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# A Bridge Too Far? - The Burke St Wharf Project That Bankrupted The Thames Borough

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## Introduction

The ill-fated Burke St wharf project undertaken by the Thames Harbour Board, and financially under-written by the Thames Borough Council, in 1927, resulted in the Council being unable to repay the loans obtained for the project. This resulted in a 1932 Act of Parliament, which put the borough under the control of a commissioner until 1947 - effectively, the Borough was bankrupt. To a large extent, the failed venture is analogous to the Muldoon government's 'think big' energy projects of the 1970s and early 1980s, which were intended to counter the effects of steeply-rising oil prices. In many instances, the resulting installations were never used, or later became uneconomic when oil prices dropped again.


*Figure 1. Burke St wharf as it is today. Apart from Shortland wharf, which is still intact and in use, this is the only visible wharf structure remaining in Thames or Tararu.*

## Historical Background

The Burke Street wharf story effectively begins with the opening of the Thames Goldfield on 1st August 1867. Thousands of miners flocked to the field, along with the myriad of services and businesses required to support the venture; and, often, their families. The only realistic mode of transport to 'The Thames,' as it became known, was by sea, from Auckland.

A major problem with sea access to Thames was the shallow water and tidal nature of the Firth of Thames. Eventually, four wharfs were built in Thames and one at Tararu. Shortland was the first used, as the Kauaeranga River outflow meant there was a natural channel. However, it was still only usable around high tide, so more were required to handle the volume of boats coming in with the tide. Grahamstown (later named Curtis') wharf was also known as the 'passenger wharf' and was built at the end of Albert St. Holdship's wharf was known as the 'timber wharf' and was built at the end of Cochrane St, next to Holdship's sawmill. The Burke St wharf was originally known as the 'Goods Wharf' due to its proximity to Prices Foundry, Big Pump and most of the highly productive mines (Caledonian, Manukau, Tookeys etc). Tararu wharf was built because the firth was deeper further down the coast and the first railway into Thames ran from Tararu to Grahamstown Station, which was actually at the end of Williamson St, not Cochrane, as shown on the existing Lions Club sign.

From the opening of the goldfield, there was pressure on the Auckland Provincial Council to provide a wharf. Local dissatisfaction reached such a height that a committee was formed to attempt to progress works related to transportation infrastructure by any means possible. A meeting even considered the possibility of setting up an independent County structure, which would enable it to collect rates, and utilise income from the goldfield, to spend on public infrastructure. However, the Provincial Council eventually came to the party and a wharf was completed at Shortland by December 1868.

The Shortland wharf project was actually bypassed (in time) by a private wharf built by Robert Graham, the creator of the settlement known as Grahamstown, adjoining Shortland to the north. Originally known as Grahamstown wharf, it was later sold to Mr Robert Curtis, and became known as Curtis' Wharf. Graham also funded the construction of the Tararu wharf in 1869 and a Mr Holdship contructed a Timber Wharf at the western end of Cochrane St in 1874.

Planning and construction of the Goods Wharf commenced in 1871 (also funded by the Provincial Council). This was an auspicious year for the Thames goldfield,

being the year of maximum production of gold bullion; mostly coming from the rich bonanza of the Caledonian mine. It was completed by June 1872.


*Figure 2. PS Wakatere at Thames (Burke St) wharf early 1900s (Sir George Grey Special Collection, Auckland Libraries, 855-2).*

Following the abolition of the provincial government system in 1875, there was a major reshuffle of duties between central and local levels of government. Day-to-day operations became the responsibility of local bodies (cities, boroughs, counties) and statutory bodies were created to manage specialist functions - among these were harbour boards. The Thames Harbour Board was established by an Act of the General Assembly in 1876.

## The Decline of the Goldfield

Around 1870, the population of Thames was around 15,000, rivalling that of Auckland, and the goldfield was regarded as the economic powerhouse of the province. By about 1920, however, bullion production had dwindled to a small fraction of the halcyon years, and most of the miners and mining companies (and their capital) had moved on to other fields - many to Ohinemuri and Waihi. The ill-fated Burke St wharf project of the 1920s was intended to take advantage of the opportunity to create a deep-water port capable of serving the new Hauraki Plains farming community, and wider Waikato region, providing an outlet for exports.

The Thames Harbour Board borrowed £66,000 for the project, the loans being under-written by the Thames Borough Council (attempts to spread the funding between the wider Thames Valley and Waikato communities were unsuccessful). The ambitious scheme involved building an artificial harbour, consisting of a large 'dry' (i.e. un-mortared) stone wall enclosing an area of 114 acres. The enclosure was to be dredged deep enough to give all-tide access for ships of a substantial size. However, there were problems with the dredging (including one dredge sinking and having to be recovered) and the enclosure refilling with silt much more rapidly than was expected.

By 1930, all the loan money was used up and the project was far from complete. Something had to give. When Mr Sydney Ensor was elected Mayor in 1931, he immediately approached the Prime Minister and pointed out to him Thames' problems of public debt and diminishing rating valuations. A conference was held in Wellington on July 30th 1931. To show how bad the position was, Mr Ensor quoted figures for one estate. For the two years 1929-31, the rent received was $112. The rates charged on that estate for that period amounted to $248[1] which were the Borough rates only and did not include the Harbour Board rate.

Central government's response was to appoint a commissioner to manage the affairs of the borough. The Thames Borough Commissioner Act (1932) was passed; and a commissioner was appointed to manage the borough's affairs until 1935, but actually remained in place until 1947. Further Acts amending the 1932 legislation were passed in 1934, 1937 and 1940, enabling this to happen. The Borough Council was retained as an advisory body and Mr Ensor remained as mayor (Isdale 1967 , Kelly 1968 , O'Neill 1973).

## What Went Wrong?

There were fundamental engineering problems associated with a scheme to build, and operate, a deep-water port at the shallow end of the firth of two major rivers, each with significant flows and frequently subject to major flooding. The drainage of the Hauraki Plains would have exacerbated this, by freeing up silt from ongoing maintenance of major drains created during the original project, plus the internal drains that prospective farmers needed to dig, to break in their own farms. The ongoing dredging requirements to keep even the tidal wharfs open during the early days of the goldfield should have provided a warning that 'silt never sleeps.'

In the author's view, another significant factor was parochialism, and nostalgia for the halcyon days when Thames was a national economic powerhouse. There are many examples of parochialism which show up in the PapersPast articles of the times. Also, the Diamond Jubilee booklet (Weston, 1927) indicates that many of

the 1867 'originals' and their offspring were still in town sixty years after the opening of the field. Mining was still carried out on a commercial scale (albeit small) through to the 1930s. In the 1920s and 1930s, the town effectively still had a 'bonanza' mentality.

## Archaeology of the Burke St Wharf and Harbour Project

At first glance, the archaeology of the wharf appears to be confined to the array of ferro-concrete piles, shown in Figure 1. Some of these have timber baulks bolted to them, and date from the 1920s harbour project. However, closer examination, at very low water, reveals an almost parallel structure of stubs of timber piles amongst the ferro-concrete, plus a few large timber piles tucked in close to the sea wall (partly concealed by flax bushes). The timber piles are likely to date from the original Goods Wharf of the 1870s, but have not been further investigated (e.g. dendrochronological dating may be helpful).

*Figure 3. Close-up of wharf piles at low tide, showing stubs of older timber piles between the 1920s piles. These were probably from the original 1870s construction.*

*Figure 4. Large timber piles at landward end of the wharf structure; these were probably part of the original 1870s construction.*

The plan for the 1920s harbour project included a harbour enclosure structure, consisting of dry (i.e. un-mortared) stone walls, which were designed to provide a barrier against silt buildup (the seabed inside the walls was supposed to be kept dredged). No engineering drawings or historic photos of this were located and it was uncertain as to whether it was actually built. The best historical evidence is a 1919 plan for the Thames sewerage system which was constructed at roughly the same time, that shows the intended placement of the harbour enclosure walls.

However, there is archaeological evidence that at least part of the enclosure structure was built. According to local surveyor Morrie Dunwoodie (Pers comm, July 2016) who was involved with the Moanataiari reclamation and subdivision in the 1970s, the landward (eastern) wing of the harbour enclosure was used as the base of the western sea wall for the subdivision. The northern and southern wings of the harbour enclosure (i.e. 'laterals') are still in situ (Figure 5), and can be negotiated on foot, almost to the outer ends, at low tides.

*Figure 5. Burke St harbour - lateral breakwater walls indicated (Eric Gosse photo, taken from top of WW1 monument, Waiotahi Valley).*

*Figure 6. Southern lateral wall, taken at low tide.*

A brief archaeological investigation was carried out over the period October - December 2016 to attempt to determine how much of the harbour walls structure was actually built. A detailed investigation of historical sources was also carried out. Numerous records of meetings of the Thames Harbour Board in PapersPast recounted progress on the project between 1926 and the 1930s, when Thames Borough was placed under the control of a commissioner. The project commenced

with great optimism and fanfare, but the tune gradually changed as time passed. Delays and engineering problems meant that, by early 1928, the loan money had all been expended and no further funds were forthcoming. Appeals to central Government were heard sympathetically, but no further funding was offered. In November 1928, matters came to a head: the Harbour Board realised that the financial situation was untenable and directed that: '(1) ... the engineer be instructed to cease dredging operations, and take steps to have the dredger placed in a position of safety, and all engines, and gear protected. (2) That the western wall and beacons be completed. (3) That the engineer submit a report and estimate of the cost of completion of the railway siding, and that, if practicable, this work be completed (*Auckland Star*, 7 November 1928).

*Figure 7. Northern lateral wall, leading to beacon (taken at low tide).*

In February 1929, Harbour Board engineer E.F. Adams resigned, stating: 'I wish to convey to you my appreciation of the assistance you have given me in the very considerable difficulty we have experienced in getting value for money expended on the harbour works. That the available funds ran out before the works were completed was unfortunate. That further funds are not available to complete the works is more unfortunate still' (*New Zealand Herald*, 7 February 1929). Despite the fact that the harbour was not completed in accordance with the original plans, attempts were still made to use it. At a meeting in May 1930, the Harbour Board was informed of a ship attempting to use the wharf becoming stuck in the mud for two days until it could be freed. (*New Zealand Herald*, 11 April 1930).

It appears that, by September 1928, the landward and both lateral walls had been completed and that work had started on the seaward wall. However, by November 1928, the scheme had run out of money, but the engineer was instructed: 'That the western [seaward] wall and beacons be completed.' By February 1929, the engineer had resigned. Was the seaward wall ever completed? It is doubtful that a responsible engineer and project manager would commit to work that they knew they had no prospect of paying for; however, it may require archaeological evidence to determine whether the seaward wall was partially or fully built, or not built at all.

The survey conducted during the last quarter of 2016 utilised shore-based observations at low tides of the 'super moon' period, an attempt to walk to the end of the southern lateral wall, drone coverage at low tide and sonar depth sounding from a small boat around high tide.


*Figure 8. Google Earth view of Burke St wharf area - 2001 aerial photo taken at or near low tide. Shows lateral walls, the beacon at the western end of the north lateral, estimated location of seaward wall (if built) and GPS track from the 17th October attempt to walk out to the end of the southern lateral wall.*

Walking out to the end of the southern lateral wall didn't produce any definitive results, as the end of the wall was below low-water mark and one could only get to within about 20m of the (estimated) end. It was possible, however, to observe the northern lateral wall and that the wall appeared to end at the beacon.

*Figure 9. Beacon at seaward end of north lateral wall (taken at spring low tide, 'super moon' period).*

A drone was used to try to locate wall structures at or below low tide mark. Due to choppy and murky water conditions, it was not possible to identify and wall structures below water level, but some interesting photos of the wharf structure were obtained.

A small boat with a 'fish-finder' sonar depth-sounder was used during December 2016 to attempt to locate the harbour walls around high tide (for safety reasons related to operation of the boat). The harbour walls could be readily detected under-water, and showed as a narrow 'step' on the fish-finder screen. Unfortunately, there was no way of recording results, nor was it was possible to properly coordinate wall detections with a GPS waypoint (even with the motor off, the boat had drifted a few metres before a GPS waypoint could be recorded). However, an attempt was made to record a waypoint for the end of the southern lateral wall, and this was done by means of numerous passes over the immediate

area. The waypoint recorded correlated closely with that estimated from Google Earth. The depth sounder clearly showed evidence of the two lateral walls (a clear 'step' of about one metre high and one metre wide on the screen). Numerous passes were made between the ends of the two lateral walls (as shown in Figure 10) but there were no indications of a seaward wall. If there were a few seaward wall rocks laid near the end of the southern lateral, the basic depth sounder used was not capable of discriminating them from the end rocks of the southern lateral.

The above was the extent of search possible with readily available local resources. More definitive data may be obtained using a more sophisticated sonar system, with recording and GPS capabilities, or by using divers or under-water techniques. However, it should be borne in mind that proving something didn't exist is very difficult, and it is usually easier to start with the assumption that something did exist and then demonstrate that the probability of that is low (as per the statistical concept of the *null hypothesis*).

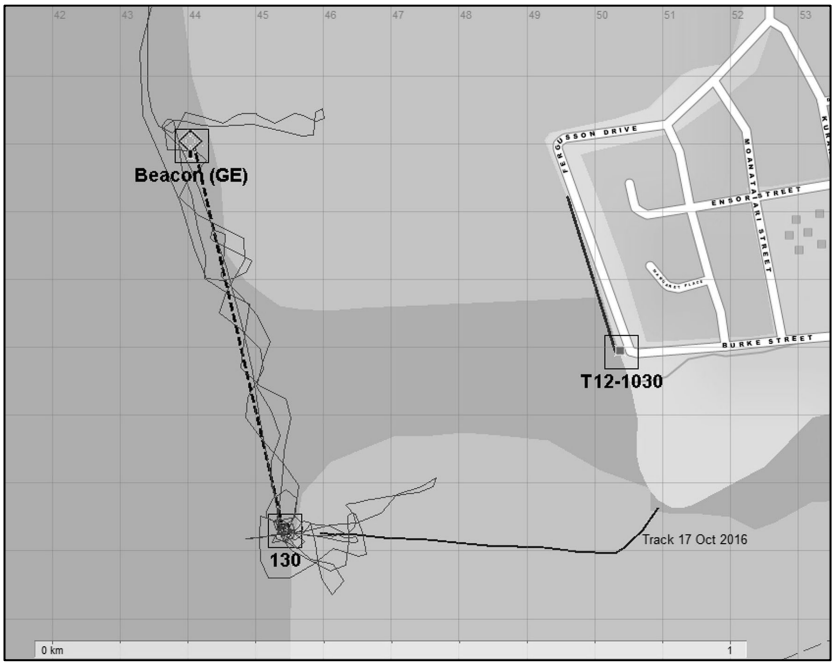


*Figure 10. GPS track of boat sonar search, conducted 2 December 2016. The two lateral walls were readily detectable using the sonar, but there was no indication of a seaward wall (estimated path showed by dotted black line). A GPS waypoint was obtained for the end of the southern lateral wall (WP 130).*

Within the bounds of the limited search resources available, it is concluded that the seaward wall of the Burke St harbour enclosure was probably not built. If this is the case it would indicate competent and responsible management on the part of E.F. Adams, the project engineer and manager, in that he didn't commence new work when there was little chance of payment for it being possible; despite instructions from the political masters (Thames Harbour Board).

One area of risk that impacted on the project, which can largely be attributed to the engineer, however, was the home-made dredge: ' ... a specially built plant, which is now moored alongside the wharf and has an appearance somewhat suggesting a houseboat. It was designed by Mr. Adams, in collaboration with Niven and Company Limited, and its marine engines have been constructed by the Harbour Board's engineering staff' (*New Zealand Herald* 20 May 1926). There were numerous instances of it breaking down, delays while parts were obtained, and, as a suction dredge, it had difficulty in coping with the hardness of the sea floor around the area of the harbour basin. Project risk management, in terms of business and technical risks, can only be described as poor. E.F. Adams mainly worked as a gold mining engineer - a field where business risk was inherent!

One unforeseen consequence of the period of commissioner control is still apparent in the early 21st century. The requirement for the commissioner to follow a policy of austerity in order to reduce debt meant that rates, as the main form of income for the Borough, had to be pursued in somewhat draconian fashion. This, coupled with the economic downturn of the 1930s, meant that some landowners were forced to sell or surrender properties that weren't capable of generating sufficient income to pay their rates. In the Waitangi Tribunal WAI 686 ('Hauraki Claim'), Ngati Maru claimants submitted that affected Maori landowners more than non-Maori, and that this is one of the reasons why Ngati Maru own very little land compared with other iwi (Waitangi Tribunal Report 2006).

The saga of the failed Burke St harbour project is an unfortunate episode in Thames' illustrious history. The town literally went from being a national economic powerhouse to (effective) bankruptcy in a few decades. However, it is worth noting that the loan for the harbour project of £66,000 was a relatively small part of the overall Council debt of over £300,000, so should be viewed in that context. Not only is the Burke St harbour project an interesting, if painful, part of local history, it probably represents a good object lesson for all elected, or aspiring, local politicians!

## Acknowledgements

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## Endnotes

1 These figures given in dollars in O'Neill (1973) *Thames Borough Centennial: 1873-1973*.

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