

## **IPENZ Engineering Heritage Register Report**

# **Trans-Tasman Telegraph Cable Numbers 1 and 2**

## **Cable Bay, Titahi Bay and Muriwai Beach**

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Scene at Cable Bay showing Cable Station and residences for cable staff [circa 1912]. Northwood brothers :Photographs of Northland. Ref: 1/1-004928-G. Alexander Turnbull Library, Wellington, New Zealand. <http://natlib.govt.nz/records/22683928>. Permission of the Alexander Turnbull Library, Wellington, New Zealand, must be obtained before any re-use of this image.

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## A. General information

**Name:** Trans-Tasman Telegraph Cable Numbers 1 and 2

**Alternative names:** Australia No.1 and No.2; Cable Bay to La Perouse Cable; New Zealand Cable; Muriwai to Bondi Beach Cable; Schroder's Mistake to La Perouse Cable; Tasman Telegraph Cable; Titahi Bay to Bondi Beach Cable; Trans-Tasman Cable No.1; Trans-Tasman Cable No.2; Waka Cable Station; Wakapuaka Cable Station; Whakapuaka Cable Station.

**Site 1 location:**

799 Cable Bay Road

Cable Bay

HIRA

**Geo-reference:** Latitude -41.160624, Longitude 173.414536

**Legal description:** Legal Road; Lot 1 DP 337610, Pt Lot 1 DP 9469, Nelson Land District



Map courtesy of Google Earth

**Access information:** Cable Bay Road terminates at Cable Bay, 21 kilometres north of Nelson. Cable Bay is also accessible as part of a Department of Conservation walking track. Foundation remnants of the former Cable Station are located on private property.

**City/District Council:** Nelson City Council

**Site 2 location:**

21 Bay Drive

Titahi Bay

PORIRUA

**Geo-reference:** Latitude -41.103, Longitude 174.836

**Legal description:** Legal Road; Lot 1 DP 3737, Wellington Land District



Map courtesy of Google Earth

**Access information:**

Titahi Bay beach is publically accessible. The cable came ashore at the north end of the beach near to the Bay Drive access point, which is also the location of some interpretation about the site. The Cable Hut is not open to the public.

**City/District Council:** Porirua City Council

**Site 3 location:**

Muriwai Regional Park

Coast Road

MURIWAI

**Geo-reference:** Latitude -36.809, Longitude 174.416

**Legal description:** Section 2 SO 65145, Section 6 SO 69320, Auckland Land District



Map courtesy of Google Earth

**Access information:** Muriwai Beach and Muriwai Regional Park are publically accessible. The Ōkiritoto Stream mouth, where the cable came ashore, is just north of the beach access from Coast Road.

**City/District Council:** Auckland Council

**IPENZ category:** Engineering Site

**IPENZ subcategory:** Communications

**IPENZ Engineering Heritage number:** 2649

**Date registered:** 26 August 2014

**Other IPENZ recognition:** N/A

**Other heritage recognition:**

- *New Zealand Historic Places Trust: N/A*
- *Local Authority District Plan: N/A*

## B. Description

### Summary

Established in 1876 and 1890 at Cable Bay, north of Nelson, Trans-Tasman Telegraph Cable Numbers 1 and 2 were essential submarine telecommunication links between the extremity and heart of the British Empire.

An internal telegraph network begun in the 1860s helped link New Zealand together and enhance governance. Soon, attention turned to connecting on an international level across the Tasman Sea to Australia and then onto Britain. After protracted negotiations the Eastern Extension, Australasia and China Telegraph Company were contracted to establish and operate the first trans-Tasman telegraph cable in 1875. Trans-Tasman Telegraph Cable Number 1 was manufactured and installed by British company Telcon from the La Perouse, New South Wales, Australia end in February 1876 and was connected to the cable station established at Schroder's Mistake (quickly renamed Cable Bay).

By the 1890s demand had grown for cable services and Eastern Extension installed a second cable. The relative isolation contributed to the cable station burning down in 1914, motivating the company to relocate the cables to Titahi Bay, near Wellington, in 1917. Another incentive was that most of the telegraph traffic was destined for Wellington and the North Island, which had now surpassed the South Island as the main population base.

In turn, in 1932 a composite of Cable Numbers 1 and 2 was relocated to Muriwai Beach, west of Auckland, making the beach the landing point for all the submarine communication cables connecting Sydney and Auckland. The Trans-Tasman Telegraph Cable was eventually abandoned in 1963 when the Commonwealth Pacific Cable (COMPAC), New Zealand's first international telephone cable, was completed.

The remnants of Trans-Tasman Telegraph Cable Numbers 1 and 2 at three New Zealand landing sites have outstanding engineering heritage importance because the cables revolutionised the country's communications. Trans-Tasman Telegraph Cable Numbers 1 and 2 were the country's first and most efficient telecommunications link to the rest of the world, reducing New Zealand's isolation. For several decades into the 20th century the cables enabled stronger international political, commercial, and social ties between New Zealand and Australia in particular.



## Historical narrative

First patented in the late 1830s, the electric telegraph was somewhat of a scientific novelty until Samuel Morse's (1791–1872) government-sponsored project in 1844, establishing a telegraph line from Washington D.C. to Baltimore. The significant economic and social impacts of this speedy form of communication were quickly realised. For example, by 1855 Britain had a telegraph network of 12,875 kilometres (km) and St. Petersburg, Russia, was telegraphically linked to Crimea.<sup>1</sup> In Australia, Sydney, Melbourne and Adelaide were connected by telegraph in 1858, soon followed by Tasmania and Queensland. Initially funded by private enterprise, land-based wire and cable systems spread rapidly through the world's continents. However, transmitting telegraphs undersea between land masses was problematic.<sup>2</sup>

A feasible insulator against sea water was required for submarine cables to be developed. A tree gum, *gutta percha*, from British Malaya was the solution, leading to the first viable submarine cable connecting Britain and France in 1851.<sup>3</sup> An early instance of the importance of the technology was demonstrated during the Crimean War (1853–1856), in which the telegraph was indispensable in the efficient ordering of British reinforcements and supplies.<sup>4</sup> Submarine telegraph cables meant the world was becoming increasingly connected. In 1866 a cable was established between Britain and the United States of America.<sup>5</sup> The telegraph gradually spread over land and sea through Britain's colonies too and the Britain-Australia Telegraph was completed in 1872. Messages were relayed through 18 stations, reaching their destination in around 20 hours. At the time this was high speed communication considering postal messages could take several months to reach their destination.<sup>6</sup>

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<sup>1</sup> Bryan Pannett, *Just a Piece of Wire: The history of the first submarine telegraph cable linking New Zealand and the world* (Wellington: Bryan Pannett, 2013) 2. A C Wilson, *Wire and Wireless: A history of telecommunications in New Zealand, 1860–1987* (Palmerston North: Dunmore, 1994), 17.

<sup>2</sup> Pannett, *Just a Piece of Wire*, 5.

<sup>3</sup> Ibid., 2, 42. *Gutta percha* comes from the gum of a set of native Malay Peninsular and Malaysian trees. It was introduced to Britain in 1843 and its thermoplastic qualities (softening at temperature and then hardening when cooled) made it easy to mould. This meant that *gutta percha* was more economical, as well as a hardier, insulator than the common insulator at the time, India rubber. Cables featuring *gutta percha* were manufactured in England from 1845. 'Scientific adjudication: Hancock v. Bunsen', *The London Journal of Arts, Sciences and Repertory of Patent Inventions* 40 (1852), 238. *Gutta percha* remained the main insulator in submarine cables for 80 years until superseded by synthetic polymers.

<sup>4</sup> Pannett, *Just a Piece of Wire*, 2.

<sup>5</sup> See 'Milestones: Landing of the Transatlantic Cable, 1866,' IEEE [Institute of Electrical and Electronics Engineers] Global History Network, URL: [http://www.ieeeqhn.org/wiki/index.php/Milestones:Landing\\_of\\_the\\_Transatlantic\\_Cable,\\_1866](http://www.ieeeqhn.org/wiki/index.php/Milestones:Landing_of_the_Transatlantic_Cable,_1866) (accessed 4 April 2014).

<sup>6</sup> Pannett, *Just a Piece of Wire*, 5.



New Zealand's European colonisation was contemporary with the development of telegraph technology. However, New Zealand's internal telegraph network only began in early 1860s, two decades after the Treaty of Waitangi was signed. It was only in the 1860s that the population level and demand for such technology reached a point of making a telegraph network feasible. Telegraph was also a useful tool at a time when there was a centralising impulse resulting in moving the capital from Auckland to Wellington in 1865.<sup>7</sup> The distance between Auckland and the South Island provinces had hindered effective government. For example, in some cases it took up to two months for official posted correspondence to go from Christchurch to Auckland.<sup>8</sup> A Cook Strait cable connecting the new capital and the South Island in 1866 helped in unifying the country. This was the same year as the first trans-Atlantic cable.<sup>9</sup>

After the internal network was established attention turned to international linking through Australia and its prospective telegraph connections to other countries. Julius Vogel (1835–1899), soon to become New Zealand's Premier, advocated strongly for a trans-Tasman telegraph cable from 1869, but its realisation was delayed because of various political and commercial negotiations and manoeuvrings. However, soundings for the prospective cable were taken during a scientific expedition featuring the British vessel Her Majesty's Ship (HMS) *Challenger* between 1873 and 1876. Several private telegraph cable companies were interested in the project, but it was only when the Eastern Extension, Australasia and China Telegraph Company entered the talks that earnest planning could begin.<sup>10</sup>

Eastern Extension was founded in 1873, combining two companies owned by British submarine telegraph cable mogul John Pender (1816–1896). At this point they operated the telegraph cable from India to Australia and China.<sup>11</sup> After negotiating an agreement between the respective governments, Eastern Extension signed the contract to create and operate the first trans-Tasman telegraph cable by the end of

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<sup>7</sup> Wilson, *Wire and Wireless*, 18–19, 30, 36. In 1861 New Zealand's population was under 100,000 but had increased to 170,000 by 1865. *Evening Post*, 22 May 1865, 2. The Post Office and Telegraph Departments amalgamated in 1881.

<sup>8</sup> 'The Fabric of Christchurch – Communications', Archives New Zealand (ANZ), URL: <http://archives.govt.nz/exhibitions/currentexhibitions/chch/fc-communications.php> (accessed 13 March 2014)

<sup>9</sup> The Cook Strait submarine cable terminals were at White's Bay, Marlborough and Lyall Bay, Wellington. 'The Submarine Cable,' *Wellington Independent*, 15 September 1866, 3.

<sup>10</sup> Pannett, *Just a Piece of Wire*, 8–11.

<sup>11</sup> Hugh Barty-King, *Girdle Round the Earth: The story of Cable and Wireless and its predecessors to mark the group's jubilee, 1929–1979* (London: Heinemann, 1979), 52–53.

July 1875. Within a year the communications link was completed.<sup>12</sup> The cable was manufactured and laid by Telcon, installation beginning on 5 February 1876.<sup>13</sup>

Telcon, a British company established in 1864, had previously been responsible for the first successful cable across the English Channel, as well as creating the trans-Atlantic cable.<sup>14</sup> Their trans-Tasman cable actually consisted of three different types of cable which were suitable for various sea depths: at the shore ends, an intermediate section and the main cable type for deep sea.<sup>15</sup>

A South Island terminal for the trans-Tasman cable was logical considering that the bulk of New Zealand's population lived there and it was also the country's economic backbone. Unlike North Island provinces, Canterbury and Otago Province were unaffected by wars and had grown powerful and relatively prosperous as the result of agricultural and horticultural industries and gold rushes.<sup>16</sup> In particular, Canterbury had the economic motivation to lead the way in telecommunications and transport areas. The Port Hills separate Christchurch from its port at Lyttelton, an impediment which led to New Zealand's first public telegraph being established there in early 1862 and, to further expedite business, work on creating a railway tunnel to access the port.<sup>17</sup> By 1865 it was said that the "telegraph has been making its way through the Middle [South] Island with unlooked for rapidity" with a line created from Invercargill to Christchurch and by June 1866 it extended from Bluff to Nelson.<sup>18</sup> By

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<sup>12</sup> *Appendix to the Journals of the House of Representatives (AJHR) 1875*, F-6B. Available from [www.atojs.natlib.govt.nz](http://www.atojs.natlib.govt.nz). Pannett, *Just a Piece of Wire*, 11–12. The Australian terminal's location was decided in October 1875. Initially "temporary" timber buildings were erected at the site and in 1882 a permanent terminal building was constructed that also included an Eastern Extension training facility.

<sup>13</sup> Barty-King, *Girdle Round the Earth*, 53. Wilson, *Wire and Wireless*, 49.

<sup>14</sup> 'About us,' Telcon, URL: [http://www.telcon.co.uk/About\\_Us.html](http://www.telcon.co.uk/About_Us.html) (accessed 4 April 2014).

<sup>15</sup> Pannett, *Just a Piece of Wire*, 14–15.

<sup>16</sup> Malcolm McKinnon, 'Otago region - Business until 1920', *Te Ara - the Encyclopedia of New Zealand*, URL: <http://www.TeAra.govt.nz/en/otago-region/page-9> (updated 13 July 2012). John Wilson, 'History - War, expansion and depression,' *Te Ara - the Encyclopedia of New Zealand*, URL: <http://www.TeAra.govt.nz/en/history/page-4> (updated 2 September 2013). The results of the 1864 census showed that 62 per cent of New Zealand's population lived in the South (Middle) Island and Otago Province had the most people (48,907). The next largest provinces were Auckland and Canterbury by a significant margin. *Evening Post*, 22 May 1865, 2. 'Census of New Zealand, December, 1864', *Daily Southern Cross*, 30 May 1865, 5.

<sup>17</sup> Wilson, *Wire and Wireless*, 23, 26–27. Planning for Lyttelton–Christchurch cable had begun in 1858. 'Lyttelton Railway Tunnel', IPENZ Engineering Heritage New Zealand, URL: <http://www.ipenz.org.nz/heritage/itemdetail.cfm?itemid=121> (accessed 13 March 2014). The first steam railway in New Zealand was created on the city side of the Port Hills to Ferrymead wharf in 1863. Work on creating the tunnel through the Port Hills began in 1861 and the Lyttelton Railway Tunnel was completed in 1867.

<sup>18</sup> *Evening Post*, 22 May 1865, 2. When the central government's Telegraph Department was established its chief engineer, Alfred Sheath, was based in Christchurch. Wilson, *Wire and Wireless*, 28. *AJHR 1866*, E-5, 3.

comparison, it took until 1872 for the line from Auckland to Wellington to be fully operational.<sup>19</sup>

An appropriate place for a cable terminal was close to Nelson – the main South Island centre in a relatively straight line from Sydney. Nelson's Harbourmaster advised the Telegraph Department that Schroder's Mistake in Whakapuaka, north of Nelson, was suitable since it was relatively sheltered with deep water up to the shore.<sup>20</sup> However, the final decision on the landing point's location was only made a fortnight prior to work beginning on cable laying. This meant a flurry of activity to construct temporary station buildings at Schroder's Mistake and the overland telegraph cable connecting Whakapuaka with Nelson and the rest of New Zealand.<sup>21</sup>

Telcon's submarine cable laying process was derived from the late 1860s' experiences of creating the trans-Atlantic cable. This project had "advanced the science and engineering of deep-sea submarine cables from the realm of amateurs to professionals",<sup>22</sup> as well as giving investors and governments increased confidence in the technology. Furthermore, by the time Trans-Tasman Telegraph Cable Number 1 was being considered many of the early manufacturing kinks had been resolved.<sup>23</sup> The Cable Steamers (CS) *Hibernia* and *Edinburgh* undertook the cable laying work and splicing of the different sections, from the Australian end at Frenchman's Bay, La Perouse, near the head of Botany Bay. In New Zealand waters these same vessels laid the cable to Schroder's Mistake, which quickly became known as Cable Bay.<sup>24</sup> The landing of the cable was overseen by engineers, T R Lucas and E Riddle.<sup>25</sup>

Trans-Tasman Telegraph Cable Number 1 was completed on 18 February 1876, for the princely sum of £290,000, and now New Zealand was connected to Britain through a telegraph network spanning Australia, Indonesia, Singapore, Malaysia,

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<sup>19</sup> A C Wilson, 'Telecommunications - Early telegraphy and telegrams', *Te Ara - the Encyclopedia of New Zealand*, URL: <http://www.TeAra.govt.nz/en/telecommunications/page-1> (updated 13 July 2012). However, military telegraph lines had been established in Auckland and Waikato during the early to mid 1860s.

<sup>20</sup> Pannett, *Just a Piece of Wire*, 21.

<sup>21</sup> 'Landing the cable', *Nelson Evening Mail*, 18 February 1876, 2.

<sup>22</sup> Pannett, *Just a Piece of Wire*, 3.

<sup>23</sup> *Ibid.*, 13.

<sup>24</sup> *Ibid.*, 11–13. Pannett notes that the trans-Atlantic cable project proved the "need for conductor purity and a lack of voids and impurities in the insulation". After the cable laying was completed Eastern Extension took over ownership of CS *Edinburgh*, using it as their local maintenance vessel. Within a month of the cable's completion the bay had been renamed or Cable Bay was used in conjunction with Schroder's Mistake. See: 'Cablegrams,' *Colonist*, 9 March 1876, 3; 'The New Zealand Cable,' *Westport Times*, 25 April 1876, 3. It appears that the name was not officially changed until 1926, nine years after the trans-Tasman telegraph cable was relocated to Titahi Bay. Pers. Comm., C A McFarlane to Harold Wilson, 11 January 1960. ANZ, Cable Bay [R10859357].

<sup>25</sup> 'Arrival of the cable', *Nelson Evening Mail*, 17 February 1876, 2.

India, Yemen, Egypt, Malta, Gibraltar, Portugal and then onto Cornwall. The trans-Tasman cable was tested the next day and the first official messages were exchanged between various government and imperial representatives on the 21st. Sending and receiving these messages must have been particularly gratifying for Premier Vogel, who had been heavily involved in getting the cable constructed.

Initially the Whakapuaka cable station was accessed by a reasonably primitive track and consisted of separate huts for the two Eastern Extension staff and three New Zealand Telegraph Department employees. By 1901 Cable Bay Road had been created and the station was staffed by 30 people, including New Zealand Press Association employees.<sup>26</sup>



Figure 1: A general view of Cable Bay, Wakapuaka, Nelson, 2 February 1905. Sir George Grey Special Collections, Auckland Libraries, AWNS-19050202-4-5.

After several decades, Trans-Tasman Cable Number 1 began showing signs of wear and in 1889 the cable became unreliable due to a series of faults. Eastern Extension undertook the cable repairs, discovering that the main cause of the problem was several miles of degraded covering. Growing dissatisfaction with the service and government plans for alternative cables motivated Eastern Extension to create a

<sup>26</sup> Pannett, *Just a Piece of Wire*, 21–22, 52. The road was constructed as part a government unemployment relief project in 1888. J N W Newport 'Whakapuaka: Cable Bay Road', *Nelson Historical Society Journal*, 2:6 (April 1973), 25. URL: [http://nzetc.victoria.ac.nz/tm/scholarly/tei-NHSJ02\\_06-t1-body1-d2-d24.html](http://nzetc.victoria.ac.nz/tm/scholarly/tei-NHSJ02_06-t1-body1-d2-d24.html) (accessed 4 April 2014).

second trans-Tasman telegraph cable at Cable Bay in 1890.<sup>27</sup> In 1914 experts still regarded Cable Number 2 as “one of the finest in the world”.<sup>28</sup> Later, the company also replaced a large section of the Cable Number 1 in September 1895.<sup>29</sup>

Despite Eastern Extension's ongoing investment in its trans-Tasman telegraph links, the governments of Australia, Canada and New Zealand continued planning for a joint project Pacific Cable (from Britain to Australia via Canada and Fiji with a New Zealand terminal at Northland's Doubtless Bay). Their cable, completed in 1902, had a marked effect on the business over the Eastern Extension's cables and pricing, since they no longer had the luxury of a monopoly.<sup>30</sup> By 1917 Eastern Extension's Trans-Tasman Telegraph Cable Numbers 1 and 2 were handling around 30 per cent of the international telegraph traffic.<sup>31</sup>

In 1917 Eastern Extension moved its cables to the North Island and within a few years of this the Cable Bay land had been sold to a local farmer, Harry Bonnington. In the late 1930s the Stuart family took it over and continue to run the farm. In the 1960s it was noted that tourists often visited the former station site and a framed history of the cable station was presented to the Stuarts by the Post Office Department for visitor information. In the late 20th century a walking track to the site was created, the Department of Conservation's Cable Bay Walkway, and a camping ground has been established at the former station site.<sup>32</sup>

### Titahi Bay to Bondi Beach

Although the rudimentary original track to the Cable Bay terminal had been upgraded by 1914, it was still reasonably isolated and hindered fire-fighting efforts at the station in early June. Buildings and instruments were destroyed, but some equipment was saved which meant Eastern Extension could quickly restore basic communications with Sydney and the connection to New Zealand's network was promptly re-established as well, based out of an abandoned two-storey government mess

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<sup>27</sup> Pannett, *Just a Piece of Wire*, 14, 25–26, 28. ‘The new cable successfully laid’, *Marlborough Express*, 6 May 1890,

2. When the Number 2 Cable was created the Australian terminal was relocated to Botany Bay.

<sup>28</sup> ‘Extra Edition. Serious fire at Wakapuaka’, *Evening Post*, 1 June 1914, 8.

<sup>29</sup> *Marlborough Express*, 22 August 1895, 2. ‘SS Sherard Osborn’, *Nelson Evening Mail*, 10 September 1895, 2.

<sup>30</sup> Pannett, *Just a Piece of Wire*, 29–30.

<sup>31</sup> *AJHR* 1917, F-1, 9.

<sup>32</sup> Certificate of Title NL50/6, Nelson Land District. Pers. Comm., C A McFarlane to Harold Wilson, 11 January 1960.

ANZ, Cable Bay [R10859357]. ‘The Cable Bay Farm’, The Cable Bay Holiday Park, URL:

<http://www.cablebayfarm.co.nz/index.php/cable-bay-farm> (accessed 10 April 2014). ‘Cable Bay Walkway’,

Department of Conservation, URL: [http://www.doc.govt.nz/parks-and-recreation/tracks-and-walks/nelson-](http://www.doc.govt.nz/parks-and-recreation/tracks-and-walks/nelson-tasman/motueka/cable-bay-walkway/)

[tasman/motueka/cable-bay-walkway/](http://www.doc.govt.nz/parks-and-recreation/tracks-and-walks/nelson-tasman/motueka/cable-bay-walkway/) (accessed 10 April 2014).



building.<sup>33</sup> Of course, New Zealand would not have been completely cut-off without this speedy recovery because of the Pacific Cable and also the direct Sydney–Auckland Cable laid in 1912.<sup>34</sup> However, the trans-Tasman cables were important enough for the fire to begin earnest plans for the New Zealand terminal to be relocated to a more accessible area closer to the capital. Government was a significant user and the North Island now had a larger population than the South Island, producing and receiving most of the international telegraph traffic. The Cook Strait cable was constantly at risk because of its hostile environment and removing this added step in messages reaching Wellington was desirable, as was removing extra opportunities for human error which effected telegram accuracy. Security of communications during wartime also became a consideration.<sup>35</sup>

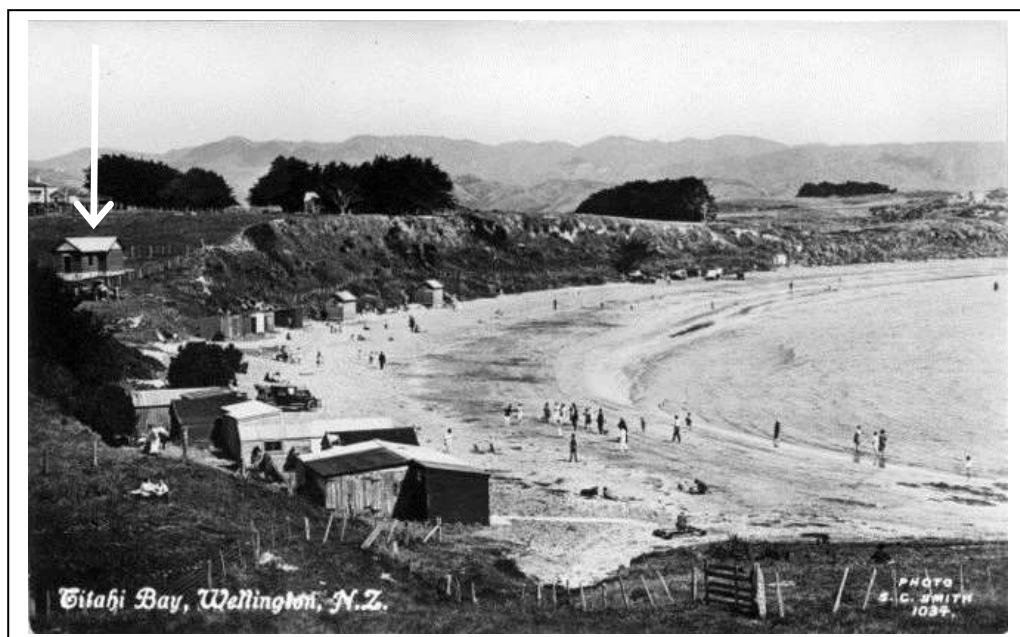


Figure 2: Smith, Sydney Charles, 1888-1972. Titahi Bay beach, Porirua, Wellington [circa 1920s]. Original photographic prints and postcards from file print collection, Box 8. Ref: PAColl-6075-45. Alexander Turnbull Library, Wellington, New Zealand. <http://natlib.govt.nz/records/22318661>. Permission of the Alexander Turnbull Library, Wellington, New Zealand, must be obtained before any re-use of this image.

The cable hut is on the hill on the far left of the image (indicated by an arrow).

In 1917 the terminals in both New Zealand and Australia were shifted. The Botany Bay terminal was moved to Bondi Beach in Sydney, while Titahi Bay near Wellington replaced the Cable Bay landing point in May.<sup>36</sup> However, preparations had been made earlier in the year with the Titahi Bay shore-end cable laying taking place in

<sup>33</sup> 'Extra Edition. Serious fire at Wakapuaka', *Evening Post*. Telephone call file note, 23 December 1959. ANZ, Cable Bay [R10859357].

<sup>34</sup> Pannett, *Just a Piece of Wire*, 31.

<sup>35</sup> Wilson, *Wire and Wireless*, 107. 'Eastern Extension cable', *Evening Post*, 31 July 1916, 8.

<sup>36</sup> *AJHR* 1918, F-1, 10. 'Cable Route', *Evening Post*, 20 August 1917, 7. "Hullo Sydney", *Dominion*, 23 August 1917, 6. To ensure Eastern Extension's continuity of service Cable Number 1 was relocated to Titahi Bay first and tested before the process of moving Cable Number 2 began.

January so that the relocation could be as efficient as possible.<sup>37</sup> Transferring the terminal to Wellington was proclaimed as being of “the utmost importance to the people of New Zealand” because for the first time the capital city was in direct contact with Australia.<sup>38</sup> On 23 August 1917 the company officially closed its Whakapuaka office, opening the Wellington one the same day.<sup>39</sup>



Figure 3: Men, possibly unemployed, and others in Post Office Square, Wellington [15 January 1933]. Negatives of the Evening Post newspaper. Ref: 1/2-084812-G. Alexander Turnbull Library, Wellington, New Zealand. <http://natlib.govt.nz/records/22916627>. Permission of the Alexander Turnbull Library, Wellington, New Zealand, must be obtained before any re-use of this image.

The Post Office is the building on the right of this image and Nathan's Building is the tallest building on the left.

Since Trans-Tasman Telegraph Cable Number 1's creation 40 years earlier, cable technologies had advanced meaning greater efficiency because operators no longer had to be stationed at the landing site. Instead, the messages could be relayed through a repeater and transmitted directly to central Wellington.<sup>40</sup> That meant an unmanned Cable Hut was constructed towards the north end of Titahi Bay by late March and connected by an underground cable through Johnsonville and Kaiwharawhara to central Wellington. The terminal was on the upper floor of the Nathan's Building, located opposite the General Post Office (see Figure 3). Messages were sent

<sup>37</sup> 'Shifting the cable station', *Nelson Evening Mail*, 22 January 1917, 4.

<sup>38</sup> 'New cable route', *Evening Post*, 11 August 1917, 7.

<sup>39</sup> Pers. Comm. Harold Wilson (Cable and Wireless Limited) to C A McFarlane, 20 January 1960. ANZ, Cable Bay [R10859357].

<sup>40</sup> Pannett, *Just a Piece of Wire*, 32.



between the buildings by Lamson Pneumatic Tube.<sup>41</sup> Eastern Extension had 19 operators based at this office, which was staffed 24 hours a day.

From the mid-1920s, the cheaper to establish and faster transmitting technology of international wireless telegraphy was coming of age. This form of telegraph was not as secure as cable methods, but this could be overcome by using codes. Therefore, when the wireless service between Australia and Europe began in late 1920s, the effect on both Eastern Extension's business and Pacific Cable's revenues was a drastic decrease. Cable telegraph companies were all in the same position; they could not survive in direct competition with wireless telegraph. However, it was recognised that cable links were both commercially and strategically important and should be retained. Under the British Imperial Telegraphs Act 1929 the operators, including Eastern Extension and the Pacific Cable Board, consolidated to form a monopoly with Imperial and International Communications becoming the new operating company.<sup>42</sup>

### **Moved to Auckland**

In the meantime Trans-Tasman Telegraph Cable Number 1 was nearing the end of its life. The aged cable was considered slow even before relocation to Titahi Bay and it seems it was infrequently used by 1932.<sup>43</sup> Therefore, when the company wanted to create economies in the cable service by relocating for a third time, to Muriwai Beach on the coast west of Auckland city, only a section of the Titahi Bay end of the Number 1 Cable was used. Subsequently the Number 2 Cable (still connected at the Sydney end) was moved northward and spliced into it. The resulting single cable now ran directly between Sydney and Auckland.<sup>44</sup> Imperial and International Communications' CS *Recorder* undertook this work, heading to Titahi Bay in late March to begin preparations.<sup>45</sup>

The portion of the Number 1 Cable was landed and connected on 19 April 1932 and the rest of the process was only completed in early July because the *Recorder* had

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<sup>41</sup> 'Waka cable station', *Evening Post*, 11 October 1916, 8. 'Transferring the cable', *Evening Post*, 29 March 1917, 6. "Hullo Sydney", *Dominion*. 'New cable route', *Evening Post*. Initially, it was hoped that space could be found in the General Post Office for the Eastern Extension staff. Neither Nathan's Building or the General Post Office remain, having been demolished in the late 20th century.

<sup>42</sup> Pannett, *Just a Piece of Wire*, 35–36.

<sup>43</sup> 'Cable to go', *Evening Post*, 16 March 1932, 10.

<sup>44</sup> 'Cable-raising', *Evening Post*, 8 April 1932, 8.

<sup>45</sup> 'Tasman cable', *Auckland Star*, 18 March 1932, 5.

been consistently hampered by stormy weather.<sup>46</sup> Eastern Extension's former Wellington office had closed on 31 May.<sup>47</sup> Despite initial test being satisfactory faults were soon discovered and repaired in late July.<sup>48</sup> The work relocating the cable from Titahi Bay to Muriwai Beach was described as the "longest and most tedious" undertaken by the *Recorder*.<sup>49</sup> Faults in the Trans-Tasman Telegraph Cable continued to be the "bugbear" of the ship throughout the 1930s, one fault reportedly being caused by a submarine volcanic eruption.<sup>50</sup>

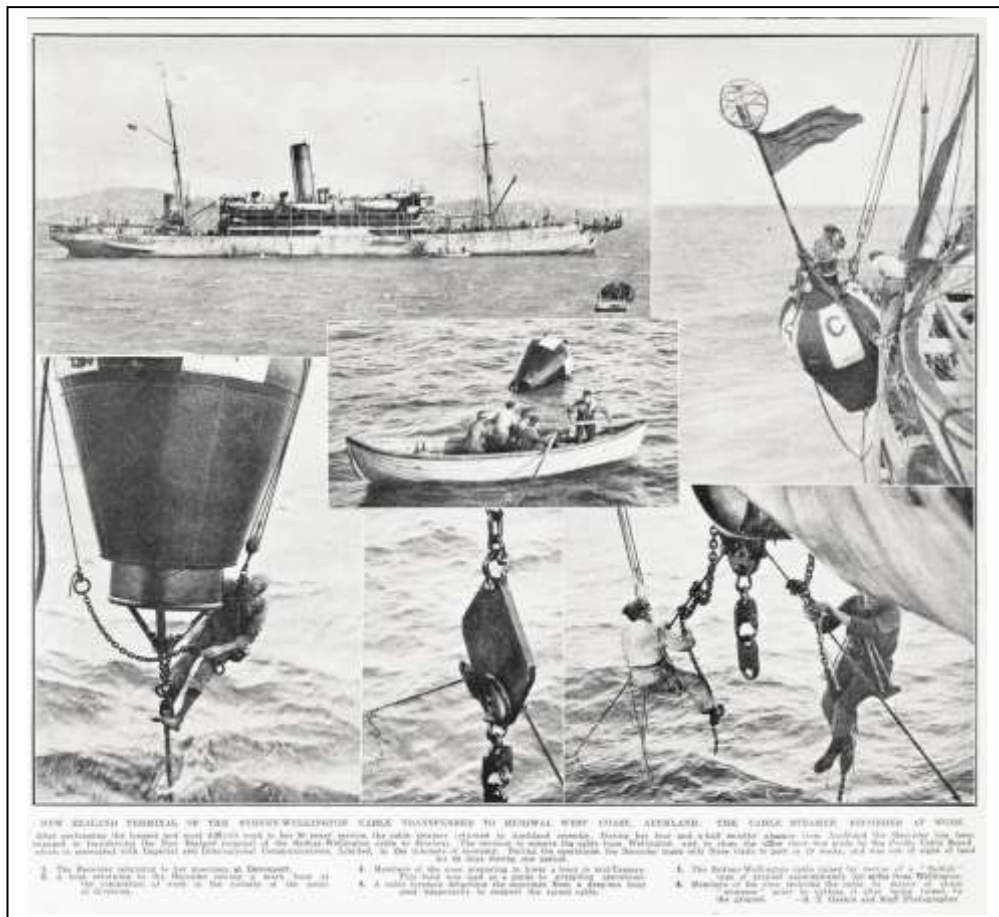


Figure 4: New Zealand terminal of the Sydney-Wellington cable transferred to Muriwai, West Coast, Auckland: the cable steamer *Recorder* at work, 17 August 1932. Sir George Grey Special Collections, Auckland Libraries, AWNS-19320817-41-1

<sup>46</sup> 'News of the day', *Evening Post*, 21 April 1932, 10. The article mentions that the cable was brought ashore on Tuesday, which works out to be 19 April. 'Tasman storms', *Evening Post*, 23 June 1932, 13. 'Transfer of cable', *Auckland Star*, 15 July 1932, 2.

<sup>47</sup> *AJHR* 1933, F-1, 18.

<sup>48</sup> 'News of the day', *Evening Post*, 6 July 1932, 8. 'Cable fault', *Evening Post*, 15 July 1932, 9. 'News of the day', *Evening Post*, 30 July 1932, 12.

<sup>49</sup> 'In port again', *Auckland Star*, 4 August 1932, 8.

<sup>50</sup> 'New cable', *Auckland Star*, 16 March 1937, 8.

By the 1930s, Auckland was well-established as New Zealand's most populous city and had approximately 14 per cent of the country's total population.<sup>51</sup> With the relocation of the Trans-Tasman Cable, Auckland fittingly became the centralised location for all three of New Zealand's international telegraph cables: the company's Trans-Tasman Telegraph Cable and the Pacific and Auckland-Sydney Cables.<sup>52</sup> Therefore, Muriwai Beach became a main international communications hub feeding into central Auckland. Muriwai Beach was also the point where the first trans-Tasman airmail flight departed from in 1934.<sup>53</sup>

In 1948 overseas telecommunications services began being nationalised throughout the Commonwealth and the Post Office purchased associated international telegraph assets.<sup>54</sup> After almost a century of submarine telegraph cables being important links between New Zealand and the rest of the world, the mid-20th century saw a shift away from this technology with the introduction of communications methods such as radio telegraph, telex and radiophoto.<sup>55</sup> The Trans-Tasman Telegraph Cable became redundant in the early 1960s when the COMPAC undersea telephone system was created. This linked Australia, Canada and New Zealand with reliable 24-hour international voice and telegraph service for the first time.<sup>56</sup>

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<sup>51</sup> Figures taken from 1931 census information in *The New Zealand Official Yearbook 1931*, Statistics New Zealand, URL: [http://www3.stats.govt.nz/New\\_Zealand\\_Official\\_Yearbooks/1931/NZOYB\\_%201931.html#idsect1\\_1\\_19554](http://www3.stats.govt.nz/New_Zealand_Official_Yearbooks/1931/NZOYB_%201931.html#idsect1_1_19554) (accessed 10 April 2014).

<sup>52</sup> *AJHR* 1933, F-1, 18.

<sup>53</sup> Telegrams to tweets – tracking communication in the CPI,' Statistics New Zealand, URL: [http://www.stats.govt.nz/tools\\_and\\_services/newsletters/price-index-news/oct-12-article-communication.aspx](http://www.stats.govt.nz/tools_and_services/newsletters/price-index-news/oct-12-article-communication.aspx) (accessed 4 April 2014).

<sup>54</sup> 'Overseas Telecommunications', from A H McLintock (ed.), *An Encyclopaedia of New Zealand*, originally published in 1966, in *Te Ara - The Encyclopedia of New Zealand*. URL: <http://www.TeAra.govt.nz/en/1966/post-office/page-4> (updated 22 April 2009). *AJHR* 1948, F-1, 13.

<sup>55</sup> 'Overseas Telecommunications', from *An Encyclopaedia of New Zealand*.

<sup>56</sup> Pannett, *Just a Piece of Wire*, 39.

## Social narrative

For several decades after New Zealand was colonised by Europeans, the speed of internal and international distance communication was dictated by how fast someone could personally transport it to the intended recipient, whether this be by ship, horse or on foot. There were any number of ways messages could be delayed, such as due to a lack of good roads and the occurrence of weather events like storms and flooding. Before Trans-Tasman Telegraph Cable Number 1 was created, world news and market information published in New Zealand newspapers was typically obtained via ship from Melbourne, so it could be weeks out of date before New Zealanders were aware of it. However, with international telegraph capability this information could be delivered the same day, yielding great economic benefits.<sup>57</sup>

Understandably, newspaper owners were among the strongest advocates for national and international telegraph links.<sup>58</sup> Anticipating the completion of Trans-Tasman Telegraph Cable Number 1, a *West Coast Evening Star* journalist highlighted the prospective commercial and social benefits of this revolution in communications and believed cabled world news items would “become concomitants of each morning and eventide meal. And not alone considered necessary but will also be expected.” However, the writer also cautioned newspaper owners of their responsibility to be judicious, otherwise the news-hungry public would get “unhealthily excited”.<sup>59</sup> The cable station workers had the privileged position of finding out all of the big international news hot off of the wire. For example, news of the start of the South African War (1899–1902) was a stand-out moment during one employee’s time at the Cable Bay station: “Of course we were the first to know, as all the cable news to New Zealand came through our station. The staff were quite excited and the boys talked about joining up.”<sup>60</sup>

New Zealand’s Governor, Lord Normanby (1819–1890), sent the first official message when Trans-Tasman Cable Number 1 was completed in 1876. His telegram to the Secretary of State for the Colonies in London stated his hopes that “[t]his great work, while facilitating the transaction of official and mercantile business will, I trust, draw closer the bonds of union between Great Britain and this her Majesty’s most distant

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<sup>57</sup> Pannett, *Just a Piece of Wire*, vii, 1.

<sup>58</sup> Wilson, *Wire and Wireless*, 28.

<sup>59</sup> ‘Increased telegraphic facilities’, *Westport Times*, 18 February 1876, 4.

<sup>60</sup> ‘The cable under test,’ unpublished manuscript, 24 November 1949. ANZ, Cable Bay [R10859357].

possession". The response telegram stated Queen Victoria's (1819–1901) satisfaction with the new link.<sup>61</sup>

Most of the other messages in the first batch sent and received were between various colonial Governors and officials in Australia and New Zealand congratulating each other on the achievement and emphasising Trans-Tasman Cable Number 1's economic, social and political national importance. Indeed, while the ability to contact Britain efficiently was appreciated, the focus of most of the early telegraph traffic was directly between New Zealand and Australia.<sup>62</sup> Communicating efficiently with Australia also had scientific implications as the two countries could co-ordinate information on meteorological and astronomical trends. In this way, from the 1880s the telegraph cable played an important role in weather forecasting.<sup>63</sup>

From 1876 New Zealand became less economically and politically isolated, because the telegraph cable connected the country to the heart of the Empire through a network of nearly 16,000 miles of land and submarine cables, and overland wires through other colonies.<sup>64</sup> Initially, sending international telegrams was very expensive, so it was generally the domain of government, the newspapers and big business.<sup>65</sup> The cable was an immediate success being "very largely used" and nearly 7,000 telegrams were exchanged between New Zealand and Australia in the first five months.<sup>66</sup> After losing their monopoly when the Pacific Cable was completed in 1902, Eastern Extension was forced to drop the price of telegraphs considerably to maintain a foothold, benefiting consumers.<sup>67</sup> The eight-fold increase in international telegraphic messaging between 1890 and 1910 can be attributed to this competitive pricing as well as the increased capacity resulting from Eastern Extension's second cable (established in 1890).<sup>68</sup>

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<sup>61</sup> 'Opening of the New Zealand cable', *Nelson Evening Mail*, 28 February 1876, 4. This response telegram was sent by the Earl of Carnarvon (1831–1890) on behalf of Her Majesty.

<sup>62</sup> Ibid. Pannett, *Just a Piece of Wire*, 24.

<sup>63</sup> Wilson, *Wire and Wireless*, 50–51.

<sup>64</sup> Pannett, *Just a Piece of Wire*, 52.

<sup>65</sup> Wilson, 'Telecommunications - Early telegraphy and telegrams'. Pannett, *Just a Piece of Wire*, 23. Pannett notes that originally a 10-word minimum message from New Zealand to Australia cost nine pence per word (equivalent to five New Zealand dollars per word in 2012 currency). Over the first five months of operation the average message was 19 words long. Special codes were developed to maximise the cost-effectiveness of telegrams.

<sup>66</sup> *AJHR 1876*, F-1a, 1.

<sup>67</sup> Pannett, *Just a Piece of Wire*, 30.

<sup>68</sup> 'Post and Telegraph Department', *Evening Post*, 2 July 1903, 5. Wilson, 'Telecommunications - Early telegraphy and telegrams'. When they held the monopoly, in 1897 Eastern Extension's cables carried over 50,000 messages. However, after the introduction of the Pacific Cable this dropped dramatically to just over 16,000 or 18 per cent of the total traffic. *AJHR 1898*, F-1, vii. *AJHR 1907*, F-1, xxiv.

In the late 19th and early 20th centuries telegrams were socially important, being the predominant means of conveying brief but significant personal information such as birth announcements or sending marriage congratulations. After the introduction of universal penny postage in 1901, New Zealanders sent over 13 million national and international letters.<sup>69</sup> Sending even one word by telegraph cost significantly more than these letters but could reach the other side of the world the same day, compared with taking around one month to reach England.<sup>70</sup> Therefore, despite penny post international telegraph use continued to increase.<sup>71</sup>



Figure 5: Telegram office, showing unidentified man standing at counter [1959]. Negatives of the Evening Post newspaper. Ref: EP/1959/1771-F. Alexander Turnbull Library, Wellington, New Zealand. <http://natlib.govt.nz/records/23504060>. Permission of the Alexander Turnbull Library, Wellington, New Zealand, must be obtained before any re-use of this image.

<sup>69</sup> Incidentally, notification to other countries of the New Zealand Government's decision to introduce universal penny post was initially made by telegraph. *AJHR* 1903, F-3, 2. 'Post and Telegraph Department', *Evening Post*.

<sup>70</sup> 'Mail Services,' from A H McLintock (ed.), *An Encyclopaedia of New Zealand*, originally published in 1966, in *Te Ara – The Encyclopedia of New Zealand*. URL: <http://www.TeAra.govt.nz/en/1966/post-office/page-2> (updated 22 April 2009). In the 1870s mail could reach Britain in six weeks, all going well with the ship. In the mid-20th century overseas surface mail took approximately 35 days to England. However, in 1940 international airmail was established which reduced delivery times. In 1902 the cost of sending a telegram to Britain using the Eastern Extension cables was three shillings per word. 'Our cable services', *Evening Post*, 27 November 1902, 6. One shilling is equivalent to 12 pence/pennies.

<sup>71</sup> For example, between 1903 and 1906 total international telegram traffic rose from 88,946 to 105,721. *AJHR* 1907, F-1, xxiv.

Telegraph was also widely used to inform of deaths and, as a result, telegram delivery was feared by New Zealand families with relatives on active wartime service.<sup>72</sup> During the South African War these notifications would have come exclusively through the Eastern Extension's Trans-Tasman Telegraph Cable Numbers 1 and 2 and for the 20th century world wars through their cables as well as the Pacific Cable. During World War One Eastern Extension had reportedly sent and received 50,000 enquiries and responses about wounded soldiers by September 1917, free of charge. This prompted Sir Joseph Ward (1856–1930), Postmaster General, to thank the company for “this work done in the interests of every class in the community”.<sup>73</sup>

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<sup>72</sup> ‘Telegrams to tweets – tracking communication in the CPI,’ Statistics New Zealand.

<sup>73</sup> ‘Over the cables’, *Evening Post*, 3 September 1917, 3. Michael Bassett, ‘Ward, Joseph George’, from *Dictionary of New Zealand Biography* in *Te Ara - the Encyclopedia of New Zealand*. URL: <http://www.TeAra.govt.nz/en/biographies/2w9/ward-joseph-george> (updated 1 April 2014).



## Physical narrative

The heritage assessment includes the former terminal and landing sites in New Zealand at Cable Bay, Titahi Bay and Muriwai Beach and associated physical remains, including any subsurface and Coastal Marine Area physical remains of Trans-Tasman Telegraph Cables Numbers 1 and 2 located in the vicinity as well as extant structures and building remnants. Inland underground telegraph cables which connected the trans-Tasman cables to the New Zealand's Post Office and Telegraph Department national network are outside of the scope of the assessment. In some instances records stating the extent of the remains are scarce or incomplete. Any identification difficulties have been outlined in the narratives for each site.

### Whakapuaka/Cable Bay terminal site

Cable Bay derives its name from its important function as the terminal for New Zealand's first two trans-Tasman telegraph cables. Trans-Tasman Cables Number 1 and 2 came ashore at the western end of the shingle bank connecting Pepin Island to the mainland, approximately 20 km north of Nelson. The cable station was established in 1876 in conjunction with the creation of the first cable and the second cable was installed in 1890.

Trans-Tasman Telegraph Cable Number 1 was touted by the manufacturer as being an innovative type. However, despite the cable being promoted as superior to its predecessors a large deep sea section was replaced in 1895 because of marine life boring into its covering.<sup>74</sup> Cable Number 1 consisted of three different types of cable, all with the same core and insulation but with different coverings dependant on the environment – whether the cable was close to shore, at an intermediary depth or in deep sea. In comparison, the entire length of Cable Number 2 was a similar type as the deep sea section of Cable Number 1.<sup>75</sup>

At the landing site Cable Number 1 was “buried in a trench four feet deep, as it is necessary that it should be kept damp”.<sup>76</sup> The second cable would have been treated similarly. When both cables were relocated to Titahi Bay in 1917 they were cut close to the shore and then transported north. There is no indication that the shore-end sections left behind were removed. This means that there may be subsurface and submarine parts of Trans-Tasman Telegraph Cable Numbers 1 and 2 at Cable Bay,

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<sup>74</sup> Pannett, *Just a Piece of Wire*, 46. *Marlborough Express*, 22 August 1895, 2.

<sup>75</sup> Pannett, *Just a Piece of Wire*, 14

<sup>76</sup> 'The cable under test,' unpublished manuscript, 24 November 1949. ANZ, Cable Bay [R10859357].

as well as the Cook Strait cable from Whakapuaka to Wanganui which was installed in 1880.<sup>77</sup> Without maps or plans delineating the exact line of the three cables it may be difficult to distinguish which are Trans-Tasman Cable remnants.

Around 1900 a group of office buildings and houses were constructed for the telegraph staff, but the offices were mostly destroyed during the 1914 fire and not rebuilt. Remaining staff buildings were either demolished or relocated to Nelson after the station moved to Titahi Bay.<sup>78</sup> In the mid-20th century it was noted that “[f]ew visible signs now remain of the former Whakapuaka cable station”.<sup>79</sup> The remnants visible include the foundations of some of the demolished or removed buildings, stone walls, as well as the sealed tennis court.<sup>80</sup>

### Titahi Bay landing site

When the cables were relocated to Titahi Bay about 80 nautical miles of new shore end cables were laid and then the existing Cable Numbers 1 and 2 were spliced onto them.<sup>81</sup> These new sections of cable were laid in a trench up the beach and hillside to the unmanned Cable Hut. There are potentially some remains beneath the sea close to the shore, although it may be difficult to determine whether these relate to the Trans-Tasman Telegraph Cable Number 1 and 2's relocation in 1917 or to a Cook Strait cable commissioned the same year.<sup>82</sup>

Despite the cable technology at the time meaning that the new terminal could be unmanned, a Cable Hut (see Figures 2 and 6) was constructed in early 1917 “to provide a place to work the instruments in should defects in the land line develop...”.<sup>83</sup> Despite its temporary sounding name, the Cable Hut was built using permanent materials.<sup>84</sup> This relatively small building is located on top of a hill towards the northern end of Titahi Bay. The building's main gable runs north to south and it has a perpendicular gable on the seaward side. In 1933 the Cable Hut was sold, after the cables were combined and relocated to Muriwai Beach. The building was then converted into a house, resulting in subsequent additions to the north and west sides.

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<sup>77</sup> 'History of Cable Bay Station', Cable Bay Holiday Park, URL: <http://www.cablebayfarm.co.nz/index.php/cable-bay-station-history> (accessed 15 April 2014). Pannett, *Just a Piece of Wire*, 38–39.

<sup>78</sup> 'The cable under test,' unpublished manuscript, 24 November 1949. ANZ, Cable Bay [R10859357]. No investigation into whether any relocated buildings remain or where they are located in Nelson has been undertaken as part of this heritage assessment.

<sup>79</sup> Pers. Comm., C A McFarlane to Harold Wilson, 11 January 1960. ANZ, Cable Bay [R10859357].

<sup>80</sup> Pers. Comm. Barbara Stuart to Karen Astwood, 14 April 2014. IPENZ.

<sup>81</sup> Pannett, *Just a Piece of Wire*, 32–33.

<sup>82</sup> Pers. Comm. Bryan Pannett to Karen Astwood, 19 March 2014. Pannett, *Just a Piece of Wire*, 33.

<sup>83</sup> "Hullo Sydney", *Dominion*.

<sup>84</sup> Based on visual evidence in Figure 2 the building seems to be a brick or masonry construction.

However, the original form of the building can be perceived behind these extensions. The stuccoed exterior and current roofing tiles probably date to post-Eastern Extension ownership.<sup>85</sup> The building is currently (2014) not in use.



Figure 6: Titahi Bay, showing Trans-Tasman Telegraph Cable landing site and Cable Hut, 19 March 2014. K. Astwood, IPENZ.

### Muriwai Beach landing site

When the cable was removed to Muriwai Beach in 1932 the resulting single cable was a composite of the two late 19th century cables. The Trans-Tasman Telegraph Cable was landed at the mouth of the Ōkiritoto Stream, just north of the current Muriwai Golf Links. It seems that there was already a cable house established at the beach, associated with the Pacific Cable, and this was also used for the Trans-Tasman Telegraph Cable.<sup>86</sup> Further research is required to determine whether physical evidence of this building exists.

The COMPAC and subsequent telecommunications submarine cables also come into Muriwai Beach around this point. The abandoned cables fall within the area protected by the Submarine Cables and Pipeline Protection Order 2009 because the Muriwai Beach region is where the operational cables come into New Zealand waters and

<sup>85</sup> Linda Fordyce and Kirsten MacLehn, *The Bay: A history of community at Titahi Bay* (Titahi Bay: Titahi Bay Residents and Ratepayers Progressive Association, 2000), 58.

<sup>86</sup> 'Cable brought ashore', *Evening Post*, 21 April 1932, 10.

onto land.<sup>87</sup> The completion of COMPAC saw the Trans-Tasman Telegraph Cable abandoned in late 1963 and during the new cable's installation the telegraph cable was left intact unless it was in COMPAC's path. Therefore, there is potential for significant subsurface and submarine remnants, although pinpointing which of the remains of early telegraphs cables at Muriwai Beach is the Trans-Tasman Telegraph Cable could be problematic.<sup>88</sup>

#### *Key physical dates*

5–18 February 1876	Trans-Tasman Telegraph Cable Number 1 laid between Cable Bay, New Zealand, and La Perouse, Australia, and Cable Station established
26 April – 7 May 1890	Trans-Tasman Telegraph Cable Number 2 laid between Cable Bay and La Perouse
September 1895	A deep sea section of Trans-Tasman Telegraph Cable Number 1 is replaced
<i>circa</i> March 1917	Titahi Bay Cable Hut constructed
March – 23 May 1917	Cable laying and relocation of Trans-Tasman Telegraph Cable Numbers 1 and 2 to Titahi Bay, New Zealand and Bondi Beach, Australia
March – July 1932	Trans-Tasman Telegraph Cable Numbers 1 and 2 combined to create a single cable (Trans-Tasman Telegraph Cable) and relocated to Muriwai Beach, New Zealand
1963	Trans-Tasman Telegraph Cable abandoned

<sup>87</sup> 'Submarine Cables and Pipelines Protection Order 2009,' New Zealand Legislation, URL: [http://www.legislation.govt.nz/regulation/public/2009/0041/latest/whole.html?search=qs\\_act%40bill%40regulation%40deemedreg\\_submarine+cables\\_resel\\_25\\_h&p=1#DLM1847705](http://www.legislation.govt.nz/regulation/public/2009/0041/latest/whole.html?search=qs_act%40bill%40regulation%40deemedreg_submarine+cables_resel_25_h&p=1#DLM1847705) (accessed 15 April 2014).

<sup>88</sup> Telephone call file note, Laurie McCalman and Karen Astwood, 15 April 2014. IPENZ.

## C. Assessment of significance

The establishment of Trans-Tasman Telegraph Cable Number 1 in 1876 was an outstanding communications achievement and watershed moment for New Zealand which, with its partner Trans-Tasman Telegraph Cable Number 2 (created in 1890), remained economically, politically and socially essential to the nation well into the 20th century.

Drawing on international submarine telegraph cable manufacturing and installation expertise, the speed and efficiency of these first transnational telecommunications links meant that through engineering New Zealanders became less isolated from the rest of the world. The cables have national engineering significance because the technology was innovative, setting the benchmark for later submarine cable communications connections.

Relocations of the landing points for Trans-Tasman Telegraph Cable Numbers 1 and 2 from the South Island to the Wellington area and then the Auckland region are also important indicators of New Zealand's changing population demographics and centres of business between 1876 and the 1930s.

Therefore, Trans-Tasman Telegraph Cable Numbers 1 and 2 are of sufficient engineering heritage significance to merit inclusion on the IPENZ Engineering Heritage Register.

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