

## 26. Archaeology and built heritage

### Overview

There are no known archaeological or built heritage sites within the area proposed to be designated for the Main Alignment. However, there are two sites of heritage significance in close proximity to the Main Alignment, which have the potential to be adversely affected by aspects of the Project's construction and / or operation.

At both locations, appropriate mitigation, monitoring and remedial action will be implemented (if required) to ensure that effects will be appropriately managed. Mitigation for noise and vibration, dust, and visual effects, which are outlined in this chapter, are also described in Chapters 16 (Noise and vibration), 17 (Air quality), and 25 (Landscape and visual). One site of heritage significance is not easily viewed or accessible in its current location on private land. To increase public appreciation of the structure, the NZTA will facilitate the use of an existing off-road access to allow it to be viewed, which would be a positive effect of the Project.

In addition, measures will be put in place to ensure that in the event of accidental discovery of potential archaeological material appropriate protocols are followed.

### 26.1 Introduction

Assessments have been undertaken that profile the existing environment in relation to archaeology, culture and heritage and assess the Project's impacts on these sites.

The reports that contribute to this overall assessment are:

- the Assessment of Built Heritage Values (**Technical Report 19**); and
- the Assessment of Archaeological Values (**Technical Report 20**).

### 26.2 Existing environment – Archaeology and built heritage

There are no recorded archaeological or built heritage sites within the boundaries of the proposed notices of requirement. However, there are archaeological and built heritage sites in the wider vicinity of the proposed designation boundaries.

**Technical Report 20** presents an archaeological assessment of the proposed footprint. This assessment includes identifying sites that may be of Maori origin. However, this does not constitute an assessment of Maori cultural values, as there are sites of significance to Maori for their spiritual and traditional values that have no physical remains, and so cannot be assessed in terms of archaeological value. Information on these sites of cultural value has been obtained from Ngati Toa Rangatira, and is contained in the Cultural Impact Report (**Technical Report 18**), and discussed in Chapter 24.

### 26.2.1 Maori occupation and subsistence

Battle Hill Farm Forest Park (BHFFP) was the site of the last battle in the region between Ngati Toa Rangatira and the Crown in 1846, and the grave sites and site of the battle itself on the ridge leading up to BHFFP summit are regarded as waahi tapu by Ngati Toa Rangatira.

The Pauatahanui area is recognised as an environment that was rich in resources for early Maori. As a result there are numerous midden sites and pits located around the edge of the Pauatahanui Inlet, reflecting the richness of the sea-based resources. This area is still regarded as a mahinga mataitai, meaning a traditional seafood gathering place, by Ngati Toa Rangatira. Several of the streams in the area (including Te Puka Stream, Horokiri Stream, Pauatahanui Stream and Duck Creek) also continue to be highly valued by Ngati Toa Rangatira as important mahinga kai or food resources and many continue to provide an important habitat for native fish species. The coast has always been important for Maori, as a route for travelling and settlement, as a source of kaimoana, and as a cultural and spiritual reference point. The Cultural Impact Assessment described in Chapter 24, further outlines the importance of these resources to Ngati Toa Rangatira.

QE Park is located within a historic Ngati Toa Rangatira reserve, which was set aside by the Crown as part of the purchase of Porirua in 1847. It includes areas of early Ngati Toa Rangatira settlement and contains a number of important waahi tapu, including urupa, and pa sites. Two significant streams also pass through the Park, the Wainui and Whareroa Streams, which were traditionally used for fishing and still retain important cultural associations for Ngati Toa Rangatira. Whareroa Farm is also located within the vicinity of the wider Project area, on the east of the existing SH1, opposite the entrance to QE Park. Whareroa Farm is within an early area of Ngati Toa Rangatira settlement and contains a number of waahi tapu, including urupa.

### 26.2.2 European settlement

There is evidence of the beginnings of European settlement in the wider study area. Several early European buildings remain at Pauatahanui. The Taylor-Stace Cottage has historical significance, as it is the oldest existing residence in the Pauatahanui area and possibly in the whole Wellington District. In the Pauatahanui area there are two historic churches. St Joseph's Church is located on SH58, opposite Bradey Road, and St Alban's Church is located near SH58. These Churches are both listed on the PCC Heritage Register<sup>155</sup>, and are registered by the New Zealand Historic Places Trust as Category 1 (St Josephs) and Category 2 (St Albans) Historic Places. St Alban's is located in the Pauatahanui Village, and there will be no effects on this Church as a result of the Project.

St Joseph's is of particular relevance, as it is in close proximity to the Project, with direct access off SH58 (approximately 1km east of Pauatahanui Village). St Joseph's is the oldest Catholic Church building still in use in Wellington and was the first Catholic Church building in the Porirua basin. The building has a historical connection with the Pauatahanui Village as many of the original settlers are buried in the Churchyard. The Church grounds are situated next to SH58, but on land that is higher (vertically) than the SH58 carriageway. The Church is also set back from the road. The Church is regularly used and the Churchyard is visited by families of those buried there. Of particular interest are

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155. The Heritage Register forms Part J of the PCDP. The heritage features identified on the Register are protected by rules in the Heritage section of the PCDP.

the “glacier windows”, on the side of the building closest to SH58. These are original windows featuring paper ‘transfers’ on the glass, which are in a delicate state and are suffering deterioration. St Joseph’s is located approximately 170m from the Main Alignment. The location of St Joseph’s Church is identified on plan **GM02**.

### 26.2.3 Past military presence

Evidence of past military presence exists in the area, including the historic battle fought at BHFFP, outlined above. There was also a military presence at Paekakariki during World War II. The 1st and 2nd divisions of the United States Marine Corps were camped in or near QE Park between June 1942 and October 1943. Three camps were built: Camp Russell was located in the Park beside the present day entrance at MacKays Crossing, Camp Mackay was located on the other side of SH1, on land now occupied by Whareroa Farm Reserve and Camp Paekakariki was located at the southern end of the Park. The combined capacity of the camps was approximately 15,000 men. The three camps are outside the area proposed for the Main Alignment, and there is no surface physical evidence of these camps.

One feature associated with the camps that still remains is a brick World War II splinter proof blast containment structure (the ‘brick fuel tank’), which is located adjacent to the Te Puka Stream (identified on plan **GM02**). The structure is listed in the KCDP as a significant site and it is identified within the Assessment of Built Heritage Values as a heritage feature. No other heritage assessment or a conservation plan is known to have been written about the structure and it is not registered under the HPA. The Main Alignment will be located approximately 22m from the brick fuel tank.

The tank is a circular splinter proof brick wall protecting a now-removed metal petrol storage tank. It was designed and built by the Public Works Department in 1942 as a petrol storage depot to be used by US Defence Force vehicles. The structure is one of 15 similar such structures built throughout New Zealand, of which six now remain, but is the only remaining land transport fuel storage tank, as the others were used to store aviation fuel. The brick fuel tank has some architectural value as a rare building type, and for its large scale, circular form and use of materials, and also for its association with the New Zealand Public Works Department and the American Defence Force. The structure is listed in the KCDP as a significant site.

## 26.3 Assessment of effects on archaeology and built heritage

Potential effects on archaeology, culture and heritage could arise from both the construction and the operation of the Project.

### 26.3.1 Construction of the Project

Although there are no archaeological or built heritage sites that have been identified within the proposed designation boundaries, there are several aspects of construction that have the potential to adversely affect sites that are in close proximity to the Main Alignment designations. These aspects are:

- dust generated from construction activities;

- noise and vibration effects arising from construction activities on artefacts; and
- discovery of artefacts during construction.

### 26.3.1.1 Dust

Construction of the Project will entail large scale earthworks and other activities, such as contractor's yards, and mobile rock crushing, all of which generate dust. This dust effect may be more significant in the vicinity of SH58, which is the location of the main construction yard.

As recorded above, St Joseph's Church is located on SH58, approximately 170m from the Main Alignment. The construction yard, which is in close proximity to the Church (at a distance of approximately 300m), will contain a concrete batching plant. Dust that may result from construction activities could adversely affect the glacier windows at the Church (which are located on the SH58 side of the building), by causing abrasion. Dust may also increase maintenance requirements for the building exterior. Without the proposed management measures in place, dust could have a potentially adverse effect on St Joseph's Church.

### 26.3.1.2 Noise and vibration

Noise and vibration may have adverse effects on heritage and archaeological sites that are in close proximity to the Main Alignment. The Main Alignment will be approximately 22m from the brick fuel tank and therefore, earthworks will be undertaken in close proximity to the structure. Vibration effects from earthworks and construction could have the potential to adversely impact on the stability of the brick fuel tank.

During construction, vibration may also have an adverse effect on the St Joseph's Church building and particularly the glacier windows. Construction noise may also affect the amenity of the Church, especially during scheduled service times.

Measures will be put in place to ensure that the potential adverse effect arising from vibration on the brick fuel tank and on St Joseph's Church are largely avoided. Good noise management is also essential to reduce the construction noise effects on the Church to the extent practicable.

### 26.3.1.3 Accidental discovery of artefacts

Although there are no sites of archaeological significance that have been identified within the area of the proposed Main Alignment, there is the possibility that such sites have not yet been discovered, or identified. As such, it is important that a precautionary approach is taken, as there may be a possibility of unknown sites being present and adversely impacted on, especially during construction. Measures will be in place to ensure correct protocol is followed, in the event of an accidental discovery of potential archaeological material.

### 26.3.2 Operation of the Project

The operation of the Project has the potential to adversely affect archaeological, cultural and historic sites.

The Main Alignment has been designed to ensure that there will be adequate separation distance between the road and the brick fuel tank, to avoid any vibration effect on the tank, associated with traffic movement from the operation of the Project. The brick fuel tank is not easily viewed or accessible in its current location on private land. To increase public appreciation of the structure, NZTA is able to facilitate an off-road access to allow the tank to be viewed, and work with HPT and / or the Whareroa Farm Guardians to incorporate the structure as part of a US Marine Corps experience trail.

The amenity of St Joseph's Church will be adversely affected as a result of the new road. St Joseph's Church is already situated next to a large road (SH58), however, there will be a new Interchange in view of the Church, once the Project is operational. This has the potential to adversely impact on the ambience and general amenity of the church grounds, although any increase in traffic noise is expected to be negligible in this location, once the Project is operational. Although the Project will realign SH58 so that it is five metres further away from the Church, mitigation measures will be implemented to reduce the potential adverse visual effects of the Project on the amenity of St Joseph's Church.

## 26.4 Measures to avoid, remedy, mitigate or offset potential adverse effects on archaeology and built heritage

From the archaeology and heritage assessments, the following potential adverse effects were identified:

- dust generated from construction activities;
- vibration effects on structures from construction activities;
- discovery of artefacts during construction; and
- effects on amenity at archaeological sites (e.g. from noise effects) once the Project is operational.

### 26.4.1 Dust from construction

Dust from construction activities (including rock crushing) will be managed through the CAQMP. The primary management approach will be the suppression of dust at its source, which will ensure that potential adverse effects on archaeological, cultural and heritage sites are largely avoided. In addition, a CBPMP will also be prepared, which will outline operating procedures for the suppression of dust at the concrete batching plant. This will be especially pertinent for St Joseph's Church, given its location in the vicinity of the concrete batching plant. As well as dust suppression using water, the CBPMP will also set out protocols for covering materials, rock crushing plant operation, and regular inspections of plant and equipment to ensure it is functioning properly.

Monitoring will be required during construction works to determine the effects of dust on the Church. If monitoring indicates a problem, management measures will be implemented, which could include protective covers being fitted for the glacier windows or removing the windows from the Church and putting them back once construction is complete.

#### 26.4.2 Vibration effects on structures

Vibration effects from earthworks and construction could have an adverse impact on the brick fuel tank and on St Joseph's Church. At the brick fuel tank, likely effects of different types of construction activity on the tank will need to be determined by structural engineers and acoustics specialists at the detailed design stage. Monitoring will then be required during construction works, and then for a further period following construction, to ensure that any adverse effects from vibration are identified and managed appropriately.

Monitoring will also be required during construction works to determine the effects of vibration on St Joseph's Church. As noted above, if monitoring indicates a problem, management measures will be implemented, which could include removing the glacier windows from the Church, and replacing them once construction is complete.

#### 26.4.3 Discovery of artefacts

Although there are no sites of archaeological significance that have been identified within the area of the proposed designations, there is always the potential that there are sites that have not yet been discovered. A number of measures will be in place to ensure correct protocol<sup>156</sup> is followed, in the event of an accidental discovery of potential archaeological material. These measures include the following<sup>157</sup>:

- If any suspected archaeological material is uncovered, all work within 100m of the discovery shall stop immediately. The NZTA Project Manager will be advised, who will immediately inform the nominated iwi representative and the Project's archaeologist;
- If the discovery contains Koiwi (human remains), all work within 200m shall cease immediately, and in addition to the above parties the Project Manager shall also inform the NZ Police, and the NZHPT; and
- The NZTA Project Manager, in consultation with the Archaeologist, Stakeholder Relationship Manager and the iwi representative, shall coordinate the response.

#### 26.4.4 Effects on amenity at historic sites

The amenity of the grounds of St Joseph's Church will be affected as a result of its close proximity to the Main Alignment. To mitigate for the adverse effects on amenity, planting on the western boundary of the Church property has been offered, to screen the SH58 Interchange from view from within the Church grounds.

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156. An accidental discovery procedures protocol for the Project has been developed and agreed with the NZHPT and Iwi (Ngati Toa Rangatira).

157. The full list of proposed procedures is located in the CEMP.

Construction noise may adversely affect the Church, especially during scheduled service times. Therefore good noise management at the Church is essential to reduce construction noise effects as far as practicable. The CEMP and its subsidiary plan for noise / vibration will form part of the suite of consent and designation conditions. The noise effects from traffic on the Church are expected to be negligible, so no noise mitigation is recommended once the Project is operational.

The NZTA require their contractors to perform to a high level in relation to managing stakeholder and community expectations. Communication will be the key tool to manage effects, allowing the NZTA and contractors to understand community concerns and ascertain the most appropriate way to respond to these concerns. For the Church, this may mean restricting construction activity during scheduled service times, to ensure that the adverse noise effect is appropriately mitigated for Church users.

The brick fuel tank is not easily viewed or accessible in its current location on private land. To increase public appreciation of the structure, the NZTA will allow for an existing off-road access track to be used, to allow the tank to be viewed. This would result in a positive effect on heritage, which would arise as a result of the Project.