddock patterns, and the backdrop provided by surrounding hill slopes. The presence of the existing stopbank means the local landscape character is already modified to a limited extent by flood protection infrastructure.

The most notable landscape effects will occur where the proposed stopbank deviates from the existing alignment and extends into greenfield land. In these areas, the new stopbank will introduce a raised linear landform and reduce the extent of productive land within its footprint. This will locally disrupt orchard and paddock patterns and may require the removal of small sections of shelterbelts or hedgerows.

Despite these changes, the stopbank will remain small in scale relative to the wider rural landscape and will read as a continuation of existing flood protection infrastructure. Overall landscape effects are assessed as **Low Adverse** in offset locations and **Very Low Adverse** to **Negligible** where the proposal follows the existing alignment.

The proposed locations where the road will be raised to tie in with the new stopbank levels will require modification of the existing road corridor, including the construction of new road embankments and associated earthworks. These works will be experienced in close visual and physical association with the new stopbank and will be viewed within the context of existing roading infrastructure and flood protection works.

The road corridors in these locations are already highly modified and do not contain established vegetation or intact landform patterns that contribute meaningfully to landscape character or amenity. As such, the introduction of additional earthworks and fill embankments will not result in a notable change to the underlying landscape character. The landscape effects associated with the road raising works are therefore assessed as **Very Low Adverse**.

5.4 EFFECTS ON VIEWS AND VISUAL AMENITY DURING CONSTRUCTION AND OPERATION

The key resource management issue relating to visual aspects is whether the proposed stopbank may intrude into views of the Waipaoa River corridor, productive farmland, and surrounding hill slopes.

5.4.1 VISUAL EFFECTS DURING CONSTRUCTION

During construction, temporary visual effects will arise from the presence of construction machinery, earthworks, temporary stockpiles, site fencing, and construction traffic. Dust generation may also be locally apparent. Apart from the stopbank, these elements will temporarily alter the existing visual environment and rural amenity.

However, such activities are typical of construction within rural and productive landscapes, where farm machinery, earthworks, and seasonal land disturbance already form part of the visual context. Construction activities will be temporary, localised, and progressively reinstated as works advance.

The removal of the existing stopbank during construction will also result in temporary visual change; however, as land is reinstated and returned to productive use, established visual patterns and rural land use characteristics will be restored, limiting longer-term effects on visual amenity.

Considering the temporary nature of these effects, the productive nature of the rural setting, and the familiarity of such activities within the landscape, visual effects during construction are assessed as **Moderate-Low Adverse**, reducing to **Negligible** once construction is complete.

5.4.2 VISUAL EFFECTS DURING OPERATION

The viewing audience comprises both fixed residential viewers and transient road users (refer Figure 3). Existing views from residential properties are variable and influenced by orientation, elevation, intervening buildings, boundary planting, and distance from the proposed stopbank.

Residential Properties in Proximity of the Proposed Stopbanks (Cliff Road, Library Road and Kipling Road)

In most cases, views toward the river corridor are already largely screened by the existing stopbank, which forms a continuous linear element between residential properties and the river. As a result, existing residential outlooks are typically focused on the immediate rural–residential environment, including paddocks, shelterbelts, local roads, and distant hill slopes.

The proposal will involve replacement of the existing stopbank with a similar engineered structure, approximately 2 m higher, and of comparable form, materials, and alignment. The visual change experienced by nearby residential properties will therefore be incremental and will not materially alter existing views.

While some properties may experience filtered or glimpsed views of the proposed stopbank through boundary vegetation or over fences, the proposal will not introduce a new or unfamiliar element into the visual environment. The stopbank will continue to screen views toward the river corridor, and the overall composition and character of views from residential properties will remain largely unchanged.

Given the limited change from the existing baseline condition, the modest increase in height, and the consistency of the proposed stopbank with the existing landscape context, the effects on residential visual amenity are assessed as **Very Low Adverse**.

Rural Properties (Farm Dwellings and Lifestyle Blocks)

Based on desktop analysis, it is considered unlikely that most rural dwellings have open views of the Waipaoa River corridor. Instead, visual amenity is primarily derived from views across productive farmland, orchards, shelterbelts, farm infrastructure, and distant hill slopes.

For the purposes of this assessment, Rural Properties are grouped into two categories based on their existing views and the nature of change anticipated.

Existing Views

Some rural dwellings currently experience distant or partial views of the existing stopbank, typically in the background of views across productive farmland. In these cases, the stopbank already screens views toward the river corridor while allowing a sense of openness and visual depth across the rural valley floor. These views are assessed as having moderate to low visual amenity and sensitivity.

Where the proposed stopbank is constructed closer to these dwellings than the existing alignment, the separation distance will be reduced to a small degree. This will result in a modest reduction in viewing depth and a greater prominence of the stopbank within the view. However, the proposed stopbank will remain consistent in form and appearance with the existing structure and will continue to read as part of the established flood protection infrastructure in their background views.

Due to the moderate to low sensitivity of these views and the incremental nature of change, the resulting effects on visual amenity are assessed as **Low Adverse**.

Considering both new and modified views, the proposed stopbank is assessed as resulting in an overall **Low Adverse** effect on the visual amenity of rural residential properties and the wider rural viewing audience.

New Views

These views comprise residential properties that will be able to see the new stopbank in their foreground. Views typically comprise paddocks and orchards in the foreground and mid-ground, with longer-distance views screened by associated orchard planting, hedgerows, and shelterbelts.

As a result, these views tend to be relatively contained, with visual amenity largely defined by productive land uses rather than expansive or scenic outlooks. Sensitivity to change is therefore assessed as moderate to low.

The proposal will introduce a grassed embankment into the foreground or mid-ground of these properties' views. This will modify the existing outlook, potentially replacing and screening portions or all the productive elements such as paddocks or orchards from their view.

Given that views of paddocks and orchards will be screened by the proposed stopbank, together with the moderate to low sensitivity of the viewing audience, visual effects for these properties are assessed as **Moderate-Low Adverse**.

Users of Cliff Road, Library Road and Kipling Road

For road users, foreground views are characterised by the road surface, grassed paddocks, orchards, residential properties, and roadside vegetation, with background views defined by distant hill slopes and rural landforms.

The proposed stopbank will generally be glimpsed from the road network, viewed obliquely and for short durations. In many locations, views will be partially screened by roadside vegetation and existing development.

Given the transient nature of views, limited duration of exposure, and consistency of the proposal with the existing rural environment, effects on visual amenity for road users are assessed as **Very Low Adverse**.

Roading Modifications

The report has assessed roading modifications at Site 1, (State Highway 2), Site 2, (State Highway 2), Site 3 (Rangatira Road), and Kanakanaia Road. Of the proposed roading modifications, the works at Rangatira Road and Kanakanaia Road are expected to result in the greatest degree of visual change.

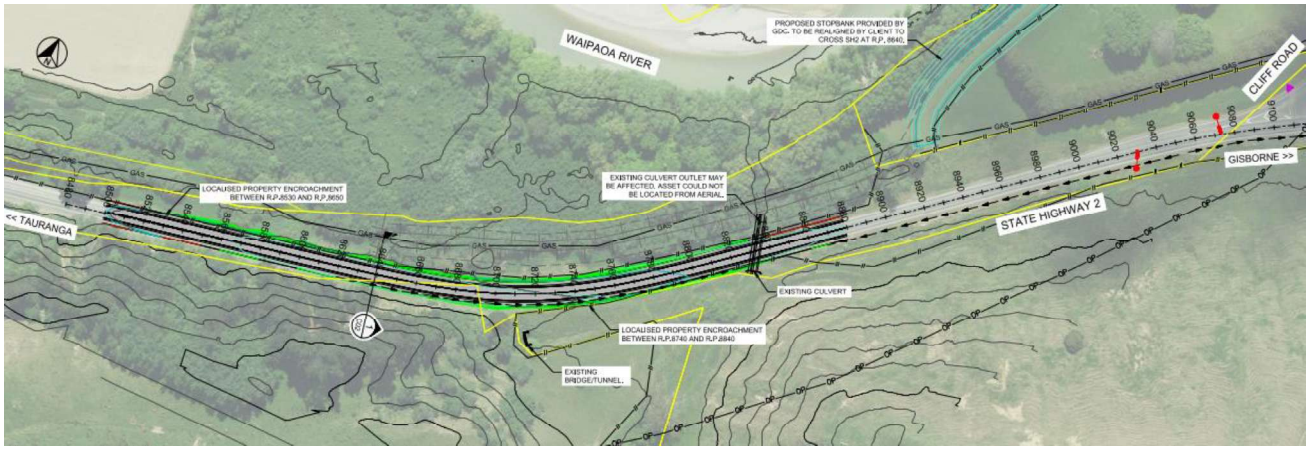


Figure 6: Site 1

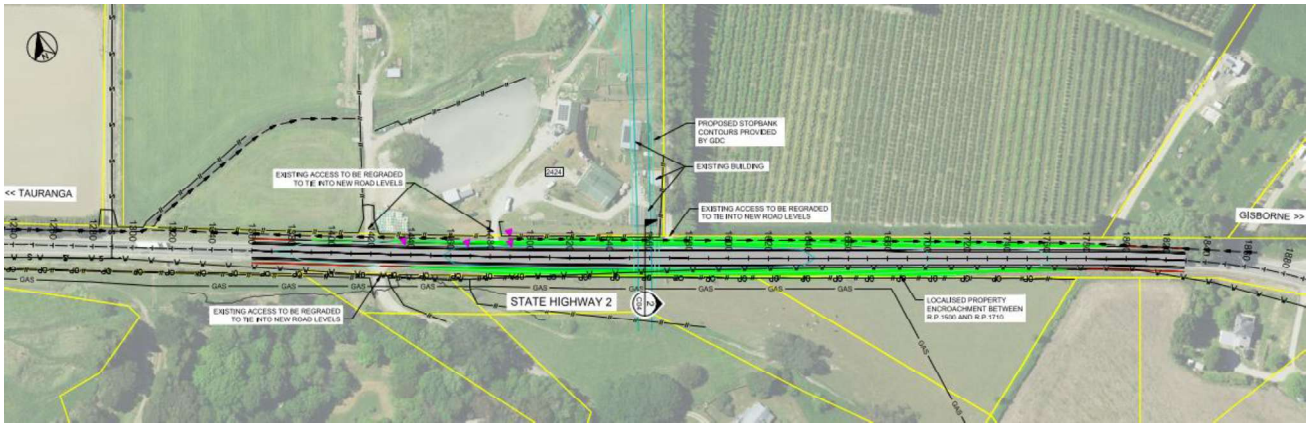


Figure 7: Site 2

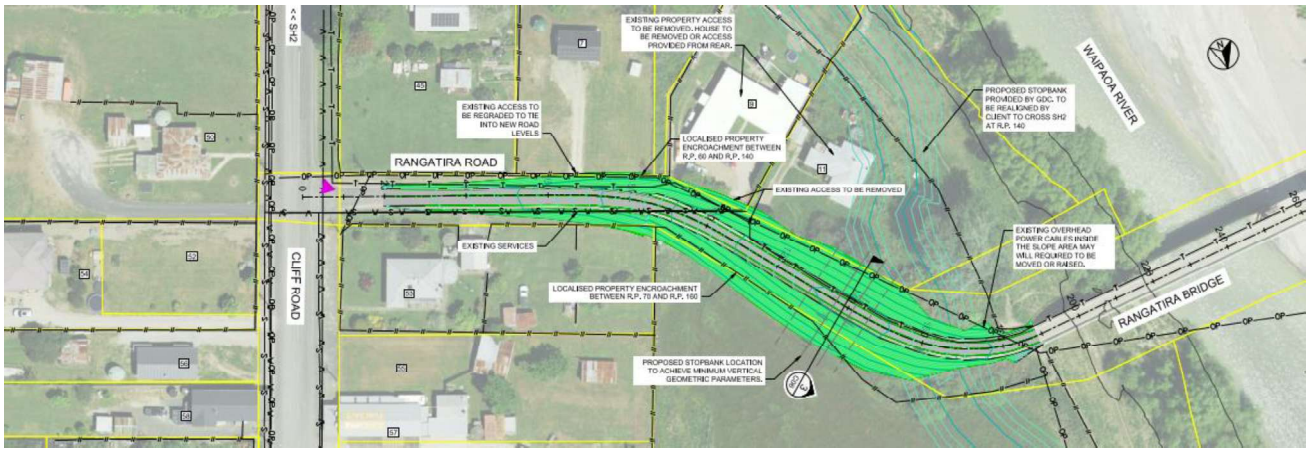


Figure 8: Rangatira Road

Figure 9: Kanakanaia Road

Rangatira Road

Existing views from nearby residential properties are currently characterised by road infrastructure, adjoining paddocks, and a generally open rural outlook.

The proposed works will require the construction of raised fill embankments to tie the road into the new stopbank levels. Due to the scale of the embankments and their proximity to residential properties on both sides of Rangatira Road, the earthworks will become a noticeable element within foreground views. In addition, the raised road profile will result in vehicles being more visible against the skyline, increasing visual prominence and potential visual clutter.

In the absence of mitigation, the proposed roading alterations at Rangatira Road are assessed as resulting in a **Moderate Adverse** effect on visual amenity due to the introduction of a visually prominent engineered landform within close-range residential views.

Kanakanaia Road

Similar to Rangatira Road, properties to the north and south of the proposed roading changes along Kanakanaia Road will experience views of raised fill embankments and elevated vehicles. However, the nearest residential properties are located approximately 150 metres from the highest point of the proposed fill embankments, and views of the works will therefore be experienced at mid-distance rather than in the immediate foreground.

While the fill embankments and raised vehicles will become a noticeable component within these views, they will be experienced at mid-distance, which will reduce the magnitude of visual effect. Furthermore, affected properties will retain wide viewing angles across the surrounding rural landscape when views are not directed toward the modified road corridor. As a result, large portions of their outlook, including paddocks, orchards, and distant hill slopes, will remain unaffected by the proposed works, and overall visual amenity will be retained.

Taking into account the greater separation distance, the mid-distance viewing context, and the cumulative effects of the stopbank and associated roading works, the proposed roading alterations at Kanakanaia Road are assessed as resulting in a **Moderate-Low Adverse** effect on visual amenity and will require mitigation measures.

Mitigation measures for both Rangatira Road and Kanakanaia Road, including the planting of the fill embankments with appropriate low-maintenance vegetation to soften and partially screen the earthworks and elevated vehicles are recommended. With the implementation of mitigation, the visual effects associated with the Rangatira Road and Kanakanaia Road modifications are assessed as being reduced to **Low Adverse**.

Removal of the Old Stopbank

Where sections of the existing stopbank are permanently removed as part of the operational works, views toward adjacent farmland may be opened for some properties. This will represent a permanent change to the existing visual baseline. However, as the land is reinstated and returned to productive use, rural land use patterns, vegetation cover, and the visual structure of the landscape will be re-established. As a result, changes to visual amenity are anticipated to be small and beneficial, and consistent with the surrounding rural environment. Overall, this is assessed as resulting in a **Very Low to Low Positive** effect on the visual environment and landscape amenity.

6 CONCLUSION

The assessment has considered the potential landscape and visual effects of the proposed stopbank and associated roading modifications within the context of the existing Te Karaka rural valley landscape. The landscape is characterised by productive farmland, ordered orchard and paddock patterns, and an established relationship with flood protection infrastructure along the Waipaoa River corridor.

The proposed stopbank will introduce localised changes to landform and land use where it deviates from the existing alignment, including the loss of small areas of productive land and minor disruption to established vegetation patterns. However, the stopbank will remain modest in scale relative to the wider landscape and will read as a continuation of existing flood protection measures. Overall effects on

landscape character are assessed as **Low Adverse**, with **Moderate-Low Adverse** effects confined to limited offset locations and **Very Low Adverse to Negligible** effects where the proposal follows the existing alignment.

In locations where sections of the existing stopbank are permanently removed, land will be reinstated and returned to productive use. This will restore rural land use patterns and, in some instances, open up views across adjacent farmland. These changes are assessed as resulting in small and beneficial effects on local visual amenity.

Visual effects on residential and rural viewers are generally limited due to existing screening, the incremental nature of change, and the consistency of the proposal with the surrounding rural environment. Most visual effects are assessed as **Very Low to Low Adverse**. In terms of roading modifications the Rangatira Road and Kanakanaia Road improvements represent the greatest potential visual change; however, with appropriate mitigation, residual visual effects are assessed as **Low Adverse**.

Overall, the proposal is not expected to result in significant adverse landscape or visual effects.

7 LIMITATIONS

This report ('Report') has been prepared by WSP New Zealand Limited ('WSP') exclusively for Gisborne District Council ('Client') in relation to the Waipaoa Stopbank Improvements ('Purpose') and in accordance with the Short Form Agreement with the Client electronically signed 4 March 2026 ('Agreement'). The findings in this Report are based on and are subject to the assumptions specified in the Report and Short Form Agreement. WSP accepts no liability whatsoever for any use or reliance on this Report, in whole or in part, for any purpose other than the Purpose or for any use or reliance on this Report by any third party.

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