IAN BOWMAN
BA • BArch • MA Cons Stud • RNZIA
Architect and Conservator

P.O Box 19252 • Wellington • New Zealand
Ph 04 385 3006 • Fax 04 385 3008
Mobile 027 445 7813

www.ianbowman.co.nz

ibowman@clear.net.nz

TRANSMISSION GULLY PROJECT

TECHNICAL REPORT 19
BUILT HERITAGE

Ian Bowman
Architect and conservator

July 2011

INDEX

Executive Summary

This report has established that there are two recognised buildings of cultural heritage value that will be affected by the Project. These are the St Joseph's Church near Pauatahanui which is registered category I with the New Zealand Historic Places Trust (register number 205) and the "Petrol Storage Tank" which is listed in the Kapiti Coast District Council District Plan Part I.1 (Heritage Register item B87).

The Project is likely to have minor negative physical and moderate negative visual effects on the church, resulting in an overall minor negative effect on the heritage values of the church. It is recommended that both areas of negative effect should be mitigated because of the very high significance of the building. Planting to screen the Transmission Gully Project (the Project) is recommended to reduce the impact on the heritage values of the setting of the church as well as documenting the condition of the church before and monitoring effects during the construction. Any effects which may have a negative impact on the heritage values or physical fabric of the church should be mitigated as soon as possible following their discovery. Maintaining the existing noise levels will retain the existing ambience of the setting of the church, particularly the churchyard, where as little noise as possible is desirable.

The Project is likely to have potential vibration effects from construction but following completion, no on-going physical effects on the "Petrol Storage Tank". The Project is likely to have little or no effect on the immediate setting of the structure, but significant effects on its wider setting with extensive cutting into the nearby hill to avoid the structure. Overall, it is likely that the Project will have a minor negative effect on the heritage significance of the "Petrol Storage Tank". Writing a conservation plan for the structure is recommended, as is management of construction to avoid any vibration effects.

1 Introduction

1.1 Engagement

Mr. Ian Bowman has been engaged by Beca Carter Hollings and Ferner Ltd to undertake technical studies in relation to the Transmission Gully Project ("the Project") for the NZ Transport Agency (the NZTA).

Mr Bowman has been engaged to assess the impacts of the proposed Transmission Gully Main Alignment ("the Main Alignment") – including both construction and operation – upon any identified built heritage.

The purpose of this report is to identify built heritage that might be affected by the Project and then to define their heritage significance along with the actual and potential effects that may arise as a result of the Project. This report then makes recommendations for actions that should be undertaken in relation to these identified effects.

The Project consists of three components:

- The Main Alignment involves the construction and operation of a State highway formed to expressway standard from Linden to MacKay's Crossing. The NZTA is responsible for the funding and delivery of the Main Alignment.

- The Kenepuru Link Road involves the construction and operation of a State highway (limited access road) from the Kenepuru Interchange to Kenepuru Drive. The NZTA is responsible for the funding and delivery of the Kenepuru Link Road.

- The Porirua Link Roads involves the construction and operation of two local roads connecting the Main Alignment to the existing eastern Porirua road network. The Porirua City Council (PCC) is responsible for the funding and delivery of the Porirua Link Roads.

This report is one of a suite of reports that have been prepared as part of the Assessment of Effects on the Environment (AEE) that will support Notices of Requirement to designate land, and applications for resource consents for the Project.

1.2 Main Alignment drawings used

The visual and documentary assessment was been made on the basis of drawings entitled "NZTA Transmission Gully Project," with specific reference to "Volume 4 Road Layout Plan" sheet 2 of 21, GMO2 and sheet 13 of 21, GM13, both Rev A.

2 Methodology

2.1 Interaction / integration with other technical experts

This Assessment has been informed by a number of relevant technical assessments, notably:

- Technical Report 5: Assessment of landscape and visual effects;
- Technical Report 12: Assessment of Acoustic Effects;
- Technical Report 18: Cultural Impact Assessment; and,
- Technical Report 20 Assessment of Archaeological Effects.

Assessment of effects in these specialist areas has been reported where relevant to potential built heritage impacts. In this regard, this Built Heritage assessment of effects provides a 'built heritage lens' on many of these other technical elements.

2.2. Identification of built heritage in close proximity to the Project

The means of identification of built heritage affected by the Project are described below.

2.2.1 Listed or registered buildings

The District Plans were inspected of those local authorities through whose areas the Project is proposed to go. These comprise the District Plans of the Kapiti Coast District Council (KCDC), the Porirua City Council (PCC) and the Wellington City Council (WCC). The Greater Wellington Regional Council (GWRC) does not list buildings but owns a number of historically significant buildings and their Asset Grading document was inspected. In addition the register of built heritage of the New Zealand Historic Places Trust (NZHPT) was inspected.

2.2.2. Documents written on the project by previous consultants

There are two main documents, which have already examined built heritage on the Main Alignment. The first is the Review of the Cultural Aspects of the Coastal Route and Transmission Gully Motorway – Western Corridor Transportation Study, for Porirua City Council, by Boffa Miskell, on 16 November 2005. This document did not identify any built heritage potentially affected by the project put forward at that time.

The second is the Contract 236 PN Transmission Gully: Scheme Assessment Review of Historical Information Opus International Consultants Limited Advanced Draft 24 August, 2007.

2.2.3 Site visit

A site visit was made on March 18, 2010 to St Joseph's church to identify its location with respect to the Main Alignment and any significant views to and from the church. A further site visit with other consultants was undertaken on 22 April 2010 to identify any potentially affected built heritage, either currently statutorily recognised or other built heritage not currently so recognised. The Project route was traversed by vehicle.

2.2.4 Selection of possibly affected built heritage

Council listed or NZHPT registered buildings that were within one kilometre of the Main Alignment were considered for possible effects. This measure was selected as a likely distance where possible permanent or temporary visual or physical effects might result from construction or operations. This distance would also allow for any inaccuracies in scaling the location of listed buildings from District Plan maps, which are at a small scale. The list of identified buildings within the defined distance and their approximate scaled distances from the Main Alignment is included in Appendix 1.

It was found that all but two structures were too far away from the Main Alignment to have any physical or visual effects.

2.3 Basis for assessing effects on identified built heritage

Appropriate documents for assessing effects of roadways on built heritage include publications by the NZHPT and the International Council on Monuments and Sites (ICOMOS) New Zealand Charter for the Conservation of Places of Cultural Heritage Value, 1996 (the ICOMOS NZ Charter). The relevant sections of these documents are listed below.

In general the topics discussed and assessed in this report are those recommended in the NZHPT Sustainable Management of Historic Heritage Guidance Information Sheet 9 Preparing a Heritage Impact Statement, although the order is different to that recommended in Sheet 9.

2.3.1 NZHPT Sustainable Management of Historic Heritage Guidance Information Sheet 1 Principles for Assessing appropriate or inappropriate Subdivision, Use and Development on Historic Heritage Values

The relevant sections of this document are:

> *6. Respect for physical material*
> *The degree to which interventions involve the least possible loss of heritage significance and the least loss of material of heritage value, including those arising from irreversible or cumulative effects.*
>
> *7. Understanding significance*
> *Whether the values of the place are clearly understood before decisions are taken that may result in change. Decision-making, where change is being contemplated, should take into account all relevant values, cultural knowledge and disciplines. Understanding significance should be assisted by methods such as the preparation of heritage assessments and conservation plans.*
>
> *8. Respect for contents, curtilage and setting*
> *The extent to which interventions respect the contents and surroundings associated with the place.*

2.3.2 NZHPT Sustainable Management of Historic Heritage Guidance Information Sheet 16 Assessing Impacts in Surroundings associated with Historic Heritage

The relevant sections of this document are:

> *Principles*
> *Assessing the significance and impacts on surroundings will require an understanding of the significance of the original relationship of the heritage item to its site and locality, adequacy of setting, visual catchments and corridors, and the need for buffer areas to screen unsympathetic development.*
>
> *General*
> - *The original relationship of the heritage item to its site and locality should be retained. All the main structures associated with the heritage item (for example, homestead, garden, stables, etc.) should be retained in single ownership.*
> - *Where a historic place has landmark values, the proposed activity should not be visually dominating or distract from the landmark qualities of the historic place. The relative scale of the activity is an important consideration.*
> - *The proposed activity should provide for an adequate setting for the heritage item, enabling its heritage significance to be maintained. The significance and integrity of the setting should be identified. Well-preserved, authentic, essential and substantial settings should be retained and protected.*
> - *The proposed activity should provide for adequate visual catchments, vistas and sight-lines or corridors to the heritage item from major viewing points and from the item to outside elements with which it has important visual or functional relationships.*

2.3.3 NZHPT Sustainable Management of Historic Heritage Guidance Information Sheet 22 Assessing Impacts of Designations on Historic Heritage

The relevant sections of this document are:

> *Principles*
> *Designations of land should not provide for any public work, project or other work that compromises the protection, condition, integrity, or public appreciation of historic heritage.*
>
> *Requiring authorities should be encouraged to seek essential designations outside of, and sufficiently distant from, sensitive historic heritage areas.*
>
> *Where land must be designated over, or near, historic heritage, particular attention should be paid to the extent of the area involved, the specific location, and the nature of activity involved, so that adverse impacts on historic heritage are minimised to the greatest practical extent. This will require a heritage impact assessment (and normally an archaeological assessment).*
>
> *Checklist for assessing proposed designations*
> - *Alternative locations for designations should be explored. Requiring*

authorities need to seek locations for essential designations outside of, and sufficiently distant from land associated with historic heritage sites or areas.

- *Planning for designations must be informed by adequate research and assessment, including a heritage impact assessment and archaeological assessment.*

- *Where land must be designated over, or near, historic heritage, particular attention should be paid to the extent of area involved, the specific location, and the nature of activity involved, so that adverse impacts on historic heritage are minimised to the greatest practical extent…*

- *Outline plans should be prepared in relation to designations to provide for historic heritage values where appropriate. Outline plans should be informed by professional research and assessment and cover matters such as: …*

    - *Any other initiatives (e.g. painting) to avoid, remedy or mitigate any adverse effects on historic*

2.4 ICOMOS NZ Charter

The relevant sections of this document are:

4. CONSERVATION METHOD
(ii) show the greatest respect for, and involve the least possible loss of, material of cultural heritage value.

6. SETTING
The historical setting of a place should be conserved with the place itself. If the historical setting no longer exists, construction of a setting based on physical and documentary evidence should be the aim. The extent of the appropriate setting may be affected by constraints other than heritage value.

2.5 KCDC District Plan

One structure has been identified as being affected within the boundaries of the KCDC, identified by them as the "petrol storage tank". This is a brick splinter proof brick wall designed to protect a steel petrol storage tank. The location of the listed structure in relation to the current designation is shown on the planning maps in Appendix 2. It is understood that, contrary to the planning map location, the structure is within the existing designation.

Section 8 of the KCDC District Plan discusses heritage objectives and policies.

2.5.1 Policy 2 General assessment criteria

When considering the
destruction, demolition, alteration, modification or removal of any heritage feature recorded in the Heritage Register, take into account the following:

In respect of historic buildings:

- *The heritage significance of the building and whether there is any change in circumstances since the building was identified as significant in the Plan that reduces its significance.*
- *The degree to which the proposal reflects the conservation principles contained within the ICOMOS New Zealand Charter for the Conservation of Places of Cultural Heritage Value.*
- *The registration (if applicable) and the reasons for this registration of the heritage resource under the Historic Places Act 1993.*
- *The policies of any conservation plan and heritage inventory relating to the heritage resource.*
- *The importance (if any) of land surrounding the heritage resource. • The impact the proposal has on the integrity/value of the heritage resource.*
- *The importance attributed to the heritage resource by the wider community.*
- *The recommendations made by the NZ Historic Places Trust and any other professionally recognised party in heritage conservation issues.*
- *Whether the building can be economically and adaptively re-used.*
- Whether any alteration to the building can be made that retains the heritage significance of the building while reasonably accommodating the objectives of the applicant.
- *Whether the building poses a risk to life in the case of earthquake.*

2.5.2 Discretionary activities

The demolition of buildings that are listed in the District Plan but are not registered with the NZHPT is a Discretionary Activity as follows:

D.2.1.3 Discretionary Activities
(B) The following are Discretionary Activities:

The alteration or modification which is not a minor work, as defined in Part Q of this Plan, and the demolition or removal of any Heritage Feature recorded in the Heritage Register. In relation to historic buildings, "modification" includes any subdivision of land containing the historic building and its curtilage (except where specified in this Plan to be a non-complying activity or prohibited activity).

2.6 PCC District Plan

St. Joseph's church listed on the heritage list of the PCC District Plan is affected by the Project. The current designation in relation to the listed structure is shown on the planning maps in Appendix 2.

Policy C8.1.1 of the PCC District Plan requires the identification and protection of significant heritage with protection being through rules in the District Plan. The relevant rule is D4.1.3 Limited Discretionary Activities, (ii) "(a) the effect of the activity on the heritage values of the Feature."

2.7 Other District Plans

The only other local authority area, which the Project traverses, is Wellington City. There are no heritage buildings listed by them that are affected by the Main Alignment.

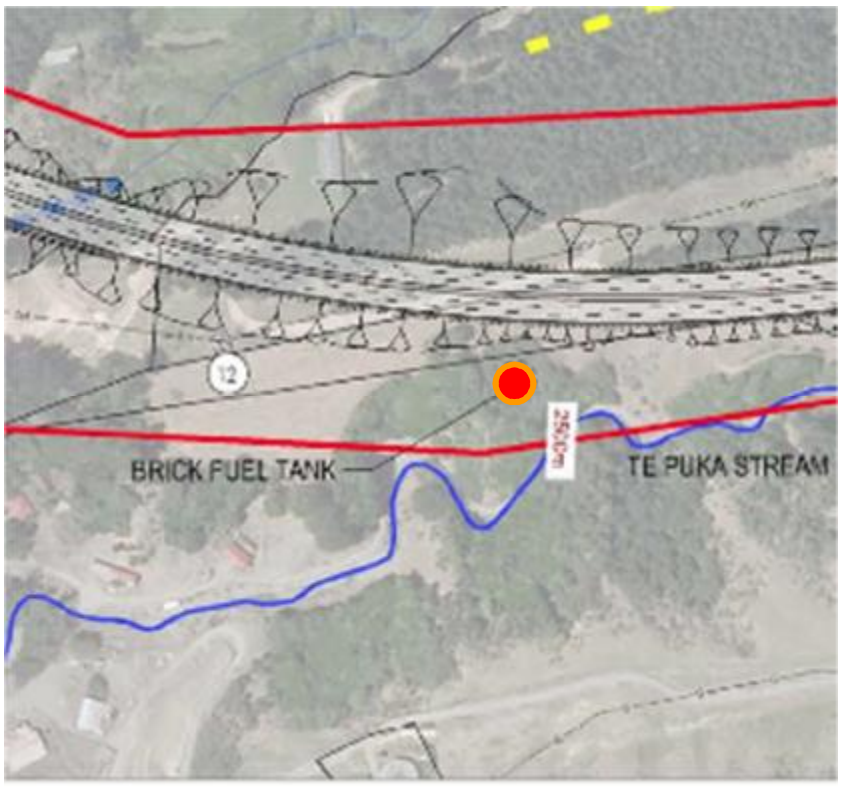
3 Identified built heritage affected by the Main Alignment

3.1 "Petrol storage tank"

3.1.1 Location

The structure identified as B87 on the Kapiti Coast District Council District Plan is noted as noted as being 22 metres away from the Main Alignment. The reference in the plan is:

No	Origin	Owner	Location/legal description	Description/significance (Valuation NZ No.)
B87	Submission	Private	SH1 Paekakariki (Pt Lot 2 DP 4269)	Petrol storage tank built during WW2, one of three in NZ.



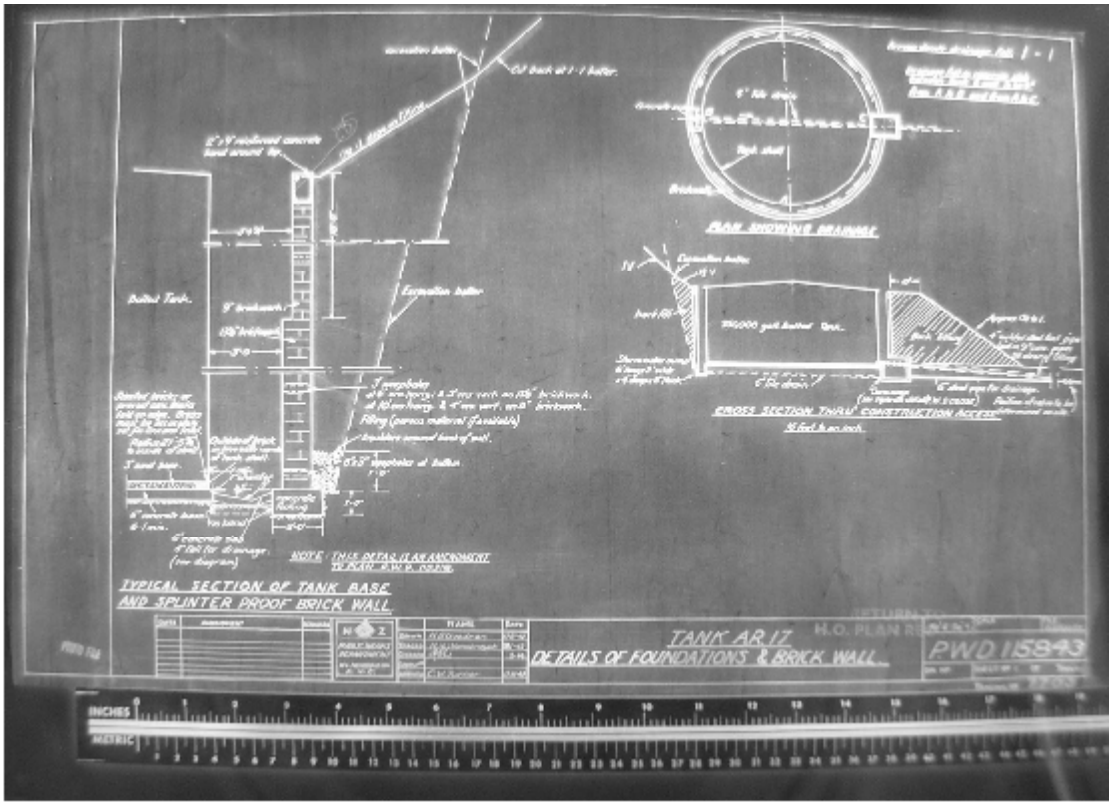
3.1.2 Significance of the "petrol storage tank"

The "tank" is a splinter proof brick wall protecting a now-removed metal petrol storage tank. It was designed by the Public Works Department in 1942 (see plan below) and was built by them during WW2 as a petrol storage depot for vehicles operated by the US Defence Force two of whose camps were constructed on the near Paekakariki. The camps are described in the following quotation from NZ History Online.

> *In the south, the major area of American settlement was on the Kapiti coast, the lovely area between the west coast beaches and the Tararua mountains. At Paekakariki there were two large settlements, Camp Russell (now Queen Elizabeth Park) and, on the other side of the highway, Camp McKay. Close by were further camps at Pauatahanui, Judgeford Valley and Titahi Bay. In all, more than 21,000 men were able to be accommodated in the area.*[1]

Camps McKay and Russell on either side of the highway at Paekakariki. Alexander Turnbull Library, National Publicity Studios Collection Reference: F 100013 1/2

[1] http://www.nzhistory.net.nz/war/us-forces-in-new-zealand/the-camps



Plan of the splinter proof brick wall protecting the fuel storage tank.

17 fuel depots were proposed to be constructed throughout the country but only 15 were completed[2]. Burgess lists five known to have survived up to 2007 since their construction in 1942, quoting G Burns as follows with the depot number[3]:

5 Ohakea
7 Whenuapai
9 Rukuhia
16 Bankside
17 Paekakariki

It is known that another exists in Gisborne as it is listed on the District Plan and is depot number 10.

Of these structure, three are recognised by being listed on district plans or registered with the NZHPT. These are at:

- Paekakariki listed by the Kapiti Coast District Council (the "petrol storage tank")
- Bankside registered category II with the NZHPT, register number 7727
- Ormond, Gisborne, listed on the Gisborne District Council District Plan, reference no. P46, valuation reference 825/119 , legal description Pt Lot 2 DP 3073 Secs 10 12 Blk VII, location Waimata SD, description WWII fuel reserve, category C

[2] Robyn Burgess, NZHPT registration report, Bankside Fuel Depot, 23 October, 2007

[3] [3] Burns, G in 'Aviation Reserve Fuel Depots' in Forts and Works, 9 August 2000 notes that tanks have been removed from most of the sites and that the blast walls remain of only 5, 7, 9, 16, 17– 3. Although 17 Aviation Fuel Depots were planned, it appears that two were not actually constructed, Burgess op cit

War historian, Peter Cooke, whose publication Defending New Zealand: Ramparts on the Sea 1840-1950s, Burgess quotes, stated that the tank and splinter proof wall at Paekakariki was the last to be constructed and, rather than being used for aviation fuel, it was used for US motor spirits and therefore believes that it is unique of the depots constructed. He considers that the brick structure at Paekakariki was the best preserved of those still in existence[4].

There are few substantial, intact, surviving structures from the period of the American camps in the Kapiti region, and a map showing all American related structures in the area is being prepared by the Kapiti Coast District Council. Several warehouses constructed by the Americans during World War II in Seaview still survive, while their main camp in Auckland, at Sylvia Park, has been demolished with little if anything surviving.

In summary, using available information, and with reference to the assessment criteria of the NZHPT Sustainable Management of Historic Heritage Guidance Information Sheet 2 and the Burgess assessment of the Bankside structure, the heritage significance of the "petrol storage tank" can be summarised as follows:

Physical values

Architecture

- the structure has some architectural values as a rare building type, and for its large scale, circular form and use of materials.

Technology and engineering

- the structure was designed using sound engineering principles of solid brick construction to limit damage from an explosion of the tank it encircled. It was positioned in a partially excavated, largely hidden location and built with a high degree of precision.

Rarity

- The structure is one of six similar structures still in existence of the 15 originally built, and it is believed to the best preserved. It is believed to be unique in its function of protecting a tank used to store petrol rather than for storing aviation fuel; the function of all others built during World War II in New Zealand. It is believed to be the best preserved.

Representative

- the structure is representative of the 15 similar structures designed by the New Zealand Public Works in particular and the design and construction work of the Department throughout World War II in general. It also reflects the co-operation between the Public Works Department and the US Defence Force to provide all structures required for the operation of the US camps in the Paekakariki area.

Integrity

- the structure retains a high degree of integrity with almost all brickwork, steel rungs, concrete ring beams and frames around openings intact. The petrol tank has been removed. There are concrete sumps nearby likely to be associated with the brick structure.

Context or group

- the structure is one of 15 similar such structures built throughout New Zealand of which six survive. It is one of a number of structures built for the US Defence Force in the Paekakariki area and wider Wellington region.

[4] Pers com Peter Cooke to Ian Bowman 8 November, 2010

Historic Values

People

- the structure is associated with the New Zealand Public Works Department. This organisation played a huge role in the physical development of New Zealand and was largely responsible for the design and construction of much of New Zealand's infrastructure from the 1860s through to the 1980s. The structure is also associated with the American Defence Force, for whom the depot was built.

Events

- the structure is associated with the war effort of the 1940s, particularly New Zealand's close association with the United States in countering the aggression of the Japan in the Pacific.

Patterns

- the structure is associated with an important period in the history of the Kapiti area and Wellington region when the US Defence Force was accommodated during World War II.

Cultural values

Public esteem

- public esteem for the structure is increasing with the identification on the Kapiti Coast District Council District Plan of three structures associated with the US Defence force and the establishment of the Kapiti US Marine Trust.

Education

- the structure adds to an "understanding of the extensive network of defensive sites which were established very quickly to counter the threat of Japanese invasion…..With appropriate interpretation…it would provide public education about a little known aspect of the war effort."[5]

Statutory recognition

- the structure is listed on the Kapiti Coast District Council District Plan.

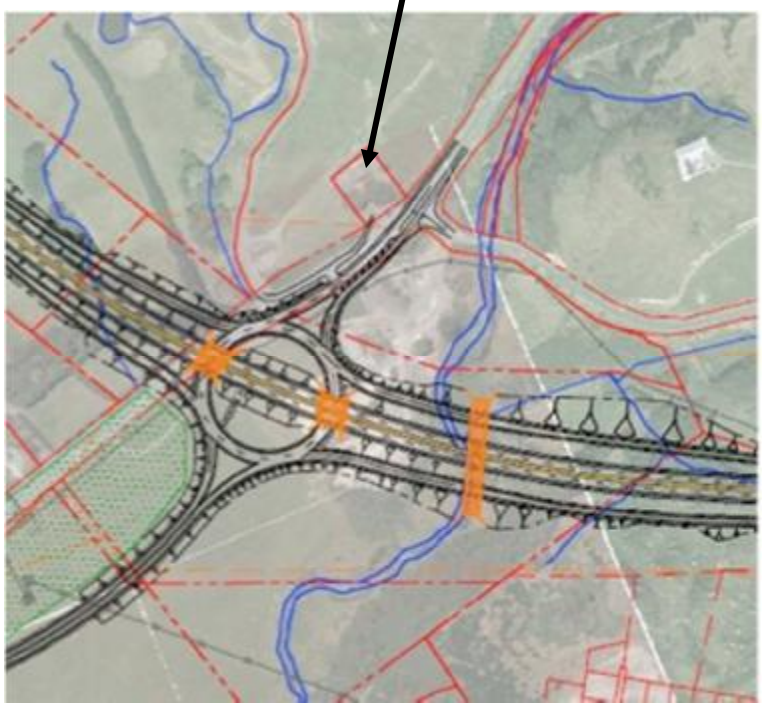
[5] Burgess, op cit, page 14

3.2 St Joseph's Church

3.2.1 Location

The structure identified St Joseph's church, listed by the Porirua City Council reference number JA 02 and registered category I with the NZHPT, register number 205. The Porirua District Plan lists the building as follows:

Map	Name	Location	NZHPT Class	Issue/feature
JA02	St Joseph's Catholic Church	State Highway 58 Pauatahanui	I	Consists of church and graveyard which are well maintained and has been virtually unaltered since 1878. First Catholic Church in Porirua Basin and oldest catholic church building still in use in Wellington.



3.2.2 Significance of St Joseph's church[7]

> *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. Prior to its construction, Catholic services in what was known as the Pahatanui [sic] Small Farms District, were held in a private residence by Father Petijean SM. In August 1876, Henry Abbott, Roderick Mulhern, and Patrick Murphy donated money to acquire land for a new church from local landowner, Thomas Hollis Stace.*
>
> *The new church was designed by Thomas Turnbull, a significant Wellington-based architect. Turnbull's design was a simple timber Gothic church measuring 18 ft. x 38 ft. [5.5m x 11.5m] and containing seating for 100 people. It was built by Blackie and Foster, and completed in 1878. The church was consecrated by Bishop Francis Redwood (later Archbishop) on 28 April 1878. The first priest was Father John Joseph Lane, who was appointed parish priest of the Hutt in 1886. Father Lane, later Dean Lane, continued to serve the Hutt Valley and Porirua Basin until his death in the 1920s.*
>
> *St Joseph's is noted for the use of 'poor man's stained glass', a form of printed, coloured transparent paper, imitating the forms and colours of glass. Adjacent to the church is a graveyard where a number of early settlers to the Pauatahanui area are buried.*
>
> *St Joseph's is significant as it is the oldest Catholic Church building still in use in Wellington and the first Catholic Church in the Porirua basin. It was designed by notable architect Thomas Turnbull, and is a perfectly realised simple Gothic church.*

The building has a significant historical connections with Pauatahanui as many of the original settlers are buried in churchyard. There are also views of the Inlet and wider village setting from the grounds, which enhance the historical connections. The church is situated above SH58 but because of its elevated location and being set back some distance from the road, the church and site retain a sense of tranquillity.

> *St Joseph's sits in a compact enclosure above the road and parallel to it, and is easy to miss when driving past, especially when travelling westward. The attractive grounds are dominated by four venerable macrocarpa trees, while close to the church there are mahoe, a cabbage tree and a totara. The upper portion contains a graveyard, a characteristic of many country churches. St Joseph's Church, surrounded by paddocks and hills, still maintains a truly rural setting[8].*

The church is used for weddings, funerals and baptisms while the churchyard is visited by families of those buried there[9]. While the church services are held inside the church, the exterior grounds of the church are also important for gatherings before and after the services, for photography of special occasions and for quiet reflection.

---

[7] http://www.historic.org.nz/TheRegister/gisterSearch/RegisterResults.aspx?RID=205

[8] Thornton, G., Worship in the Wilderness, Early Country Cuurches of New Zealand, Reed Publishing, Auckland, 2003, page 85

[9] pers com. Robert McLean, Senior Heritage Policy Adviser, NZHPT, 6 September, 2010

Of particular interest are the “glacier windows”. These are original “poor man’s” stained glass windows. They are in a delicate state and are suffering deterioration.

4 Assessment of effects on the "Petrol Storage Tank"

The Main Alignment is proposed to avoid the "petrol storage tank" by 22 metres. The relevant documents for assessing the effects of these possible options are those listed above in 2.2.1, 2.2.2, 2.2.3, 2.3, 2.4.1, and 2.4.2.

4.1 NZHPT Guidance Sheet 1

4.1.1 6 Respect for physical significance

The proposed Project will have little effect on heritage significance and no loss of heritage fabric. The area where significance may be impacted is on the setting, which is discussed below.

4.1.2 7. Understanding significance

The KCDC have identified the structure as being one of only three in New Zealand and is one of few substantial and intact structures from the American Camps near Paekakariki during the Second World War. As described in 3.1.2 above, the brick structure is in fact one of six similar structures but its use was unique. The assessment in 3.1.2 has confirmed that the structure has significant heritage values. No other heritage assessment or a conservation plan is known to have been written on the structure.

4.1.3 8. Respect for contents, curtilage and setting

There are no longer any contents within the structure, while the immediate curtilage of a narrow gully, tall vegetation, stream and four wheel drive track is not expected to be altered. Nor is the wider setting to the west of the structure. However the proposal to construct a highway 22 metres away from the structure will involve extensive cutting into the nearby hillside and creating an appropriate platform for the road, which will modify the west of the setting to a significant extent.

4.2 NZHPT Guidance Sheet 16

4.2.1 Principles
Understand the significance of the original relationship of the heritage item to its site and locality

The brick structure was intentionally located so that its top level would be at or below ground level. The structure was set in a depression, which was excavated further and then back filled so that is was as invisible from the air as possible and also to limit any damage from an explosion of the petrol tank.

4.2.2 General
The original relationship of the heritage item to its site and locality should be retained

The relationship of the brick structure with the immediate site and locality will not be changed as explained in 4.1.3. The wider setting to the east will be modified extensively with the construction of the proposed highway.

4.2.3 General

Where a historic place has landmark values, the proposed activity should not be visually dominating or distract from the landmark qualities of the historic place. The relative scale of the activity is an important consideration.

"Landmark" has two meanings. One is being visually prominent, the other is representing a significant or historic development. The brick structure is clearly not visually prominent, but it does represent a significant or historic development. The landmark qualities of the place are largely those of its rarity and historical values which will be unaffected.

4.2.4 General

The proposed activity should provide for an adequate setting to maintain its heritage significance

As discussed above in 4.1.3, the wider setting will be modified to a considerable extent with a new highway cut into an existing hill and 22 metres to the east of the structure. The immediate curtilage and wider setting to the west will be unaffected..

4.2.5 General

The proposed activity should provide for adequate visual catchments, vistas and sightlines.

The brick structure will not be visible from the Project and will be physically separated from it by an embankment approximately six metres above the Project.

4.3 NZHPT Guidance Sheet 22

4.3.1 *Principles*

Designations of land should not provide for any public work, project or other work that compromises the protection, condition, integrity, or public appreciation of historic heritage.

The proposed designation alignment will not compromise the protection, or condition of the brick structure. Dr. Stephen Chiles, acoustics engineer, advised in his report "Technical Report 12: Assessment of Acoustic Effects" in sections 5.3 and 5.4.4 that the vibration effects of the Project from traffic movement will not affect the condition of the brick structure because of the distance between the Project and the brick structure. He advised in section 5.4.4, however, that vibration effects from construction may have an impact and will need to be managed.

4.3.2 *Principles*

Where land must be designated over, or near, historic heritage, particular attention should be paid to the extent of the area involved, the specific location, and the nature of activity involved, so that adverse

impacts on historic heritage are minimised to the greatest practical extent. This will require a heritage impact assessment (and normally an archaeological assessment).

The potentially adverse impact on the brick structure is the modification of the wider setting to the east. This will create a cutting into the hill near to the structure with the Project running from the south to the north of it.

4.4 ICOMOS NZ Charter

4.4.1 4. CONSERVATION METHOD

(ii) show the greatest respect for, and involve the least possible loss of, material of cultural heritage value.

As 4.1.3.

4.4.2 6. SETTING

The historical setting of a place should be conserved with the place itself.

As 4.2.4

4.5 KCDC District Plan, Policy 2 General Assessment Criteria

4.5.1 The heritage significance of the building and whether there is any change in circumstances since the building was identified as significant in the Plan that reduces its significance

There have been no known changes in physical circumstances that have reduced its significance since having been identified as a heritage structure on the KCDC heritage list.

4.5.2 The degree to which the proposal reflects the conservation principles contained within the ICOMOS New Zealand Charter for the Conservation of Places of Cultural Heritage Value.

As 4.4

4.5.3 The registration (if applicable) and the reasons for this registration of the heritage resource under the Historic Places Act 1993.

The structure is not registered.

4.5.4 The policies of any conservation plan and heritage inventory relating to the heritage resource.

No conservation plan or heritage inventory is known to have been prepared for the building.

4.5.5 The importance (if any) of land surrounding the heritage resource.

Not known, however the wider area may be considered as a heritage landscape relating to the occupation of the US during WWII.

4.5.6 The impact the proposal has on the integrity/value of the heritage resource.

As 4.3.1.

4.5.7 The importance attributed to the heritage resource by the wider community.

There is considerable importance attached to the structure by the local, regional and international communities. The structure is one of a number identified for conservation and promotion by the Kapiti US Marines Trust. This Trust was established by Kapiti Mayor Jenny Rowan for those "with an interest in the collection, conservation, exhibition and promotion of Marine's History – particularly that history involving the WWII Camps particularly that history involving the WWII Camps Paekakariki, Mackay and Russell in southern Kapiti". Represented on the Trust are the KCDC, the GWRC, the United States Embassy, the New Zealand American Association, the Marines Division, the Paekakariki Station Precinct, Friends of Queen Elizabeth Park and the Guardians of Whataroa Farm. Also associated with the Trust are the Ministry of Culture and Heritage, tangata whenua, Old St Paul's and the RSA.

4.5.8 The recommendations made by the NZ Historic Places Trust and any other professionally recognised party in heritage conservation issues.

It is not known if the NZHPT have made recommendations on this building.

4.5.9 Whether the building can be economically and adaptively re-used.

Adaptation of the structure would not be appropriate, as this would compromise its heritage values.

4.5.10 Whether any alteration to the building can be made that retains the heritage significance of the building while reasonably accommodating the objectives of the applicant.

Alterations could be inappropriate and could compromise the heritage significance of the structure.

4.5.11 Whether the building poses a risk to life in the case of earthquake.

It is not known if the structure is an earthquake risk, however its form is inherently strong and its condition is good.

5 Assessment of effects on St Joseph's Church

The church will not be physically affected by the Project but its wider setting will be modified. It has been confirmed in Dr. Stephen Chiles report, "Technical Report 12: Assessment of Acoustic Effects" in sections 5.3 and 5.4.4 that vibration is not likely to cause damage while noise levels will be raised by 5 dB LAeq(24h). Dust from construction is likely but it is understood that this will be managed appropriately by regular washing. The relevant documents for assessing the visual effects of these possible options are those listed above in 2.2.1, 2.2.2, 2.2.3, 2.3, and 2.5.

5.1 NZHPT Guidance Sheet 1

5.1.1 Respect for physical material

The NZHPT online registration report of the church describes the significance of the church, while Geoffrey Thornton, a previous Board member of the NZHPT, in his book, extends the significance of the church to its environs as described in 3.2.2 above. The main impacts on the significance of the church are to its setting and potential effects on the glacier windows. These are described below in 5.1.3 and 5.2 respectively.

5.1.2 7. Understanding significance

The heritage values and significance of the church are well understood and have been described above in 3.2.2.

5.1.3 8. Respect for contents, curtilage and setting

The middle distance of the setting of the building will be modified by the construction of the Project. The church is located several metres above the existing road so that the Project will be visible from it, even though there are large trees around the building, which will partially obscure the Project. Sheet GM13 of the NZTA drawings indicate that the Project will be raised by 9.5 metres from the existing ground level and will be 1.5 metres above the church level so that the Project will be visible to the west and north of the church grounds. The historical visual connection with the Inlet and wider village setting described in 3.2.2 will be hindered.

5.2 NZHPT Guidance Sheet 16

5.2.1 *Principles*

Assessing the significance and impacts on surroundings will require an understanding of the significance of the original relationship of the heritage item to its site and locality, adequacy of setting, visual catchments and corridors, and the need for buffer areas to screen unsympathetic development.

As discussed above in 5.1.3 the middle distance setting of the church will be affected by the Project hindering historic views of the inlet and wider village setting and modifying the views from the church to the east to a moderate extent.

5.2.2 General

Where a historic place has landmark values, the proposed activity should not be visually dominating or distract from the landmark qualities of the historic place. The relative scale of the activity is an important consideration.

As discussed above, the Project will be 9.5 metres above the existing ground level and 1.5 metres above the ground level of the church. Therefore its construction is large-scale.

5.2.3 General

The proposed activity should provide for an adequate setting for the heritage item, enabling its heritage significance to be maintained. The significance and integrity of the setting should be identified. Well preserved, authentic, essential and substantial settings should be retained and protected.

As discussed above in 3.2.2, heritage values of the church include historical, physical and visual connections with the landscape and the tranquillity of its setting. The immediate setting of the church and church-yard are not directly affected, but the wider setting beyond the boundaries of the church will be affected to a moderate negative extent.

Noise levels will rise by 5 dB LAeq(24h). This may have an effect on the setting of the church and churchyard. The churchyard in particular has a quiet ambience where relatives of those buried in the churchyard can visit and contemplate in relative peace. It is acknowledged by the acoustic engineer, Dr. Stephen Chiles, that once Transmission Gully is constructed and is operational the noise level rise from its use will be just noticeable. Dr. Stephen Chiles also advises that no operational vibration effects from the operation of Transmission Gully are anticipated.

It is noted that as part of the Transmission Gully Project the existing state highway 58 is needed to be moved so that it is slightly further away from the Church than at present and will as part of this work be resurfaced. This will have some noise and vibration benefits to the Church.

5.2.4 General

The proposed activity should provide for adequate visual catchments, vistas and sight-lines or corridors to the heritage item from major viewing points and from the item to outside elements with which it has important visual or functional relationships.

As discussed above, the historic visual connections between the church, inlet and the wider village and surrounding countryside are likely to be impaired.

5.3 NZHPT Guidance Sheet 22

5.3.1 ***Principles***

Designations of land should not provide for any public work, project or other work that compromises the protection, condition, integrity, or public appreciation of historic heritage*.*

Technical Report 12 notes that vibration is unlikely to be a problem but that sound levels will rise as a result of the Project. As is noted above, the glacier windows are in a poor state and any vibration at all may cause damage. Similarly dust from construction may have a deleterious effect from abrasion on the glass and increase maintenance requirements for the exterior coatings and finishes of the church.

5.3.2 ***Principles***

Where land must be designated over, or near, historic heritage, particular attention should be paid to the extent of the area involved, the specific location, and the nature of activity involved, so that adverse impacts on historic heritage are minimised to the greatest practical extent. This will require a heritage impact assessment (and normally an archaeological assessment).

The Main Alignment is within approximately 120 metres of the church. There will be moderate negative visual impacts of the Project on the church.

5.4 ICOMOS NZ Charter

6. SETTING

The historical setting of a place should be conserved with the place itself. If the historical setting no longer exists, construction of a setting based on physical and documentary evidence should be the aim. The extent of the appropriate setting may be affected by constraints other than heritage value.

As discussed above, the immediate setting of the church will not be affected, but the middle distance of the church will be physically modified so that the wider visual setting of the building will be altered to a moderate negative effect.

5.5 PCC District Plan D4.1.3 Limited Discretionary Activities

5.5.1 (ii) "(a) the effect of the activity on the heritage values of the Feature."

The known likely effects on the values of the Church are increased noise and modification to the wider setting. There is the possibility of dust and potential deterioration of the glacier windows. The effects on heritage values are discussed above in 5.2, 5.3 and 5.4.

6 Conclusions

While a number of structures nearby the Project have been listed by Councils and/or registered with the NZHPT, only two heritage structures have been identified as likely to be affected by it. These are the "Petrol Storage Tank" and St Joseph's Church. The effects are as follows:

- **Petrol Storage Tank:** The Project is proposed to pass 22 metres to the east of the splinter proof brick structure, described as a "petrol storage tank" on the KCDC District Plan, constructed in World War II. The only long-term effect of the Project on the significance of the brick structure will be the modification of the currently authentic setting. The structure is not likely to be visible from the Project and will be physically separated by a six metre high embankment when immediately adjacent. While the impact on the setting will be considerable, the effect on the overall heritage significance of the structure will be minor. There may be a physical impact caused by vibration during the construction of the Project.

- **St Josephs Church:** The views of the middle distance from St Joseph's church will be affected by the Project and there will be some increased noise generated by the new road. At the same time State Highway 58 will be realigned and located slightly further away from the Church. The visual effects on the heritage values of the church are considered as moderate, negative and permanent. Vibration effects are expected to be minimal based on standard measurement. However, because of the very delicate nature of the glacier windows, even very small vibrations may cause damage. The building has painted timber cladding and corrugated steel roofing. The expected dust effects from construction may slightly increase maintenance requirements on the 1878 church if the paintwork.

7 Recommendations

7.1 "Petrol Storage Tank"

It is recommended that the immediate environs of the structure be retained as existing as far as possible.

Both the NZHPT and KCDC emphasise the need for conservation plans to guide conservation of built heritage. This is also recommended by the ICOMOS NZ Charter and is a common recommendation by the larger local authorities when resource consents are required on listed heritage buildings. It is therefore recommended that a conservation plan be prepared for the structure. This will give long-term policies to retain heritage values and recommend maintenance and repairs.

7.2 St Joseph's Catholic Church

The main effect on the heritage values of the church is the modification to its historic setting, an important heritage value of the church, while there may be physical effects from vibration and dust because of the friable nature of the windows.

It is recommended that:

- the edges of the Project be planted with appropriate vegetation so that it is largely obscured from the Church. As the Project will largely obscure visual connections with the inlet and wider village anyway, planting along the Main Alignment would mitigate, to a certain extent, the visual impact of the view from the church of the Project.

- a full and up-to-date condition survey of the Church is completed prior to the construction phase to measure any deterioration in the building due to construction effects.

- there are regular inspections of the Church during construction to monitor any physical effects.

- where physical effects are discovered during construction, appropriate action is taken to remedy those effects as soon as possible.

- the church is to be monitored for dust from the construction activity and if necessary the Church is to be washed up to once every two months as appropriate.

- special care is taken of the glacier windows in the church. Options include removal and appropriate storage throughout the duration of the contract, or to install protective covers over them in situ. Taking and following advice from a stained glass window conservator member of the New Zealand Conservators of Cultural Material is recommended.

Sources

Boffa Miskell, Review of the Cultural Aspects of the Coastal Route and Transmission Gully Motorway – Western Corridor Transportation Study, prepared for Porirua City Council, by Boffa Miskell, Tauranga, 16 November 2005.

Bowman, I, Asset Grading for the Greater Wellington Regional Council, 1999

Bowman I, Regional Parks and Natural Forest Asset Management Plan for heritage Structures, 1999

Burgess, R., NZHPT Registration Report, Bankside Fuel Depot, 23 October, 2007

Greater Wellington Regional Council Plan

http://www.nzhistory.net.nz/war/us-forces-in-new-zealand/the-camps

ICOMOS New Zealand Charter for the Conservation of Places of Cultural Heritage Value, ICOMOS, January 1996

Isthmus Group, Wellington Regional Land Atlas 18 May, 2009

KCDC District Plan

NZHPT register on-line at
http://www.historic.org.nz/TheRegister/gisterSearch/Register

NZHPT Sustainable Management of Historic Heritage Guidance Information Sheet 1 Principles for Assessing appropriate or inappropriate Subdivision, Use and Development on Historic Heritage Values

NZHPT Sustainable Management of Historic Heritage Guidance Information Sheet 2 Assessment Criteria to Assist in the Identification of Historic Heritage Values

NZHPT Sustainable Management of Historic Heritage Guidance Information Sheet 9 Preparing a Heritage Impact Statement

NZHPT Sustainable Management of Historic Heritage Guidance Information Sheet 15 Demolition of historic buildings

NZHPT Sustainable Management of Historic Heritage Guidance Information Sheet 16 Assessing Impacts in Surroundings associated with Historic Heritage

NZHPT Sustainable Management of Historic Heritage Guidance Information Sheet 22 Assessing Impacts of Designations on Historic Heritage

O'Keeffe, M. Victoria Grouse, V., Technical Report 29: Transmission Gully: Archaeological Assessment of proposed roadway Report to New Zealand Transport Agency.

Opus International Consultants Limited, Transit NZ Contract 236 PN, Transmission Gully: Scheme Assessment Review of Historic Information, August 2007

PCC District Plan

Thornton, G., Worship in the Wilderness Early Country Churches of New Zealand, Reed Publishing, Auckland, 2003

APPENDIX 1

Lists of buildings within one kilometre from the Main Alignment

1 Porirua City Council

1.1 District Plan

The following items of built heritage have been listed in the Porirua Council District Plan and appear to be within approximately one kilometre of the existing and proposed designations.

Map	Name	Location	NZHPT Class	Description	Proximity to the Project
JA01	**Taylor-Stace Cottage**	State Highway 58 Pauatahanui (Lot 1 DP 50929)	I	Simple Georgian cottage built in 1847, this is the oldest existing cottage in the Pauatahanui district. Former colonial homestead currently used as a craft shop. Consists of main building and outbuildings, largely original throughout with minor modifications. One of a group of buildings connected to significant families since 1841.	600 m from new interchange
JA02	**St Josephs Catholic Church**	State Highway 58 Pauatahanui	I	Consists of church and graveyard which are well maintained and has been virtually unaltered since 1878. First Catholic Church in Porirua Basin and oldest catholic church building still in use in Wellington.	120 m from new interchange
JB09	**Battle Hill Farm Forest Park**	Paekakariki Hill Road		When Te Rangihaeata withdrew to the Horokiri Valley, he made a stand on a site now known as Battle Hill. Neither the government forces nor Te Rangihaeata could claim victory of Battle Hill. This site contains the rifle pits of Te Rangihaeata and the graves of Tuite and Roberts who were killed in 1846.	Goes through the park but not close to any heritage structures
JB22	**St Albans Church Area**	Paekakariki Hill Road Pauatahanui	II	The St Albans Church Building (Anglican) was built in 1895 of timber, weatherboard construction with corrugated iron roof. It	750 m from new interchange

				was designed by Frederick de Jersey Clere, Fitzgerald and Richmond. The Church is still in use today. The Church is built on a site which had been used as a Pa by Rangihaeata, nephew of Te Rauparaha. Originally located where St Albans Church in Pauatahanui stands, the Matai-taua Pa was built as a fighting pa by Te Rangihaeata. This is also the site of a Military Camp (1846-1850), the site of the original Chapel and the St. Albans grave yard.	
JB23	**Thomas Hollis Stace Cottage**	Paekakariki Hill Road Pauatahanui	II	Built in 1860 by Thomas Hollis Stace as a private dwelling. Used in the late 1870's as a Post Office and in the mid 1880's as a bakehouse and general store. More recently it has been used by the Royal Forest and Bird Protection Society as a base for field work. It is one of the oldest buildings in Porirua.	750 m from new interchange
JB24	**Pauatahanui World War I Memorial**	Paekakariki Hill Road Pauatahanui	II	World War I memorial.	750 m from new interchange

1.2 Proposed Heritage Management Strategy, 2009

The Porirua City Council Proposed Heritage Management Strategy, 2009 is a non-regulatory document, which outlines an approach that the Council may take in "managing natural, cultural and historic heritage within Porirua City." The document lists further built heritage, which could be considered for future inclusion in the District Plan. These proposed additional buildings or areas which may be within approximately one kilometre of the existing and proposed designations:

HIDB number	Name	Street number	Street name	Suburb	Proximity to the Project
52	**Pauatahanui Historic Area**		Pauatahanui Inlet		750 m from new interchange
179	**Pauatahanui graveyard**		Paremata Haywards Road (State Highway 58)	Pauatahanui	750 m from new interchange
385	**Bradey's Grave, Pauatahanui**		End of Navigation Drive	Duck Creek, Whitby	600 m from the Project

2 Kapiti Coast District Council

2.1 Kapiti Coast District Plan

The following items of built heritage have been listed in the Kapiti Coast District Council District Plan and appear to be within approximately one kilometre of the existing and proposed designations[10].

Historic Register No.	Origin	Owner	Legal Description	Description/significance (Valuation NZ no.)	Proximity to the Project
B44	Submission	Private	Main Road North, Paekakariki (Sec 93 Wainui Dist Blk II Paekakariki SD)	Old school house - built 1888 (1541043101)	200m
B87	Submission	Private	SH1 Paekakariki (Pt Lot 2 DP 4269)	Petrol storage tank built during WW2, one of three in NZ.	On the Main Alignment

3 Greater Wellington Regional Council

The GWRC does not specifically list buildings, but it owns a number of listed heritage buildings in its Regional Parks. Of relevance to the Project is Battle Hill Forest Farm Park. The following structures and fabric were identified as being of significant heritage values in Regional Parks and Natural Forest Asset Management Plan for heritage Structures (Bowman, I, 1999)

3.2 BATTLE HILL FARM FOREST PARK – HISTORICAL SITES

Agriculture/domestic/commerce

Stockyard – timber

Homestead – timber framing, timber exterior and interior cladding, wallpaper and scrim, concrete foundations, concrete water tank, hardboard, electrical services, rainwater systems

Cottage – timber framing, timber exterior and interior cladding, wallpaper, gibraltar board, concrete foundations, electrical services, rainwater systems

Woolshed corrugated steel cladding, timber frame, timber interior cladding and flooring, timber joinery, particleboard, electrical services, rainwater systems, timber ramp and railings

Defensive sites

Industrial/transport/commerce

Religious

Graves – marble, lead lettering

[10] The website used is file:///Jobs%20folder/Small%20jobs%20folder/Transmission%20gulley%20folder/KCDC%20map%203.webarchive

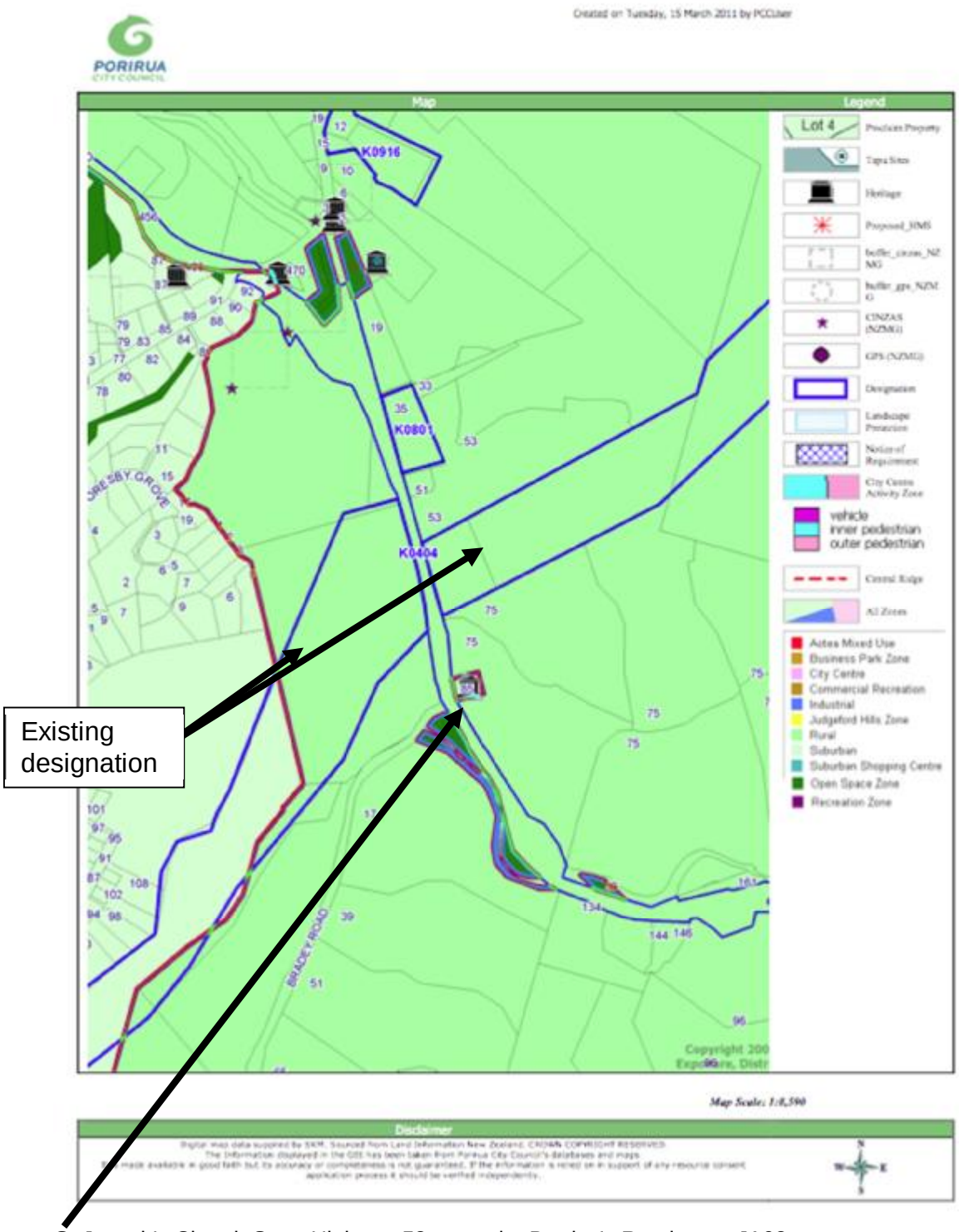
4 New Zealand Historic Places Trust (NZHPT) Register

The NZHPT register lists the following heritage buildings that are within approximately one kilometre of the proposed Project:

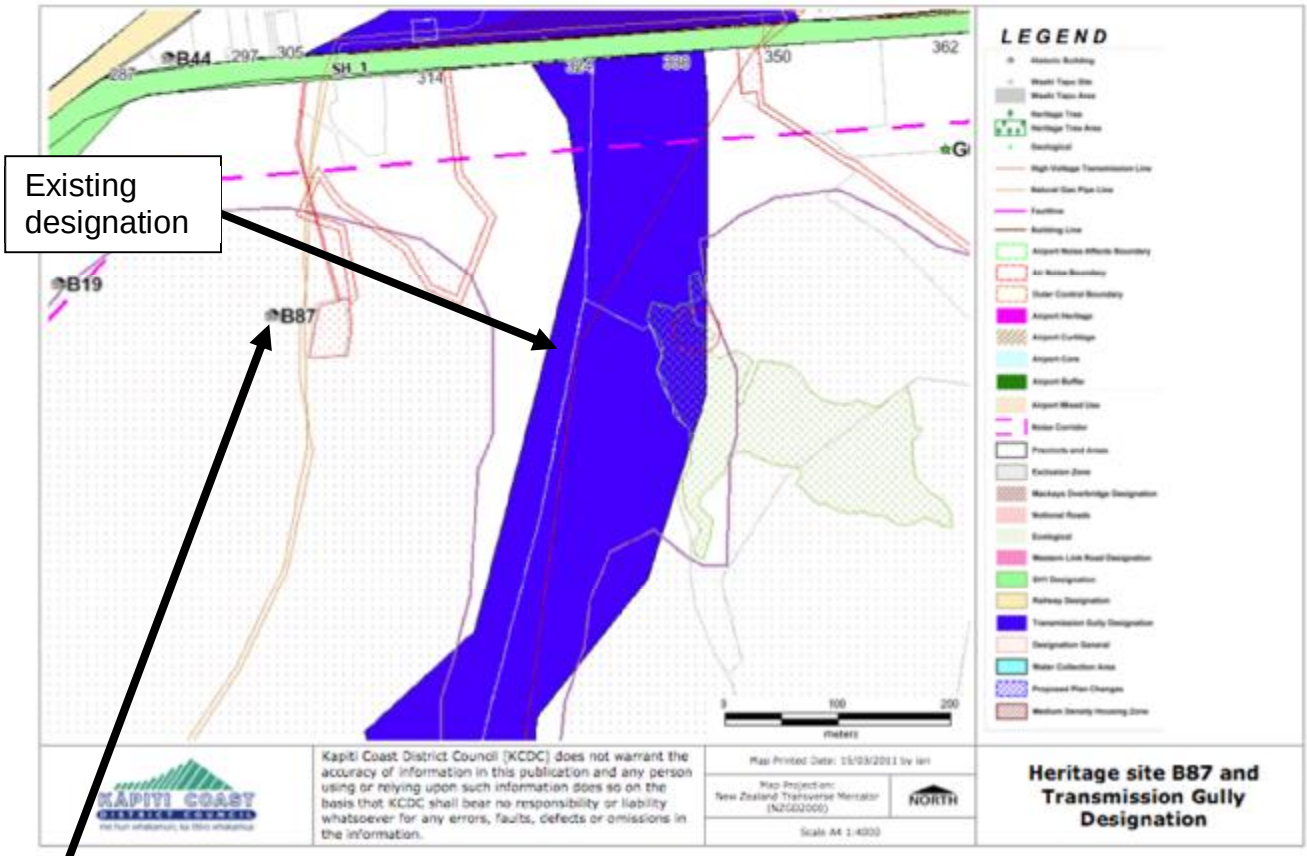
Register number	Registration Type	Name	Location	Comments	Proximity to the Project
7029	Historic Area	Pauatahanui Historic Area	Pauatahanui Inlet	Includes: St Albans Church; Pa Site; World War I Memorial; Taylor Stace Cottage; Thomas Hollis Stace Cottage (formerly Stace Bakehouse); Timber Bridge	750 m from new interchange
4107	**II**	Pauatahanui World War One Memorial	Paekakariki Hill Road, SH58, Pauatahanui		750 m from new interchange
1320	**II**	St Alban's Church	Paekakariki Hill Road Pauatahanui		750 m from new interchange
205	**I**	St Joseph's Church	State Highway 58, Pauatahanui		120 m from new interchange
4108	**I**	Taylor-Stace Cottage	Corner 470 Paremata Road and Paremata Road (State Highway 58), Pauatahanui		600 m from new interchange
4106	**II**	Thomas Hollis Stace Cottage	Corner 2 Paekakariki Hill Road (State Highway 58) and Paremata Road and Paremata Haywards Road Pauatahanui		750 m from new interchange

APPENDIX 2

Listed heritage structures in relation to the existing designation



St Joseph's Church State Highway 58, opposite Bradey's Road, map JA02.



"Petrol storage tank" B87, although shown in the wrong location being located at what appear to be farm supply water tanks. The Petrol storage tank (B87) have been identified as part of this assessment and is located within the proposed designation and is shown on plan GM02.