

b r o w n

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PAKIRI SAND EXTRACTION PROJECT LANDSCAPE ASSESSMENT



Prepared for the
McCallum Brothers Ltd

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1.0 INTRODUCTION

This report addresses the landscape and natural character effects associated with the proposed renewal of McCallum Bros Ltd® (MBL) current sand extraction license for two areas off Pakiri Beach.

Current sand extraction occurs within limits set by the Environment Court's current consent (dated 2006), effectively confining such operations to two areas – between the 5m and 10m as mapped on the LINZ Bathymetric Chart NZ53 1992. In addition, extraction is precluded from areas within 100m seaward of the crest of the nearshore bar, and this will remain the case, while the total area of operations will continue some 10.8 km down the in-shore CMA parallel with Pakiri Beach (with a 1.9km exclusion area near Te Arai / Eyres Point), covering some 230ha. Total extraction quantities are also to remain limited to 76,000 m³/yr.

However, a number of changes are associated with the proposed consent renewal that are explained in Section 2.0. These relate to:

- the delineation of the sand extraction areas;
- a change of extraction vessel;
- changes to the discharge of overflow water from the 'barge';
- changes to the duration of extraction operations; and
- changes to the time at which they occur.

The effects associated with the renewal of the current sand extraction consent are assessed in relation to the current characteristics and values of the landscape and catchments around Pakiri Beach, focusing strongly on the beachfront, its foredunes and Te Arai Regional Park, and the key coastal feature of Te Arai Point / Eyres Point.

These effects are also evaluated with regard to the relevant statutory instruments, including key provisions of the Auckland Unitary Plan (RPS and District Plan), Policies 13 and 15 of the NZ Coastal Policy Statement and relevant provisions of the Hauraki Gulf Marine Park Act.

This report is accompanied by **27 Attachments**, which show the following:

- The landscape of Pakiri Beach, Te Arai Point and Leigh that is exposed to the current and proposed extraction operations;
- Two maps showing those areas on and near Pakiri Beach that would be theoretically exposed to the top of the exhaust stacks on the new dredge proposed for use at Pakiri – the *William Fraser*;
- Typical views from the Pakiri road network towards the current coastal consent; and
- Key viewpoints used to assist in the comparison of existing and proposed operations incorporating a photographic / visual comparison of the *Coastal Carrier* and *William Fraser* operating within the existing consent areas: Zones 1 and 2 north of Eyres Point and Zones 3 and 4 south of Te Arai Point.

2.0 THE PROPOSAL

As indicated above, renewal of MBLs' current sand extraction license would give rise to the following operational changes:

1. A change to the delineation of the extraction area boundaries: presently, the defined consent area is loosely defined by the 5m and 10m seabed contours off Pakiri Beach. Consequently, it is proposed that the future consent area be demarcated solely by coordinates aligned with LINZ's bathymetric contours, without reference to water depths, except to ensure that dredging does not occur within contours of less than 5m. In fact, most current operations occur around the 9m and 10m contours to avoid shoreline hazards and conflicts with recreational use of Pakiri Beach. Operations would still be confined to current extraction Zones 1 and 2 north of Te Arai / Eyres Point, and Zones 3 and 4 south of it.
2. A change of extraction vessel: currently, the *MV Pohonui* (see photo overleaf) and its tug, the *Acheron III*, undertake most dredging off Pakiri from a stationary position, supplemented by the *Coastal Carrier* which undertakes trailing suction dredging while moving up and down the consented extraction zones (at approximately 1.0 to 1.5 knots). Both of these vessels would be replaced by a single, slightly larger, vessel – the *William Fraser*. Both the *Coastal Carrier* and *William Fraser* are trailing suction dredges, but the larger vessel now proposed would improve the efficiency of extraction and reduce both the number of vessels operating at Pakiri and the duration of operations (see below). A comparison of the *Coastal Carrier* and *William Fraser* is outlined in **Table 1** overleaf.
3. This would also result in a change to the discharge of overflow water in the course of dredging. Presently, the *Coastal Carrier* discharges overflow water via weir boards on the sides of the hopper and an overflow flume: the *William Fraser* would discharge overflow water under the keel via 6 'moon pools', with no overflow flume.
4. A change to extraction duration: currently, the *Pohonui* averages 10 trips to Pakiri per month and the *Coastal Carrier* averages 2 trips – totalling 12 trips per month on average. By contrast, the *William Fraser* would reduce this to 6 trips per month. Similarly, whereas both existing dredges typically operate off Pakiri for approximately 4.5hrs on average, the *William Fraser* would complete such operations in an expected time of around 2.5hrs.
5. Finally there would be a shift in the timing of such operations: much of MBL's current extraction already occurs at night-time, but it is anticipated that the proportion of night-time extraction would further increase, and MBL further proposes to limit most such operations to weekdays – avoiding extraction over weekends when Te Arai Regional Park is more heavily used, especially over the Summer months.



The Pohonui leaving the port of Auckland

The following table outlines the main dimensional differences between the Pohonui, the Acheron III and the *Coastal Carrier* that are currently employed by MBL for sand extraction, and the *William Fraser*, which is expected to replace these vessels in October or November 2019:

Table 1.

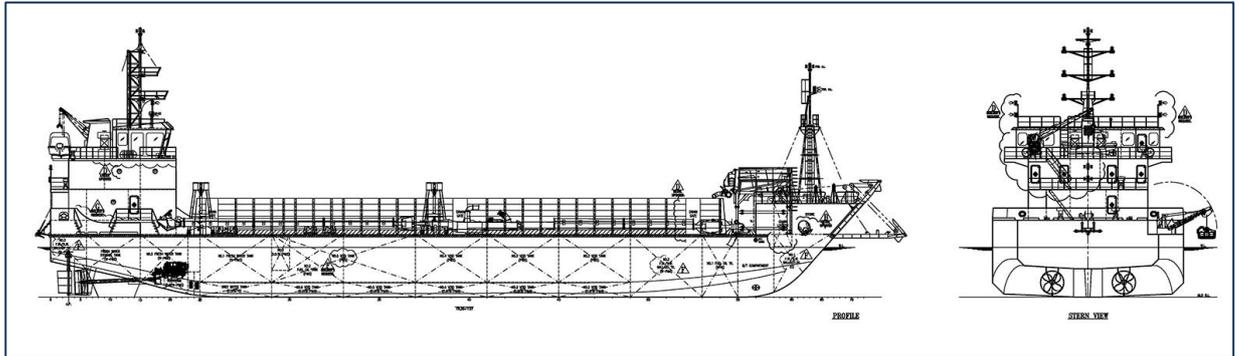
Vessel:	Coastal Carrier Motorised, Sand Dredger, General cargo transport, roll on roll off capability	Acheron III Tug 16T Bollard Pull	Pohonui Non-motorised general cargo transport
			
Beam	12 meters	7.3 meters	13 meters
Length	56.65 meters	23.9 meters	55 meters
Deck Size	28m x 10m	N/A	25m x 12m
Light Draft	1.8 meters	3.0 meters	0.4 meters
Max Draft	2.8 meters	3.5 meters	3.5 meters
Gross Tonnage	630 Tonnes	163 tonnes	684 Tonnes
Capacity	860 Tonnes	N/A	1500 Tonnes

In addition, the following are more precise differences that also affect the height and profile of all three existing vessels and the *William Fraser*:

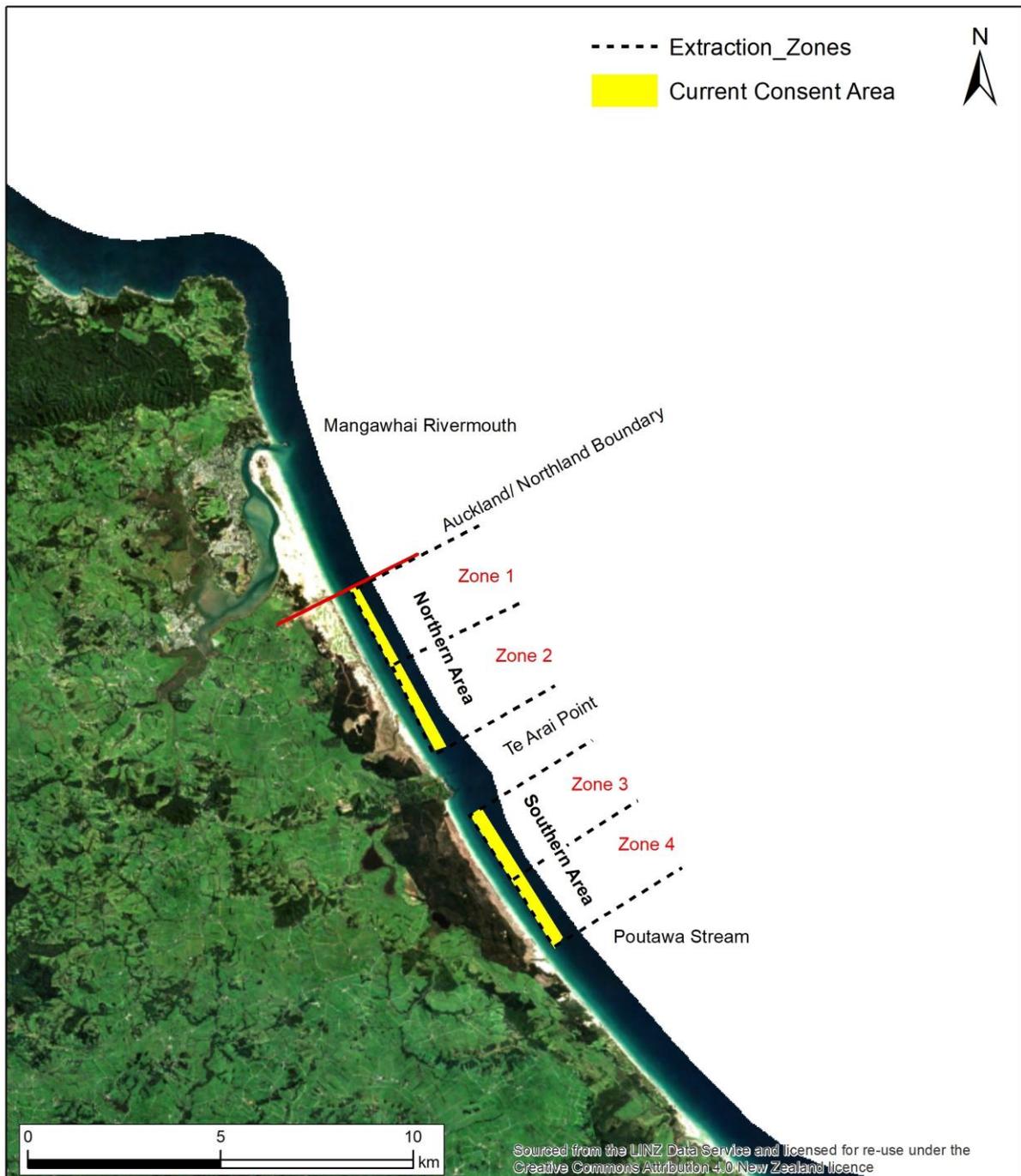
	Pohonui	Acheron III	Coastal Carrier	William Fraser
Depth of Vessel: Mast to Keel	7.5m	10.0m	14.5m*	22.0m
Height Above Water to Top of Mast*			13.0m* / 12m	20m* / 17.8m
Height A.W. to Top of Exhaust Stacks*	6.5m		10m*/9m	12.8m*/10.6m

* When unloaded; otherwise when loaded

The following diagram shows the profile of the *William Fraser*:



The William Fraser



The two sand extraction areas subject to re-consenting

Key points to emerge from all of the above are that sand extraction would occupy the same license area as at present, while a new single dredge – the *William Fraser* – would replace both the *Pohonui* and the *Coastal Carrier*. The new dredge would be slightly larger than the *Coastal Carrier*, but the frequency and duration of operations would be shorter than at present, with most sand extraction being undertaken during week days to minimise their visibility from the regional park and DoC reserve during more heavily used weekends. In addition, the greater bulk of extraction would continue to shift from daytime to night-time.

These various factors need to be considered when assessing the effects of the renewal application.

3.0 LANDSCAPE CONTEXT

Pakiri Beach, extending either side of Te Arai and Eyres Points, is the largest of the Region's eastern ocean beaches (**Attachments 1-3**). Its broad crescent, defining the coastal edge of the Jellicoe Channel (which extends out to the Hen and Chicken Islands to the north, and Little Barrier Island to the south), provides an expansive 'gateway' to the Pacific Ocean, with its rolling seas and surf backed by a series of dune formations that culminate in the massive dunes of Mangawhai Heads. This dune corridor, much lower down most of the rest of the beach, spreads out to enclose three dune lakes south of Te Arai Point: Slipper Lake, Spectacle Lake and Tomarata Lake; while behind the northern-most of these dunes, low lying, formations of sand, mud and peat underpin a coastal terrace that extends from near Mangawhai to Te Arai Point Road. A mixture of underlying mudstone and sandstone formations combine to then form a sequence of more elevated, rolling to gently rolling, ridges and foothills, that provide the backdrop to most of the beach and its dune / terrace hinterland.

Farming operations have long dominated the area behind the coastal edge, with large areas of open pasture, especially obvious around Coal Hill and Black Swamp Roads north of Te Arai / Eyres Point and parts of Ocean View Road further south. By contrast, one of the defining features of the Pakiri coastline and landscape is the broad strip of pine forest that separates these hinterland areas from both ocean beaches. While pine forestry in the more immediate vicinity of both the northern and southern halves of Pakiri Beach was initially established to protect the coastline from dune progression inland, forestry production has superseded that initial protective function, despite the adverse effects of coastal winds and salt on many of the pine rows closer to both ocean beaches. More recently, development of the exclusive Tara Iti links golf course together with the adjoining Tara Iti Cottages (**Attachment 3**, lower photo), has removed a substantial portion of the pines north of Te Arai / Eyres Point. Even so, there remains a clear demarcation and separation of Pakiri Beach from its more immediate hinterland that is frequently accentuated by the shelterbelts criss-crossing pasture behind both arms of the Mangawhai Forest.

Moving further inland, however, the rising hill country and ridges that many local roads follow – notably Coal Hill Road, Te Arai Point Road, Lake Road, Red Hill Road and Atkins Road, all, of which 'fall' towards the sea – offer increasingly panoramic views of the Pacific Ocean, its forest fringe and the array of dunes and dune lakes, coastal terraces and lower lying ridges that frame both ocean beaches. At the same time, this sequence of rising terrain becomes both increasingly convoluted and notable for the interplay of residual pasture with stands of bush and native regeneration. A patchwork of rural-residential development and dwellings is also apparent behind both beaches, more obviously near Ocean View Road. Spread across the rising mantle of ridges behind the coastline and its lowland margins, this matrix of development extends as far inland as Mangawhai Road.

The simplicity and scale of the coastal landscape also starts to break down as one moves inland, but these qualities are replaced by increasingly complex, terrain, a string of dune lakes that vary in their size and aesthetic character, and bush remnants that – like the lakes – are evocative of the Region's natural heritage. The intertwining of landforms and bush helps to articulate the three-dimensional nature of this landscape and also creates a sense of attractive enclosure that contrasts with the expansive, often panoramic, views towards the Pacific Ocean and its margins. Even though the sea and other features like Slipper and Spectacle Lakes (**Attachment 4**), remain key features within such views, the interplay of landforms, vegetation, sea and lakes is both complex and enticing: the sea is the centrepiece of most views, but it is strongly farmed by an array of other elements that also contribute to the area's wider landscape character and values.

South of the Pakiri River, the relatively gradual and progressive layering of landforms just described is replaced by a sequence of sharply defined, cliffs and steep slopes that rapidly rise up to over 300m. Closely linked to Goat Island, just north of Leigh and Cape Rodney, this line of steep faces remains

dominated by old pasture, although an area of extensive native regrowth falling from M Greenwood Rd to the stony shoreline and rock shelves below, marks the presence of Pakiri Regional Park.

Returning to the actual coastline, Pakiri Beach has long been regarded as one of Auckland and the North's pre-eminent surfing beaches, but also a place that Aucklanders and their families can escape to on weekends and at holidays. The DoC car park at Te Arai / Eyres Point itself is now also frequently full of cars and vans carrying tourists on week days as well. Consequently, it is far from uncommon to see locals and visitors alike swimming and surfing off the Point; wading and strolling along its white sand margins; picnicking among and behind the dunes within the grassed reserve area; or clambering up the tracks that climb above the old quarry and cove at the outer edge of the headland.

Tern Point, near the Mangawhai estuary, and the forestry access road immediately south of Te Arai Point offer other means of public access to Pakiri Beach (as also does Pakiri River Road at the very southern end of main beach), Te Arai Point Road offers the most obvious and readily accessible of these points of entry to this important ocean beach. It is also the only point of access that caters for public use with provision of a DoC reserve, and Te Arai / Eyres Point itself is a clear and legible landmark that is intrinsically linked to both the northern and southern beaches. Much further south again, Pakiri River Rd offers an alternative point of access to the southern end of Pakiri Beach, although the beachfront immediately south of the Pakiri River lies some 6.3km from the nearest edge of the current sand extraction consent area, close to Poutawa Stream.

Regardless of how it is accessed, Pakiri Beach is a place of many moods. It can be bright and suffused with colours that are deeply saturated on a hot summer's day, with its glass like, surf crashing onto bleached sand that is both crisp and uncomfortably hot. At other times, it can be bleak, rain lashed and turbulent – with surf that is grey and wind-whipped amid a wider landscape that is largely bleached of its colour. Regardless, it also remains – for the most part – a place that is imbued with feelings of remoteness, spectacle, dynamism and grandeur. The scale of both the northern and southern beaches makes it easy to retreat from human contact, but also contributes to a sense of openness and of an almost endless, 'big sky', landscape that contrasts with the much more physically convoluted, and intimate, climes of both Leigh and Mangawhai nearby. It caters to a varied mix of passive and active recreational pursuits, as I have just indicated, but it can also be a place for quiet contemplation and 'getting away from it all'.

It is this amalgam of landscape characteristics and qualities, together with the strong feeling of still being in a relatively remote, untrammelled (albeit modified), part of the Auckland Region that has most served to draw decades of beach visitors and surfers, and even the surge of much more recent rural-residential development amid Te Arai's foothills and ridges.

3.1 IDENTIFIED VALUES

These contrasting values are clearly reflected in the delineation of two ONLs near Te Arai and Eyres Points in the Auckland Unitary Plan's Schedule 7 (**Attachment 5**). ONL 22 "*Pakiri Beach*" stretches from Auckland's northern regional boundary at the edge of Mangawhai's high dunes down the length of Pakiri Beach, before embracing the steep coastal slopes that extend through to Cape Rodney (and Goat Island) before turning southwards to enclose the rocky inlet of Leigh's small boat harbour. At its centre, this ONL captures the beachfronts of northern and southern Pakiri Beach together with the coastal slopes of Te Arai / Eyres Point, and the descriptions of ONL 22's key characteristics in Schedule 7 include the following (overleaf):

Schedule 7: ONL22

ONL Description					WESI Criteria						
ID	Name	Location	Landscape Type, Nature & Description	Elements, Patterns & Processes	Natural Science Factors			Aesthetic Values		Expressiveness	Transient Values
					Geological Topographical	Ecological	Dynamic	Memorability	Naturalness		
22	Pakiri Beach	North East Rodney	Wild Nature (coastal) Pakiri Ocean Beach extending into dune system for most of its length together with some coastal terrace landforms at the southern end near Pakiri Stream.	Natural duneland topography, strongly expressed coastal processes. Long uninterrupted sweep of beach.	High <i>Very extensive and open ocean beach together with a clearly articulated dune system, the elevated headlands of Eyres Point and Te Arai Point, as well as a small area of coastal terrace and stream corridors near the Pakiri River in the south.</i>	High Clear dune, stream corridor and coastal terrace sequence interacting with the open sea of the Pacific Ocean. Also a significant bird habitat.	High Strongly expressed coastal processes evident in sequence of landforms and stream corridors, and their dramatic interaction with the ocean.	Very High Arising from the combination of the beach's expansive aesthetic sheer length, together with openness, remoteness and wildness.	High / Mod Despite the incursion of the pine forest backdrop and limited pockets of development the unit's naturalness is derived from an amalgam of its natural elements, the dynamic and obvious natural processes at play along the beach and its relative remoteness and wildness.	Very High Very obvious combination of natural elements and dynamic natural processes, in particular related to the beach and dune corridor.	High Interplay of coastline and the open waters of the Pacific Ocean, including variation resulting from atmospheric conditions, time of day/year, tide and wildlife. Sea birds prevalent.

Inland from Te Arai / Eyres Point and the ocean beach either side of it, ONL 21 “*West Te Arai Point*” embraces much of the hill country and bush around the top two-thirds or more of Lake Road, together with most of Red Hill Road and cemetery Road. Among Schedule 7’s description of this landscape are the following comments:

Landscape Type / Nature & Description:

Prominent amalgam of ridges and spurs as well as stream gullies that are reinforced and articulated by remnant native forest and shrubland. Rural development related to land use.

Natural Science Factors Geological / Topographical:

Clear sequence of ridgelines and gullies, at the back of Te Arai Point and Pakiri Beach, including several stream corridors, which are reinforced by remnant indigenous vegetation.

Aesthetic Factors – Memorability:

Clearly defined landform and sequence of ridges that is reinforced by native forest remnants; strong interplay between bush and open pasture on surrounding farmland creating a very marked structure and pattern.

These descriptions give a clear indication of some of the qualities associated with the area around, and inland of, Pakiri Beach. Viewing this area even more broadly, it is also apparent that there is a profusion of ONLs within this north-eastern corner of the Region (**Attachment 6**), with ONLs arrayed down the coastline extending through to Goat Island and Leigh, as well as across the inland hill country, intertwined with remnant stand of bush, that frames its coastal margins. This contrasts very markedly with the more sporadic ‘pepper-popping’ of ONLs across most of the Auckland Region and reflects the concentration of higher order landscape values, generally, within the Leigh / Omaha / Mangawhai area.

In addition, HNC Area 48 “*Te Arai and Pakiri Beach*” (**Attachment 7**) runs down the length of the Te Arai coastline, again focused primarily on its beachfront, foredune corridor and the coastal edge of Te Arai / Eyres Point. It avoids the pine forest and all but the outer edge of the Tara Iti Golf Course. AUP Schedule 8 describes this HNC Area as follows:

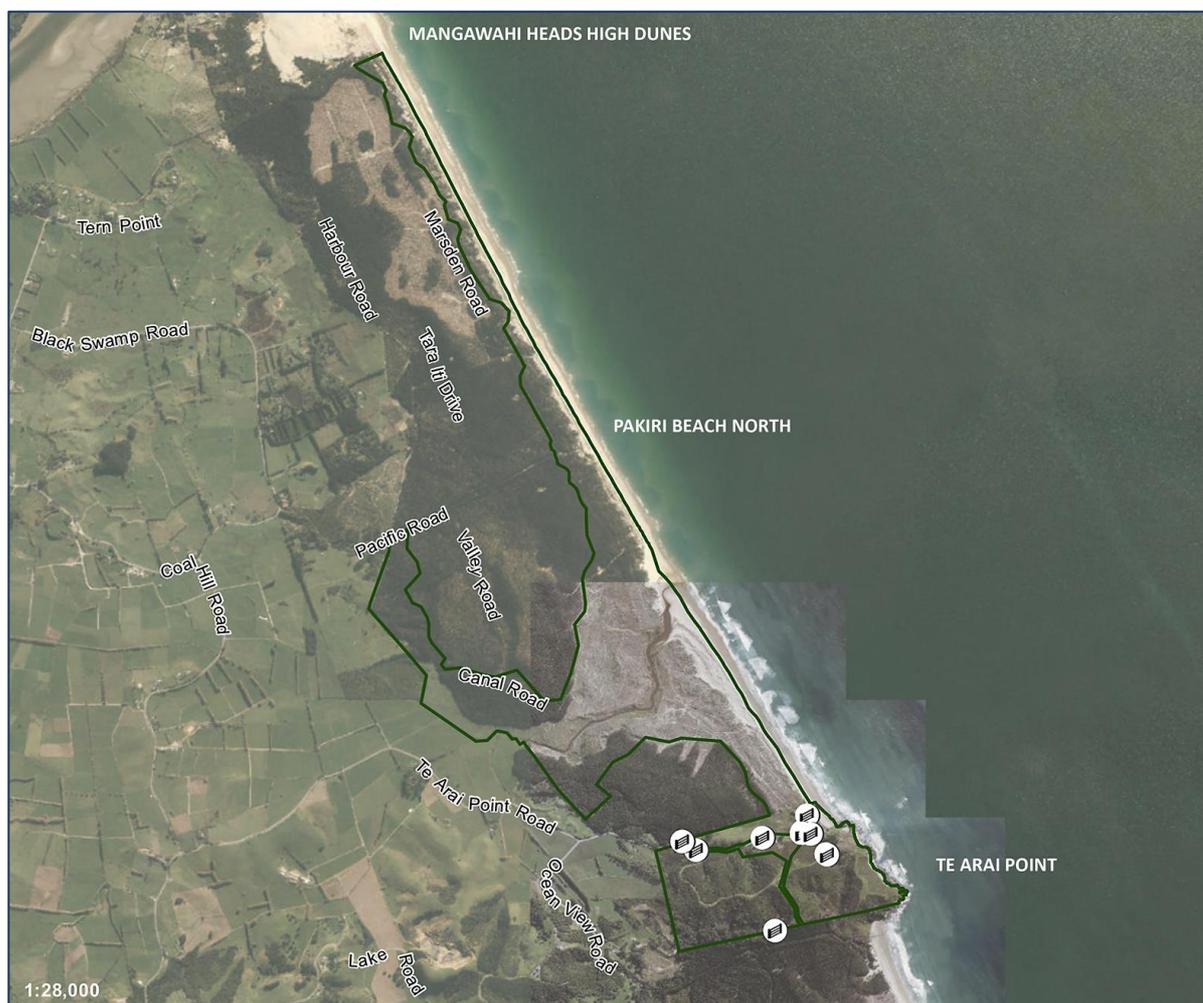
An extensive unit comprising remote beaches, sand dunes and dramatic coastal cliffs and scarps which descend to rock shoals and coves. Very little development is evident throughout the unit, which adds to the feeling of remoteness. Natural vegetation is variable – being influenced to the north by adjacent forestry vegetation – but is extensive in the upper reaches of the Pakiri River, with the regenerating native forest on the ridges above Pakiri Road and the remnant native forests on the coastal scarps between Leigh and Pakiri.

This HNC area merges with HNC Area 50 “Goat Island” southeast of the Pakiri River (also shown on Attachment 6) and is described as follows in Schedule 8:

An exposed and dramatic island landform that combines sheer cliffs and rock shoals with craggy coves backed by mature pohutukawa and other re-emergent coastal vegetation. The rocky shoals that surround much of the island interact dramatically with the open waters of the Pacific Ocean.

Looking beyond the ONLs and areas of High and Outstanding Natural Character identified in the AUP, Spectacle Lake and Tomarata Lake are also identified as being Outstanding Natural Feature No.75 in Schedule 6 of the AUP (**Attachment 5**). They are jointly described as being, “the best examples of dune-dammed lakes on the east coast of Auckland or Northland”. Although Slipper Lake is not given such status, it remains an important adjunct to Spectacle Lake in the general vicinity of Te Arai Point.

In addition to these statutory ‘values’, all of northern Pakiri Beach, together with much of its dune corridor – extending to the edge of the Tara Iti Golf Course – and Te Ari Point, are included within Auckland Council’s Te Arai Regional Park, as shown below and on **Attachment 7**.

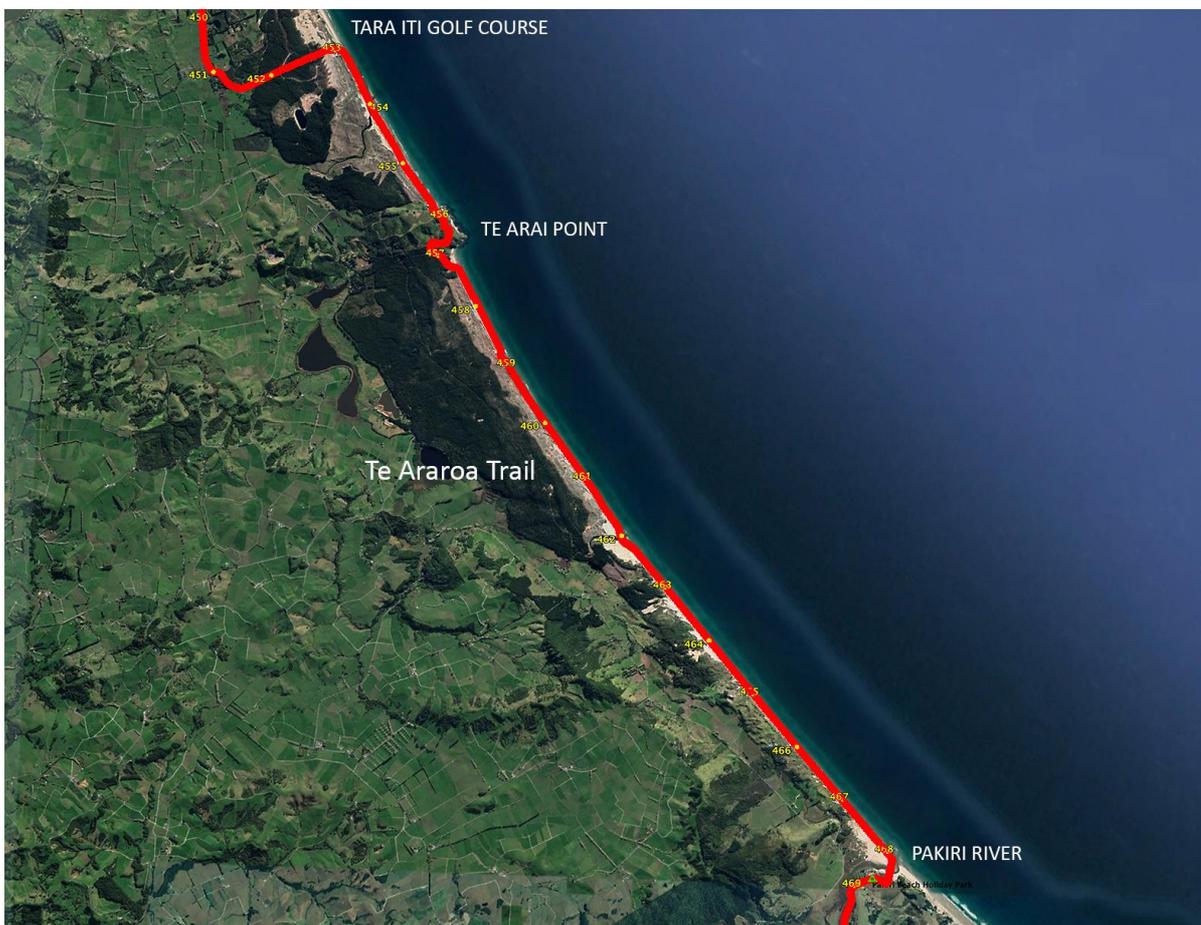


Te Arai Regional Park (outlined by dark green line)

The Tara Iti Golf Course and Cottages Road are located immediately behind (west of) the regional park and its dune margins, while part of the nationally important, Te Araroa Trail enters the regional park via Pacific Road – through the Mangawhai Forest– before running down the length of Pakiri Beach to the Pakiri River. The walkway / cycleway is not formed down the beach, but nevertheless remains a significant component of the northern Te Araroa Trail. Both the golf course and Te Araroa Trail route are shown overleaf.



Tara Iti Golf Course & Cottages behind Pakiri Beach (north)



Te Araroa Trail running down Pakiri Beach to the Pakiri River

Although the Te Araroa Trail and even the adjoining golf course have no statutory significance, the Trail, in particular – together with the Te Arai Regional Park – strongly reinforce the importance of Pakiri Beach and Te Arai / Eyres Point from a community perspective. The interplay between the beach area, its dunes and the ‘volcaniclastic’ of Te Arai Point with the Pacific Ocean makes a powerful landscape statement that resonates with locals and visitors alike.

Moreover, in relation to all of the landscapes and views / outlooks associated with the Te Arai / Pakiri area, the open plane of the Pacific Ocean is THE central feature: the fulcrum around which the beachfront, its dune system and the layering of hinterland terrain behind Pakiri Beach pivots. Although not referred to in any detail within the unit descriptions found in the AUP’s Schedules 7 and 8, the broad expanse of the Jellicoe Channel and beyond is critical to the character of the Pakiri coastline and the regional community’s perception of its value.

4.0 STATUTORY CONSIDERATIONS

The license renewal areas would either be within ONL 22 and HNC Area 48. Over greater distance, activities and development within the extraction consent areas could also potentially affect ONL 21 and HNC Area 50. In addition, they are also located within a Special Ecological Area Marine 2 overlay. As a result, the application is Non-complying and needs to be assessed against a broad suite of relevant landscape and natural character provisions within the AUP, the NZ Coastal Policy Statement and the Hauraki Gulf Marine Park Act (2000). Key provisions are set out as follows.

The Auckland Unitary Plan

B4.2. Outstanding natural features and landscapes B4.2.1. Objectives

- (1) *Outstanding natural features and landscapes are identified and protected from inappropriate subdivision, use and development.*
- (2) *The ancestral relationships of Mana Whenua and their culture and traditions with the landscapes and natural features of Auckland are recognised and provided for.*
- (3) *The visual and physical integrity and the historic, archaeological and cultural values of Auckland's volcanic features that are of local, regional, national and/or international significance are protected and, where practicable, enhanced.*

B4.2.2. Policies

Identify, evaluate and protect outstanding natural landscape

- (1) *Identify and evaluate a place as an outstanding natural landscape considering the following factors (refer to Schedule 7 of the AUP)*
- (2) *Include a place identified as an outstanding natural landscape in Schedule 7 Outstanding Natural Landscapes Overlay Schedule.*
- (3) *Protect the physical and visual integrity of Auckland's outstanding natural landscapes from inappropriate subdivision, use and development.*

Management of outstanding natural landscapes and outstanding natural features

- (8) *Manage outstanding natural landscapes and outstanding natural features in an integrated manner to protect and, where practicable and appropriate, enhance their values.*

D10.2. Objectives [rcp/dp]

- (1) *Auckland's outstanding natural features and outstanding natural landscapes are protected from inappropriate subdivision, use, and development.*
- (2) *The ancestral relationships of Mana Whenua with outstanding natural features and outstanding natural landscapes are recognised and provided for.*
- (3) *Where practicable the restoration and enhancement of outstanding natural features and outstanding natural landscapes, including in the Waitākere Ranges Heritage Area and the Hauraki Gulf/Te Moana-nui o Toi/Tikapa Moana, is promoted.*
- (4) *Existing rural production activities are recognised as part of landscape values including in outstanding natural features and outstanding natural landscapes.*

D10.3. Policies [rcp/dp]

- (1) *Protect the physical and visual integrity of outstanding natural landscapes by:*
 - (a) *avoiding the adverse effects of inappropriate subdivision, use and development on the natural characteristics and qualities that contribute to the values of the outstanding natural landscape;*
 - (b) *maintaining the visual coherence and integrity of the outstanding natural landscape;*
 - (c) *maintaining natural landforms, natural processes and vegetation areas and patterns;*
 - (d) *maintaining the visual or physical qualities that make the landscape iconic or rare; and*

- (e) *maintaining high levels of naturalness in outstanding natural landscapes that are also identified as outstanding natural character or high natural character areas.*
- (2) *Protect the physical and visual integrity of outstanding natural landscapes while taking into account the following matters:*
 - (a) *the extent of anthropogenic changes to the natural elements, patterns, processes or characteristics and qualities;*
 - (b) *the presence or absence of structures, buildings or infrastructure;*
 - (c) *the temporary or permanent nature of any adverse effects;*
 - (d) *the physical and visual integrity and the natural processes of the location;*
 - (e) *the physical, visual and experiential values that contribute significantly to the natural landscape's values;*
 - (f) *the location, scale and design of any proposed development; and*
 - (g) *the functional or operational need of any proposed infrastructure to be located in the outstanding natural landscape area.*

D11.2. Objectives

- (1) *The natural characteristics and qualities of areas with outstanding natural character, or high natural character values are preserved and protected from inappropriate subdivision, use and development.*
- (2) *Where practical areas with outstanding natural character or high natural character values in the coastal environment, including areas in the Waitākere Ranges Heritage Area and the Hauraki Gulf/To Moana Nui o Toi/Tikapa Moana, are enhanced.*

D11.3. Policies

- (1) *Subdivision, use and development in areas scheduled in Schedule 8 Outstanding Natural Character and High Natural Character Overlay Schedule must:*
 - (a) *avoid adverse effects on the natural characteristics and qualities that contribute to the natural character values of outstanding natural character areas;*
 - (b) *avoid significant adverse effects, and avoid, remedy or mitigate other adverse effects, on the characteristics and qualities that contribute to the natural character values of high natural character areas;*
 - (c) *maintain significant landforms and indigenous vegetation and habitats that are significant natural characteristics and qualities in outstanding natural character and high natural character areas, to protect the visual and biophysical linkages between areas, while taking into account:*
 - (i) *the location, scale and design of the proposed subdivision, use or development;*
 - (ii) *the extent of anthropogenic changes to landform, vegetation, coastal processes and water movement;*
 - (iii) *the presence or absence of structures, buildings or infrastructure;*
 - (iv) *the temporary or permanent nature of any adverse effects;*
 - (v) *the physical and visual integrity of the area, and the natural processes of the location;*
 - (vi) *the intactness of any areas of significant vegetation and vegetative patterns;*
 - (vii) *the physical, visual and experiential values that contribute significantly to the wilderness and scenic value of the area;*
 - (viii) *the integrity of landforms, geological features and associated natural processes, including sensitive landforms such as ridgelines, headlands, peninsulas, cliffs, dunes, wetlands, reefs, freshwater springs, streams, rivers and surf breaks;*
 - (ix) *the natural characteristics and qualities that exist or operate across mean high water spring and land in the coastal environment, including processes of sediment transport, patterns of erosion and deposition, substrate composition and movement of biota, including between marine and freshwater environments; and*
 - (x) *the functional or operational need for any proposed infrastructure to be located in the area.*

These objectives and policies are effectively carried through to Policies E18.3, E19.2 and E19.3, which comprise Auckland wide provisions addressing the Natural Character of the Coastal Environment and

Natural Landscapes in the Coastal Environment. They are followed by objectives and policies that directly address resource extraction from the Region's sea beds:

Objective F2.6.2

- (1) *The extraction of minerals, sand, shingle, shell, petroleum, and other natural material occurs in a manner that does not have significant adverse effects on the coastal marine area or near-shore environments.*

Policy F2.6.3

- (4) *Require applications for mineral extraction in the coastal marine area to include measures to manage any adverse effects, including remediation and mitigation measures.*

NZ Coastal Policy Statement

Objective 2

To preserve the natural character of the coastal environment and protect natural features and landscape values through:

- *recognising the characteristics and qualities that contribute to natural character, natural features and landscape values and their location and distribution;*
- *identifying those areas where various forms of subdivision, use, and development would be inappropriate and protecting them from such activities; and*
- *encouraging restoration of the coastal environment.*

Objective 4

To maintain and enhance the public open space qualities and recreation opportunities of the coastal environment by:

- *recognising that the coastal marine area is an extensive area of public space for the public to use and enjoy;*
- *maintaining and enhancing public walking access to and along the coastal marine area without charge, and where there are exceptional reasons that mean this is not practicable providing alternative linking access close to the coastal marine area; and*
- *recognising the potential for coastal processes, including those likely to be affected by climate change, to restrict access to the coastal environment and the need to ensure that public access is maintained even when the coastal marine area advances inland.*

Policy 3 Precautionary Approach

1. *Adopt a precautionary approach towards proposed activities whose effects on the coastal environment are uncertain, unknown, or little understood, but potentially significantly adverse.*
2. *In particular, adopt a precautionary approach to use and management of coastal resources potentially vulnerable to effects from climate change, so that:*
 - (a) *avoidable social and economic loss and harm to communities does not occur;*
 - (b) *natural adjustments for coastal processes, natural defences, ecosystems, habitat and species are allowed to occur; and*
 - (c) *the natural character, public access, amenity and other values of the coastal environment meet the needs of future generations.*

Policy 4 Integration

Provide for the integrated management of natural and physical resources in the coastal environment, and activities that affect the coastal environment. This requires:

- (c) *particular consideration of situations where:*
- (i) *subdivision, use, or development and its effects above or below the line of mean high water springs will require, or is likely to result in, associated use or development that crosses the line of mean high water springs; or*
 - (ii) *public use and enjoyment of public space in the coastal environment is affected, or is likely to be affected; or*

- (iii) *development or land management practices may be affected by physical changes to the coastal environment or potential inundation from coastal hazards, including as a result of climate change; or*
- (iv) *land use activities affect, or are likely to affect, water quality in the coastal environment and marine ecosystems through increasing sedimentation; or*
- (v) *significant adverse cumulative effects are occurring, or can be anticipated.*

Policy 13 Preservation of Natural Character

- (1) *To preserve the natural character of the coastal environment and to protect it from inappropriate subdivision, use, and development:*
 - (a) *avoid adverse effects of activities on natural character in areas of the coastal environment with outstanding natural character; and*
 - (b) *avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of activities on natural character in all other areas of the coastal environment; including by:*
 - (c) *assessing the natural character of the coastal environment of the region or district, by mapping or otherwise identifying at least areas of high natural character; and*
 - (d) *ensuring that regional policy statements, and plans, identify areas where preserving natural character requires objectives, policies and rules, and include those provisions.*
- (2) *Recognise that natural character is not the same as natural features and landscapes or amenity values and may include matters such as:*
 - (a) *natural elements, processes and patterns;*
 - (b) *biophysical, ecological, geological and geomorphological aspects;*
 - (c) *natural landforms such as headlands, peninsulas, cliffs, dunes, wetlands, reefs, freshwater springs and surf breaks;*
 - (d) *the natural movement of water and sediment;*
 - (e) *the natural darkness of the night sky;*
 - (f) *places or areas that are wild or scenic;*
 - (g) *a range of natural character from pristine to modified; and*
 - (h) *experiential attributes, including the sounds and smell of the sea; and their context or setting.*

Policy 15 Natural Features and Natural Landscapes

To protect the natural features and natural landscapes (including seascapes) of the coastal environment from inappropriate subdivision, use, and development:

- (a) *avoid adverse effects of activities on outstanding natural features and outstanding natural landscapes in the coastal environment; and*
- (b) *avoid significant adverse effects and avoid, remedy, or mitigate other adverse effects of activities on other natural features and natural landscapes in the coastal environment; including by:*
- (c) *identifying and assessing the natural features and natural landscapes of the coastal environment of the region or district, at minimum by land typing, soil characterisation and landscape characterisation*

The Hauraki Gulf Marine Park Act (2000)

8 Management of Hauraki Gulf

To recognise the national significance of the Hauraki Gulf, its islands, and catchments, the objectives of the management of the Hauraki Gulf, its islands, and catchments are—

- (a) *the protection and, where appropriate, the enhancement of the life-supporting capacity of the environment of the Hauraki Gulf, its islands, and catchments:*
- (b) *the protection and, where appropriate, the enhancement of the natural, historic, and physical resources of the Hauraki Gulf, its islands, and catchments:*
- (c) *the protection and, where appropriate, the enhancement of those natural, historic, and physical resources (including kaimoana) of the Hauraki Gulf, its islands, and catchments with which tangata whenua have an historic, traditional, cultural, and spiritual relationship:*

- (d) *the protection of the cultural and historic associations of people and communities in and around the Hauraki Gulf with its natural, historic, and physical resources:*
- (e) *the maintenance and, where appropriate, the enhancement of the contribution of the natural, historic, and physical resources of the Hauraki Gulf, its islands, and catchments to the social and economic well-being of the people and communities of the Hauraki Gulf and New Zealand:*
- (f) *the maintenance and, where appropriate, the enhancement of the natural, historic, and physical resources of the Hauraki Gulf, its islands, and catchments, which contribute to the recreation and enjoyment of the Hauraki Gulf for the people and communities of the Hauraki Gulf and New Zealand.*

This array of provisions provides guidance as to the acceptability of renewed sand extraction within the current consent areas. Of particular note, Policy 13 of the NZ Coastal Policy Statement requires the avoidance of significant adverse effects on HNC Areas 48 and 50. However, Policy 15 ‘raises the bar even higher’ by stipulating that all adverse effects on ONL 22 (in particular) must be avoided. Although other provisions pertaining to protection of the characteristics and qualities of both the CMA and wider coastal environment at Pakiri are also relevant to assessment of the current proposal, this particular policy sets the highest ‘test’ for the renewal application by MBL and is supported by AUP Objectives D.10.2 and D11.2, as well as Policies D10.3, D11.3, E18.3, E19.2 and E19.3.

The only appreciable difference between NZCPS Policy 15 and the AUP provisions listed above is that Policy 15 stresses the avoidance of effects on outstanding natural character values and landscapes in a rather generic fashion, whereas the AUP provisions tend to emphasise avoiding effects on the ‘characteristics and qualities’ that contribute to such higher order values. Policies D10.3, D11.3, E18.3 and E19.3 also indicate that the assessment of effects on such higher order landscapes and parts of the coastal environment is also contextualised by having regard to:

- the extent of anthropogenic changes found within particular areas / locations that have already affected their landforms, vegetation, coastal processes and water movement;
- the presence or absence of existing structures, buildings or infrastructure within those same landscapes and parts of the coastal environment; and
- the temporary or permanent nature of any adverse effects.

In addition, the current application needs to be assessed taking into account the effects associated with MBL’s current dredging operations off Pakiri Beach, undertaken utilising the *Pohonui* and *Coastal Carrier*, together with those undertaken further offshore by Kaipara Ltd. The current MBL activities, in particular, provide a benchmark against which the future effects of reconsented extraction need to be evaluated, as those present operations are part and parcel of the ‘existing environment’.

5.0 EFFECTS

Adverse impacts upon landscape, amenity and natural character values typically arise where there is evident discontinuity between the character and values of an existing environment and what is proposed, and where the resultant ‘challenge’ to the existing landscape ‘order’ is perceived in a negative light. Consequently, this section of the report addresses the effects of the proposed continuation of sand extraction operations, albeit using the *William Fraser* and subject to the other operational modifications outlined in Section 2.0 of this report.

5.1 RECEIVING ENVIRONMENTS & AUDIENCES

In order to gauge the realistic exposure of a dredge to different parts of the Pakiri landscape, a site visit was undertaken on the 17th June 2019, during which the *Coastal Carrier* was directed by Shayne Elstob (Chief Operating Officer of MBL) to traverse the current consent areas offshore of our location at Pakiri Beach, Te Arai Point and within the local road network. By travelling up and down Pakiri Beach and the roads behind it while the *Coastal Carrier* traversed the northern, then southern, consent areas it was possible to gauge the current dredge’s level of visibility from a wide range of vantage points on local roads, including:

- Mangawhai Road;
- Te Arai Point Road,
- Lake Road;
- Red hill Road;
- Ocean View Road;
- Atkins Road;
- Pakiri Block Road; and
- M Greenwood Road.

On the basis of this site visit, it was determined that the current dredge is visible at the outer limits of the northern consent area from a few isolated points on Te Arai Point Road and one specific part of Mangawhai Road – albeit over a viewing distance of more than 4kms. Even so, it was not visible from most of the other roads listed above, even when travelling from the northern to southern consent areas past Te Arai / Eyres Point, via Ocean View Road. In particular, the dune corridor behind both beaches, and its broad swathe of production pines, created a substantial barrier between most of Pakiri’s coastal hinterland and the existing dredge. As a result, exposure to the *Coastal Carrier* from most of the road network behind Te Arai Point and the beaches was, at worst, sporadic, affording quite limited visual contact with the current dredge. **Attachments 8-15**, showing views from Mangawhai Road, Te Arai Road (2 photos), Lake Road, Ocean View Road, Atkins Road and Pakiri Block Road while the *Coastal Carrier* was operational help to ‘explain’ this assessment.

It appears unlikely that the slightly larger profile of the *William Fraser* will change this situation. The dredge may still be visible from some rural residential properties and farms off more elevated parts of Te Arai Point Road, Ocean View Road, Red Hill Road, Cemetery Road (including the recent subdivision at the ‘top’ of that road), and Mangawhai Road. However, the distance of such views would appreciably reduce awareness of the dredge and its visual presence to the point where it is often insignificant. The movement of the dredge within the consent areas would further limit such visual interaction.

In reality, this indicates that the proposed dredge will – like the *Pohonui*, *Acheron III* and *Coastal Carrier* – be most visible from:

- Pakiri Beach itself, both north and south of Te Arai / Eyres Point;
- The adjoining Te Arai Regional Park, including a series of elevated vantage points offered by the tracks up and over Te Arai and Eyres Points, as well as from its old quarry; and
- The Tara Iti Golf Course and Cottages.

Two maps showing the Zones of Theoretical Visibility cast from the top of the *William Fraser's* exhaust stacks (set at 22.8m above the sea floor at 10m depth) – **Attachments 16** and **17** – help to confirm these findings, although the maps don't take into account the screening generated by vegetation cover – notably the pine plantations either side of Te Arai Point. This ultimately limits their value in terms of accurately defining the dredge's visual receiving environments.

Turning to the key audiences associated with these 'catchments', those most exposed to the MBL's existing vessels already comprise users of Pakiri Beach – including the majority of regional park users who utilise the beachfront and dune margin north of Eyres Point. Over the summer months, especially, those already exposed to the *Pohonui* and *Coastal Carrier* include family groups visiting the regional park, those swimming and picnicking near the car park, surfers, tourists, and those meandering up and down the beach foreshore / 'promenade' – including some on the Te Araroa Trail. In addition, many visitors clamber over the volcanic plug of Te Arai / Eyres Point itself, which acts as a natural lookout. The southern half of Pakiri Beach is also regularly used by fishermen, including long-liners, away from the more heavily used northern beach. However, a few also venture up the northern beach, away from the areas of greater public activity towards the beachfront off the Tara Iti Golf Course.

Others likely to clearly see the *William Fraser* in the future (much as at present) comprise those staying at the Tara Iti Cottages or playing on the golf course.

On the other hand, exposure of the vessel to locals and visitors alike on the local road network would be much more sporadic, as would the views experienced by residents from Pakiri's matrix of farms and rural-residential properties. Even so, some road users and local residents still see the *William Fraser*, either periodically or on a more regular basis, and this would remain the case in the future.

5.2 EFFECTS ASSESSMENT

To assess the effects of the proposed dredge and related extraction operations, a sequence of 'before and after' images have been prepared for a representative sample of viewpoints. These images show the *Coastal Carrier* operating within the consented extraction areas (Zones 2 and 4 specifically), then replaced by an 'enlarged' version of the *Coastal Carrier* - approximating the increased scale of the *William Fraser* – so as to assist with a comparison of the effects of both vessels while undertaking dredging operations. The viewpoints used in this assessment are located as follows (refer to **Attachment 8 & 18-27**):

- Viewpoint 1. **Te Arai Regional Park Car Park**
- Viewpoint 2. **Pakiri Beach North** (near the Tara Iti Golf Course)
- Viewpoint 3. **Eyres Point Track**
- Viewpoint 4. **Pakiri River Mouth**
- Viewpoint 5. **M Greenwood Road & Pakiri Regional Park**

This assessment takes into account the following factors / considerations:

Existing Values:

Reflecting the relative extent to which a landscape / environment is valued in terms of:

- **Biophysical Components:** including landforms, vegetation cover, freshwater / marine bodies, and key cultural elements / features: buildings, other structures and activities
- **Perceptual Components:** aesthetic value, expressiveness, legibility (focusing on the degree to which landscape elements combine to create an attractive composition, 2D patterns, 3D sense of structure) and ephemeral / transient values

Legibility / Prominence:

- **Visibility / Legibility of The Proposed Development / Activities:** indicating the extent to which the activity proposed would be legible and visually prominent from the vicinity of each viewpoint

Landscape Effects:

- **Impacts on Landscape Elements & Patterns:** the extent to which the proposal would adversely affect the structure of Pakiri's coastal landscape: its layering of elements, the interplay between different types of land use / structures
- **Impacts on Visual Coherence / Unity:** the extent to which the proposal would adversely affect the perceived integrity of the Pakiri coastline's landscape by altering the balance between natural and man-made elements found within that landscape and/or disrupt its visual cohesion
- **Impacts on Character & identity:** the extent to which the activity would adversely affect public perceptions of Pakiri Beach and Te Arai / Eyres Point, and the area's related sense of place and identity
- **Impacts on Key Features / Views:** (where applicable) the extent to which the presence of the proposed activity would disrupt or disturb views to, and of, the expanse of sea directly off Pakiri Beach and Te Arai / Eyres Point

Natural Character Effects:

The degree to which the development proposal would adversely affect perception and appreciation of the following characteristics associated with the existing Coastal Environment:

- Abiotic factors (essentially landform)
- Vegetation Type & Cover (native / endemic to exotic)
- Sea / Water Areas
- Natural Processes
- Uses / Activities: Buildings & Structures (their presence / absence)

Taking all of the above into account, each viewpoint analysis concludes with an overall **Impact Rating** for the individual development component. These ratings employ the following impact scale:

	<i>Landscape Effects:</i>	<i>Natural Character Effects:</i>	<i>Rating:</i>	<i>RMA Rating:</i>
1	<i>No change or barely legible change to some landscape elements & character; no change to values</i>	<i>No change or barely legible change to some coastal elements; no change to overall naturalness</i>	<i>Very Low Effect</i>	<i>Less Than Minor Effect</i>
2	<i>Limited change to some landscape elements & character; no change to values</i>	<i>Limited change to some coastal elements; no change to overall naturalness</i>	<i>Low Effect</i>	<i>Minor Effect</i>
3	<i>Increasingly evident change to some landscape elements & character; limited change to values (naturalness, expressiveness, aesthetic value, etc)</i>	<i>Increasingly evident change to coastal elements & patterns; slight reduction in overall naturalness</i>	<i>Low / Moderate Effect</i>	
4	<i>Appreciable change to some landscape elements & character; more obvious impact on some values</i>	<i>Appreciable change to some coastal elements & patterns; more apparent change in overall naturalness</i>	<i>Moderate Effect</i>	
5	<i>Marked change to some landscape elements, character and values</i>	<i>Marked change to coastal elements & patterns; evident reduction in overall naturalness</i>	<i>Moderate / High Effect</i>	<i>Significant Effect (or greater)</i>
6	<i>Obvious degradation of landscape elements, character and values</i>	<i>Obvious degradation of coastal elements & patterns, and overall naturalness</i>	<i>High Effect</i>	
7	<i>Very serious and obvious degradation of elements, character & values</i>		<i>Severe Effect</i>	

This scale is aligned with the 7-point scale of ratings recommended by the NZ Institute of Landscape Architects (*Best Practice Note: Landscape Assessment And Sustainable Management 10.1*) and the Auckland Council Design Manual, which contains a 9-stage outline of the steps to be taken to assess the landscape effects of any project (*Information Requirements for the Assessment of Landscape and Visual Effects¹*).

VIEWPOINT 1. TE ARAI REGIONAL PARK CAR PARK

(Attachments 18 & 19)

Existing Values: The main car park at Te Arai Regional Park directly abuts Pakiri’s expansive northern beachfront. Framed on one side by a rock outcrop at the edge of Eyres Point that flanks an old quarry site, and on the other by a sequence of dunes, marram grass and pingao reaching towards Mangawhai, the broad sweep of the beach opens up before those arriving at the regional park at this key vantage point. The broad expanse of the Jellicoe Channel and Pacific Ocean, interrupted only by the serrated, volcanic profile of the Hen and Chicken Islands, melds with an open shoreline to offer a spectacularly panoramic outlook.

The dynamic nature of views from this quarter – often embracing wind-tossed surf and tidal fluctuations that dramatically alter the shape and depth of the shoreline – add to this spectacle, as does the relative absence of significant signs of human intervention and development, apart from within and around the immediate car park area. Moreover, the clarity of the waters crashing on Pakiri’s beachfront, combined with its often rolling to tumultuous surf, and the flowing grasses across its even dune corridor, help to affirm the limited nature of such intervention, while the grand scale and seamlessness of the beach and sea is matched by the ‘big skies’ that reach seawards overhead. These qualities reinforce the beachfront’s sense of engagement and interaction with the Pacific Ocean, and its high level of appeal as a seemingly very natural, landscape.

Attachment 18 shows the *Coastal Carrier* within this landscape setting, at the nearest point of Zone 2. The current dredge is clearly visible and, moving at roughly 1 to 1.5 knots per hour, takes some time to complete its operations up and down the beach. Yet, Zones 1 and 2 extend over 4.5km north of the point at which the *Coastal Carrier* is shown in Attachment 18, so that it rarely has the sense of being as close to the car park and Te Arai / Eyres Point as the Viewpoint 1 images suggest. As such, it presently remains sufficiently remote from this viewpoint that there is a sense of detachment from it. Consequently, the *Coastal Carrier* has little real impact on the key values associated with views from near the car park, and even though it introduces a man-made component to the seascape of northern Pakiri Beach, it lacks sufficient visual presence to appreciably disrupt or erode the area’s core landscape qualities.

Legibility / Prominence: The *William Fraser* is 20% longer than the *Coastal Carrier*, 33% wider and 28% taller (to the top of the exhaust stacks). Attachment 19 shows the *Coastal Carrier* modified in accordance with this increase in length, girth and height. Of the changes proposed, perhaps the most obvious is the increase in length, accentuated by both Attachments 18 and 19 showing the *Coastal Carrier* while turning; not running towards or away from Te Arai Point, as would typically be the case. Even so, the vessel’s degree of visual presence and legibility remains similar to that of the current vessel: devoid of the sort of direct comparison offered by Attachments 18 and 19, the new vessel might appear slightly larger, but no more obvious or prominent *per se*.

1

<http://content.aucklanddesignmanual.co.nz/resources/tools/landscapeandvisualeffectsassessment/Documents/Landscape%20and%20Visual%20Effects%20Assessment%20Requirements.pdf>

Other changes to the proposed scheduling and duration of sand extraction operations would, however, have a much more obvious effect. In particular, the shift from two vessels to one, the very significantly reduced number of extraction trips per month, the elimination of most weekend operations, and the shorter duration of each dredging session – down from approximately 4.5 hours to 2.5 hours – would significantly reduce public awareness of the proposed sand extraction. Relatively few people appear to use the regional park and Pakiri Beach at night-time, even though a ‘Self Containment Campground’ is located behind the dunes near the current toilet blocks and fishing is frequently undertaken at twilight, merging with the night hours.

Lighting on the *William Fraser* would be limited to that required for safe navigation and safe activities on the vessel, while the transition from daytime to night-time is typically marked by a progressive washing out of the colours and contrasts in the visible landscape, followed by its envelopment in darkness and replacement by the night sky. As a result, the spectacle of the daytime landscape is replaced by other attributes: the panorama of the Milky Way, and feelings of solitude, remoteness, even isolation. Given the limited nature of the lighting proposed on the *William Fraser* and an average distance of 500m or more from Pakiri’s shoreline to the dredging operations, it is not anticipated that it would be prominent enough to noticeably disrupt, or adversely affect, any of these characteristics.

On balance, therefore, it is considered that the *William Fraser* and its extraction operations would be less visually apparent than the current MBL vessels and associated extraction.

Landscape Effects: The slightly increased scale of the *William Fraser* when dredging close to Te Arai / Eyres Point would result in it appearing marginally more intrusive and more disruptive of the coastal landscape’s naturalness when viewed from Viewpoint 1. This would, in turn, result in the following ‘worst case’ effects, with the dredge at its closest consented location to Te Arai / Eyres Point:

- A slight increase in the awareness of human activity and ‘structures’ off the Pakiri beachfront, resulting in a slight shift in the balance between natural and cultural (man-made) elements associated with the coastal landscape as a whole; and
- Very marginally increased incursion into key views across the inshore margins of the Jellicoe Channel towards the Hen and Chicken Islands.

Yet, there would be little or no change to the wider patterning and layering of the Pakiri Landscape, or to its character and identity, which would continue to be very substantially defined by the simple, open, planes of the sea and beachfront. Indeed, the *William Fraser’s* reduced level of visual exposure to Viewpoint 1, overall – taking into account the timing and duration of operations – would actually result in it having less of an impact on the Pakiri landscape than the current vessels and sand extraction operations.

As a result, the modified activity would have no appreciable effect, overall, in terms of the 7-point scale outlined above.

Natural Character Effects: The slightly increased scale of the *William Fraser* would have no appreciable effects in relation to the abiotic / landform, vegetative, or natural processes characteristics of the Coastal Environment north of Te Arai / Eyres Point. It would have a very slight effect on the integrity of the expansive sea area of HNC Area 48 and it would add, cumulatively to the intrusion of human elements and activities within this area – again, to a slight or minor degree.

Yet, as with Landscape Effects, the shift to mainly night-time operations and the reduction in weekend extraction, would in turn reduce the perception of such incursion, even though dredging would still physically occur. The reduced duration of operations on a day to day, and monthly, basis would reduce both the perceived (visual), and physical, intrusion associated with extraction near Te

Arai / Eyres Point. Overall, therefore, the Natural Character effects associated with the proposed sand extraction are expected to be of either negligible (No Effect) or of very low order – in line with the effects identified on Landscape Values.

The following table summarises these findings:

SUMMARY:

EXISTING VALUES:							
VALUE RATINGS:	VERY LOW	LOW	LOW / MODERATE	MODERATE	MODERATE / HIGH	HIGH	VERY HIGH
Biophysical:							
Perceptual:							

EFFECTS RATINGS:	NO EFFECT	VERY LOW / LOW	LOW / MODERATE	MODERATE	MODERATE / HIGH	HIGH	SEVERE
LEGIBILITY / PROMINENCE:							
Visibility:							

LANDSCAPE EFFECTS:							
Elements & Patterns:							
Coherence/ Unity:							
Character / Identity:							
Key Features / Views:							

NATURAL CHARACTER EFFECTS:							
Abiotic:							
Vegetation:							
Water Areas:							
Natural Processes:							
Uses / Activities:							

VIEWPOINT 2. PAKIRI BEACH NORTH

(Attachments 20 & 21)

Existing Values: The view from most of Pakiri’s beachfront shares many of the qualities outlined in relation to Viewpoint 1: panoramically expansiveness views (albeit with less elevation), the pre-eminence of a sweeping ‘white sand’ foreshore, an emphatic visual focus on the broad plane of the Pacific Ocean, the backdrop of low to medium height dunes and their marram / pingao cover, and the ‘big skies’ – all described above – remain key attribute of the outlook from most locations up and down the beach. Daily diurnal, seasonal, and weather induced, changes all add to the drama of this location.

However, whereas most views from near the car park (Viewpoint 1) and the lower margins of Te Arai / Eyres Point offer an overview of the beach and its extension northwards, views from the actual beach area tend to be more ‘binary’ – either directly towards or away from the sea. The surf line and tidal undulations at the very edge of the beachfront offer natural points of focus, whereas views inland tend to capture the merger of the beachfront with the rising mantle of dunes and marram / pingao that frame it – backed by pines and, in places, the Tara Iti Golf Course, beyond. Looking seaward, the often turbulent drama of Pakiri’s renowned surf often takes ‘centre stage’ for surfers,

swimmers, fishermen and just those walking up and down the beach alike – including those on the Te Aranga Walkway. In views to the north, the beach is much less defined, with the Mangawhai Dunes a distant sequence of landforms that merge to a greater or lesser extent – depending on viewing distance – with the Brynderwyn Hills and Bream Tail beyond the settlement of Mangawhai. Looking southwards, Eyres Point rears up more emphatically, but the sounds and smells of the surf and actual beachfront still tend to draw most attention much closer to Viewpoint 2 and other beach based vantage points, to the sea especially.

While pines of the northern Pakiri Forest dominate the skyline, their enclosure has diminished over recent years, with the emergence of the Tara Iti links course and its patchwork of both cottages and other structures. These are not so close as to be intrusive, but together with the manicured nature of the course, these have still diminished some of the beach's intrinsic naturalness, and its feelings of relative remoteness, isolation and tranquillity. The inshore presence of the *Coastal Carrier* is also clear, although some might mistake it for a trawler, and few parts of Auckland's northeastern maritime area are totally devoid of boat and ship movements of one kind or other. Even so, the movement and limited duration of current operations mean that it has a temporary or ephemeral effect on the current environment of north Pakiri.

Overall, therefore, the beachfront (typified by Viewpoint 2) and views from it embrace an area that displays a high level of visual drama and appeal, together with moderate to high levels of perceived naturalness, although the screening afforded by the dunes and their marram / pingao cover provides an important buffer to the adjacent, and much more developed environs, of the current golf course.

Legibility / Prominence: The changed dimensions of the *William Fraser* are described above, so that Attachment 20 shows the *Coastal Carrier* as is, and Attachment 21 shows it replaced by an enlarged *Coastal Carrier* acting as a facsimile of the *William Fraser*. As with Viewpoint 1, comparison of Attachments 20 and 21, reveals the new vessel appearing slightly larger, but not obviously more prominent *per se*. In both cases, the vessel appears prominent when viewed at close range (ie. directly off this viewpoint), but the changed dimensions of the new vessel wouldn't add appreciably to the magnitude of its incursion into views out over the Jellicoe Channel and Pacific Ocean beyond.

At present, such 'close-up' views also occasionally allow the public to see dredged seawater being spilled over the sides of the *Coastal Carrier*, although the low angle of viewing and intervening surf often hide this and preclude any awareness of the dredging plume either side of, and behind, the current vessel. The *William Fraser*, with its 'moon pools' and under-keel discharge of seawater, would avoid any such visual effects and limit awareness of the plume even from other vessels passing close to the dredge, as well as from more elevated (but also much more distant) vantage points, such as on Eyres Point.

Other changes proposed in relation to the scheduling and duration of sand extraction operations – as outlined for Viewpoint 1 – would also help to reduce public awareness of the proposed dredging overall. This includes a preponderance of night-time extraction, reduced dredging duration and almost no operations over weekends. Again, lighting of the *William Fraser* needs to be considered in this regard; however, on balance, it is considered that the *William Fraser* would be less visually apparent, overall, than the current dredge and associated extraction operations.

Landscape Effects: As for Viewpoint 1, the increased scale of the *William Fraser* when dredging close to the Pakiri beachfront would result in it appearing marginally more intrusive and more disruptive of the coastal landscape's naturalness than the *Coastal Carrier*. This would, in turn, result in the following 'worst case' effects, when viewed directly off Viewpoint 2:

- A slight increase in the awareness of human activity and 'structures' off the Pakiri beachfront, resulting in a slight shift in the balance between natural and cultural (man-made) elements associated with the coastal landscape as a whole; and

- Slightly increased incursion into key views across the inshore margins of the Jellicoe Channel towards the Hen and Chicken Islands.

There would no appreciable modification of the wider patterning and layering of the Pakiri Landscape, or to its character and identity, which – as with Viewpoint 1 – would continue to be very substantially defined by the simple, open, planes of the sea and beachfront. The *William Fraser's* altered timing and duration of operations, together with the avoidance of any exposure to seawater spillage over the sides of the new dredge, would also result in it having less of an impact on the Pakiri landscape than the *Coastal Carrier* and its current operations.

Accordingly, the Landscape Effects associated with the modified extraction regime would result in the renewed operations having no appreciable effect or a very low level of effect overall.

Natural Character Effects: As for Viewpoint 1, the increased scale of the *William Fraser* would have no appreciable effects in relation to the abiotic / landform, vegetative, or natural processes characteristics of the Coastal Environment north of Te Arai / Eyres Point. It would, however, have a slight effect on the integrity of the expansive sea area of HNC Area 48 and it would add, cumulatively to the intrusion of human elements and activities within this area – again, to a slight or minor degree. The presence of the Tara Iti Golf Course and Cottages is a factor that also has some bearing on this assessment.

Additionally, as with Landscape Effects, the shift to mainly night-time operations, the reduction in weekend extraction, and the use of under-keel, dredged seawater dispersal would, in turn, reduce the perception of such incursion, despite the ongoing physical presence of sand extraction. As such, the Natural Character effects associated with the proposed sand extraction are expected to be of a very low order.

The following table summarises these findings:

SUMMARY:

EXISTING VALUES:							
VALUE RATINGS:	VERY LOW	LOW	LOW / MODERATE	MODERATE	MODERATE / HIGH	HIGH	VERY HIGH
Biophysical:							
Perceptual:							

EFFECTS RATINGS:	NO EFFECT	VERY LOW / LOW	LOW / MODERATE	MODERATE	MODERATE / HIGH	HIGH	SEVERE
LEGIBILITY / PROMINENCE:							
Visibility:							

LANDSCAPE EFFECTS:							
Elements & Patterns:							
Coherence/ Unity:							
Character / Identity:							
Key Features / Views:							

EFFECTS RATINGS:	NO EFFECT	VERY LOW / LOW	LOW / MODERATE	MODERATE	MODERATE / HIGH	HIGH	SEVERE
NATURAL CHARACTER EFFECTS:							
Abiotic:							
Vegetation:							
Water Areas:							
Natural Processes:							
Uses / Activities:							

VIEWPOINT 3. EYRES POINT TRACK

(Attachments 22 & 23)

Existing Values: The visual qualities of Viewpoint 3 are closely aligned with those described in relation to Viewpoint 1, although the more elevated nature of the sequence of views that unfolds as one climbs up and over the crest of Eyres Point (immediately north of Te Arai Point) means that they are even more panoramic in nature. They are also framed by more of the immediate foreground, including the old quarry side and present-day sheltered inlet that is a distinctive feature of the Point’s volcanic apron. The distant profiles of the Hen and Chicken Islands, the Brynderwyns, Bream Tail and even Little Barrier Island – directly to the east – also come more to the fore, visually. The gently arcing profile of Pakiri Beach is also more apparent, particularly at its northern end near the Mangawhai High Dunes, while the swathe of dune corridor and coastal shrubland behind the near beachfront is clearly apparent, backed by the remnants of the northern production forest and the fairways of the Tara Iti Golf Course.

As for Viewpoint 1, Attachment 22 shows the *Coastal Carrier* at the nearest boundary of Zone 2. The current dredge is clearly visible although not perhaps as prominent as from near the car park. Zones 1 and 2, which provide the limits for current operations extend over 4.5km north of the *Coastal Carrier* as shown in Attachment 22, so that, again, it rarely has the sense of being as close to Eyres Point as the Viewpoint 3 images indicate. As with Viewpoint 1, this creates a feeling of remoteness and detachment in relation to the dredge: although clearly visible, it lacks the visual presence and proximity needed to disrupt the wider panorama experienced from Eyres Point and the core values associated with that landscape / seascape.

Legibility / Prominence: The changed dimensions of the *William Fraser* are described above, so that once more, Attachment 22 shows the *Coastal Carrier* as is, and Attachment 23 shows it replaced by an enlarged facsimile of the *William Fraser*. Comparison of Attachments 22 and 23 reveals the new vessel appearing fractionally larger than the current dredge, but not obviously so. In both cases, the vessel appears clearly legible when viewed at close range, but the enlarged scale of the *William Fraser* would not appreciably alter the magnitude of its visual presence and incursion into views within the seascape of the Jellicoe Channel.

Again, the proposed changes to the scheduling and duration of sand extraction operations have to be considered in relation to the new vessel’s visual signature and presence. The shift to predominantly night-time / twilight extraction, the elimination of most weekend operations and the shorter duration of each dredging session would result in the *William Fraser* having reduced exposure to the public climbing Eyres Point, while very few people would be likely to see its distant navigation lights and deck lighting at night-time. Notwithstanding the *William Fraser*’s larger size, it is therefore anticipated that the proposed sand extraction operations would be less apparent than those currently associated with the *Coastal Carrier*.

Landscape Effects: As for Viewpoint 1, the slightly increased scale of the *William Fraser* when dredging close to Te Arai / Eyres Point would result in it appearing marginally more intrusive and more disruptive of the coastal landscape’s naturalness. This would, in turn, result in the following ‘worst case’ effects, with the dredge at its closest consented location to Te Arai / Eyres Point:

- A very slight increase in the awareness of human activity and ‘structures’ off the Pakiri beachfront, resulting in a negligible shift in the balance between natural and cultural (man-made) elements associated with the coastal landscape as a whole; and
- Very marginally increased incursion into key views across the inshore margins of the Jellicoe Channel.

Again, however, there would be little or no change to the wider patterning and layering of the Pakiri Landscape, or to its character and identity, which would continue to be very substantially defined by the simple, open, planes of the sea and beachfront. The *William Fraser’s* reduced level of visual exposure to Viewpoint 3, overall – taking into account the timing and duration of operations – would actually result in it having less of an impact on the Pakiri landscape than the current dredge and related sand extraction.

As a result, the modified regime proposed is likely to generate a negligible level of Landscape Effect (No Effect).

Natural Character Effects: The slightly increased scale of the *William Fraser* would have no appreciable effects in relation to the abiotic / landform, vegetative, or natural processes characteristics of the Coastal Environment north of Te Arai / Eyres Point. Moreover, any changes to the perceived integrity of the sea area of HNC Area 48 arising from the larger vessel, and any increased intrusion arising from human elements and activities within this area would again be of a negligible to very low order.

In addition, as with Landscape Effects, the shift to mainly night-time operations and the reduction in weekend extraction would further reduce the perception of such incursion, despite the ongoing physical presence of sand extraction *per se*. As such, the Natural Character effects associated with the proposed sand extraction are expected to be negligible (No Effect), overall.

The following table summarises these findings:

SUMMARY:

EXISTING VALUES:							
VALUE RATINGS:	VERY LOW	LOW	LOW / MODERATE	MODERATE	MODERATE / HIGH	HIGH	VERY HIGH
Biophysical:							
Perceptual:							

EFFECTS RATINGS:	NO EFFECT	VERY LOW / LOW	LOW / MODERATE	MODERATE	MODERATE / HIGH	HIGH	SEVERE
LEGIBILITY / PROMINENCE:							
Visibility:							

EFFECTS RATINGS:	NO EFFECT	VERY LOW / LOW	LOW / MODERATE	MODERATE	MODERATE / HIGH	HIGH	SEVERE
LANDSCAPE EFFECTS:							
Elements & Patterns:							
Coherence/ Unity:							
Character / Identity:							
Key Features / Views:							
NATURAL CHARACTER EFFECTS:							
Abiotic:							
Vegetation:							
Water Areas:							
Natural Processes:							
Uses / Activities:							

VIEWPOINT 4. PAKIRI RIVER MOUTH

(Attachments 24 & 25)

Existing Values: The coastal outlook from the general vicinity of the Pakiri River mouth is dominated in the more immediate foreground by the course of the river and the dunes that enclose both sides of it. A more distant Te Arai Point, then Bream Tail and the Hen and Chicken Islands, enclose the northern reaches of the Jellicoe Channel and Pakiri Beach as a whole beyond the river mouth, while a cascading sequence of ridges and bush enclose its inshore margins.

As with the views experienced from Viewpoints 1-3, those from near Viewpoint 4 also embrace the broad expanse of the Jellicoe Channel and Pacific Ocean, flanked by the dunes and headlands described above, while the rapidly rising sequence of hill country south of the Pakiri River frames the general outlook in that direction as well. As for the other viewpoints described, the dynamic nature of views from this quarter – often embracing wind-tossed surf and tidal fluctuations that dramatically alter the shape and depth of the shoreline – add to this spectacle, as does the relative absence of significant signs of human intervention and development, apart from within and around the nearby camping ground and toilet block next to Pakiri River Road. The clarity of the waters crashing on south Pakiri’s beachfront, combined with its often rolling to tumultuous surf, are part and parcel of this coastal landscape, while the grand scale and seamlessness of the beach and sea is matched by the ‘big skies’ that extend seawards. Again, these qualities reinforce the beachfront’s sense of engagement and interaction with the Pacific Ocean, and its high level of appeal as a seemingly very natural, landscape.

Attachment 24 shows the *Coastal Carrier* within this landscape setting, off the Poutawa Stream, at the nearest point of Zone 4. The current dredge is visible, but its operational area within Zones 3 and 4 stretches some 4km north of the Poutawa Stream. Consequently, the vessel rarely conveys the sense of being even as close to the Pakiri River and beachfront as the Viewpoint 4 images indicate. Again, therefore, it presently remains sufficiently remote from this viewpoint that there is a very real sense of detachment, even isolation, from it. It has little real impact on the key values associated with views from near the river, even though it inevitably introduces a man-made component to the coastal landscape around it: the current dredge lacks sufficient visual presence to disrupt or appreciably erode the key qualities experienced near the river mouth and its beachfront.

Legibility / Prominence: The changed dimensions of the *William Fraser* are described above, so that once more, Attachment 24 shows the *Coastal Carrier* as is, and Attachment 25 shows it replaced by an enlarged facsimile of the *William Fraser*. Comparison of Attachments 24 and 25 reveals the new vessel appearing fractionally larger than the current dredge, but far from obviously so. In both cases, the vessel is clearly legible when viewed at close range, but the enlarged scale of the *William Fraser* would not appreciably alter the magnitude of the dredge's visual presence and incursion into views up the Pakiri coastline.

Again, the proposed changes to predominantly night-time / twilight extraction, the elimination of most weekend extraction and the shorter duration of each dredging session would result in the *William Fraser* having reduced exposure to the public using the southern end of Pakiri Beach, while the dredge's distant navigation lights and deck lighting would be all but impossible to see at night-time. Notwithstanding the *William Fraser's* larger size, it is therefore anticipated that the proposed sand extraction operations would be less visually apparent than those currently associated with the current dredging vessels

Landscape Effects: As for Viewpoint 1, the slightly increased scale of the *William Fraser* when dredging close to Te Arai / Eyres Point would result in it appearing very marginally more intrusive and more disruptive of the coastal landscape's naturalness. This would, in turn, result in the following 'worst case' effects, with the dredge at its closest consented location to Te Arai / Eyres Point:

- A very marginal increase in the awareness of human activity and 'structures' off the Pakiri beachfront, resulting in a negligible shift in the balance between natural and cultural (man-made) elements associated with the coastal landscape as a whole; and
- Very marginally increased incursion into key views across the inshore margins of the Jellicoe Channel.

Again, however, there would be little or no change to the wider patterning and layering of the Pakiri Landscape, or to its character and identity, which would continue to be very substantially defined by the simple, open, planes of the sea and beachfront. The *William Fraser's* reduced level of visual exposure to Viewpoint 4, overall – taking into account the timing and duration of operations – would actually result in it having less of an impact on the Pakiri landscape than the current dredge and related sand extraction.

As a result, the Landscape Effects of the modified operational regime are considered to be negligible.

Natural Character Effects: The slightly increased scale of the *William Fraser* would have no appreciable effects in relation to the abiotic / landform, vegetative, or natural processes characteristics of the Coastal Environment north of Te Arai / Eyres Point. Moreover, any changes to the perceived integrity of the sea area of HNC Area 48 arising from the larger vessel, and any increased intrusion arising from human elements and activities within this area would again be of a negligible to very low order. In addition, as with Landscape Effects, the shift to mainly night-time operations and the reduction in weekend extraction would further reduce the perception of such incursion, despite the ongoing physical presence of sand extraction *per se*. As such, the Natural Character effects associated with the proposed sand extraction are expected to be of a very low order.

The following table (overleaf) summarises these findings:

SUMMARY:

EXISTING VALUES:							
VALUE RATINGS:	VERY LOW	LOW	LOW / MODERATE	MODERATE	MODERATE / HIGH	HIGH	VERY HIGH
Biophysical:							
Perceptual:							
EFFECTS RATINGS:	NO EFFECT	VERY LOW / LOW	LOW / MODERATE	MODERATE	MODERATE / HIGH	HIGH	SEVERE
LEGIBILITY / PROMINENCE:							
Visibility:							

LANDSCAPE EFFECTS:							
Elements & Patterns:							
Coherence/ Unity:							
Character / Identity:							
Key Features / Views:							

NATURAL CHARACTER EFFECTS:							
Abiotic:							
Vegetation:							
Water Areas:							
Natural Processes:							
Uses / Activities:							

VIEWPOINT 5. M GREENWOOD ROAD / PAKIRI REGIONAL PARK

(Attachments 26 & 27)

Existing Values: M Greenwood Road provides the entrance to Pakiri Regional Park and is perched atop the sharply aligned sequence of cliffs and ridges that enclose the southern end of Pakiri Beach. As a result, M Greenwood Road offers a spectacularly panoramic overview of the southern half of Pakiri Beach, then a layering of headlands, hill country and islands beyond, including Te Arai Point, Bream Tail, the Brynderwyns and the Hen and Chicken Islands. The mouth of the Pakiri River is prominent in the near middle distance of such views, while bush regeneration covers the slopes immediately below M Greenwood Road.

Many of the qualities associated with this vantage point have already been addressed in relation to Viewpoints 1-4. They include the panoramic, and in many regards, highly dramatic, overview of Pakiri already mentioned; but also greater appreciation of the crescent profile of Pakiri Beach (south) and the framing of the river mouth and adjoining beach by both rising landforms and various layers of vegetation. Also apparent is the interaction between an increasingly ‘bushed’ foreground, in the immediate vicinity of M Greenwood Road, and the vast expanse of the Jellicoe Channel and Pacific Ocean cradled by an array of coastal landforms from the southern end of Pakiri Beach to Bream Tail.

Attachment 26 shows the *Coastal Carrier* within this landscape setting, off the Poutawa Stream, at the nearest point of Zone 4. The current dredge is just about visible, as a ‘pinprick’ in the surface of the coastal waters below Te Arai Point, while its operational area within Zones 3 and 4 stretches some 4km north of the Poutawa Stream. Consequently, in views from this quarter, it barely registers at all, even on clearer days than that on which the Attachment 26 photo was taken. It has no

appreciable impact on the character or qualities of the coastal landscape and environment visible from this viewpoint.

Legibility / Prominence: Attachment 27 incorporates the enlarged dimensions of the *William Fraser*, but this does little to alter the ‘pin prick’ nature of its visibility from the general vicinity of Viewpoint 4. Again, the proposed changes to the scheduling and duration of sand extraction operations would reduce the overall legibility and awareness of the proposed vessel (relative to the *Coastal Carrier*), and this would further diminish its legibility / prominence within the coastal landscape exposed to this viewpoint.

Landscape Effects: Although the enlarged dimensions of the *William Fraser* would theoretically increase public awareness of it, the modified extraction regime proposed would more than offset the effects of that ‘up-sizing’. Consequently, the proposed dredge would have:

- No appreciable effect on public awareness of human activity and ‘structures’ off the Pakiri beachfront and no related impact on the balance between natural and cultural (man-made) elements within the coastal landscape as a whole;
- No real effect on key views up the Pakiri coastline;
- No effect on the wider patterning and layering of the Pakiri Landscape; and
- No effect on its character and identity.

As a result, it is considered that the modified extraction regime would have no appreciable adverse effect on the Landscape Values experienced from Viewpoint 4..

Natural Character Effects: The slightly increased scale of the *William Fraser* would have no discernible impact on the abiotic / landform, vegetative, or natural processes characteristics of the Coastal Environment north of Te Arai / Eyres Point. Moreover, any changes to the perceived integrity of the sea area of HNC Area 48 arising from the larger vessel, and any increased intrusion arising from human elements and activities within this area would also be negligible.

In addition, the shift to mainly night-time operations and the reduction in weekend extraction would further reduce the perception of such incursion, despite the ongoing physical presence of sand extraction *per se*. As such, it is anticipated that the proposed sand extraction regime would have no appreciable effect on the Natural Character values of the coastal environment exposed to Viewpoint 4.

The following table summarises these findings:

SUMMARY:

EXISTING VALUES:							
VALUE RATINGS:	VERY LOW	LOW	LOW / MODERATE	MODERATE	MODERATE / HIGH	HIGH	VERY HIGH
Biophysical:							
Perceptual:							

EFFECTS RATINGS:	NO EFFECT	VERY LOW / LOW	LOW / MODERATE	MODERATE	MODERATE / HIGH	HIGH	SEVERE
LEGIBILITY / PROMINENCE:							
Visibility:							

EFFECTS RATINGS:	NO EFFECT	VERY LOW / LOW	LOW / MODERATE	MODERATE	MODERATE / HIGH	HIGH	SEVERE
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LANDSCAPE EFFECTS:							
Elements & Patterns:							
Coherence/ Unity:							
Character / Identity:							
Key Features / Views:							
NATURAL CHARACTER EFFECTS:							
Abiotic:							
Vegetation:							
Water Areas:							
Natural Processes:							
Uses / Activities:							

5.3 EFFECTS SUMMARY

The following table summarises the effects ratings for all five viewpoints:

VIEWPOINT:	LANDSCAPE EFFECTS RATING:	NATURAL CHARACTER EFFECTS RATING:
VIEWPOINT 1. Te Arai Regional Park Car Park	No Effect / Very Low Effect	No Effect / Very Low Effect
VIEWPOINT 2. Pakiri Beach North	No Effect / Very Low Effect	Very Low Effect
VIEWPOINT 3. Eyres Point Track	No Effect	Very Low Effect
VIEWPOINT 4. Pakiri River Mouth	No Effect	No Effect
VIEWPOINT 5. M Greenwood Road	No Effect	No Effect

Although it seems implausible that the larger *William Fraser* would have no appreciable increased effect at all, a number of key factors consistently downgrade the effects of the proposed dredging operations as a whole. Key among these are the following:

- The 'existing environment' associated with operations under the current sand mining consent issued by the Environment Court in 2006;
- The reduced number of vessels operating off the Pakiri shoreline;
- The greatly reduced frequency of extraction operations;
- The significantly reduced duration of such operations;
- The minimisation of extraction over weekends; and
- The continued shift to mainly night-time dredging and the limited effects associated with lighting of the *William Fraser* at night-time.

In addition, the move away from the discharge of dredged seawater over the side of the *Coastal Carrier* to the use of 'moon pools' and under-keel discharge with the *William Fraser* would eliminate almost any prospect of seeing a dredging plume under the proposed extraction regime even for those passing the dredge close by in other vessels. In effect, these factors combine to outweigh the increased bulk of the new MBL vessel.

6.0 STATUTORY ASSESSMENT

The following key statutory directives have been identified in Section 4.0 of this report as being of most significance with reference to the Auckland Unitary Plan RPS, the AUP (DP) and Policies 13 and 15 of the NZ Coastal Policy Statement:

1. The avoidance of adverse landscape effects associated with extraction activities on ONL 22; and
2. The avoidance of significant adverse effects on HNC Area 48;

It is considered that these 'tests' would be met by the current consent renewal application, for the reasons set out in Sections 5.2 and 5.3 of this report. Accordingly, the consent application is considered to be consistent with the relevant provisions of the AUP (RPS and District Plan), the NZ Coastal Policy Statement, Sections 6(a) and (b) of the resource Management Act and Section 8 of the Hauraki Gulf Marine Park Act.

7.0 CONCLUSIONS

On the basis of this assessment, including evaluation of the proposal against relevant statutory provisions, it is considered that the proposed MBL application is appropriate in terms of its landscape and natural character effects.



Stephen Brown

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