



DOVER HARBOUR BOARD

HERITAGE RECORDING PRINCE OF WALES PIER

TO THE DOVER WESTERN DOCKS, DOVER, KENT

Desktop Study



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Summary

In 2012, Dover Harbour Board (DHB) gained consent for Terminal 2 (T2), a major proposal for a new second ferry terminal and marina development in the Western Docks, via the Dover Harbour Revision Order 2012 (the HRO). DHB are now carrying forward the construction of certain elements of the HRO. The scheme being progressed lies within the consented development for T2 and is referred to as the Dover Western Docks Revival (DWDR).

A collection of historic building surveys and desktop studies have been completed by the DWDR team on behalf of the Port of Dover. These have been undertaken in order to create a record of historical assets which can be found within the Port of Dover and that will be subject to impact from the construction of DWDR. These reports have been completed before any of the planned construction work begins on the revival scheme.

This report comprises a desktop study and historic record of the Prince of Wales Pier.



1. Project Background

In 2012, Dover Harbour Board (DHB) gained consent for Terminal 2 (T2), a major proposal for a new second ferry terminal and marina development in the Western Docks, via the Dover Harbour Revision Order 2012 (the HRO). DHB are now carrying forward the construction of certain elements of the HRO. The scheme being progressed lies within the consented development for T2 and is referred to as the Dover Western Docks Revival (DWDR).

There are 11 Listed Buildings and two Scheduled Monuments within the Port of Dover. Neither of the Scheduled Monuments and only two of the Listed Buildings (including the Prince of Wales Pier) fall within the footprint of the DWDR scheme that will be directly affected by the overall works. Listed Building Consent has been obtained for work affecting the listed structures

In addition to the listed buildings, however, there are a number of non-designated historic structures which will be subject to impact from the DWDR scheme. A Level 1 photographic heritage recording of the entirety of the DWDR foot print was carried out by DHB, between 2nd September 2015 and 9th February 2016. The purpose of this recording was to log the current physical properties of the Western Docks and highlight select structures of historic importance.

Subsequent to this Level 1 photographic recording, desktop studies have been undertaken for the following structures of historic importance:

- Granville Dock, Tidal Basin, Tug Haven and the Wick Channel;
- The Telford Sluices and Associated Sluice Mechanisms;
- The Union Street Swing Bridge and Wellington Dock gates;
- Train Ferry Dock and the Dunkirk Jetty;
- The Prince of Wales Pier; and
- The Promenade.

This report presents the results of the desktop study for the Prince of Wales Pier.



2. Methodology

2.1 Aims and Objectives

The aim of the desktop study is to provide a detailed record of the Prince of Wales pier prior to impact from the construction of DWDR.

The objectives of the desktop study are:

- To clarify the impact from the construction of DWDR;
- To provide a description of the history of the site based on archive material and secondary sources;
- To provide a historic record of the structure through historic plans, maps, charts and photographs;
- To provide a current record of the structure through recent photographs, laser scanning or measured drawings if available; and
- To identify any further recording requirements or mitigation measures that may be required prior to the commencement of works for DWDR.

2.2 Approach

Work for this desktop study was undertaken in accordance with the Written Scheme of Investigation for DWDR prepared by Royal HaskoningDHV (2015). The methodology for the desktop study was carried out with consideration of available standards and guidance, including:

- CIfA, 2014, Standard and Guidance for the archaeological investigation and recording of standing buildings or structures; and
- Historic England, 2016, Understanding Historic Buildings: A guide to good recording practice.

This study comprises an account of the structure's origins, development and use, and includes evidence on which this analysis has been made. The research for this desktop study was undertaken using readily available sources to help understand the construction, development and historical context of the Prince of Wales Pier. This study incorporates the findings and interpretations of this research.

2.3 Sources

Key primary sources for this report include historic Ordnance Survey maps in the DHB archive and historic newspapers sourced from the British Newspaper Archive Online (<http://www.britishnewspaperarchive.co.uk/>). Further use has been made of published secondary sources, including books and online research. To illustrate the development of the structure's appearance and form use has been made of the DHB archive, including



photographs, drawings and plans. For this study all photographs have been taken from the DHB Photographic Archive. Although some hard copies of these documents exist, in particular the historic Ordnance Survey maps, the majority of these are digital copies that can be found in the DHB archive. The historic maps can be found in the archives in Harbour House, Waterloo Crescent.



3. Description of the Site

The Prince of Wales Pier is located on the Western side of the Dover Port, running almost parallel to the Admiralty Pier along the same line as Union Street. (National Grid Reference: TR 31997 40738). **Figure 1** in **Appendix 001** shows the location of the Prince of Wales Pier within the Western Docks. As part of the DWDR scheme, the Prince of Wales Pier is located within an area of land reclamation. The overall height of the Prince of Wales Pier is being lowered in certain areas with others to be encased to form part of the new port development. **Figures 2-3** in **Appendix 001** demonstrate the work that will be undertaken as part of the redevelopment project.

Listed Building Consent was granted by Dover District Council for works affecting the pier. Consent (DOV/15/00627) for the removal of all pier furniture (including all historic and late 20th century railings, lamp standards, memorials, mooring bollards (cleats) and gates) and height reduction of the late 20th century steel sheet pile section, was granted 02/12/2015. Consent (DOV/15/01254) for the reduction of ramps to either end of the sheet pile section and for the construction of cargo berths and marina Curve, to be attached to masonry section, was granted 10/02/2016. All items of furniture removed from the pier are currently being stored in Cruise Terminal One for relocation, where appropriate, within the setting of the DWDR scheme, or within a similar maritime setting within the Western Docks.

Prior to commencement of works a photographic and descriptive record of the pier furniture to be removed and the areas to be lowered was compiled by DHB (2016). Although a requirement for further recording of the Prince of Wales Pier was not specified as a condition of consent, DHB have undertaken this desk study alongside others compiled for the non-designated structures in order to ensure a complete record is retained.

4. History of the Site

Some background history of how the Port of Dover was initially developed has been included in this report in order to give context to the significance of the structure in question: The Prince of Wales Pier.



It is thought that the initial success of the Port dates back to the 14th century, due to its sheltered position behind the Archcliff headland situated to the West of the Port (Leach, 2006). Other ports at the time were struggling with the build up of silt blocking entrances to the newly forming harbours, causing access issues as well as the beaching of ships. The headland protecting the Port of Dover blocked strong winds resulting in the formation of mud and shingle, creating an open pool with access to clear waters; this safely allowed ships to berth within the port. Dover was the 'gateway to England' and many passed through its town in order to further travel to places like Canterbury for pilgrimage or the capital London. Further development was needed and in 1495 Sir John Clark installed a small pier on the East of the Archcliff headland, this worked well for some time, strengthened by shingle which had built up around the structure. However this shingle eventually grew too much and threatened to block the gate of the small dock, known as the Paradise Pent.

An impression of the port was drawn by Vincent, King Henry VIII's royal painter, around c.1520-1530, and called 'The Haven of Dover', as seen in **Figure 3** in **Appendix 001**. Although the perspective of this image is slightly misleading, it clearly shows the layout of the port, with a small and developing town in the background. The formation of Union Street has not yet begun here as the focus of the port is to the west of the developing harbour, at this time only consisting of a few jetties.

A coloured plan was drawn in 1582 (**Figure 4** in **Appendix 001**) by Thomas Digges, which shows the layout of the harbour. Thomas Digges was a local typographer at the time and was commissioned to do the piece by the contemporary Lord Warden William Brooke, the 10th Baron of Cobham. He would have been acting on behalf of Queen Elizabeth the 1st, who had always tried to improve the conditions within the harbour and make it run more efficiently. The plans included Lord Cobham's intentions of installing a second sluice on the 'Snargate over the sluice' piece of land. This is the first evidence of the strip of land that would later become Union Street.

The 1595 plan of the harbour (**Figure 5** in **Appendix 001**) shows the port at a much further developed stage, with large amounts of progress to the Western side of the harbour. The map itself has also been drawn in a much more technical way which means it's easier to read as well as being a more accurate representation of the harbour in 1595.

These maps reflect a layout that can be seen underlying the structure of the port as it is today. The Port in 1595 was compiled of three different sections, all situated to the Western Side of the harbour today. The Pent (Wellington Dock), the Great Paradise (Granville Dock and the Tidal Basin) and the Little Paradise are all labelled on the map drawn by Digges (**Figure 6** in **Appendix 001**), with the Little Paradise also noted to be 'decaying' at the time of record. The Little Paradise continued to silt up until it became completely filled in and built over in the 19th century.



Digges' map shows the start of the Port of Dover being at its most established size to date, with dockyards forming and structures being built where needed in order to make the port sustainably usable. At the time shingle was becoming an issue and effecting movement around the port. Clark's pier had been badly damaged by a storm and was no longer fulfilling its function. In 1606, James I declared a Royal Charter with the condition that '11 discreet men' would take over management of the port, known as the Guardians of the Harbour of Dover. The Lord Warden at the time was amongst the eleven along with the mayor of Dover and other courtiers; control of the ports affairs remained with the organisation until 1861 when the new Harbour Board was founded. The initially well intentioned scheme, however, brought little change to the port, at one point the townsmen took it upon themselves to come out with shovels and buckets in order to clear the shingle themselves (Leach, 2006).

Within the charter was also a condition that stipulated that any of the reclaimed land that had formed from shingle within the harbour, would automatically belong to the Harbour Board, and that this included land, forming at the time, on the seaward side of the Pent. This could be labelled today as the Esplanade and Waterloo Crescent, forming the promenade. As the land developed housing was built on the reclaimed land, all paying rent accrued to the Harbour Board (Leach, 2006) the Prince of Wales Pier would later be built projecting off this land. An increase in income for the Harbour Board meant improvements to the port began to be devised, and with this, proper surveys detailing the layout of the harbour had to be taken.

These surveys did not officially take place until 1641, after many poor attempts, eventually drawn by a local Freeman, William Eldred, who later went on to become a Master Gunner at Dover Castle. Multiple maps were drawn up by Eldred, giving an overview of the town in 1641, as well as detailed sections of maps taken throughout the harbour. Each one had the dwellings at the time included and, as well as this, on the reverse of the maps are lists of tenants and their sub tenants names.

Figure 7 in **Appendix 001** is a map drawn by William Eldred, showing a much more developed port and properly surveyed buildings. It can also be seen here that the development on the eastern side of the Harbour is yet to be started; this is something that didn't happen until the 20th century as it would require a vast amount of reclamation works.

There are multiple early and later Post Medieval buildings known to have stood in the Western side of the Port of Dover, including a chapel, now lost, called Chapel of Our Lady of Pity. The majority of these structures were lost in the 19th and 20th centuries although remains of these may still be present under the parking and haulage facilities in the Western Dockyard (Maritime Archaeology, 2008). Many were demolished to ground level with basements being filled in with



rubble, typically from the demolition waste. Some of these would have stood along Union Street and ran onto to the Esplanade and along the seafront.

A more formal plan of the Port of Dover can be found dating back to 1737 (**Figure 8** in **Appendix 001**); this would have been commissioned by the Dover Harbour Board. The layout of the port has clearly evolved by this point, with the main sections of the harbour becoming much more developed and substantial. The map itself has also been drawn in a much more technical manner, removing the misleading perspectives that have been included on Eldred's. The area of reclaimed land at the base of the cliff appears to have developed further with more homes being constructed, whereas those previously seen on the promenade are no longer standing.

The Prince of Wales Pier is located in the Western Side of the Dover Harbour, sometimes referred to as the 'old pier district'. The Pier was commissioned by the Harbour Board to give shelter to the eastern side of the harbour and also allowed for berths for Cross-Channel steamers and transatlantic liners. Discussions started around 1878 amongst the board members for the construction of the new pier and its importance to the harbour. There were issues with boats docking due to the rough tide that was caused by deflecting waves from the Admiralty pier, it was hoped that building this new structure would reduce these issues (Hasenson, 1980). The chief engineer on the project was Sir John Coode, who unfortunately only lived to see the preliminary approval stages as he died in 1892, his association with the development was one of the contributing factors to the pier being listed in 1975. The construction began in 1893 with the foundation stone being laid by the contemporary Prince of Wales Edward VI on Thursday 20th July 1893. The day was described as consisting of 'high wind and driving rain' although this apparently didn't dampen spirits and the 'most worthily noted parsonages of the County of Kent' came to see the Prince in Dover (Hasenson, 1980).

Drawings of the original pier can be found in **Figure 9** in **Appendix 001**, detailing construction details, measurements and plans. The pier was named after the Prince with a special commemorative trowel being used to lay the first stone with an engraved ivory mallet also being created for the occasion; a small time capsule was also buried alongside it. Within this were two sealed glass jars, one containing newspaper clippings and the other containing coins of the kingdom. This was covered by a brass plaque engraved with the names of those involved at the time, including: Sir John Coode, Marquis of Dufferin and Ava, Lord Warden of the Cinque Ports. Once the pier was announced inaugurated, a steam launch, which had attached a bugle to its engine, began to play 'god save the prince', much to the amusement of the gathered crowd (Hasenson, 1980).

This capsule was later discovered on the July 2016 during the current height reduction works of the pier, unfortunately both bottles were empty and broken; a brass plaque was found near the site, it can be assumed that this is the same plaque from 1893 however damage to it

makes it very difficult to read. More information and images can be found of this discovery in **Section 8**. Another plaque was placed on the entrance of the pier to commemorate the Prince; this was damaged in WWI and later replaced, images relating to the laying of the first foundation stone can be found in **Plates 1-4**. The foundation stone was laid at the base of what would be the approach to the new pier. Construction had actually already started on the iron viaduct which was based just seaward of the newly laid stone and was not connected to the shoreline yet (Hasenson, 1980).



Plate 1- Preparations taking place for the stage work hosting the laying of the stone, 14/07/1893, looking South, DHB.



Plate 2- *The stands for the crowds watching the foundation stone being laid, the stone is visible to the left hand side of the image, 14/07/1893, DHB.*

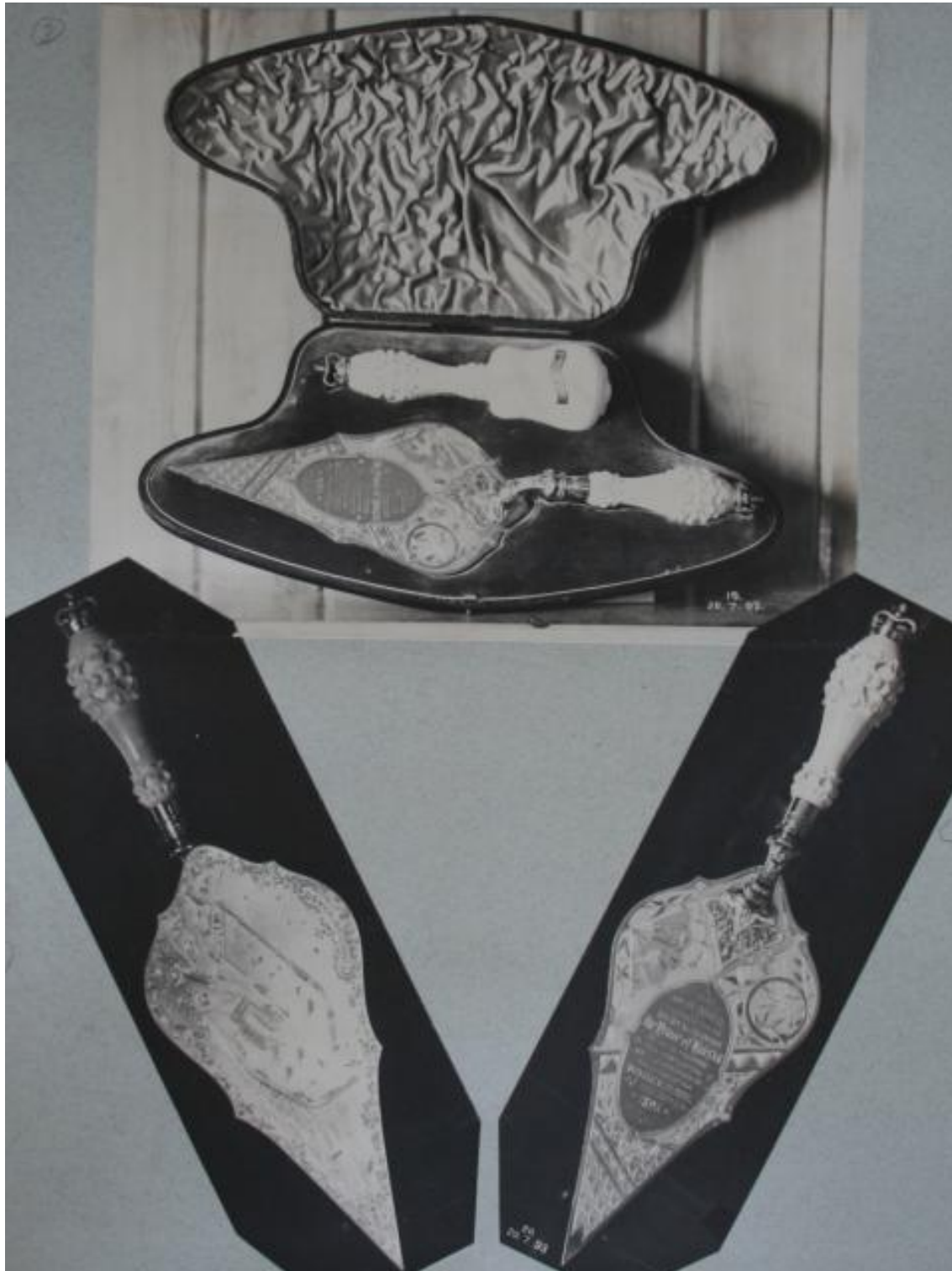


Plate 3- A collage of images showing the trowel used to lay the stone, as well as the ivory mortar, 1893, DHB.

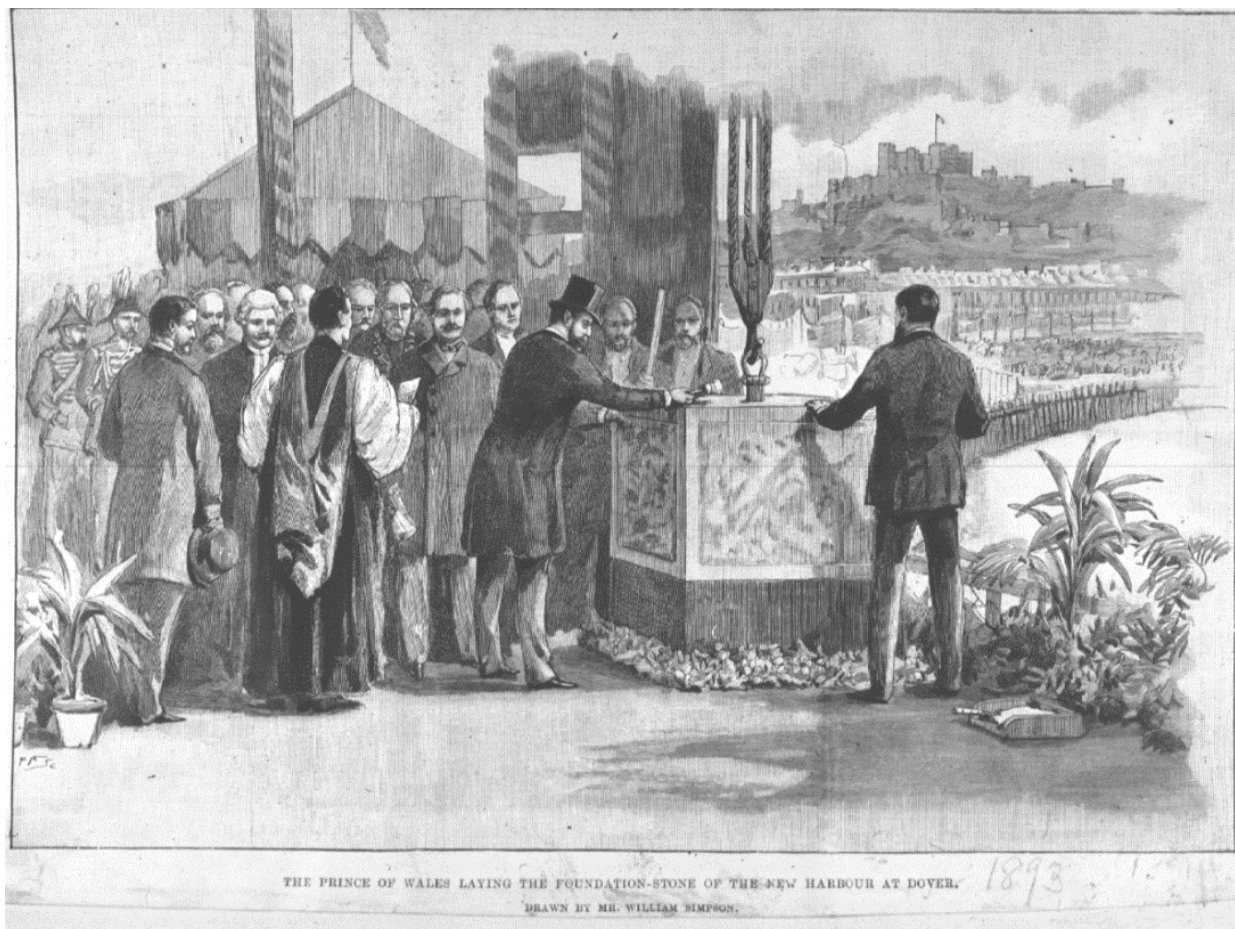


Plate 4- A sketch of the Prince of Wales laying the foundation stone for the pier, c1893, Dover Museum Collection d01355.

Towards the end of 1893 the ironwork section of the Prince of Wales Pier was advanced enough that precautions had to be made in order to warn approaching ships that there was a hazard which might not always be visible. On September 21st 1893 two green lights were placed at the outer end of the works, with a red conical buoy anchored out a further 1,300 feet. These markers indicated where the mooring would be placed for the temporary staging which was going to be needed to construct the masonry portion of the pier.

At the same time there were issues with the foundations which had been originally selected to build the pier on. Initially it had been intended to have pile foundations 40 feet apart, braced with diagonal ties and girders, about 10 of these were put into place in their designated diagonal rows before the issues began. A 100 ton load was applied to test one of these piles, to make sure it would be strong enough to withstand the weight of the pier which was soon to be built on top of it, to the disbelief of the workman, the *in situ* pile was pushed through the seabed and disappeared (Hasenson, 1980). Clearly the pile choice needed to be changed and instead large hollow cast iron cylinders were sunk to the required depth within the seabed, and



then filled with concrete, this method was considered much stronger than the previously proposed pile foundation, however it did slow the progress of works dramatically.

At the time, this slowing in progress was not considered a negative effect on the project, there had previously been discussions with parliament about funding for the Port of Dover and how it needed to be transformed into a harbour of refuge, however this thought was dismissed and work on the Prince of Wales Pier had started regardless. A short length of the solid portion of the pier had been constructed in 1895 when parliament decided to recall its previous decision to not supply Dover with any funding and instead insisted that, amongst others, Dover had to be changed, not only to a harbour of refuge but it also had to be torpedo proof. This meant that the harbour would have considerable more use for both commerce and the Royal Navy (Hasenson, 1980). Had this decision been made prior to the construction of the Prince of Wales Pier the funding and torpedo requirements may have influenced the design of the western pier, instead it was applied to the extension of the Admiralty Pier.

This scheme also ran in Portsmouth, Portland, and Gibraltar and would be funded by an annual loan provided by the houses of Commons. However, very quickly it became apparent that the first Loan Bill did not provide Dover with any funding at all. The government quickly realised their mistake and a statement of proposed expenditure in connection with the naval works issued by the Admiralty in March 1895 included a provision of nearly £2,000,000 for Dover. An amendment to leave this sum out of the schedule was introduced in the House of Commons on June 21st 1895 but was quickly withdrawn.

Over the next two years more estimates took place of the funding money that should be given to Dover in order to make it a more protected harbour. The original £2,000,000 quickly turned to £3,500,000 and was surprisingly met with little opposition from both the Admiralty and parliament. This money would eventually go on to be spent on extending the Admiralty Pier with a breakwater as well as constructing the Eastern Arm of the Dockyard. These newer stages of work had to be planned around the construction of the Prince of Wales Pier, the longer that these debates lasted the more substantial the pier came and the harder this was (Hasenson, 1980).

Once constructed, the Prince of Wales Pier comprised a cased framework of iron trestles and lattice girders at the landward end and a masonry jetty at the seaward end (Royal HaskoningDHV 2015). The ironwork was popular for its time and common amongst Victorian pier design. The style of the pier was recorded in newspaper in July 22nd 1893 as 'a new pier starting from an open viaduct, 1260ft long forming an agreeable marine promenade. It can be approached from the esplanade near the Granville Clock Tower' (London Illustrated News 1893). Photographs were taken throughout the piers original construction, from 1893 onwards; these can be found in **Plates 5-23**.



Plate 5- *An old steam crane working on the foundations of the Prince of Wales Pier, 1893, looking north, DHB.*

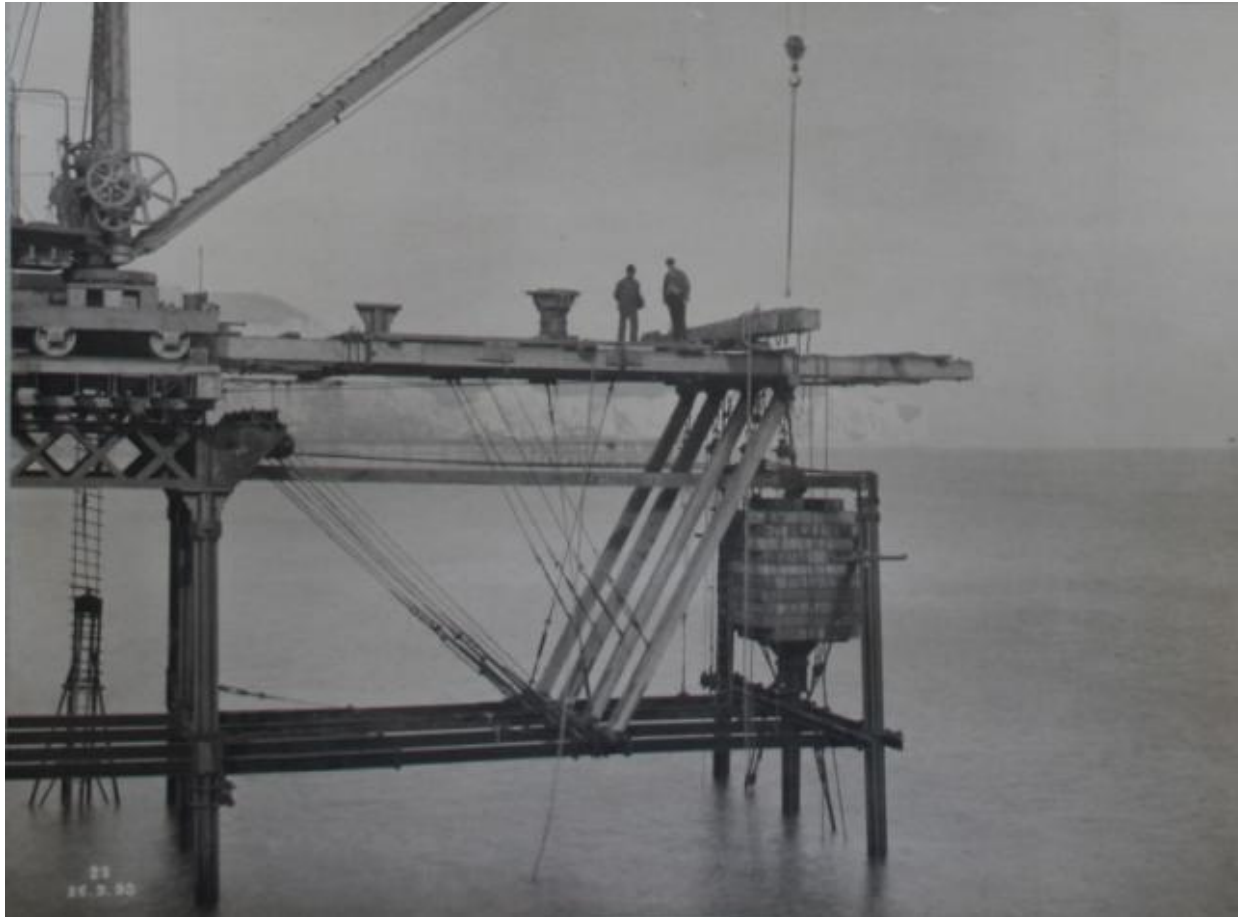


Plate 6- *An old steam crane working on the foundations of the Prince of Wales Pier, 1893, looking North, DHB.*



Plate 7- *A cold spell during the construction, the clock tower can be seen in the background, 1893, DHB.*

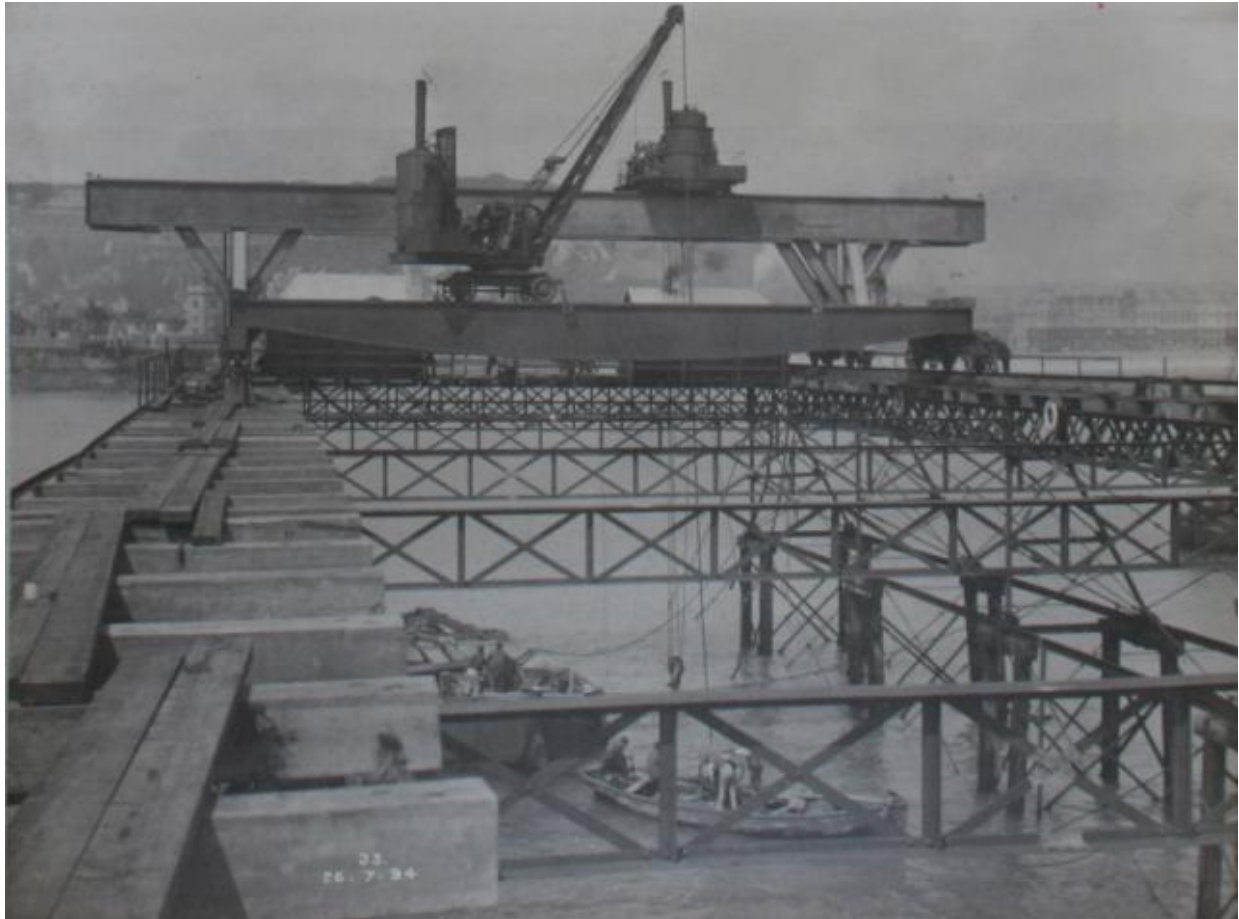


Plate 8- *Supporting framework and cranes during construction, divers can be seen on the water in small boats, 1894, looking north-west, DHB.*

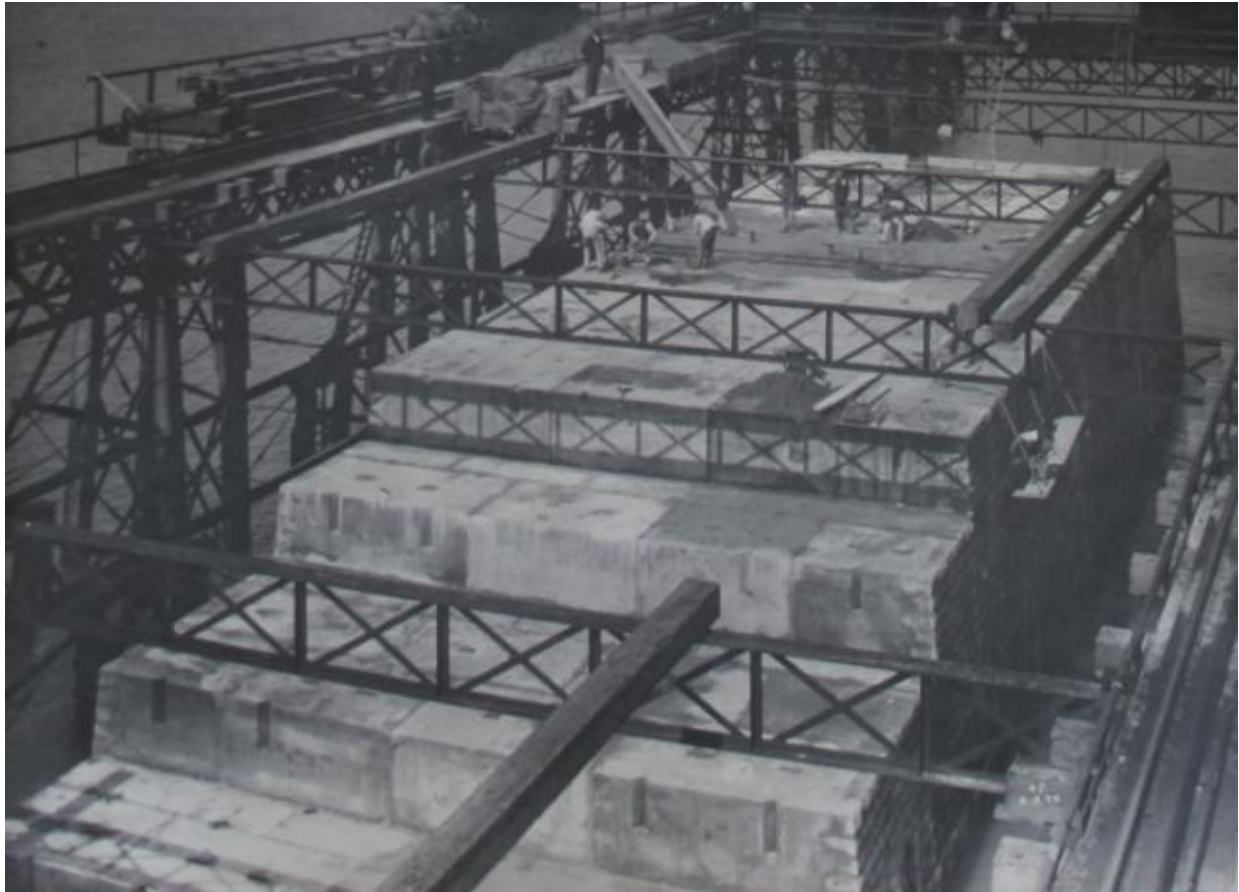


Plate 9- *The formation of the pier can clearly be seen here with the lattice structure and stones visible, c.1894, DHB.*



Plate 10- *Thought to be a diving bell to allow men to work on the sea bed c.1895, DHB.*



Plate 11- *The brick yard was being used to store materials before they were ready to be used in the construction 18/11/1895, Looking North, DHB.*



Plate 12- *The Prince of Wales Pier at a much more established condition, 1895, Looking south-east, DHB.*



Plate 13- *Some of the lifting equipment has collapsed, c.1895, Looking south-east, DHB.*



Plate 14- *A partially collapsed gangway c.1895, Looking north-east, DHB.*



Plate 15- *The finished iron structure can be seen here with some works still taking place on the pier 9/04/1897, Looking north-west, DHB.*



Plate 16- *The finished pier complete with light house at the seaward end of the pier, 20/03/1903, Looking north-east, DHB.*



Plate 17- *The seaward end of the pier looking back towards the land c.1903, Looking south-east, DHB.*



Plate 18- *The seaward end of the pier looking towards the newly constructed light house c.1903, Looking south-east, DHB.*



Plate 19- *The finished Prince of Wales Pier, officially opened in 1902, The admiralty pier can be seen in the background, c.1902, Looking south-east, DHB.*



Plate 20- *The newly completed pier and the existing clock tower, c.1903, Looking south-east, Clinton Collection Dover Museum d00616.*

There have been multiple occasions where the Prince of Wales Pier has been officially opened, this is due to different re-openings after development construction work has taken place, for example the train line being installed. On the 26 December 1902 the Dover Express released a statement announcing that the pier was officially opened to the public with the following charges to apply: '1 Person 6d, 1 Person Fishing 6d as well as admission prices, 1 Person with bathing chair 1s6d, 1 person conveying coals by cart 6d per ton of coals, those landing on the pier 3d, No one under 12 years without adult supervision' (Dover Express, 1902). It was also stated that the pier was opened on the 13th February 1903, at the cost of £600,000 with a total land reclamation estimate at 75 acres (Dover Express, 1903).

In 1905 a railway track was installed along the pier allowing an easier connection with the shipping berths; this track ran the length of the seafront and also ran across Union Street, finishing at Marine Station, now Cruise Terminal One. Images of this track can be seen in **Plates 21-23**. When the Admiralty Pier extension was completed in 1909 the Prince of Wales Pier became the inner Pier to the harbour (Hasenson, 1980).

In order to complete this installation, a section of the Esplanade Hotel, which sat at the base of Union Street, had to be demolished with the gap braced. An image of this hotel with a parade passing through it, this can be seen in **Plate 24**.



Plate 21- *The shelters which were installed on the pier to encourage those walking to look back at the harbour and the castle, the train line can also be seen c.1903, Looking north-east, DHB.*



Plate 22- *The train lines running centrally down the pier allowed passengers to directly get on or off liners when travelling c.1903, Looking south-east, DHB.*



Plate 23- *The arrangement of the train lines which connected the pier with other local stations, c.1903, Looking south-east, Dover Museum Collection d05808.*



Plate 24- *Naval Parade passing through the Esplanade hotel onto the Prince of Wales Pier, c.1920, Looking north-west, Rendle Collection, Dover Museum d28101.*

After the transatlantic trade had declined, a café was built around the base of the lighthouse at the seaward end of the Prince of Wales Pier, this was the original lighthouse included in plans dated 1893 (**Figure 14**) The lighthouse café was once described as being “the nearest Café to France”. *It stands about three-quarters of a mile out into the harbour and on a clear day you can see the coast of France less than 21 miles away.* The 1987 hurricane caused a great deal of damage to both the lighthouse and café; the Café was demolished and the lighthouse was dismantled. In total 400 granite blocks were salvaged and cleaned and numbered so that they could be reused, this was vital due to the tapered structure in its design; this numbering strategy can be seen in **Plate 25**. A new café for the Prince of Wales Pier was commissioned by Dover Harbour Board and estimated to cost around £65,000, it was single storey in height and with this allowed visitors to travel around the base of the light house. Work started in January 1989 and was due for completion in July of the same year. It was officially opened by the town Mayor at the time, Councillor Bill Newman on August 7th 1989 and ended up costing around £70,000 (Dover Ferry Photos, 2012).



Plate 25- *The reconstruction of the clock tower with visible numbering, 24/7/1988, Looking south-east, DHB.*

The first ever cross-Channel hovercraft flight was made in 1959 in a prototype vessel created by Charles Cockerell, crossing between Dover and Calais in 2 hours and 3 minutes. By 1968 the first Hoverport was open at Dover and situated on the Eastern Docks. This new way of travel captured public excitement for travel and by 1979 the Eastern Hoverport was in such high demand it was decided by the Dover Harbour Board to open another on the Western Docks. This was opened in July 1978 with only one craft being fully functioning at the time. One was awaiting maintenance, another two had yet to arrive from France and the final had been destroyed by a recent unfortunate fire. With the reclamation works that took place in order to open this new structure the original lattice framework from the Pier was buried inside the newly built Hoverport apron (Leach, 2006).

A solid sheet pile section, which is visible today, was installed and this forms the basis of the Prince of Wales pier currently. Although much controversy surrounded the changes to the Prince of Wales Pier, the added supports were vital to the longevity of the structure. In its condition at the time the Prince of Wales Pier would have failed under the weight of the new development and more of the protected structure would have been lost. With the



development, the original structure was encased rather than removed. Images from the construction of the Hoverport can be found in **Appendix 002**.

The new Hoverport opened on the 4th of July 1978 and ran for 22 years until the 1st of October 2000 when a change in duty free laws resulted in higher prices for tickets and demand fell (Doverport.co.uk, 2015), this combined with the popularity of the Channel Tunnel and high maintenance costs on the crafts themselves led to the decline and redundancy of the Hoverport. To mark the end of an era the last hovercraft to cross the channel was beached outside the, then, Churchill Hotel, where the first craft initially landed in 1959. The day after the last hovercraft ran the Seacats moved into the sites and ran a very similar style of transport across to Calais, carrying more passengers and cars. This ran from site from 2000 until 2004. In February 2007, SpeedFerries signed a lease on the former Dover Hoverport, though not including the terminal building, at Dover's Western Docks and subsequently moved operations there in March 2007. Once the move was achieved, SpeedFerries was able to provide exclusive facilities in both of its ports as it no longer shared them with other operators (Customer Newsletter, 2007). SpeedFerries went into administration on the 13th November 2008, with a subsequent closure notice issued on the 28th of November, this resulted in them leaving the site of the Hoverport shortly after (BBC News, 2008). Buildings which remained on the site which were not in use saw demolition take place in 2009, ready for the new Harbour development scheme.

The Hoverport complex covered approximately 15,000m² and was formed by the main terminal building, a number of smaller subsidiary buildings, a car park and a concrete apron which ramps down to the sea. The main building was formed of steel and concrete framework with a red brick entrance. The apron, where the crafts would undergo maintenance as well as berthing on land was created on reclaimed land; made possible by infilling the space with sand taken from the Goodwin Sands. The concrete which forms the apron is made from pre cast concrete slabs which fit together in a staggered pattern. The Hoverport and the buildings associated with it were investigated for possible listed status by Historic England in December 2009 but it was decided against as it does not show architectural merit in its own right (List.historicengland.org.uk, 2015).

The Pier was listed on the 1st of December 1975 and recognised for the design work that was completed by Sir John Coode, arguably the most distinguished harbour engineer of his time. It was also noted that the Pier itself is largely intact with end light house, cleats and steps, iron railings and lamp standards; collectively they form of a group of designated structures in the harbour. The shelters and café are not of a specialist interest within this listing as they were added to the structure much later (List.historicengland.org.uk, 2015).

Currently sections of the pier are being reduced in height as part of the DWDR works. The height reduction has uncovered different stages of the piers past, including the time capsule



which was buried alongside the first stone, as well as what is left of its Victorian Lattice Structure form. Images of these details can be seen in **Section 7, Plates 52-66**.

5. Construction Details

The following information has been taken from the Listing Description specified by Historic England, as recorded in 10 June 2009, and details information on materials as well as construction prior to current works for DWDR commencing.

The pier is 2,910 feet long; the entrance section and seaward half constructed of stone with granite coping, the intermediate part constructed on a framework of cast iron trestles on screw piles with lattice girders, but this has been concealed under later C20 concrete on the western side and under later piling on the eastern side.

The curved entrance section at the landward end is constructed of stone, with granite coping and cast iron railings. These have ornate end piers with rosette decoration and knops, simpler intermediate posts and horizontal rails. The cast iron pedestrian and vehicle gates at the landward end are of later C20 date, in traditional style. On the north east side of the landward half are the original railings and thirteen cast iron lamp standards bearing the shield of Dover Harbour Board, and shafts with bulbous bases bearing anthemion decoration.

The north part of the western side of the pier is now concealed behind reclaimed land of the former Hoverport Terminal, and the original railings have been replaced by tall concrete panels. At the start of the eastern half of the pier is a granite plinth; the base and moulded cornice of white granite, the rest of pink granite, with a panel commemorating the opening of the pier with names of the engineers and contractors and members of the Dover Harbour Board. Along the eastern half of the pier, the stone structure with granite coping is visible on both sides and end. There are a further thirteen lamp standards. The seaward end terminates in a circular end with a flight of granite steps, and some cast iron cleats supporting a painted granite tapering lighthouse with moulded plinth, moulded cornice with handrail and cylindrical lantern surmounted by metal weathervane.

6. Pre- Height Reduction Works Condition

In 2012 Dover Harbour Board commissioned Atkins Limited to conduct an inspection and structural appraisal of the marina walls located in the Western Docks. The resulting Asset Management Structural Integrity Surveys (AMSIS) were completed in January 2014 and provide the most recent condition appraisal of all Western Dock marina walls. Two different reports were created for the Prince of Wales Pier as it is such a large and detailed structure, the sheet piling landward section (2014a) and the masonry seaward end of the pier which has



the lighthouse and café (2014b). Information from the AMSIS reports has been combined with recent photographs and information collected during site visits by DHB staff to provide an overview of the nature and extent of the current structures and their overall condition.

Plates 26-43 demonstrate the form of the Prince of Wales Pier, before the height reduction works commenced. Further photographic recording can be found in the Level 1 Heritage Recording of the Prince of Wales Pier produced by Dover Harbour Board (2016). **Figures 24-26** in **Appendix 001** are plans which show the layout as to where the current images were taken. This drawing had to be split into three different images in order to make them accurate and readable.

The AMSIS report (2014A) provides a detailed description of the construction details derived from site observations and archive drawings provided to Atkins by DHB. These drawings of the sheet pile section of the pier, the landward end, are included in **Appendix 001** as follows:

DHB Dwg No	Description	Author	Date	App 001 Fig No
15824	Steel Sheet Pile Details	DHB	27/11/1975	49
15825	Coping Details	DHB	20/11/1975	48
15827A	Western Docks. Hovercraft Apron. Steel sheeting piling general arrangement	DHB	21/11/1975	46
15828A	Details of access ladders and balustrading to Prince of Wales Pier	DHB	24/11/1975	47
15837B	Services-water	DHB	05/12/1975	50
15840A	Details of Access Ramp	DHB	04/12/1975	
15871	Prince of Wales Pier capping reinforcement details	DHB	29/04/1975	55
16277	Proposed precast concrete windwall panel details	DHB	1976	52
16281B	Revised detail of South end	DHB	30/09/1976	53
16405A	Revised details of pits and ducts required at south end of POWP diversion	DHB	08/02/1977	57
16411	POWP Entrance Details Sheet One	DHB	14/02/1977	58
16425	Windwall panel detail	DHB	11/1976	59
16663	Slab details at junction of old and new POWP	DHB	12/07/1977	60
16690	RC Windwall Detail	DHB	01/12/1977	61



The AMSIS report (2014B) provides a detailed description of the construction details derived from site observations and archive drawings provided to Atkins by DHB. These drawings of the sheet pile section of the pier, the landward end, are included in **Appendix 001** as follows:

DHB Dwg No	Description	Author	Date	App 001 Fig No
1535	General details of masonry	DHB	01/05/1892	9
1536	Details of concrete blocked with granite	DHB	01/05/1892	10
1537	Details showing junction with viaduct	DHB	01/05/1892	11
1538	Details of parapet	DHB	01/05/1892	12
1539	Plan and elevation	DHB	01/05/1892	13
1540	Details of head and lighthouse	DHB	01/05/1892	14
1541	Modified arrangement of foundations	DHB	03/02/1894	15
1542	Modified arrangement of incline and roadway	DHB	01/11/1896	18
1543	Details of fendering berths and boat ladders	DHB	01/11/1896	19
1544	Details of lamps, bollards, permanent way and hydrants	DHB	01/11/1896	20
1545	General arrangement of landing stage	DHB	01/11/1896	21
1546	Details of landing stage	DHB	01/11/1896	22
1547	Details of landing stage	DHB	01/11/1896	23
1548	Details of steps	DHB	11/06/1895	25
1549	Plan and cross sections of works in progress and in contemplation	DHB	06/05/1897	26
1550	Plan and cross section of east pier	DHB	26/04/1897	27
1552	General plan	DHB	09/03/1898	28
1553	Plan and cross section of east Pier	DHB	01/04/1899	29
1554	Details of granite in lighthouse	DHB	01/04/1899	30
1555	Proposed apron to protect footings	DHB	01/04/1899	31
1556	Plan and longitudinal section	DHB	01/04/1908	34
1557	Proposed landing stage	DHB	14/05/1909	35
6554	General plan of solid portion	DHB	1932	36
6555	Elevation of solid portion	DHB	1933	37
6560	Prince of Wales Pier Plan	DHB	14/07/1950	38
6562	Cross section at seaward end	DHB	27/09/1950	39
6570	Arrangement for royal visit of June 1957	DHB	10/04/1958	40
6572	Plan of the pier head and elevation of the lighthouse	DHB	27/05/1958	41

DHB Dwg No	Description	Author	Date	App 001 Fig No
7434	Prince of Wales Pier Plan	Unknown	05/03/1907	32
7766	Solid portion of East pier	Unknown	Unknown	33
7767	Solid portion of East pier foundation	Unknown	01/09/1884	16
7768	Solid portion of East pier foundation plan	Unknown	01/09/1895	17
7769	Foundation of solid portion of the East pier	Unknown	01/06/1897	24
7770	Solid portion of East pier	Unknown	01/09/1894	42
9675	Prince of Wales pier plan	DHB	08/07/1963	43
15871	Prince of Wales Pier capping reinforcement details	DHB	29/04/1976	55
15984	Hovercraft apron adjacent6 mass concrete section	DHB	02/04/1976	51
16277A	Precast concrete windwall panel details	DHB	23/09/1976	56
16281	Revised detail of south end	DHB	30/09/1976	
16640	Tide gauge installation	DHB	Unknown	54
16689	Windwall panel detail	Dean Jesmond and Co	01/12/1977	63
16690	Unit details DB1 and EP2	Dean Jesmond and Co	01/12/1977	64
16691	Unit Details	Dean Jesmond and Co	19/10/1977	65
18053	Datum and cross section	DHB	17/06/1980	66

The AMSIS report describes the construction of the masonry, seaward end, of the Prince of Wales Pier as follows:

The structure consists of numerous unreinforced mass concrete blocks, placed into the chalk bed and rising for 17 courses to deck level. The mass concrete blocks are typically one of two sizes and are staggered. The outer layer of concrete blocks is keyed.

The construction of the quay wall is shown in **Plate 26**, comprising of a mass concrete wall with mass concrete fill and embedded rock armour protecting the wall at bed level.



6.1 Above Water Inspection of Sheet Piling Section

The above waterline visual inspection of asset reference P07-WA16 was conducted on 13/03/13 by Atkins staff, with the aid of Port of Dover pilot boat Dianna and crew. The inspection was conducted with the collation of photographic and video records and notes recorded at 10m intervals:

From drawing records obtained from DHB, the construction of asset P07-WA16 consists of Larssen 4A's and 5's steel sheet piles on the East and Western side of the pier which is tied near to the top and bottom of the structure. Ballast fill was placed behind the steel piled walls with two tiers of tie rods connecting the Eastern and Western pile lines. On the top tier tie rods are located every 6th inpan, and tie rods located on the bottom tier are present every 2nd inpan. Every other inpan has a bolted connection to a waling located behind the pile line which stiffens the pile line. The top waling, bolts and row of tie rods are shown at a level of 8.61mCD, and the bottom waling, bolts and row of tie rods are shown at a level of 2.820mCD. Approx.1m thick reinforced concrete transverse beams span between the Eastern and Western piles at 5m centres which forms part of the deck. The deck itself is constructed using reinforced concrete and is only 0.5 thick.

This recording started on the shore on the Eastern side of the pier and moved along the side until it reached the start of the masonry section. The Western side of the sheet section of the pier could not be investigated as it is encased within the Hoverport development.



Plate 26: Sea wall and entrance ramp to the Prince of Wales Pier, looking West. Atkins 2014A: 100.



Plate 27: *The point where the masonry work ends and the iron sheet piling begins on the East side of the pier, some sheet piling can also be seen at beach level, looking south-west, Atkins 2014A: 98.*



Plate 28: *Sheet piling on the Eastern side of the Prince of Wales Pier, looking south Atkins 2014A: 91.*



The Atkins report continues:

[At the start of the survey] the steel sheet piled wall arrangement abuts the existing mass gravity wall structure. Drawing records show that the steel sheet pile line continues through the existing pier structure, however this appears to not be the As-Built condition.... The pile line appears to have been cut to suit the shape of the existing wall with mass concrete fill in behind.... The pile line changes direction here and tie rods located at every third inpan on the top and bottom line connect towards the Western pile line. Additional tie rods are also located on every fourth inpan on the top and bottom. These tie rods appear to span in a North to South direction which would indicate that they may connect to a dead man anchor wall behind the pile line. Bolts for waling's are located at this section of the pile line. It was recorded that 3No. Predrilled holes were located on the top tie rod line which has been left open, there is also no sign of backfill material behind the pile line.

It was also noticed that a steel bar connects from the hand railing to the steel sheet piles; it is thought that its purpose is to earth the hand railing to the steel piles given the electrical services that are located nearby on the topside (Atkins 2014A).



Plate 29: *The connecting junction between the sheet piling and the masonry section of the pier, the piles change direction here, looking West, Atkins 2014A: 61.*

6.2 Above waterline inspection of Masonry Section

The above waterline visual inspection was conducted in May and August 2013: *A section of the masonry portion of the pier is restricted by the former catamaran berth (Plate 30) also with a large section on the Western side being encased and blocked by the Hoverport development. Throughout this section there is a barbed wire fence approximately 3m high along the cope with a concrete parapet wall behind approximately 1m high with a safety chain over.*

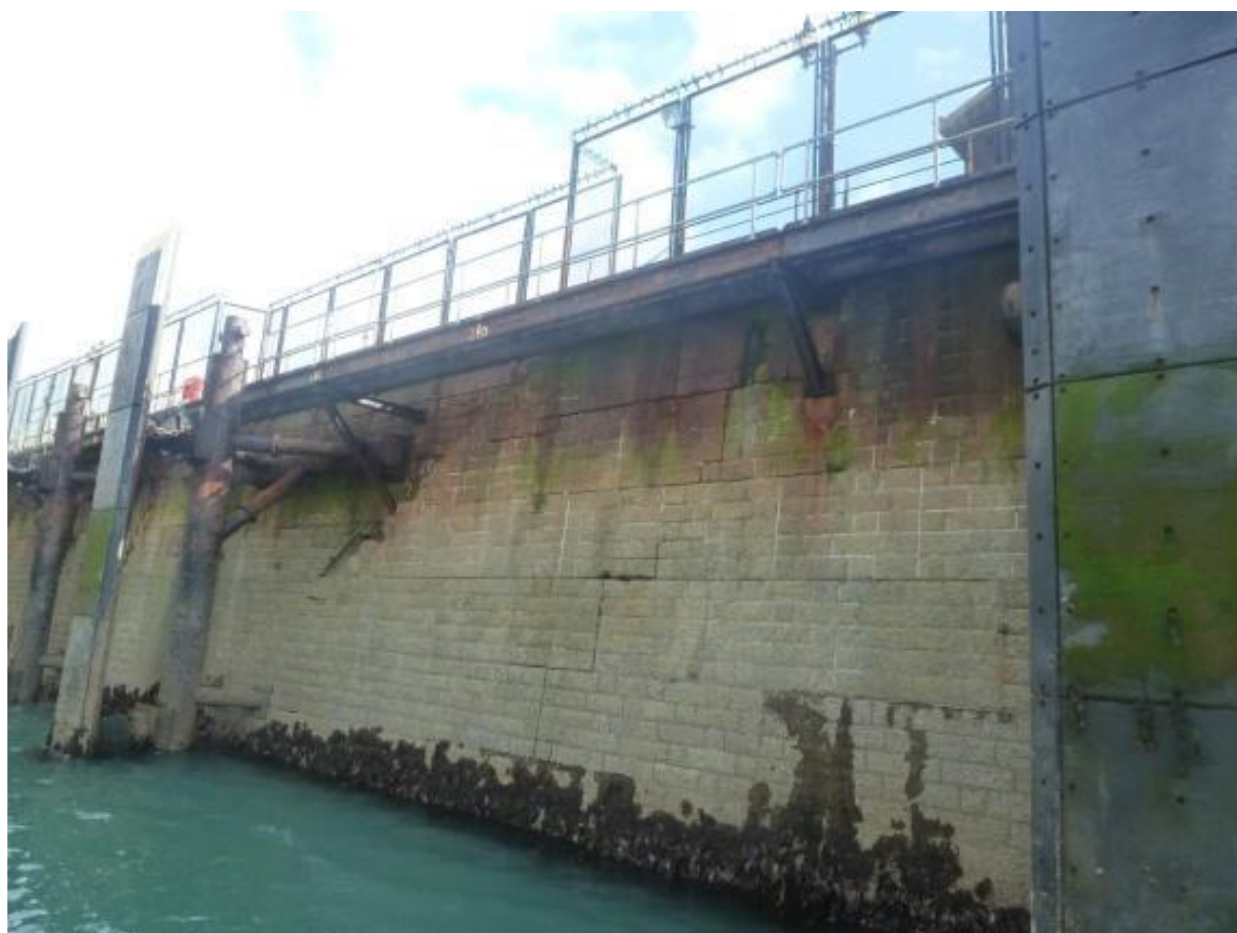


Plate 30: *View of the masonry section behind the disused catamaran berth, Atkins 2014B: 28.*



Plate 31: *Two stairways which have been chained off leading down to a no longer used stage landing, Atkins 2014B: 30.*



Plate 32: *Recesses of previous timber fenders, no longer in use, Atkins 2014B: 32.*



Plate 33: *The side view of the roundhead seaward ending of the pier, with a galvanised steel hand rail, looking North, Atkins 2014B: 34.*



Plate 34: *Low water at time of recording shows a step at the base of the pier, plans show that this form is present throughout the masonry section of the entire pier, Atkins 2014B: 35.*



Plate 35: *General view of the masonry section of the Prince of Wales Pier, looking East, Atkins 2014B: 9.*

6.3 Topside Inspection

The topside survey of asset reference P07-WA16 was conducted on 18/02/13 and 19/02/13 by Atkins staff. Photographic records along with measurements of defects were recorded at 10m sections. Records of the findings along with commentary of defects present can be reviewed in the original report.



Plate 36: The Entrance to the Prince of Wales Pier, Looking South, 02/09/15, DHB.



Plate 37: The plaque commemorating the foundation stone laid in 1893 by the Prince of Wales, 02/09/15, DHB.



Plate 38: One of the original lamp post bases from c.1900, 02/09/15, looking North, DHB.



Plate 39: *The windbreaker wall with added windows, this shows views of the Hoverport Apron, 03/09/15, looking South, DHB.*



Plate 40: Looking back towards the landward end of the pier and the entrance, looking north-west, Atkins 2014A: 46



Plate 41: Concrete shelters, added alongside the Hoverport developments, 04/09/15, looking south-east, DHB.



Plate 42: *Looking back towards the landward end of the pier, also with the Hoverport to the left, looking West, Atkins 2014B: 17.*

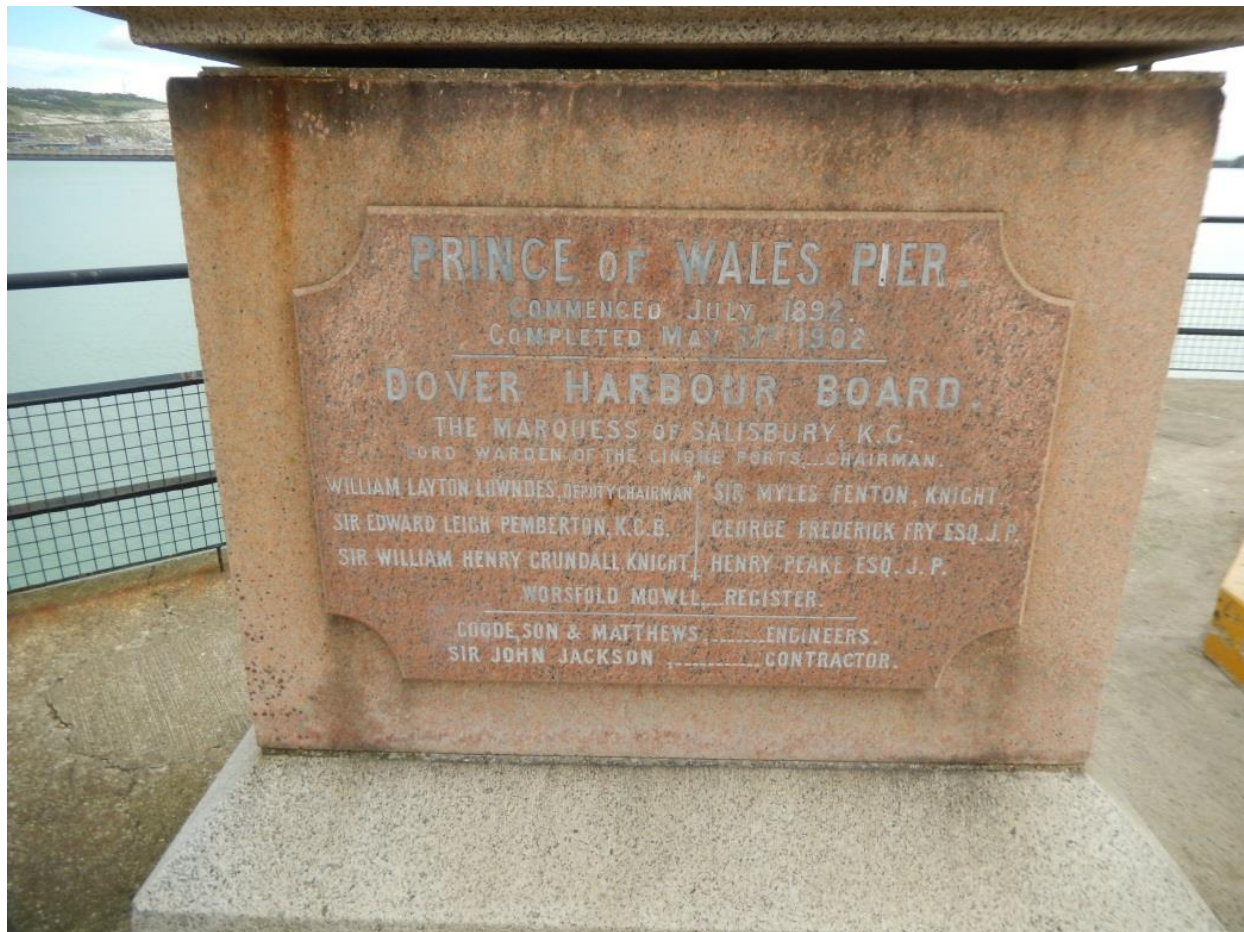


Plate 43: A memorial to those who helped design and construct the pier in 1893, 04/09/15, looking south-east, DHB.



Plate 44: Concrete shelter to the left hand side of the Prince of Wales Pier, The Hoverport can be seen on the left and Waterloo Crescent on the right, 08/09/2015, looking north-west, DHB.



Plate 45: View looking seaward down the Prince of Wales Pier, towards the lighthouse, 09/09/2015, DHB.

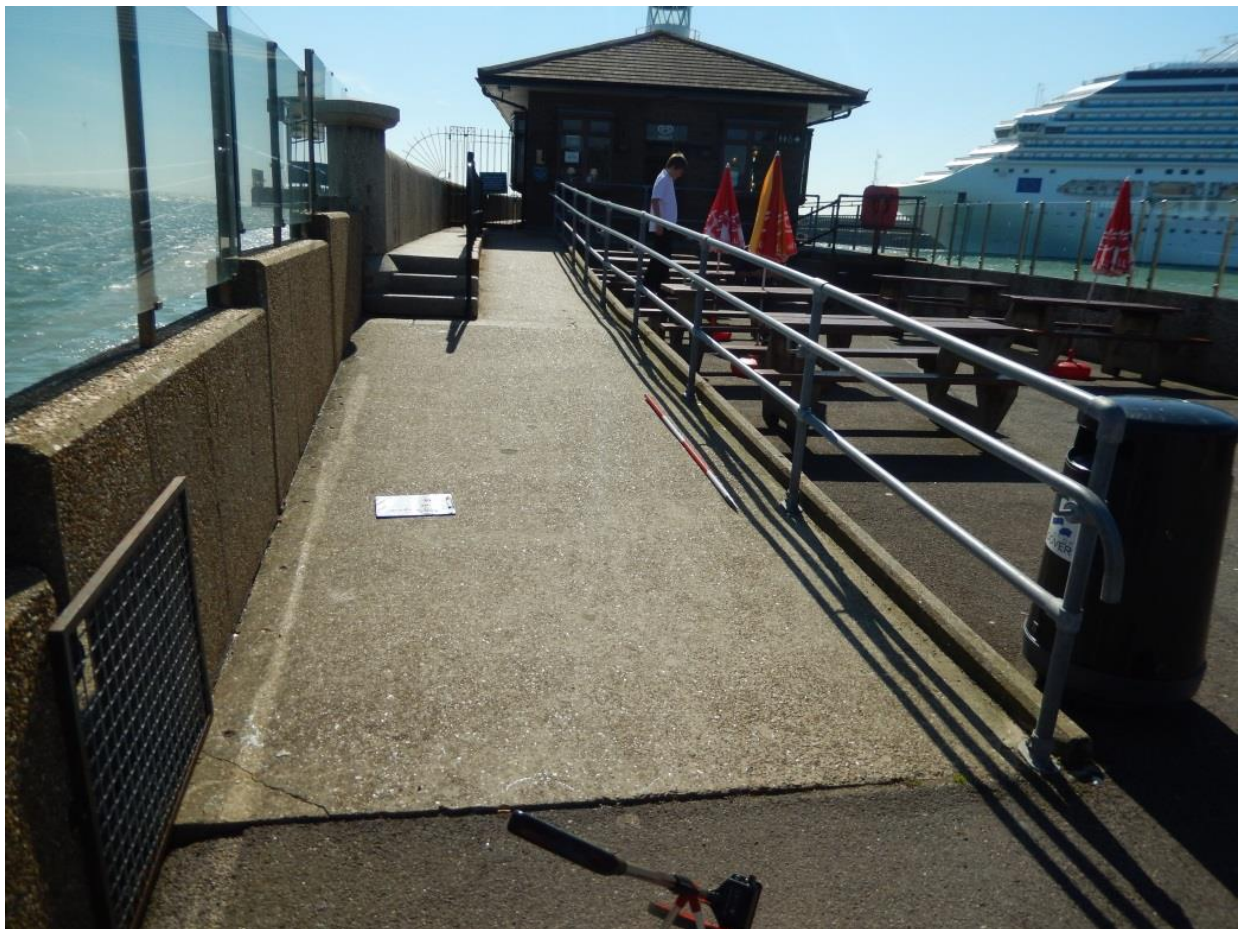


Plate 46: The current café present on the end of the Prince of Wales Pier, looking South-East, 10/09/2015, look south-east, DHB.



Plate 47: *The side of the café present on the pier looking landward, looking West, Atkins 2014B: 21.*



Plate 48: *A stepped recess which is no longer in use as a suspended masonry deck has been added over the top of it, looking North back at the side of the pier, Atkins 2014B: 21.*



Plate 49: Roundhead stone at the end of the pier, also the supporting foundations for the lighthouse formed of granite blocks, Atkins 2014B: 21.



Plate 50: *The view approaching the lighthouse and the roundhead, looking south-east, Atkins 2014B: 21.*



Plate 51: *Detail of The lighthouse no the end of the Prince of Wales Pier, 10/09/2015, DHB.*

7. Discoveries during Height Reduction Works

During the height reduction works elements of the historic structure have been revealed. These are described below. The buried time capsule in the foundation stone, laid by the Prince of Wales in 1893 (**Plate 4**) was uncovered during the height reduction works on the 25th of July 2016. Unfortunately all that remained of the buried items were the glass jars that they were encased in, with the coins and newspaper clippings gone. The plaque that once covered the capsule was also discovered. Due to the nature of the disturbance, it is concluded that this damage occurred during the construction of the hoverport.

On the discovery of the time capsule it was discussed with the HSG that time capsule will be stored and addressed through the schedule for the relocation of pier furniture with a view to creating a new time capsule including the artefacts and new additions to be reburied within the DWDR scheme. The following plates detail the site of which the time capsule was found as well as the associated plaque.



Plate 52: Image showing the context of where the time capsule was found, 2m Scale, looking south-east, 27/07/2016, DHB.



Plate 53: Image showing the context of where the time capsule was found, 2m Scale, looking south-east, 27/7/2016, DHB.



Plate 54: Granite block that would have held the time capsule, the commemorative plate would have fit into the rectangular slot on top,, 2m Scale, 27/7/2016, DHB.



Plate 55: *Detail of the granite housing that held the time capsule, 27/7/2016, DHB.*



Plate 56: *The position of the infilled granite time capsule, looking West, 29/7/2016, DHB.*



Plate 57: *The front of the plaque laid by the contemporary Prince of Wales in 1893, DHB.*



Plate 58: *The back of the plaque laid by the contemporary Prince of Wales in 1893, DHB.*



Plate 59: A detail of the date on the plaque laid by the contemporary Prince of Wales in 1893, DHB.

Also found during the height reduction works were the remains of some of the original iron pier structure, built between 1893 and 1902. They appear to be what is left of the pile foundations with the top of them being rediscovered, 11 have been found. As well as this there was a the connecting joist found, that would have connected the land as an extra brace to the newly built iron structure. This join would have a given the materials used to build the pier a slightly reduce rigidity allowing it to move slightly and then settle in a position.

The following images show both the iron pile elements as well as the bracing joist.



Plate 60: *One of the original pile foundations for the Prince of Wales Pier, 14/10/16, DHB.*



Plate 61: *One of the original pile foundations for the Prince of Wales Pier can be seen in the foreground, with the context of the Lord Warden House, looking South, 26/10/16, DHB.*



Plate 62: *One of the original pile foundations for the Prince of Wales Pier, 26/10/16, DHB.*



Plate 63: Three of original pile foundations for the Prince of Wales Pier in context with one another, highlighted in red, 26/10/16, DHB.



Plate 64: Three of original pile foundations for the Prince of Wales Pier, highlighted in red, 26/10/16, DHB.



Plate 65: *The position of the remaining connecting joist, looking North, 28/7/2016, DHB.*



Plate 66: *The position of the remaining connecting joist, looking West, 2m Scale, 28/7/2016, DHB.*



Plate 67: *The remaining connecting joist, looking West, 28/7/2016, DHB.*



Plate 68: *The remaining connecting joist, looking West, 2m Scale, 28/7/2016, DHB.*



Plate 69: A detail of the remaining connecting joist, 28/7/2016, DHB.

Due to this item not being listed it was decided it was left in situ but recorded by photographic evidence. The joint was covered in plastic sheeting and buried in sand like the rest of its surrounding area. It will be uncovered again in a later stage of the works with the possibility of removing it then following further consultation with the HSG.



8. Conclusions and Recommendations

This desktop study details the development of this area known as the Prince of Wales Pier from its earliest origins in the nineteenth century to the present day. This provides a detailed historic record ahead of planned reclamation and demolition works.

In 1975 the decision was made by English Heritage to list the Prince of Wales Pier, this was then amended in 2009, the reasons for the listing are the following:

- The original pier structure was designed by, considered the most distinguished harbor engineer of his time, Sir John Coode in 1890-1892, and then completed by his sons after in death.
- The pier is considered 'large and handsome', standing at 2.910 feet in length being partially constructed by stone and partially from a cast iron lattice structure of pile foundations.
- Although changed throughout the years, the railings, lamp standards, lighthouse and remaining shipping berths were included in the list description.
- Forms part of a group of listed structures in the Western Harbour.

The Prince of Wales Pier has a strong presence amongst the old pier district in the Western side of the Harbour. However, the majority of assets that were once considered the most historically important of the listing have not been visible since the Hoverport Development in 1978. Based upon the significance of the pier, as well as other reports which have been created concerning the listed structure, the level of existing information as presented through this desktop study is expected to be sufficient to provide a record of the impacted structures prior to the commencement of works. This will be confirmed through consultation with the HSG and details of this consultation will be included in the final draft of this study. Ultimately this Desktop Study will form part of the DWDR archive and will be made publically available.



9. References

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10. Appendices

Appendix 001 – Figures

Appendix 002- Hoverport Images 1977

Appendix 001 – Figures

**This document is to be read in conjunction with the Prince of
Wales Pier Desktop Study**

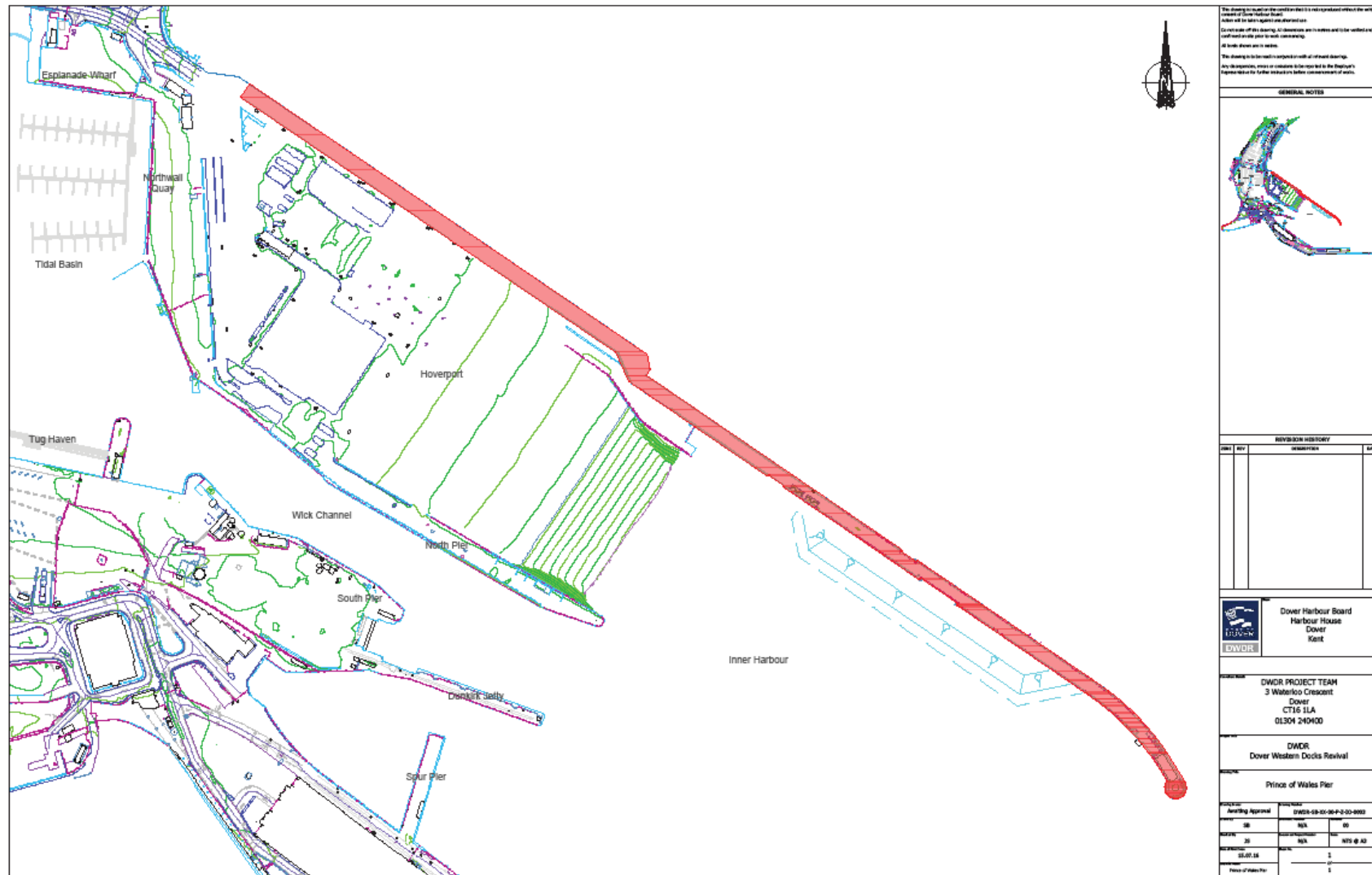


Figure 1: DWDR Project Office, Location of the Prince of Wales Pier within the Western Docks.

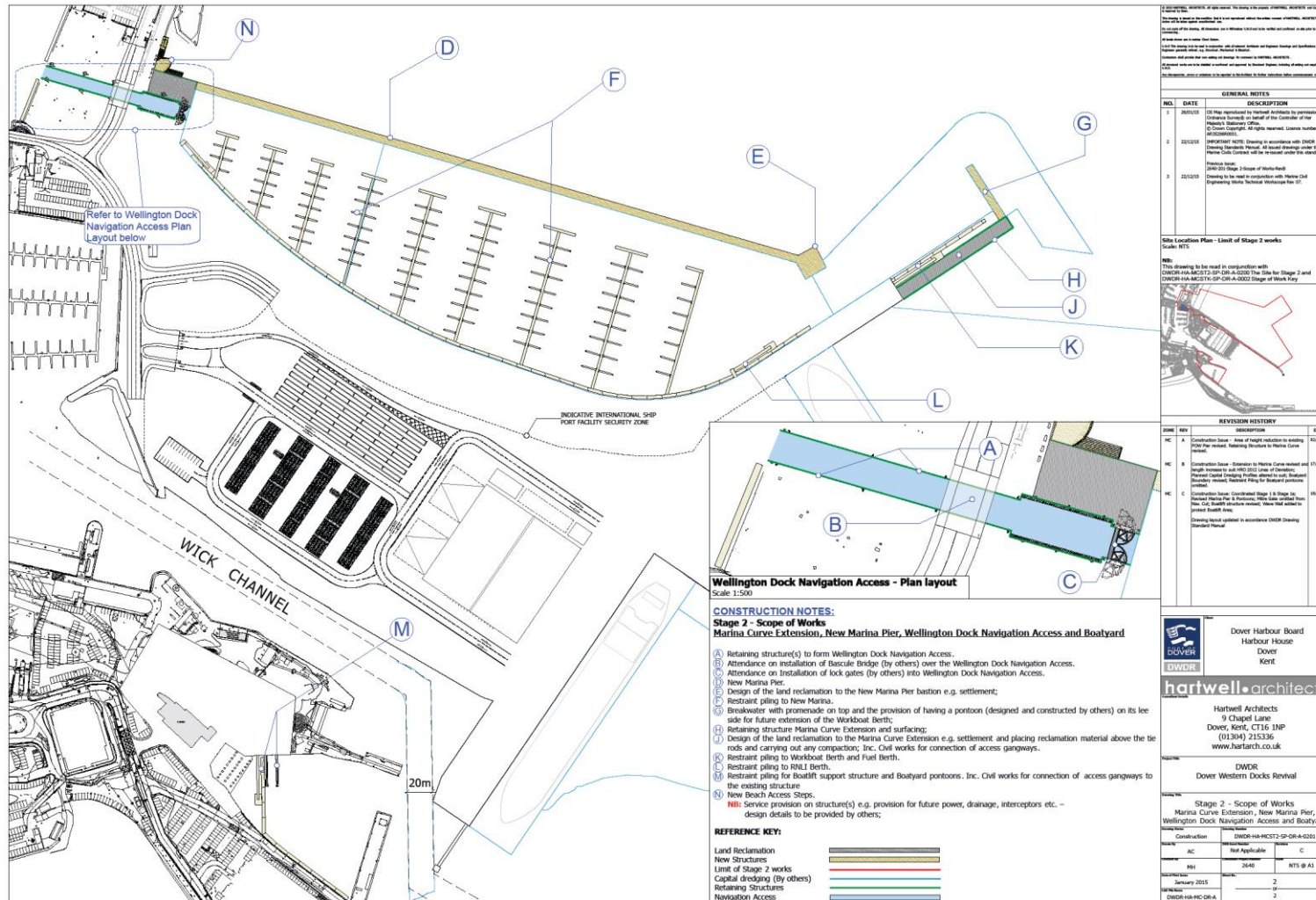


Figure 2: DWDR Project Office, Scope of Works for DWDR Stage Two, 2015.



Figure 4: *The Haven of Dover, c1530, Kent History and Library Centre, DHB/P141/1.*



Figure 5: British Library, *State of Dover Haven* by Thomas Digges, 1582, © The British Library Board, Cotton Augustus I.i, f.45



Figure 6: British Library, *State of Dover Haven* by Thomas Digges, 1595, © The British Library Board, Cotton Augustus I.i, f.46

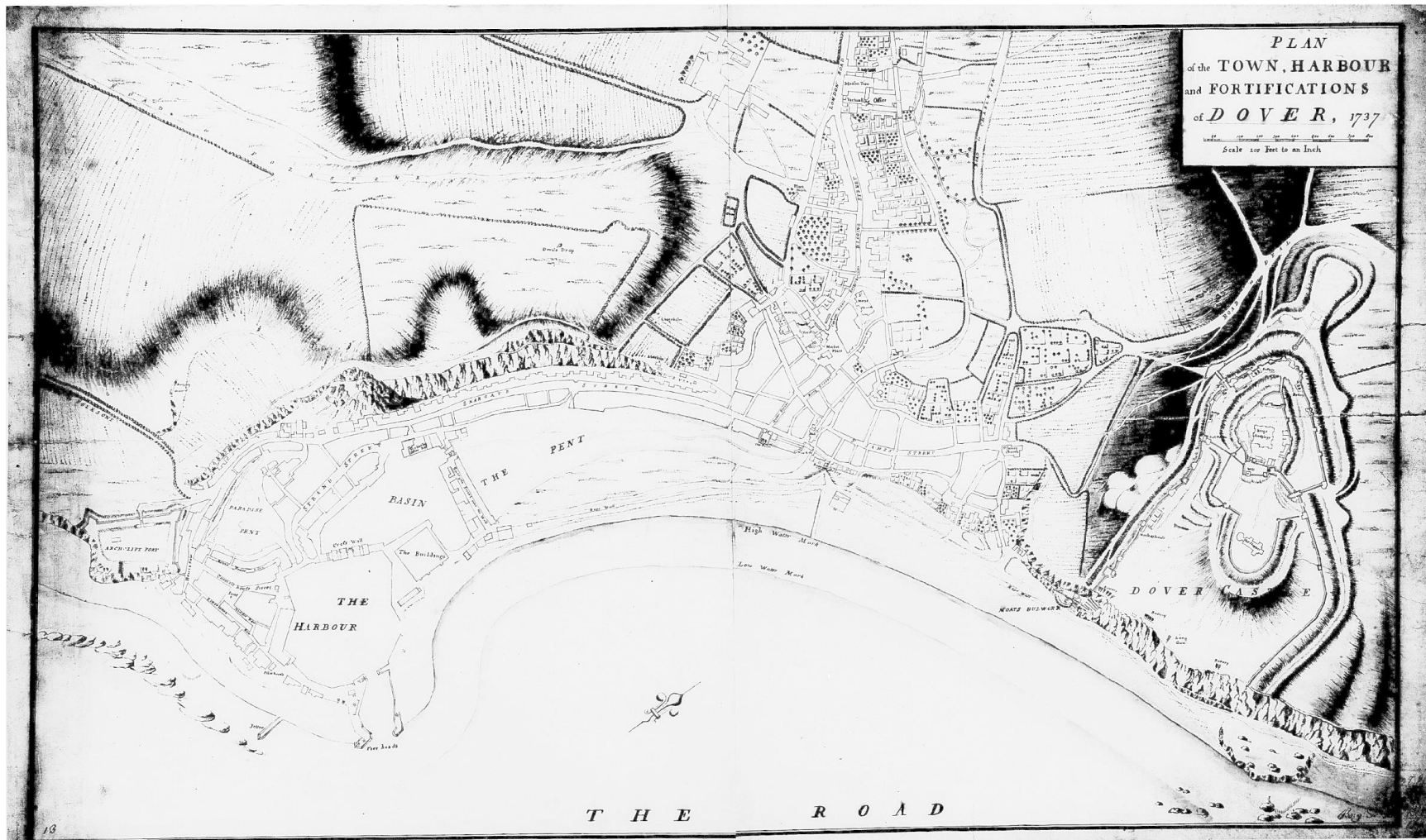


Figure 8: Town Harbour and Fortifications, c.1737, Dover Harbour Board Archives, Location- Strong Room.

Figure 9: Solid Portion of the East Pier, General Details of Masonry, May 1892, DHB Historical Drawings Archive Ref; 1535.

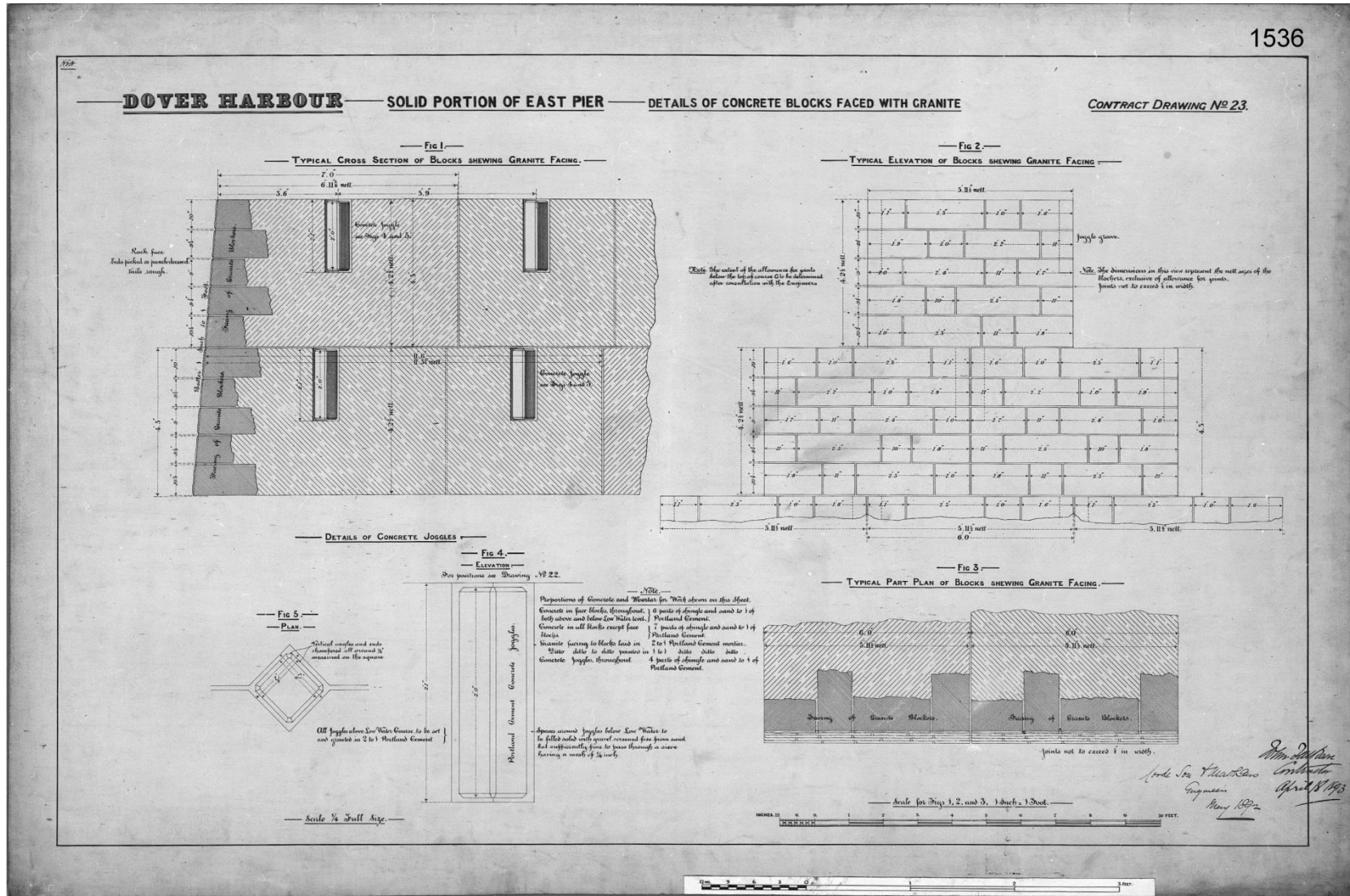


Figure 10: Solid Portion of the East Pier, Details of Concrete Blocks Faced with Granite, May 1892, DHB Historical Drawings Archive Ref; 1536.

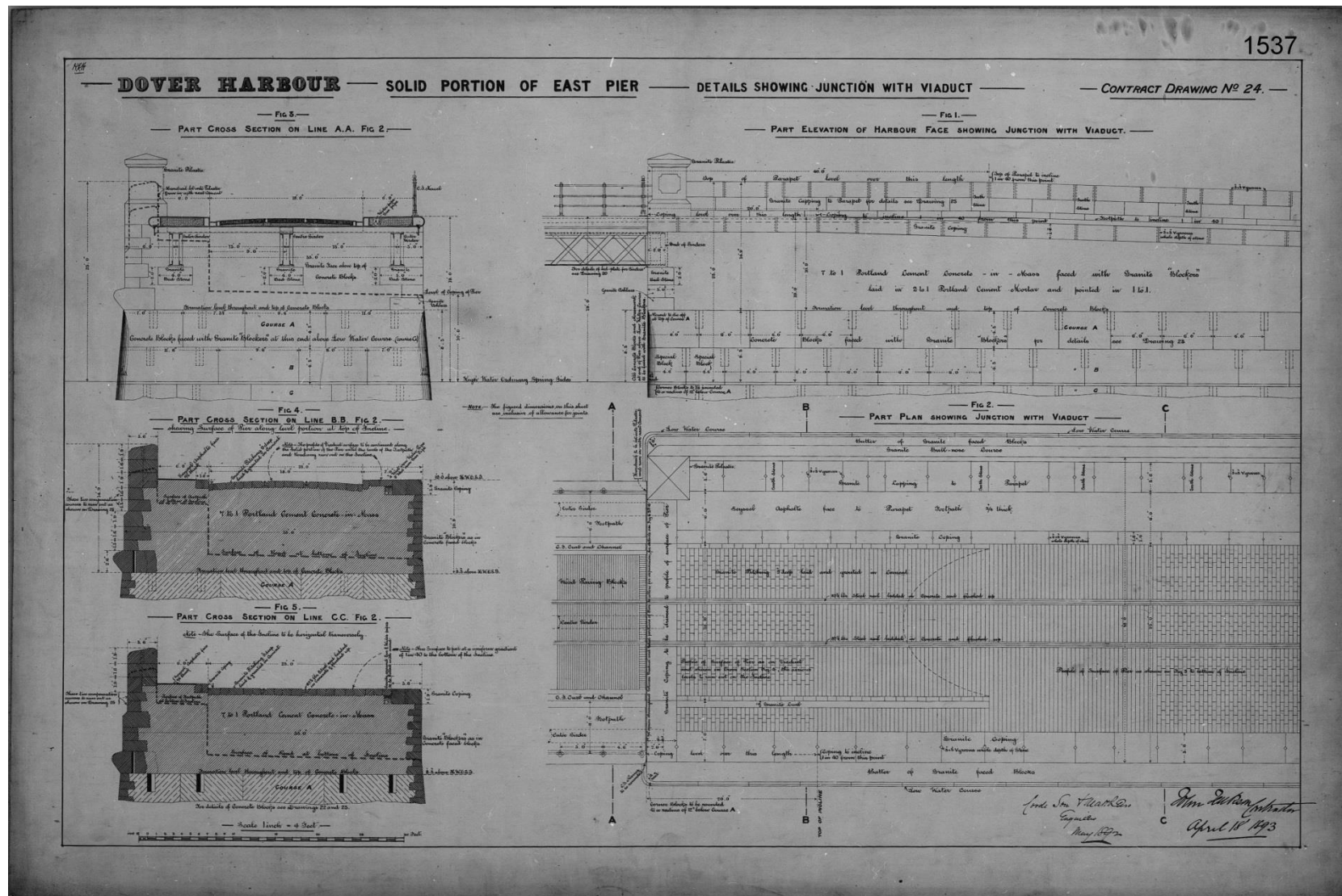


Figure 11: Solid Portion of the East Pier, Details showing junction with viaduct, 01/05/1892, DHB Historical Drawings Archive Ref; 1537.

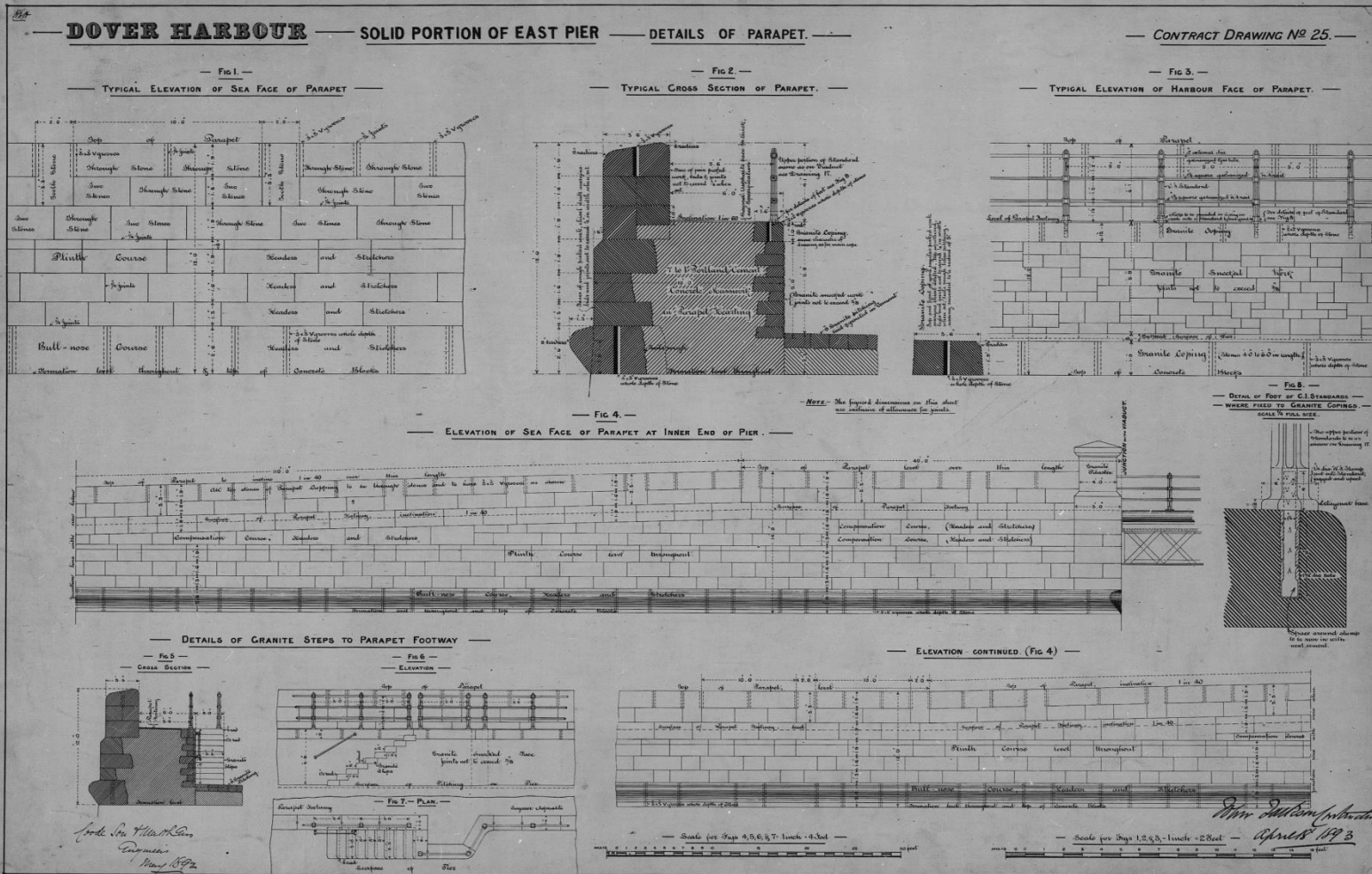


Figure 12: Solid Portion of the East Pier, Details of parapet, 01/05/1892, DHB Historical Drawings Archive Ref; 1538.

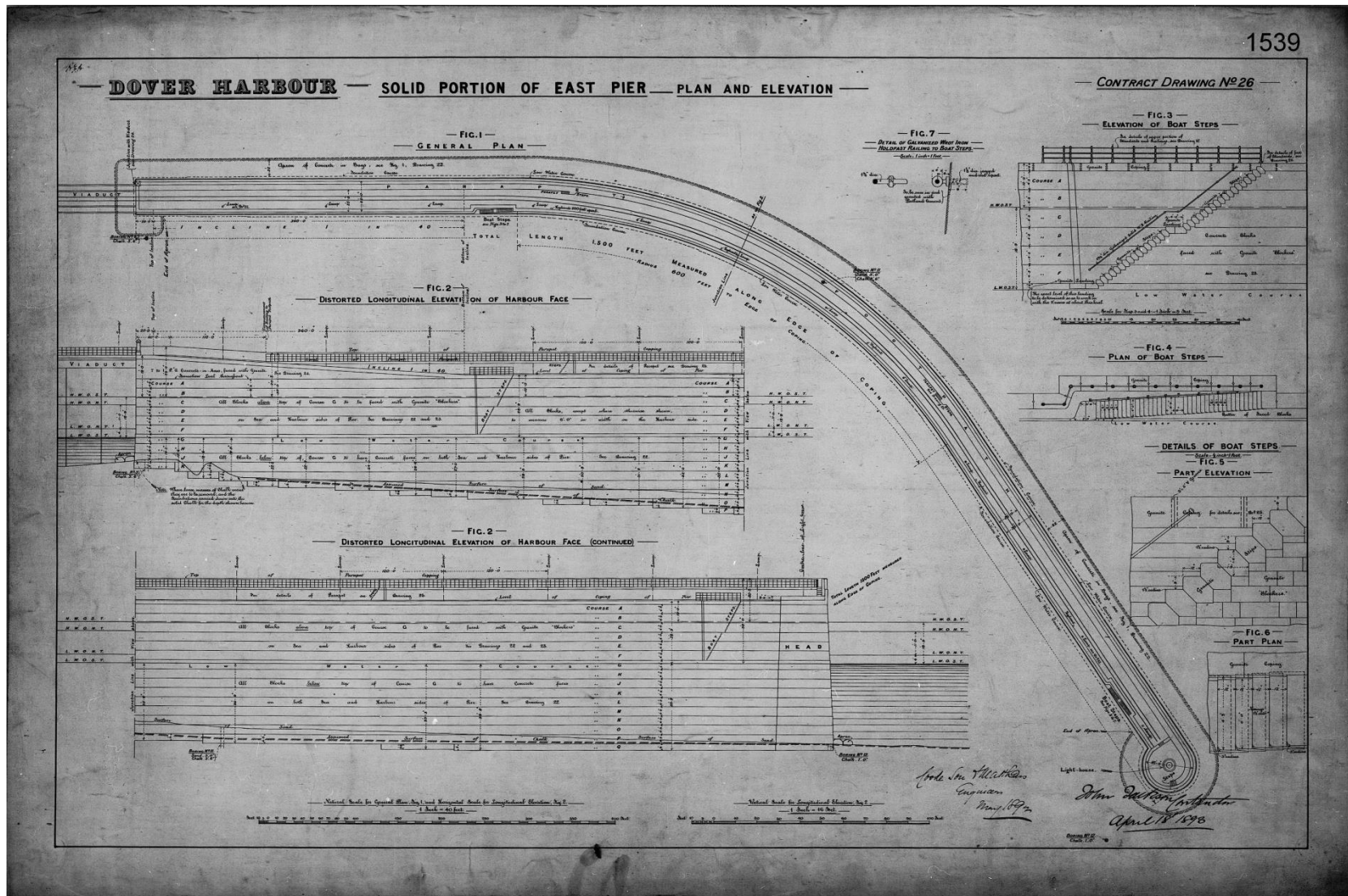


Figure 13: Solid Portion of the East Pier, Plan and Elevation, May 1892, DHB Historical Drawings Archive Ref; 1539.

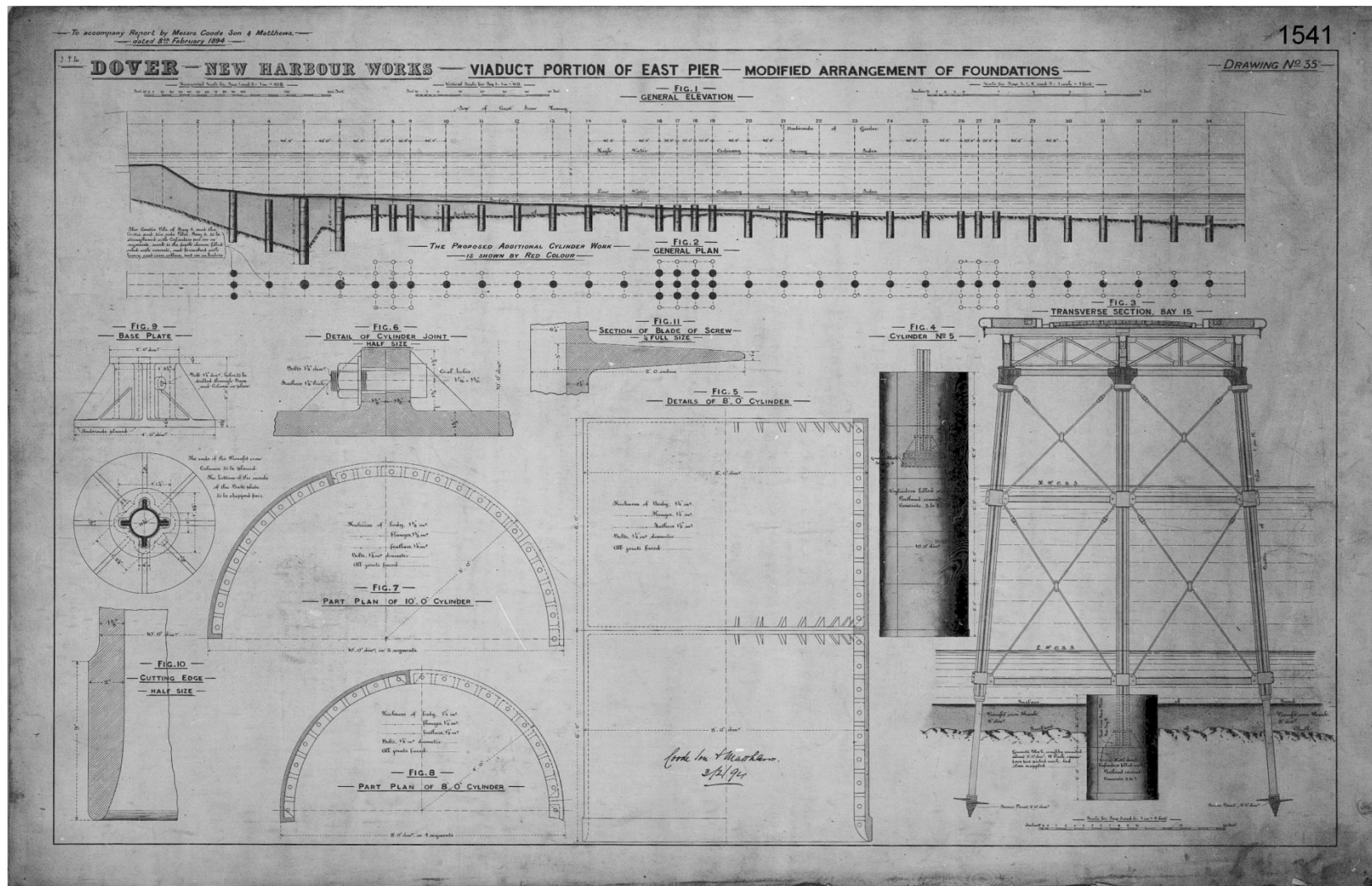


Figure 15: Viaduct portion of the East Pier, Modified arrangement of foundations, April 1893, DHB Historical Drawings Archive Ref; 1541.

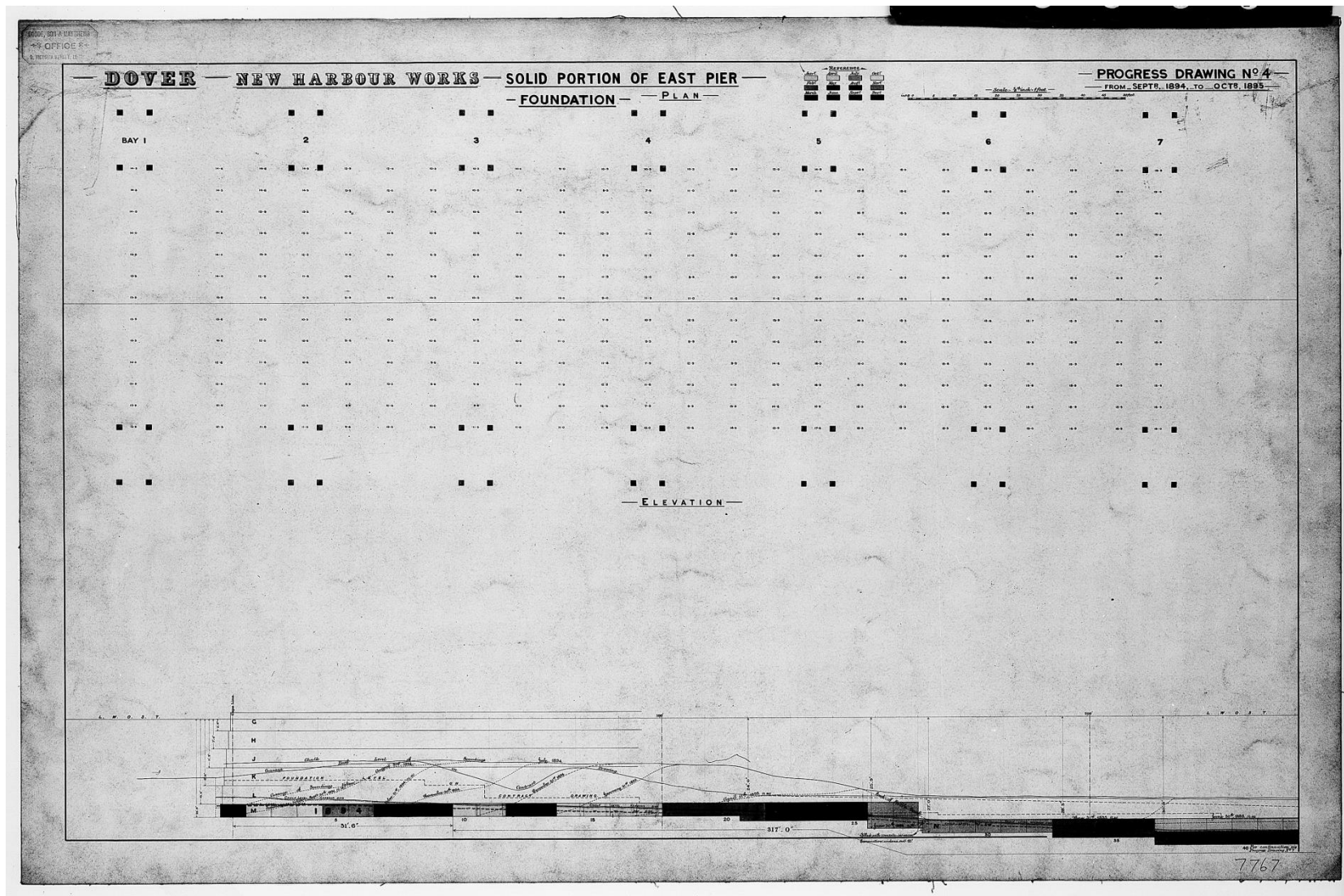


Figure 16: Solid portion of East Pier Foundation, September 1894, DHB Historical Drawings Archive Ref; 7767.

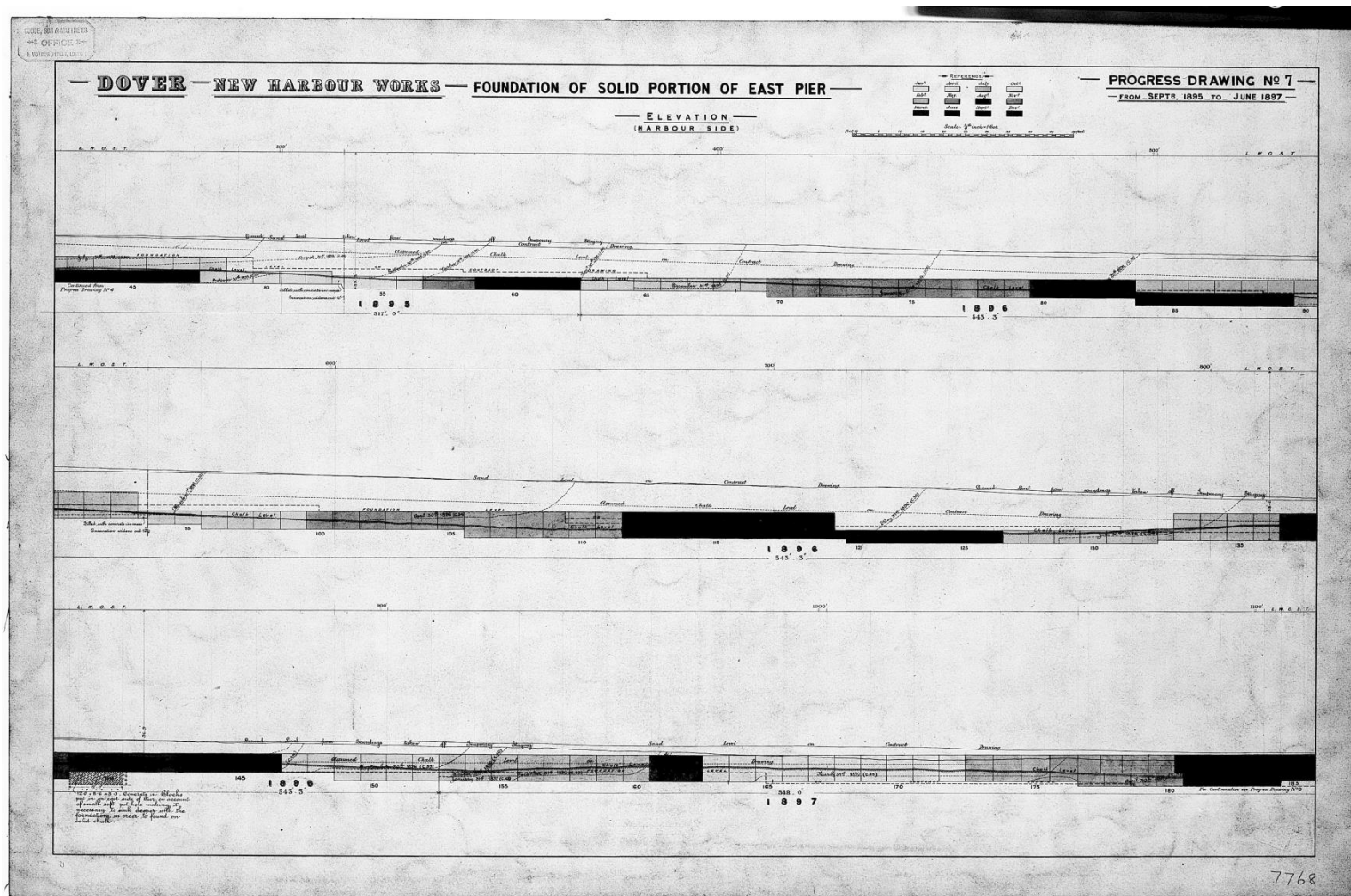


Figure 17: Solid portion of East Pier Foundation, September 1895, DHB Historical Drawings Archive Ref; 7768.



Figure 18: Viaduct portion of the East Pier, Modified arrangement of incline and roadway, March 1896, DHB Historical Drawings Archive Ref; 1542.

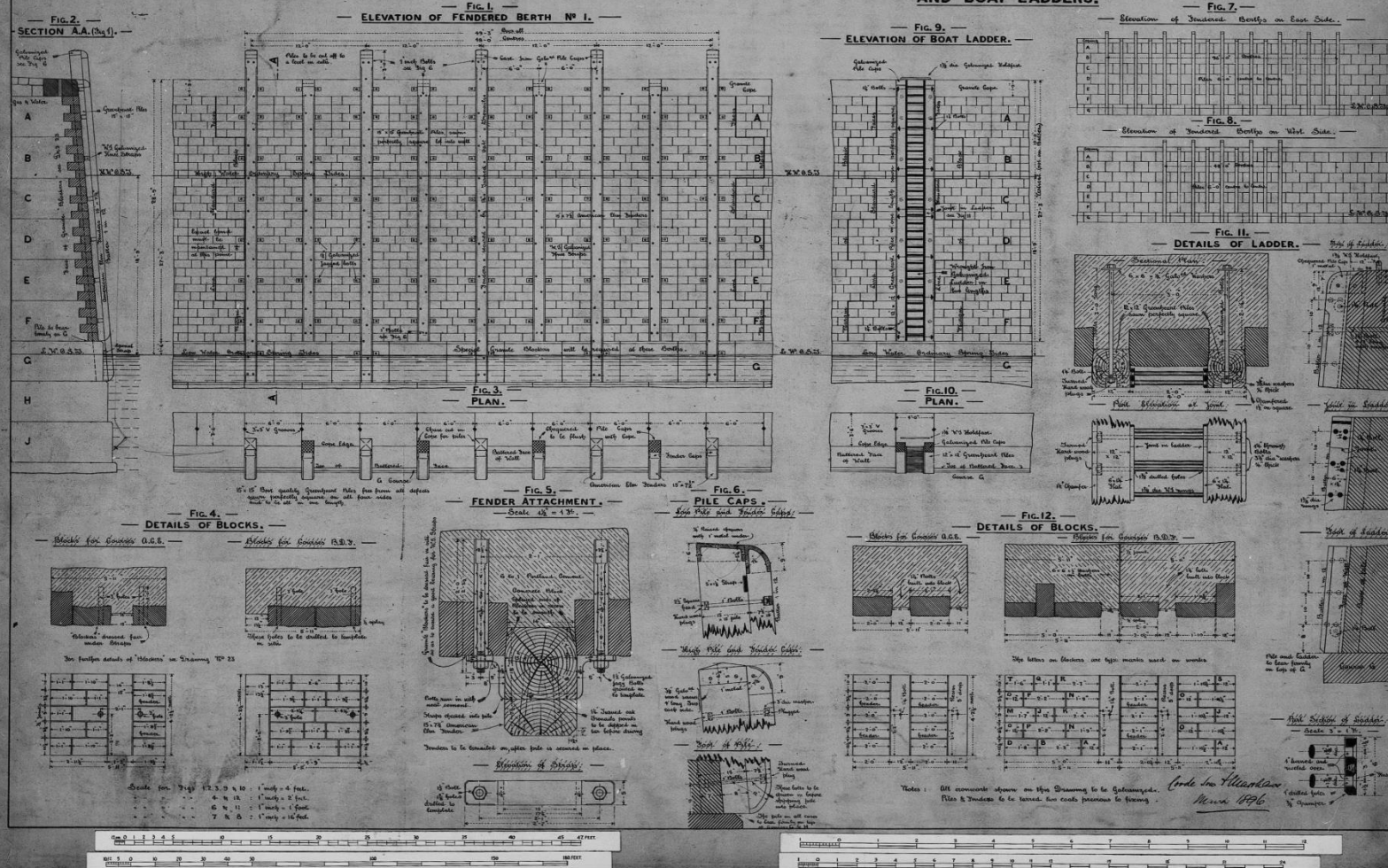


Figure 19: East Pier, Details of fendering berths and boat ladders, 01/11/1896, DHB Historical Drawings Archive Ref; 1543.

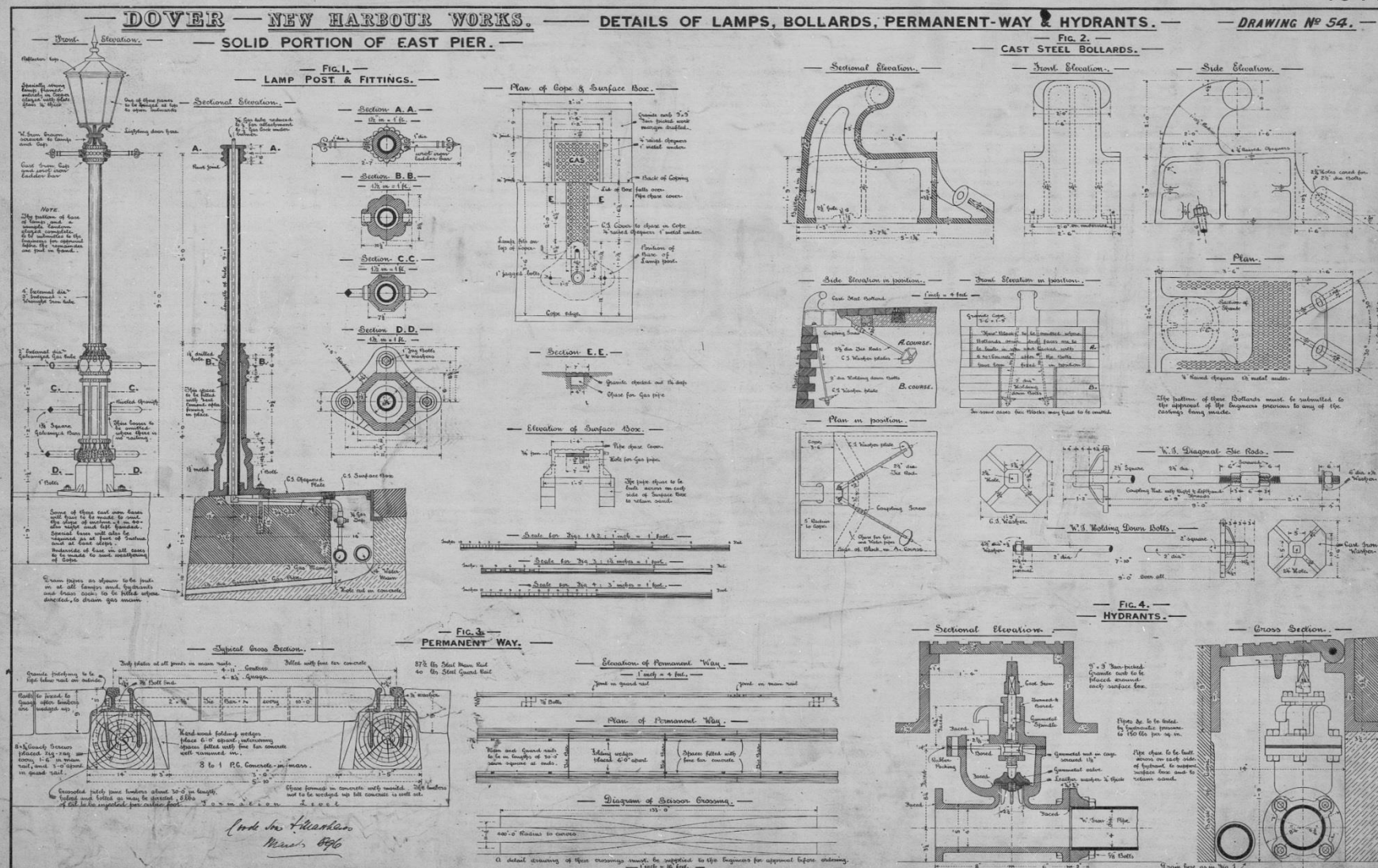


Figure 20: Solid portion of the East Pier, Details of lamps, bollards, permanent-way and hydrants, March 1896, DHB Historical Drawings Archive Ref; 1544.

Appendix 001

Appendix 001

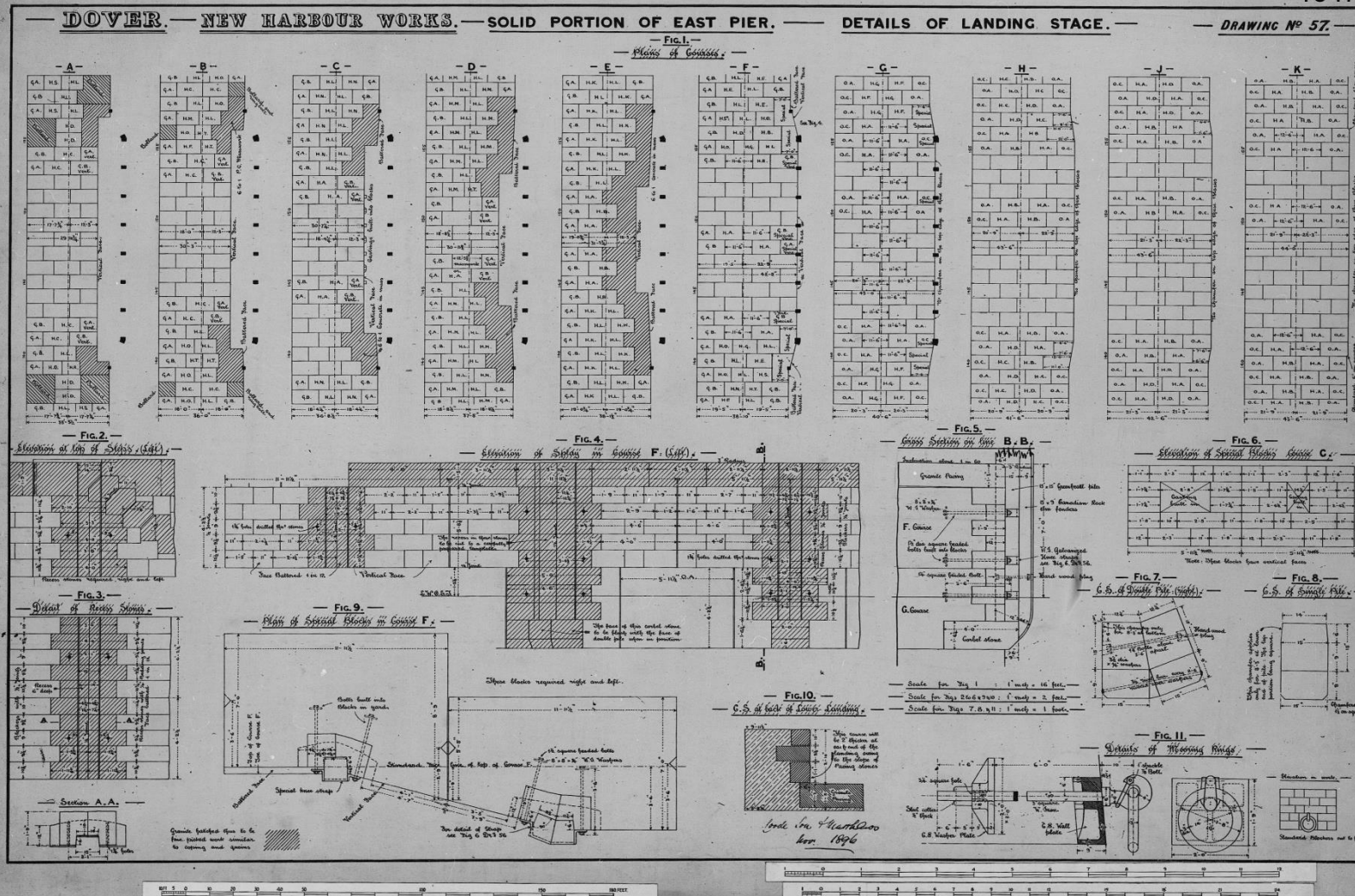


Figure 23: Solid portion of the East Pier, Details of landing stages, 01/11/1896, DHB Historical Drawings Archive Ref; 1547.

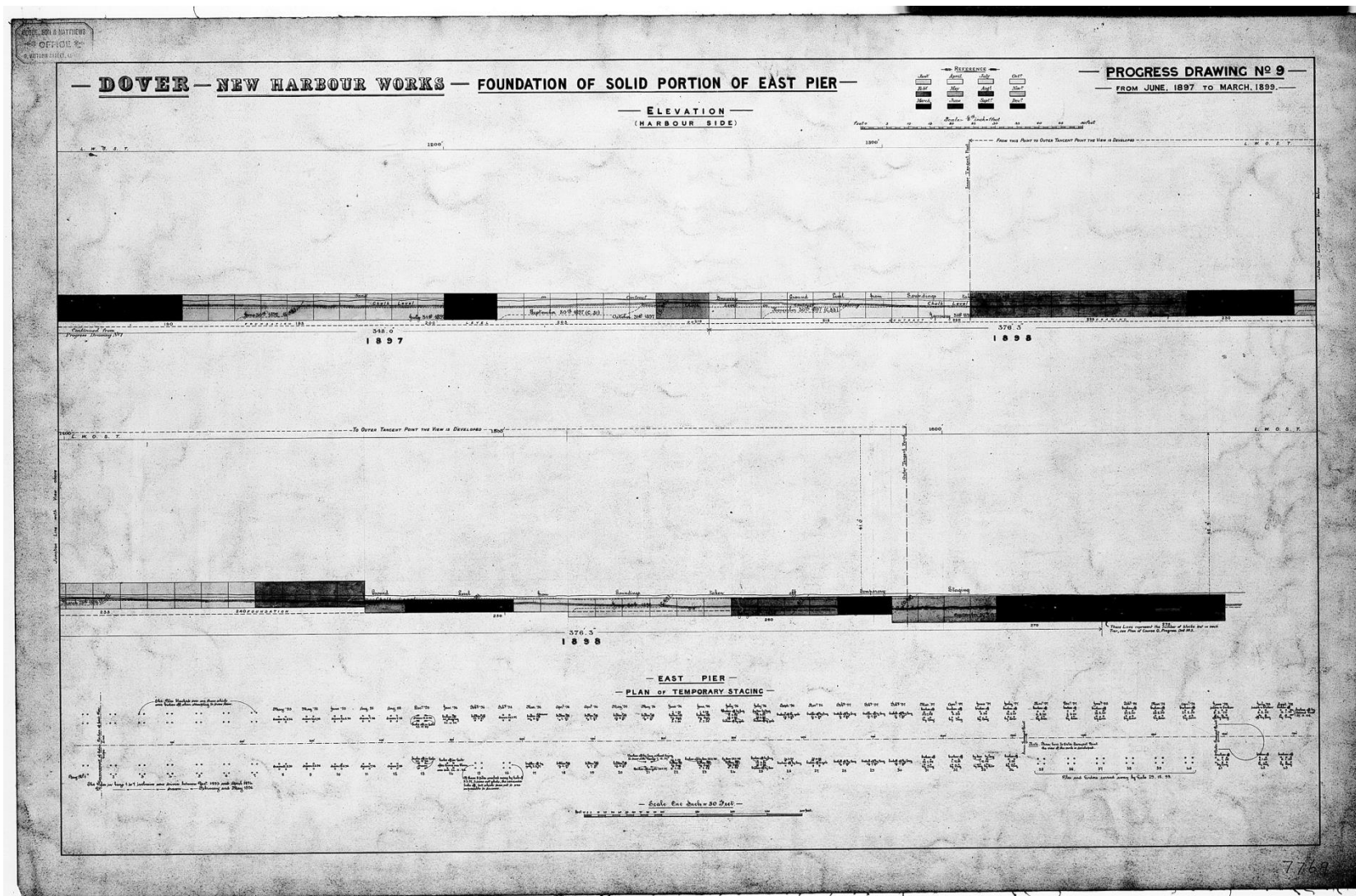


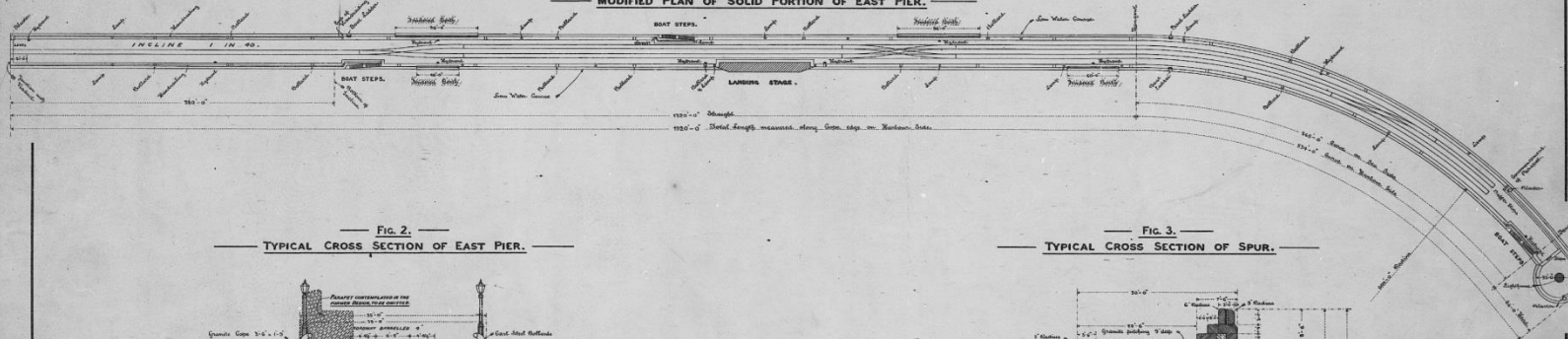
Figure 24: Foundation of the solid portion of East Pier, 01/06/1897, DHB Historical Drawings Archive Ref; 7769.



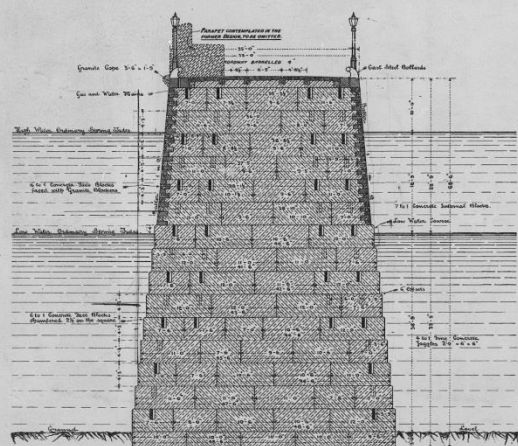
BY THE DOVER HARBOUR BOARD.

— DATED 6TH MAY, 1897.—

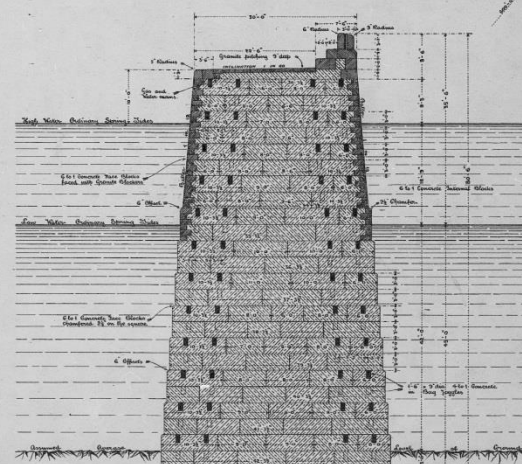
— FIG. 1. —
— MODIFIED PLAN OF SOLID PORTION OF EAST PIER. —



— FIG. 2. —
— TYPICAL CROSS SECTION OF EAST PIER. —



— FIG. 3. —
— TYPICAL CROSS SECTION OF SPUR.



_____ Scale for Fig. 1: 1" inch = 50' feet. _____
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Lord to Alameda Co
 6th May 1894

Desktop Study Prince of Wales Pier

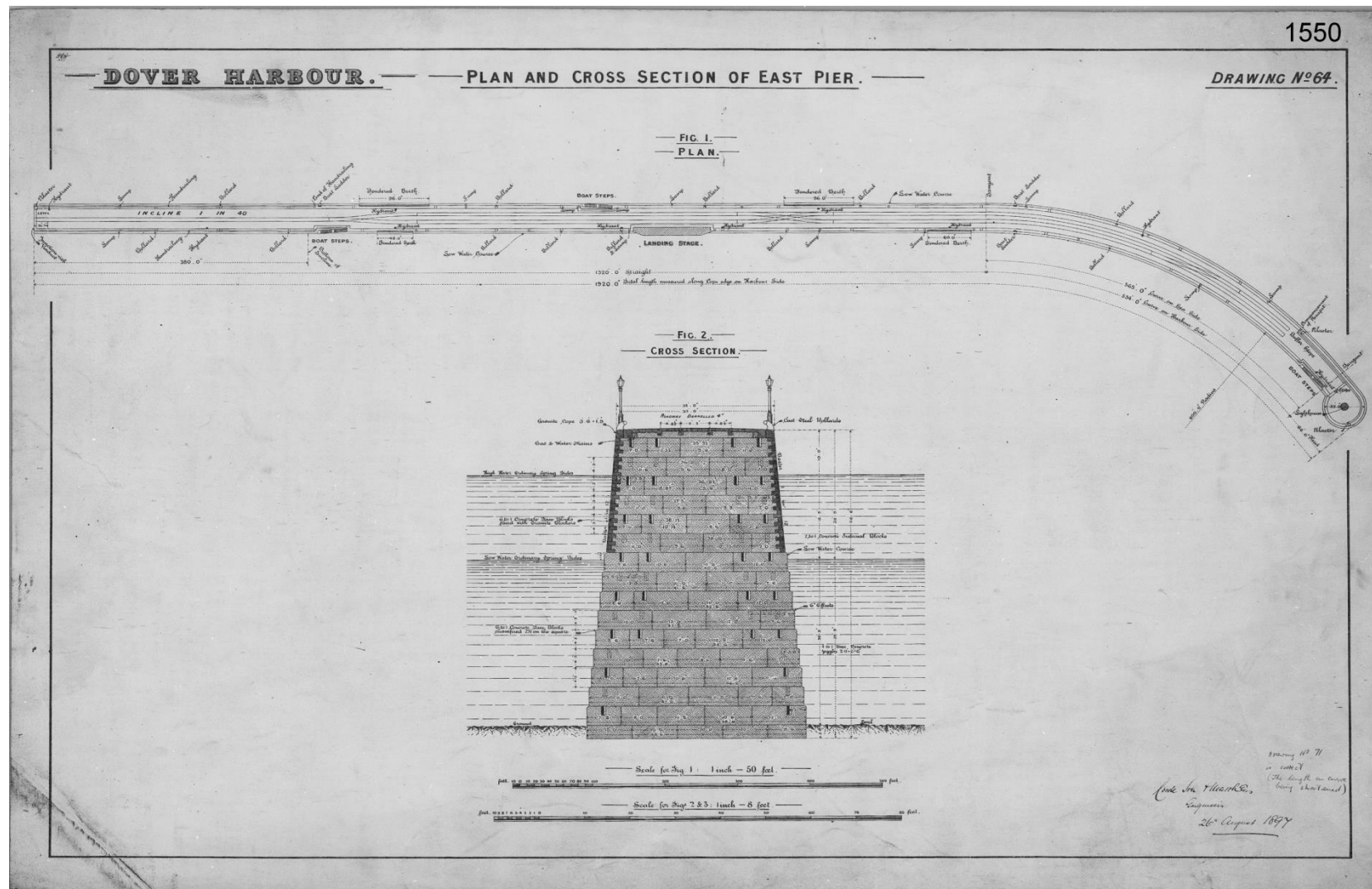


Figure 27: Plan and Cross Section of East Pier, 26/04/1897, DHB Historical Drawings Archive Ref; 1550.

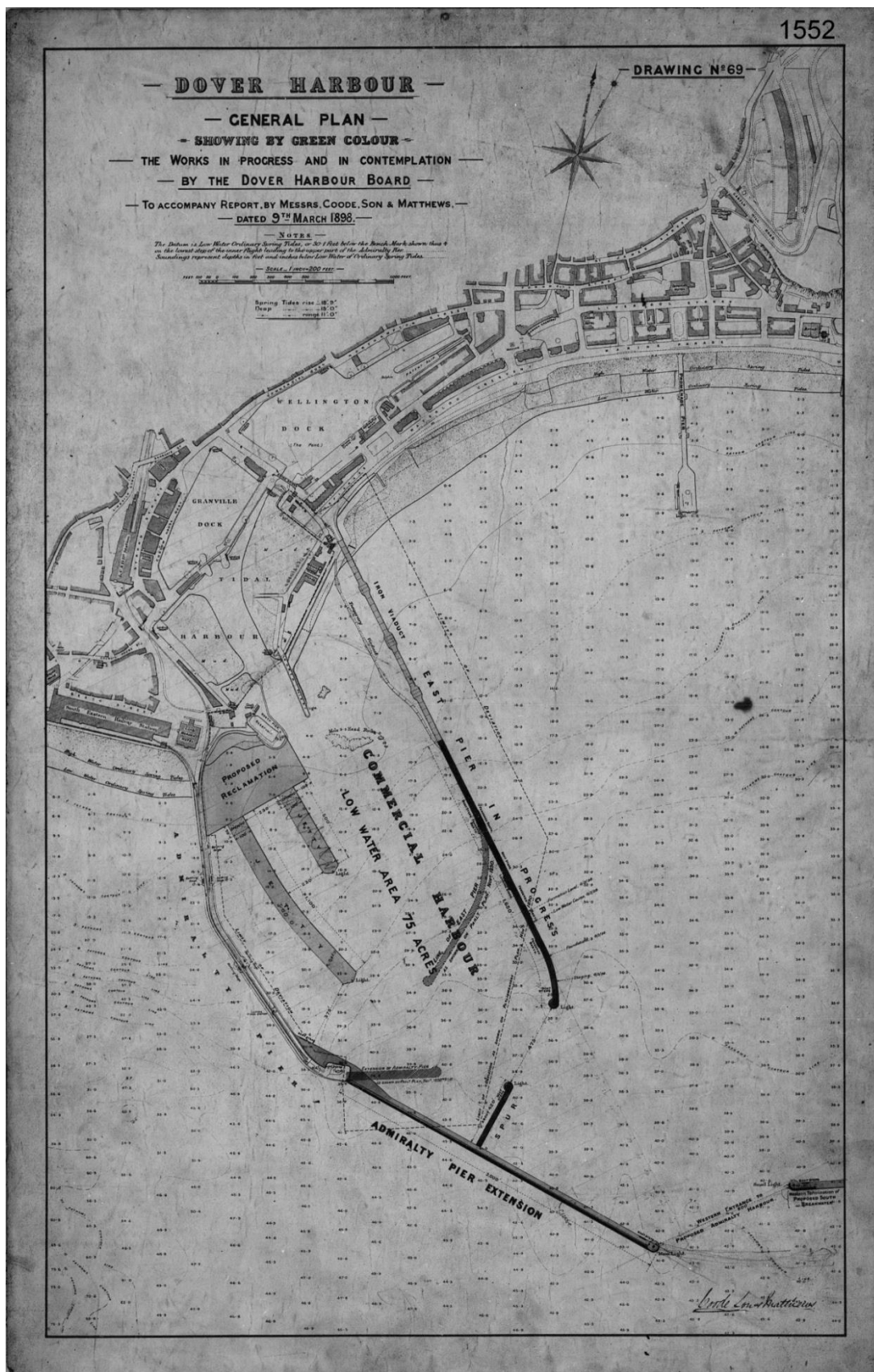
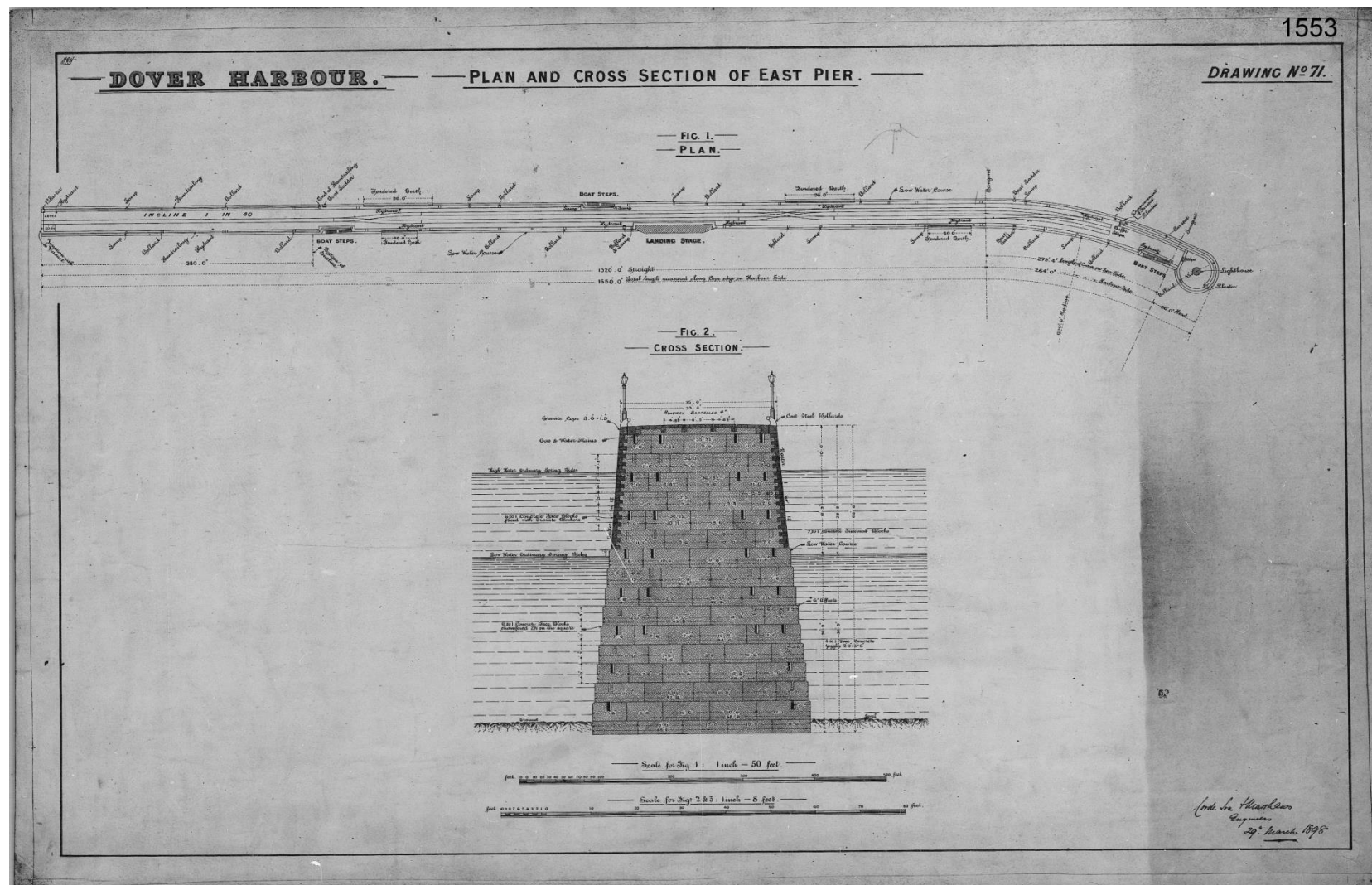


Figure 28: East Pier, General Plan and proposals, 09/03/1898, DHB Historical Drawings Archive Ref: 1552.



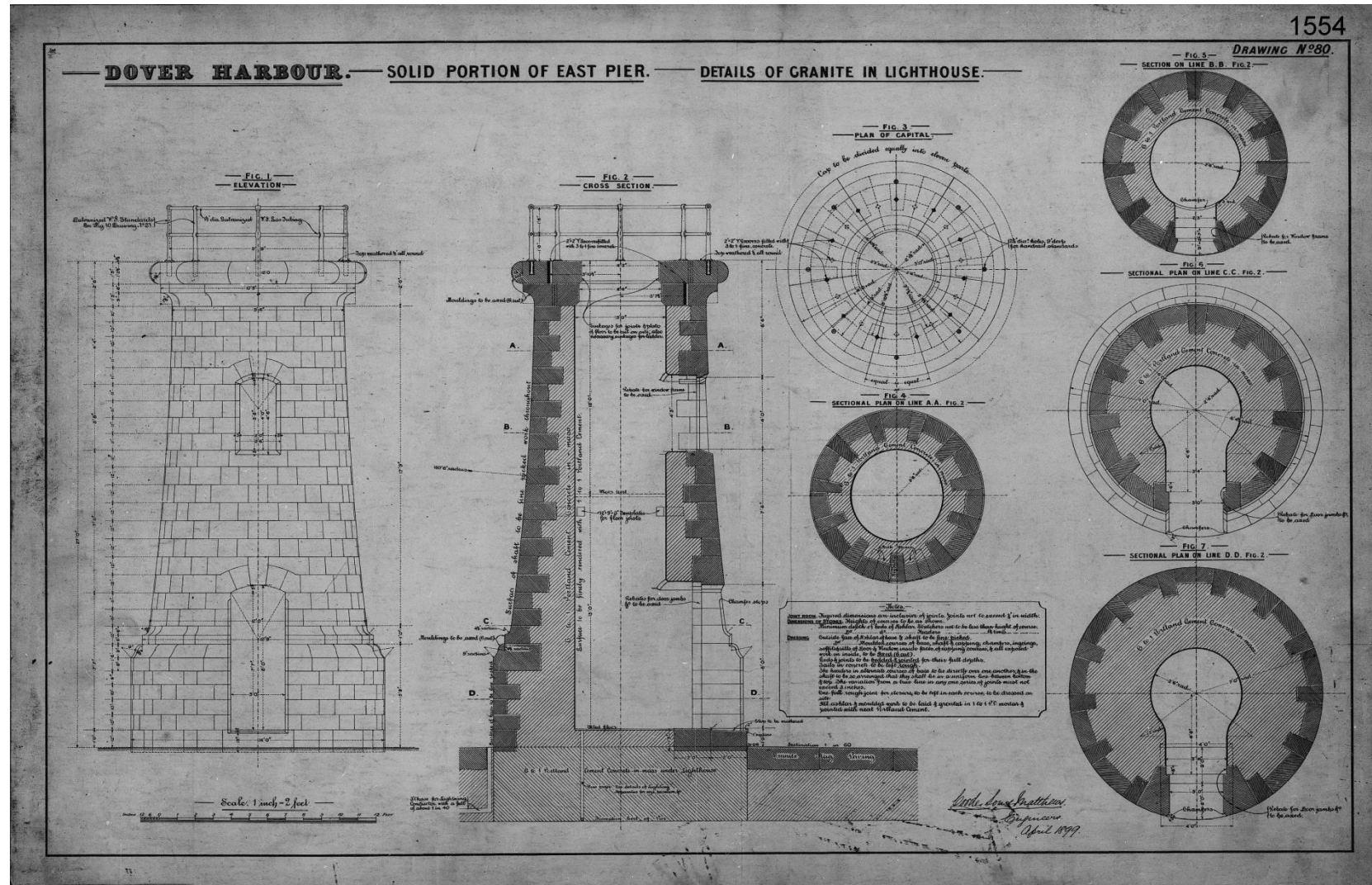
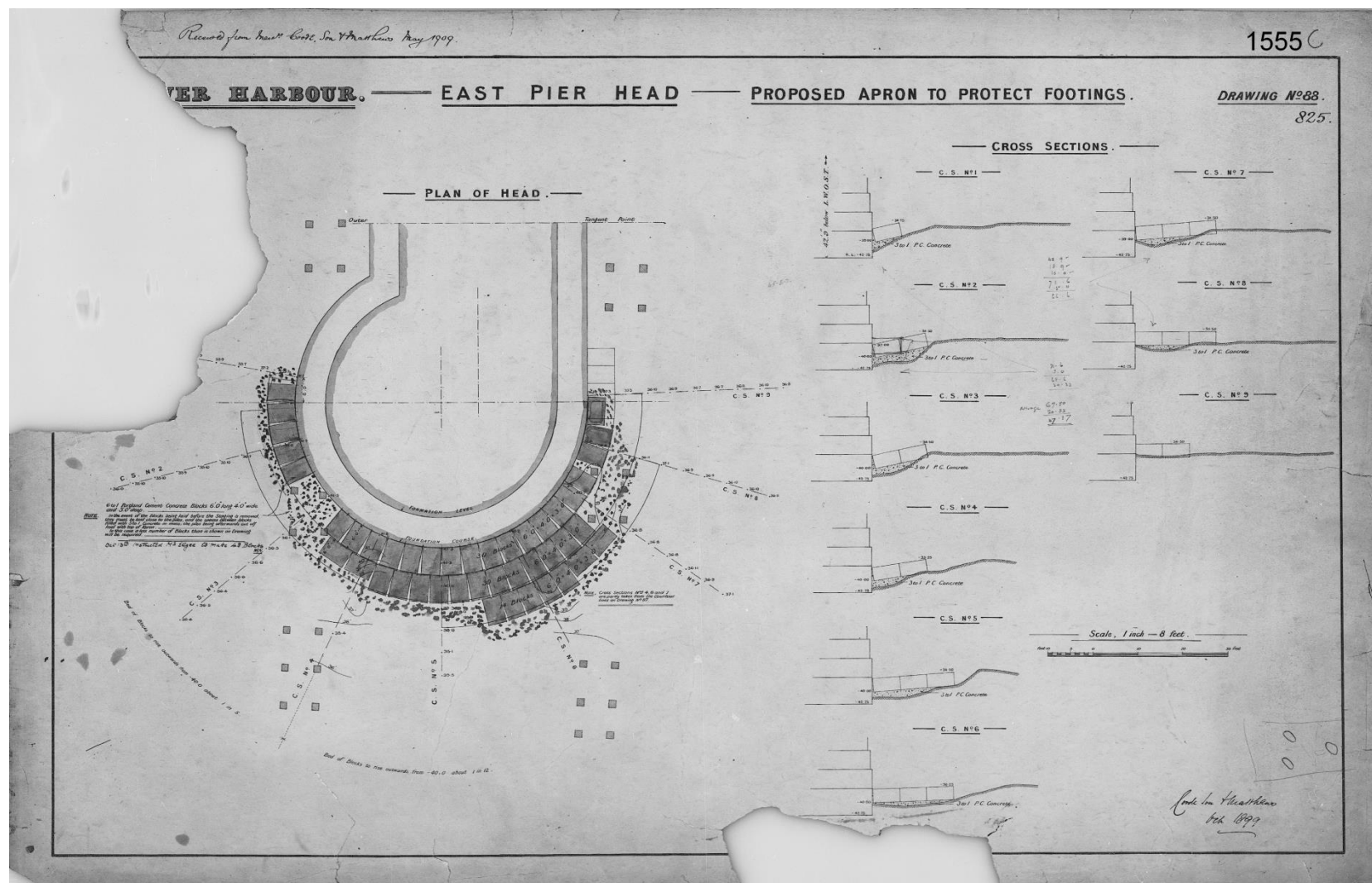


Figure 30: Solid Portion of the East Pier, Details of Granite in Lighthouse, April 1899, DHB Historical Drawings Archive Ref; 1554.



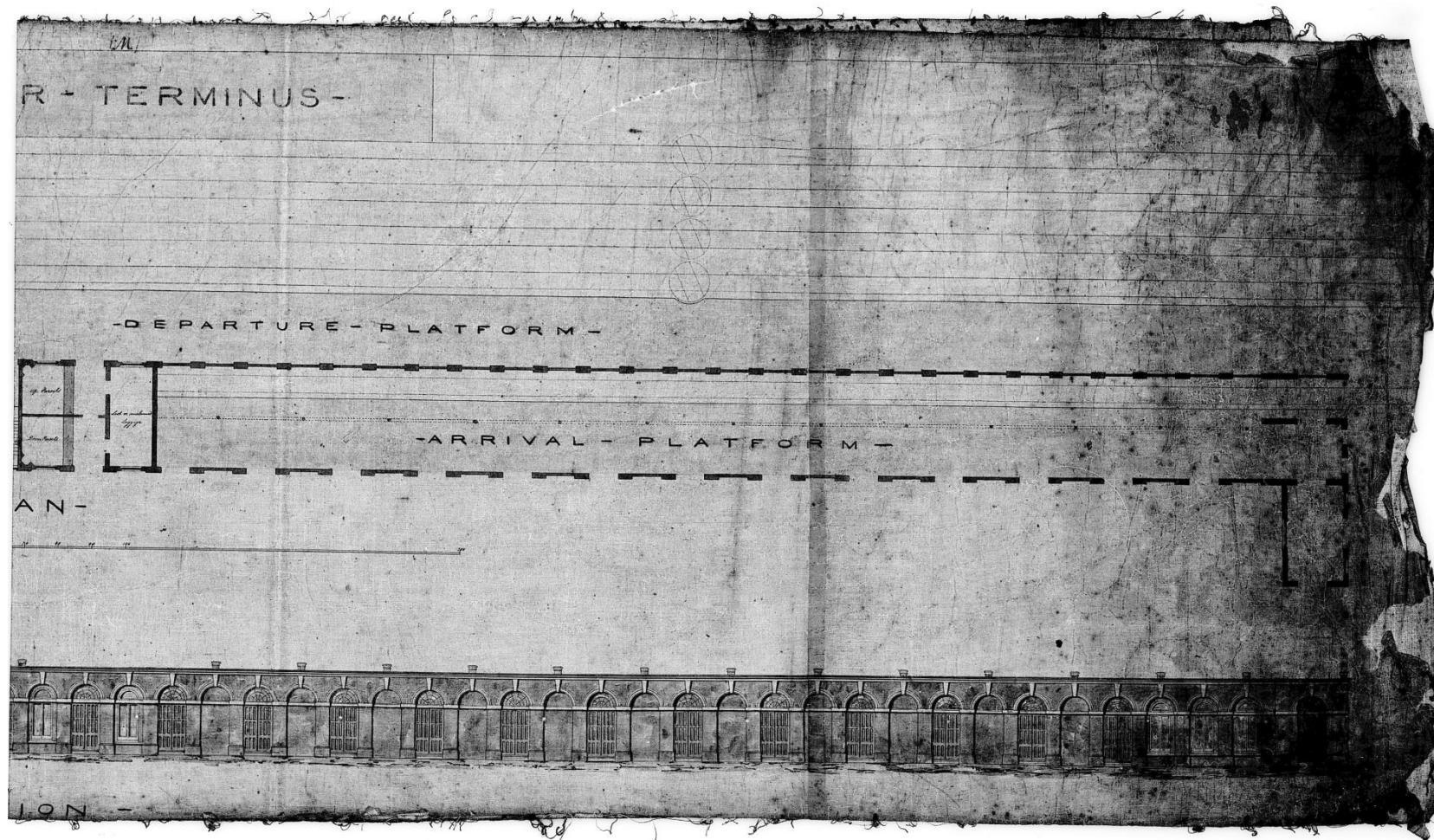


Figure 32: Prince of Wales Pier Plan, 05/03/1907, DHB Historical Drawings Archive Ref; 7434.

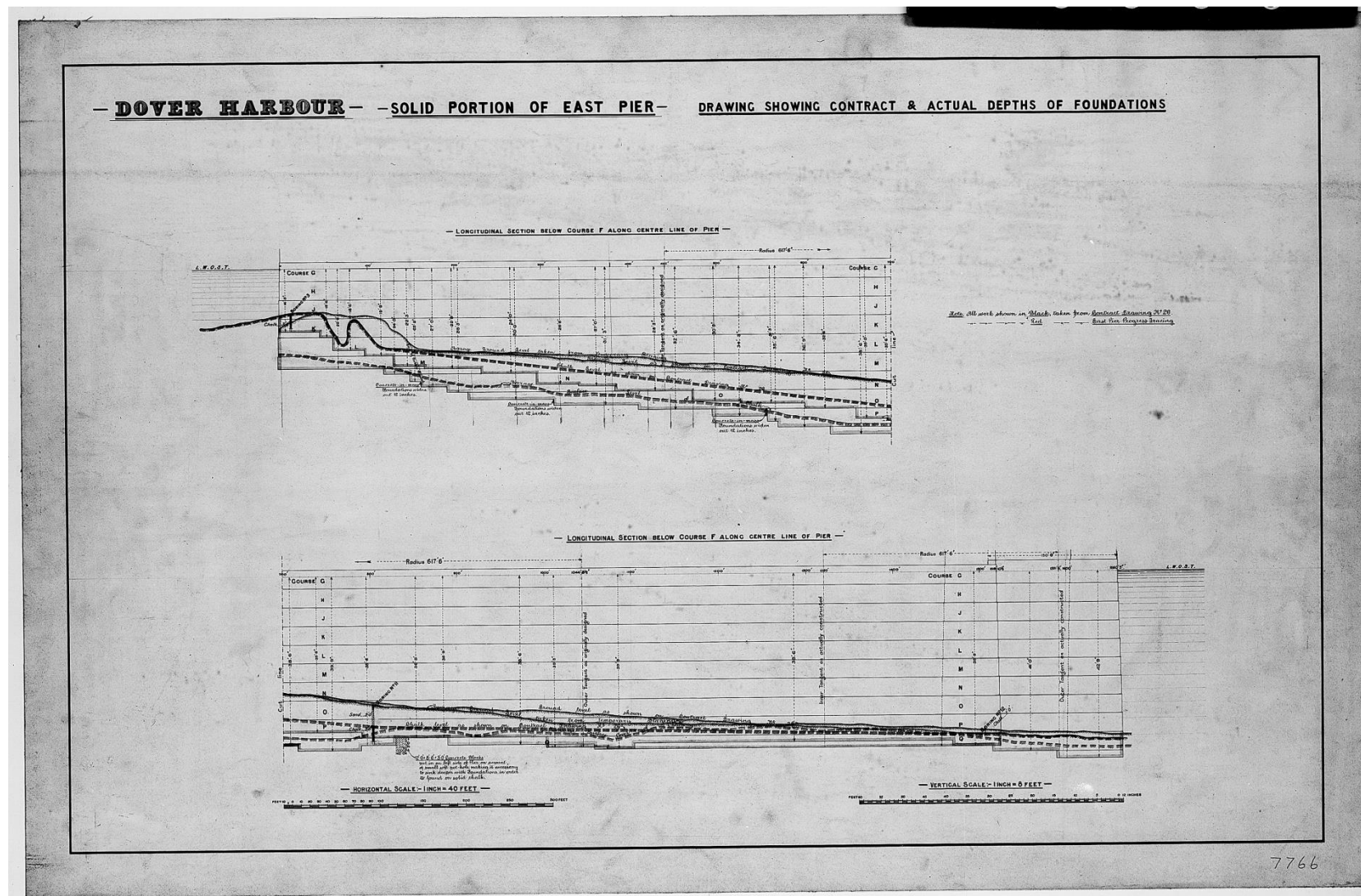
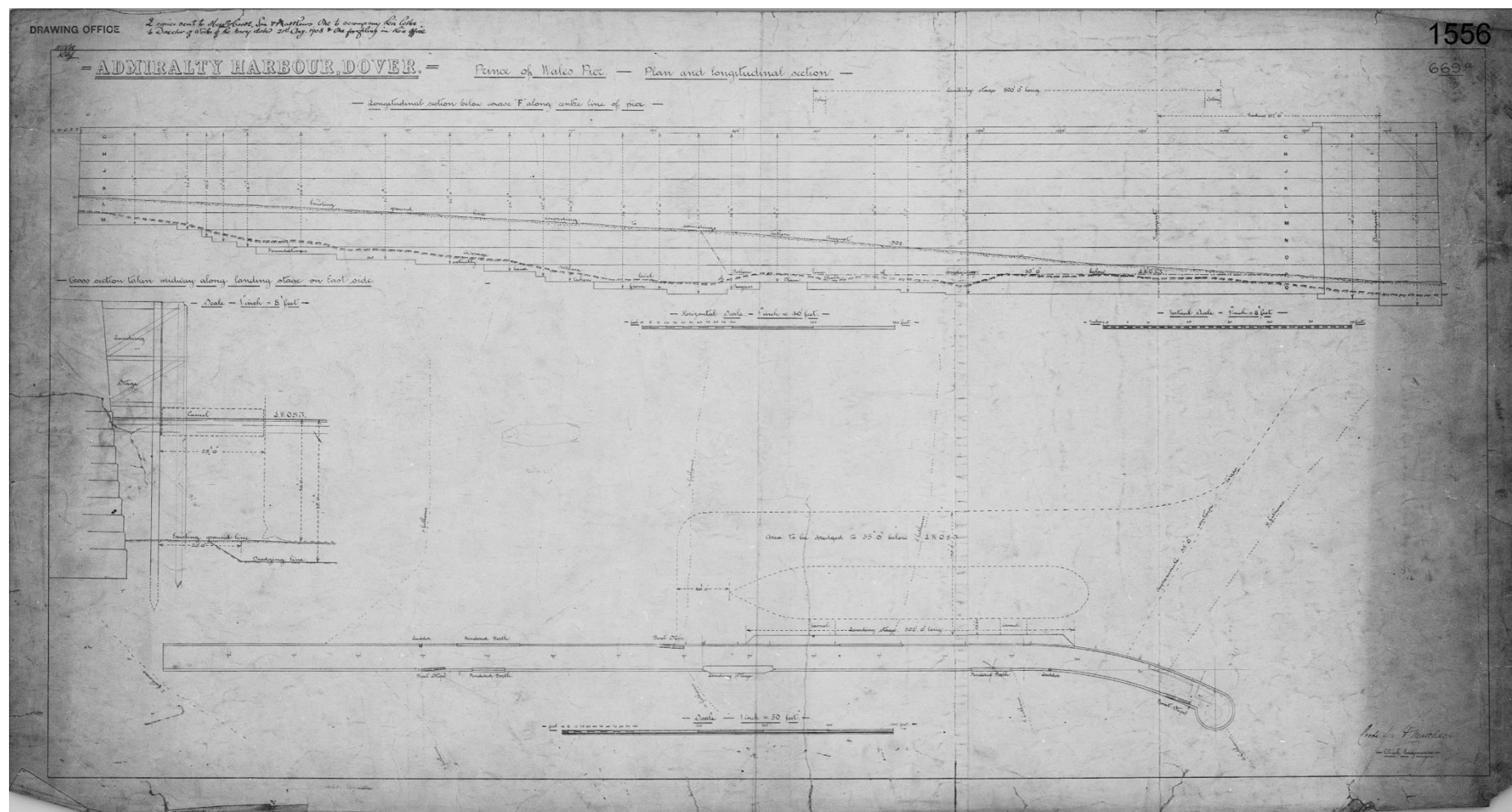


Figure 33: Solid portion of the East Pier, Drawing showing contract and depths of actual foundations, No Date c.1898, DHB Historical Drawings Archive Ref; 7766.



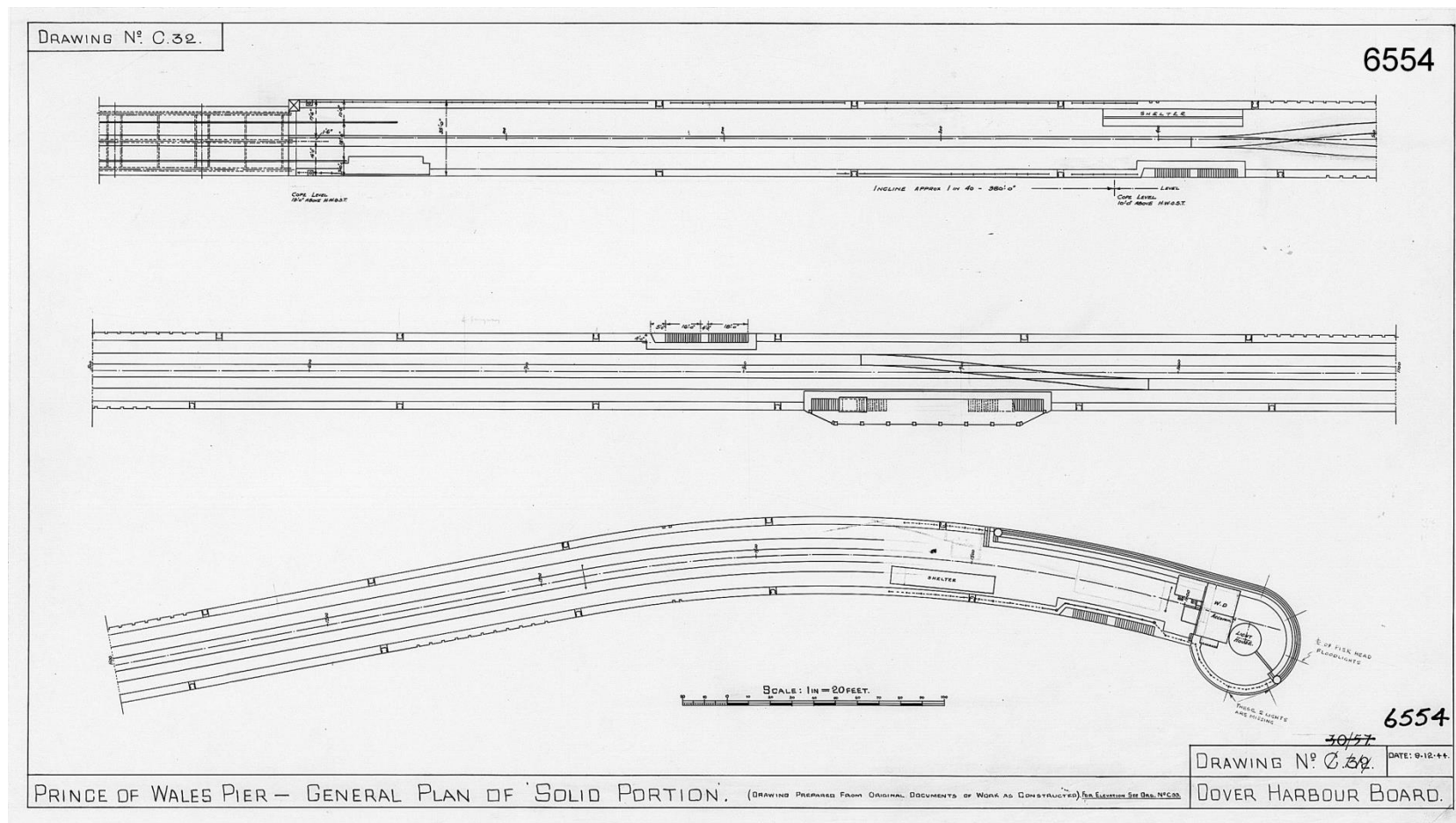


Figure 36: Prince of Wales Pier, General plan of solid portion, 1932, DHB Historical Drawings Archive Ref; 6554.

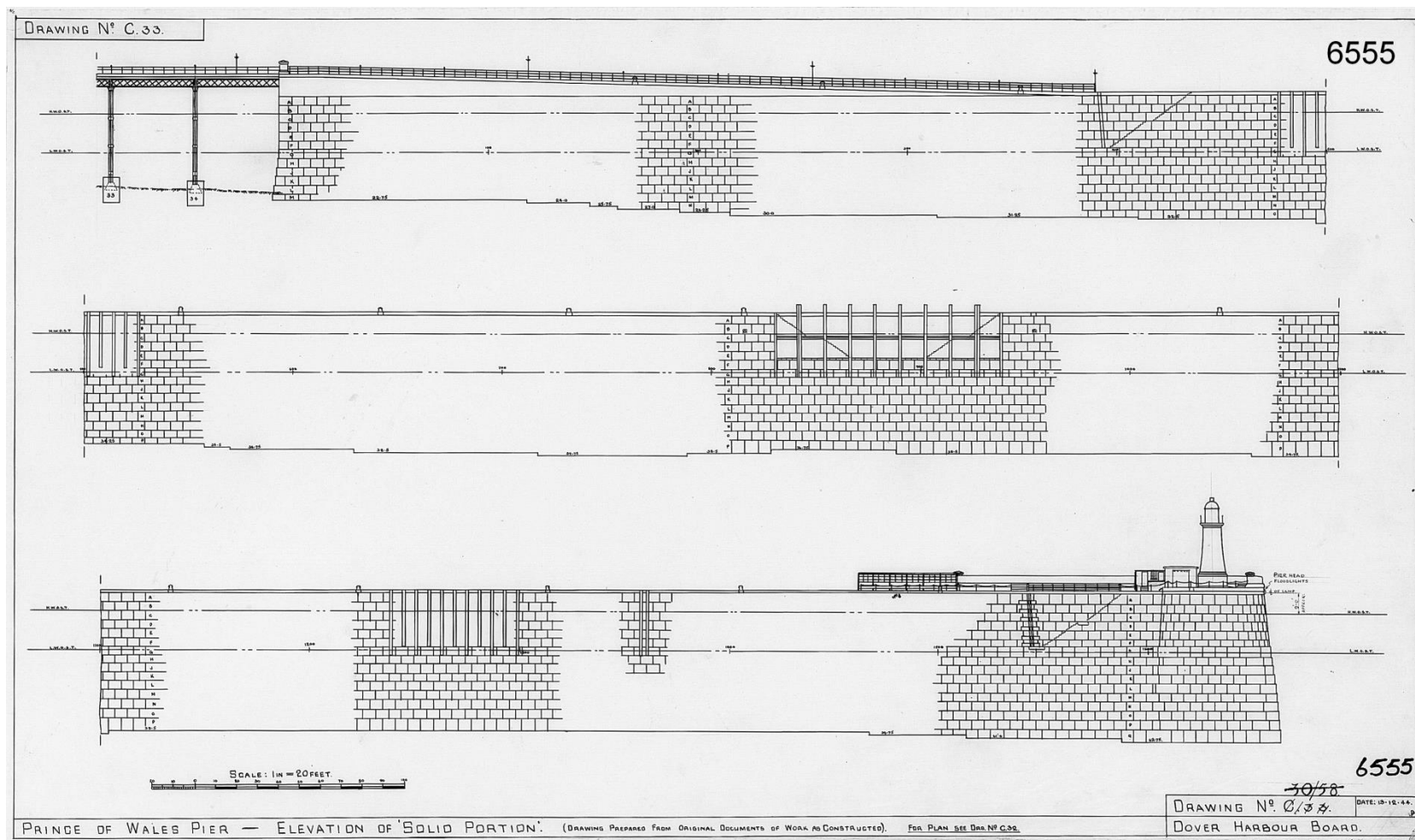


Figure 37: Prince of Wales Pier, Elevation of solid portion, 1933, DHB Historical Drawings Archive Ref; 6555.

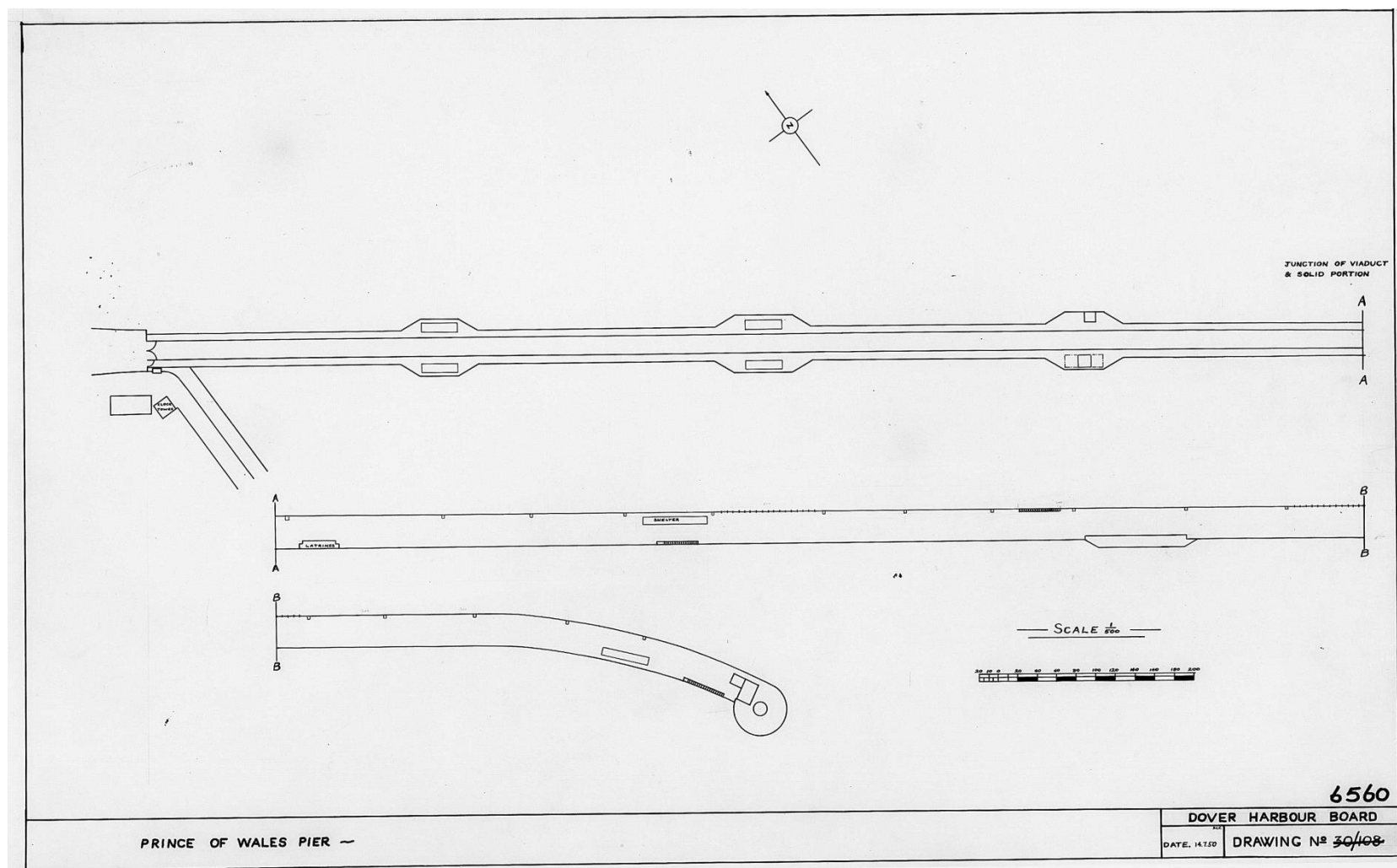


Figure 38: Prince of Wales Pier, Elevation of solid portion, 14/07/1950, DHB Historical Drawings Archive Ref; 6560.

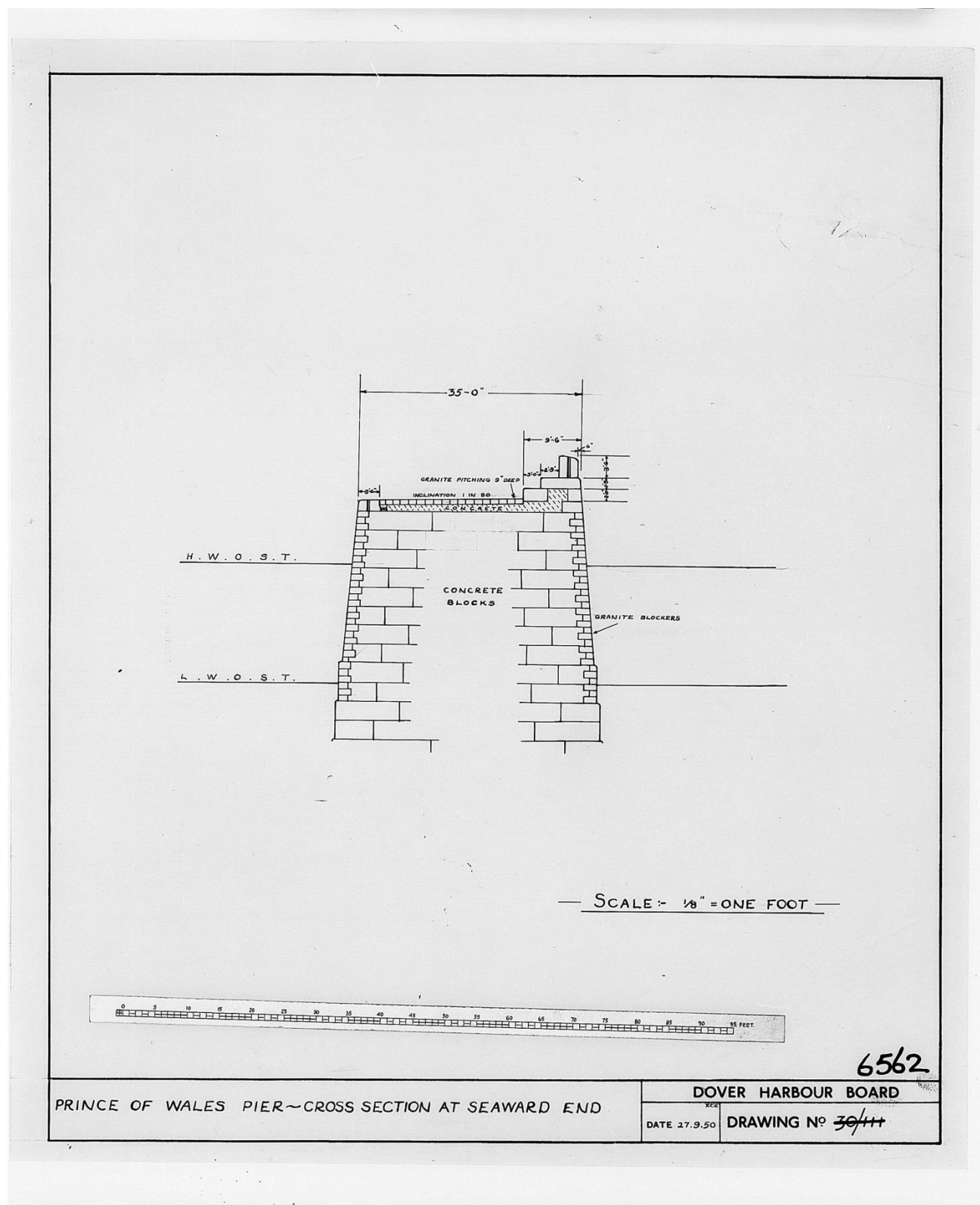


Figure 39: Prince of Wales Pier, Cross Section at Seaward end, 27/09/1950, DHB Historical Drawings Archive Ref: 6562.

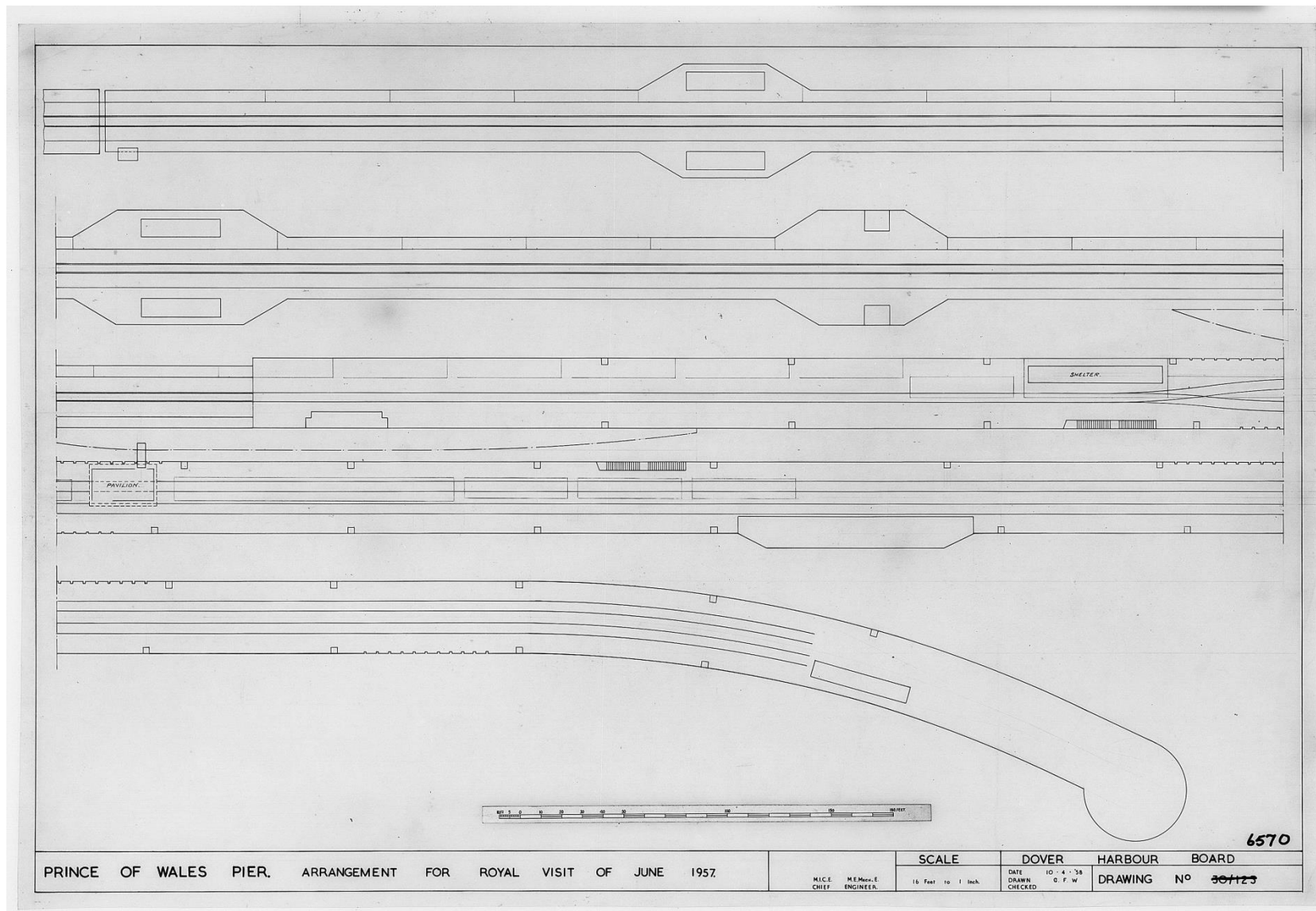


Figure 40: Prince of Wales Pier, Arrangements for the royal visit of June 1957, 10/04/1958, DHB Historical Drawings Archive Ref; 6570.

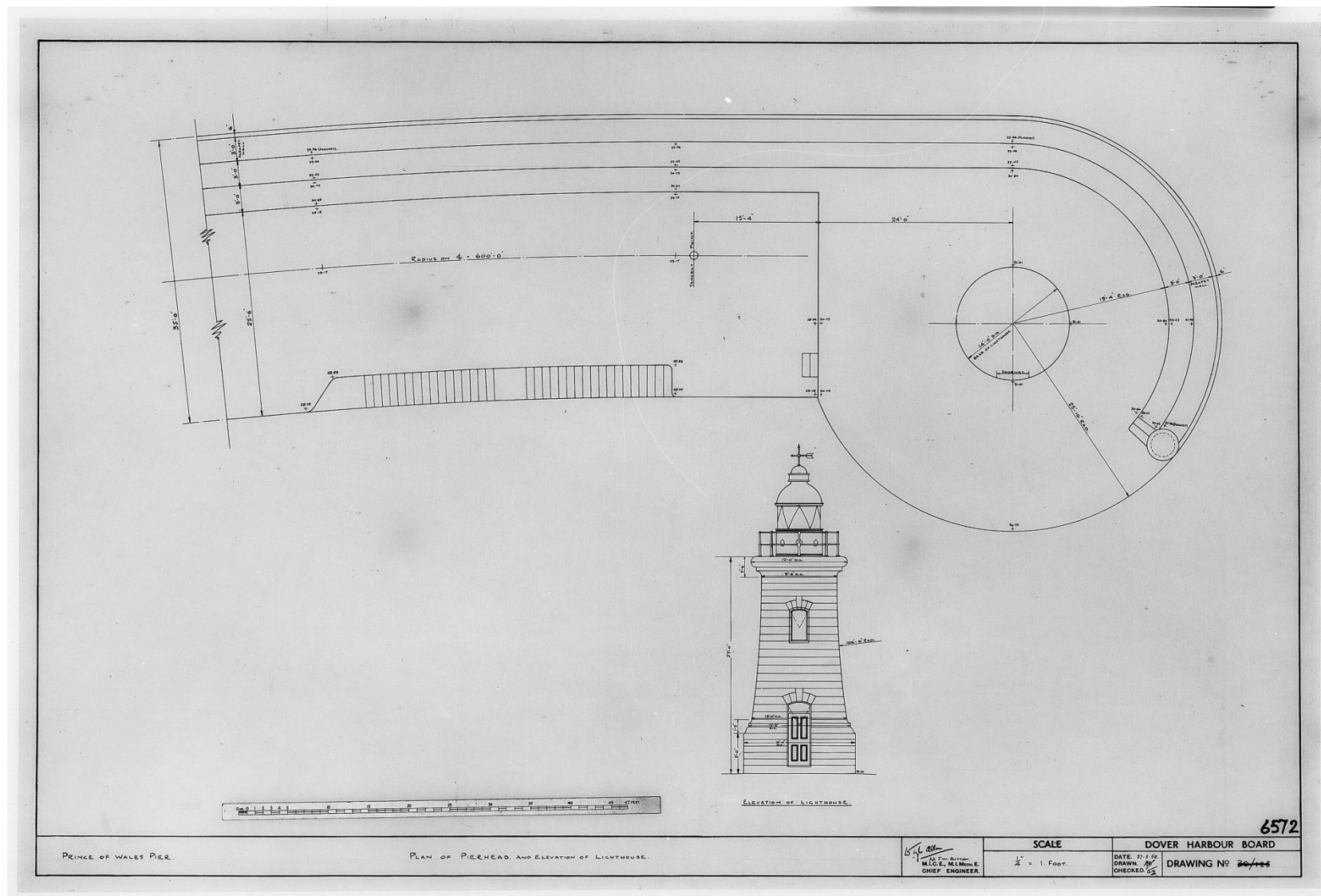


Figure 41: Prince of Wales Pier, Plan of the pier head and elevation of the lighthouse, 27/05/1958, DHB Historical Drawings Archive Ref; 6572.

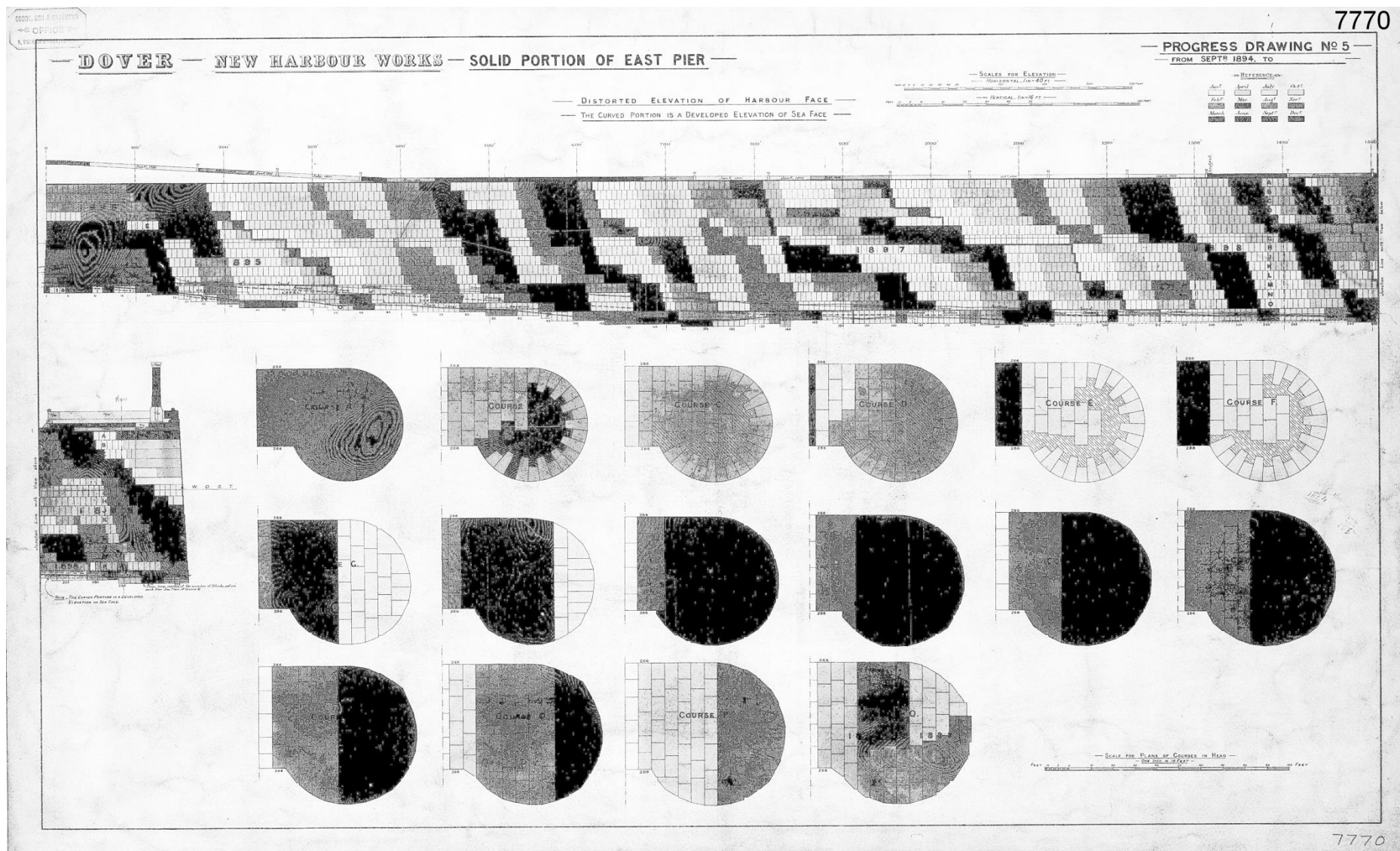


Figure 42: Solid Portion of the East Pier, Progress Drawings, c1894, DHB Historical Drawings Archive Ref; 7770.

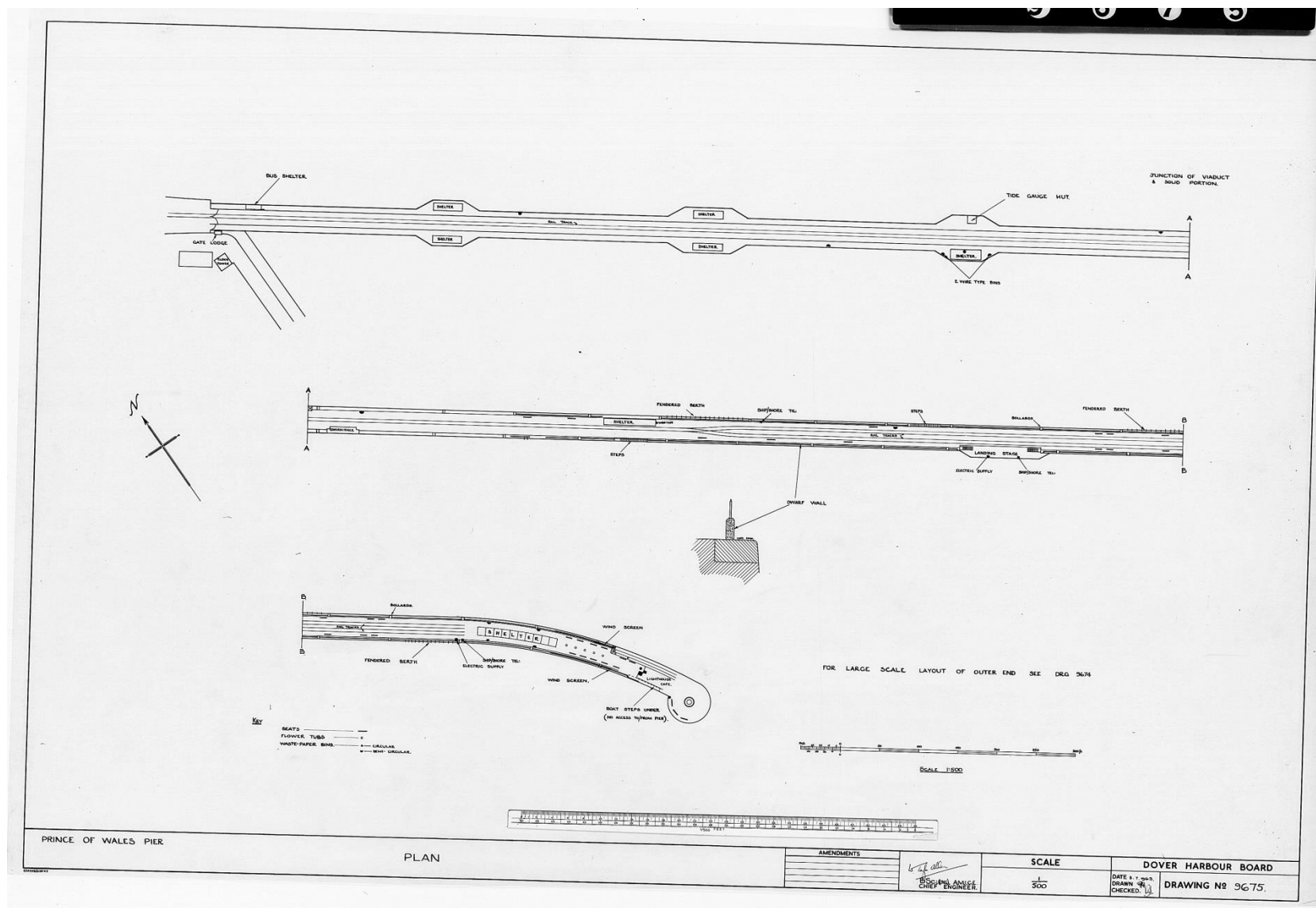


Figure 43: Prince of Wales Pier, Plan, 08/07/1963, DHB Historical Drawings Archive Ref; 9675.

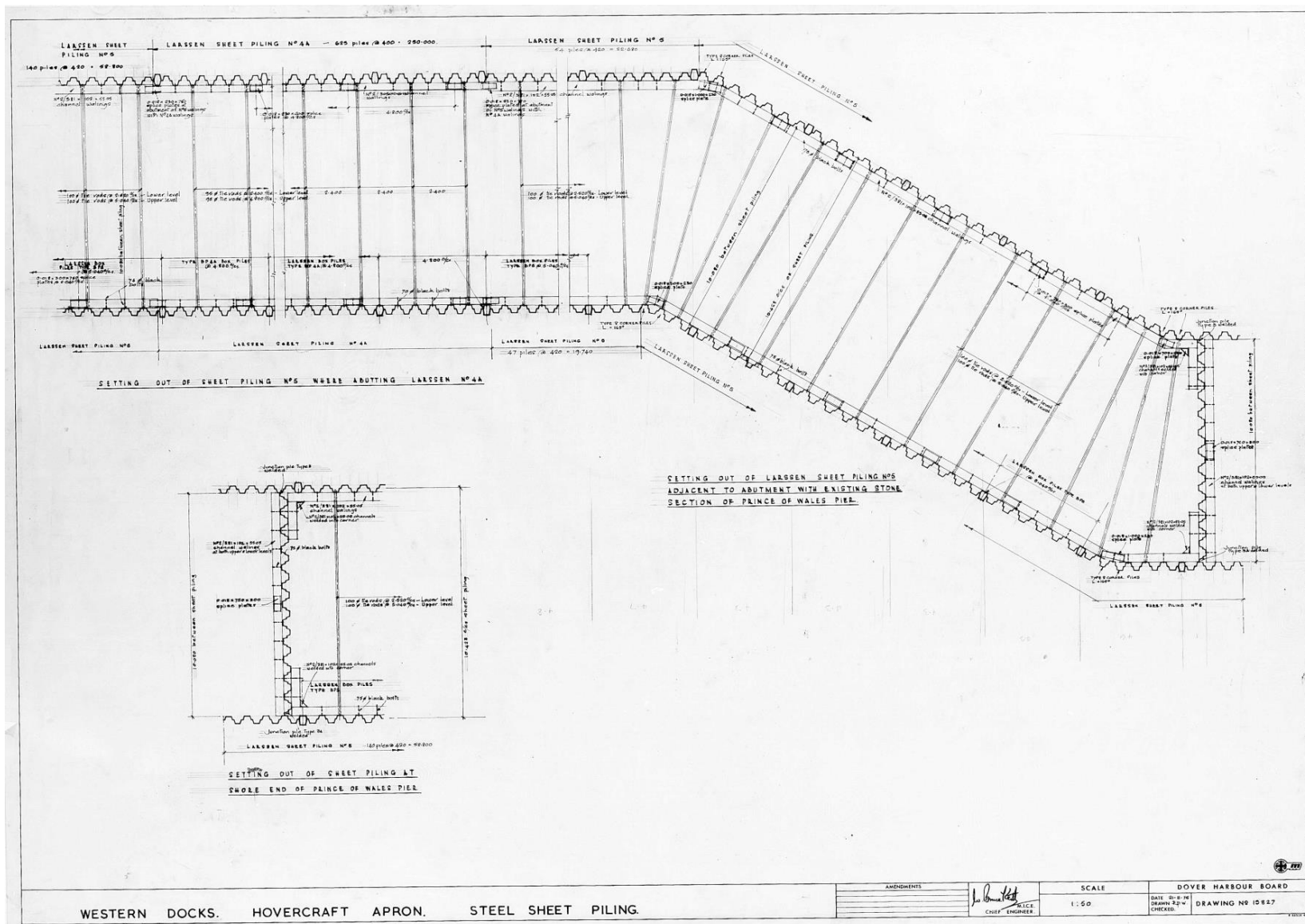


Figure 46: Western Docks Hovercraft Apron, Steel Sheet Piling General Arrangement, 21/11/1975, DHB Historical Archive Ref: 15827A.

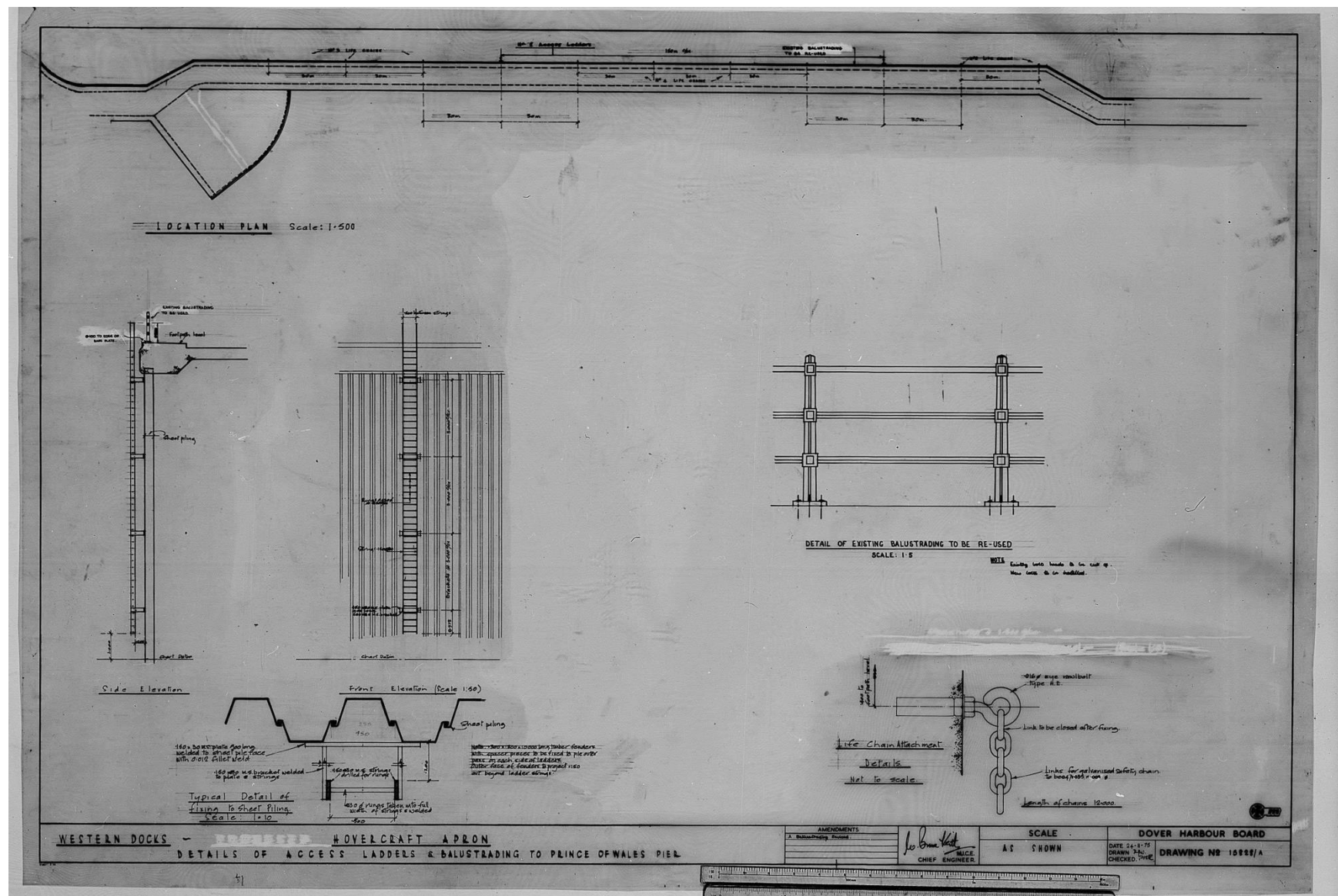


Figure 47: Western Docks Hovercraft Apron, Details of access ladders and balustrading, 24/11/1975, DHB Historical Archive Ref: 15828A.

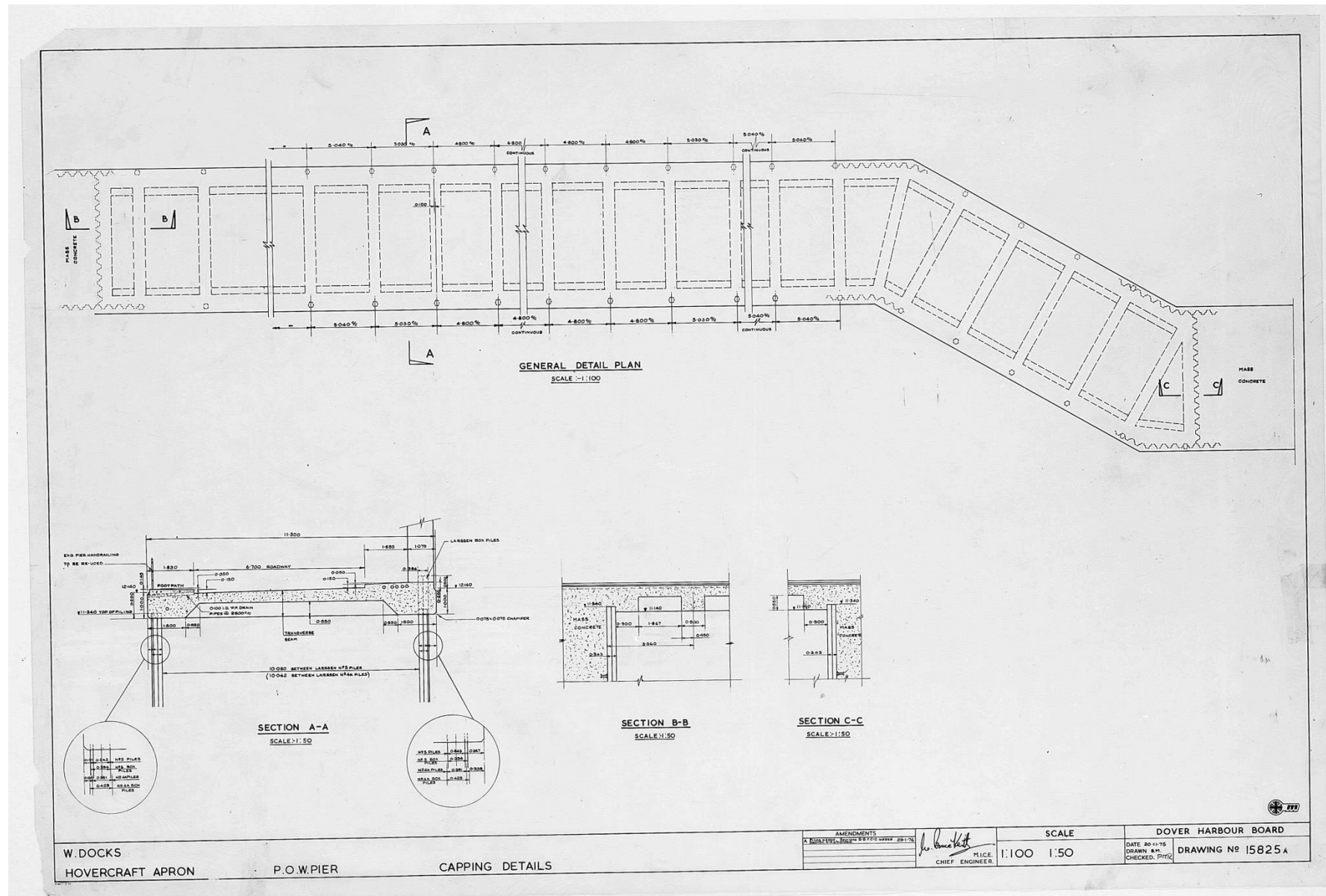


Figure 48: Western Docks Hovercraft Apron, P.O.W.P Capping Details, 20/11/1975, DHB Historical Archive Ref: 15825A.

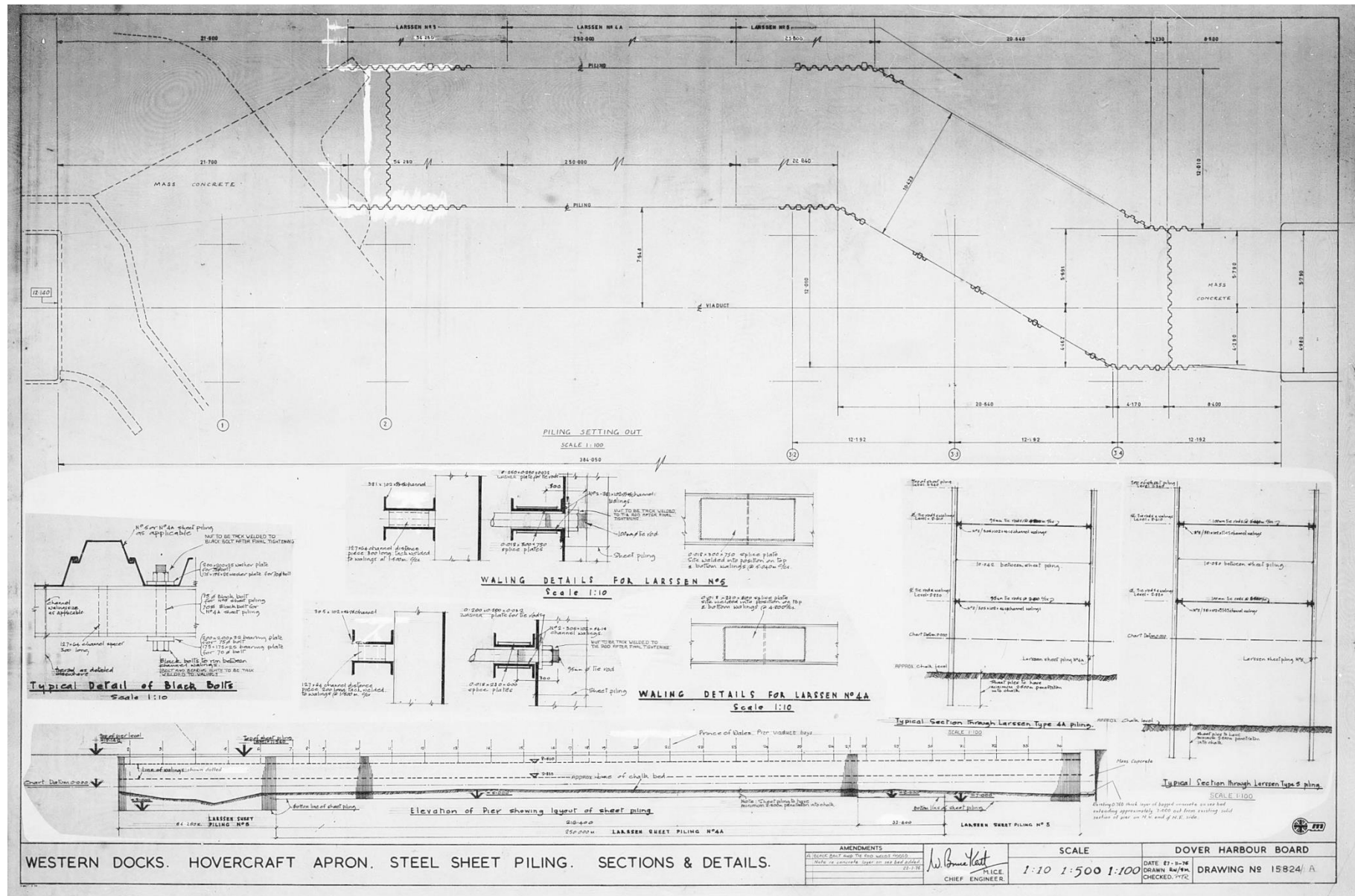


Figure 49: Western Docks Hovercraft Apron, Steel Sheet Piling Sections and Details, 27/11/1975, DHB Historical Archive Ref: 15824/A.

8 7 6 5 4 3 2 1 | | 2 3 4 5 6 7

4

8

9

10

11

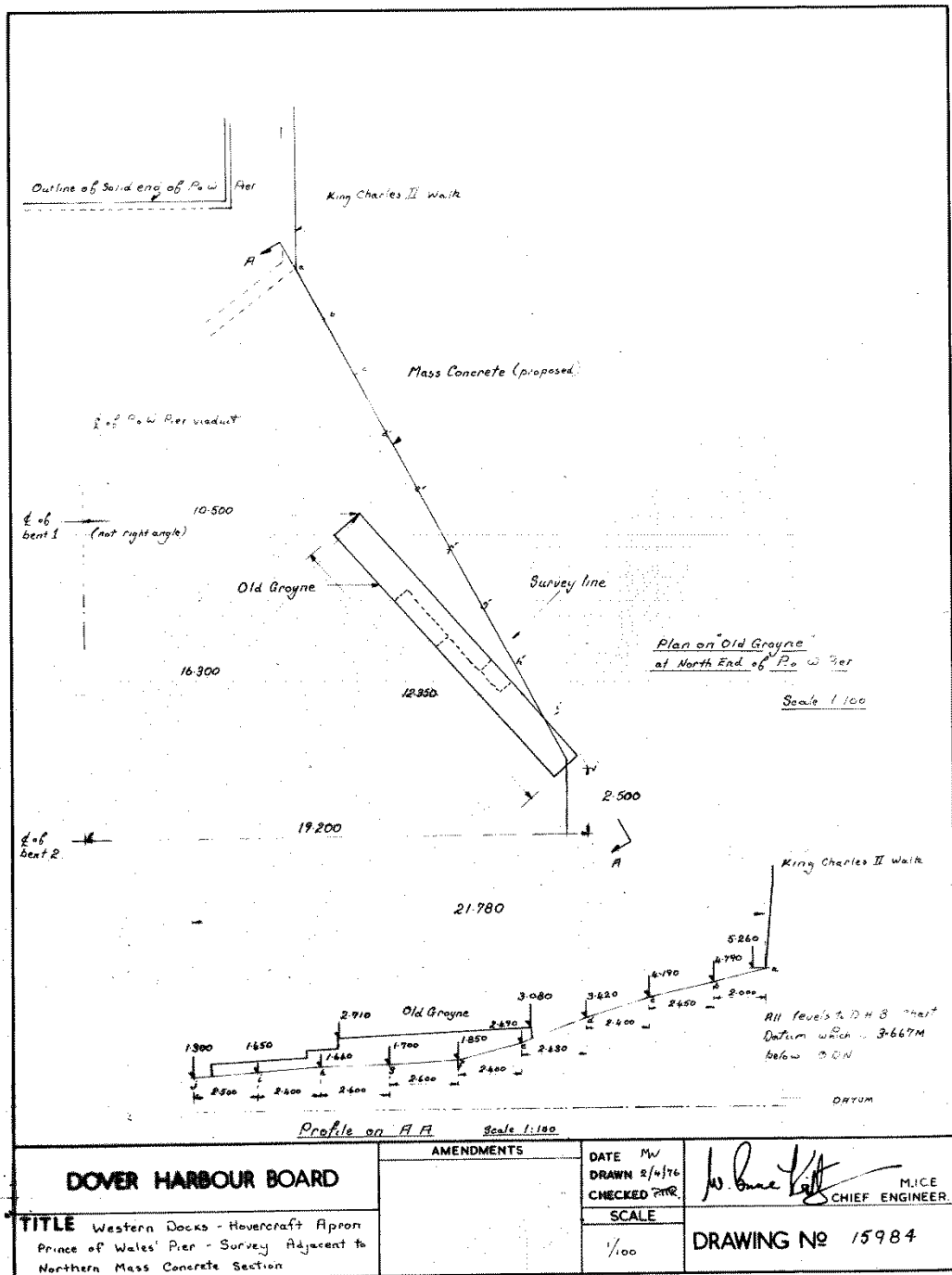


Figure 51: Western Docks Hovercraft Apron, Mass Concrete section, 02/04/1976, DHB Historical Archive Ref: 15984.

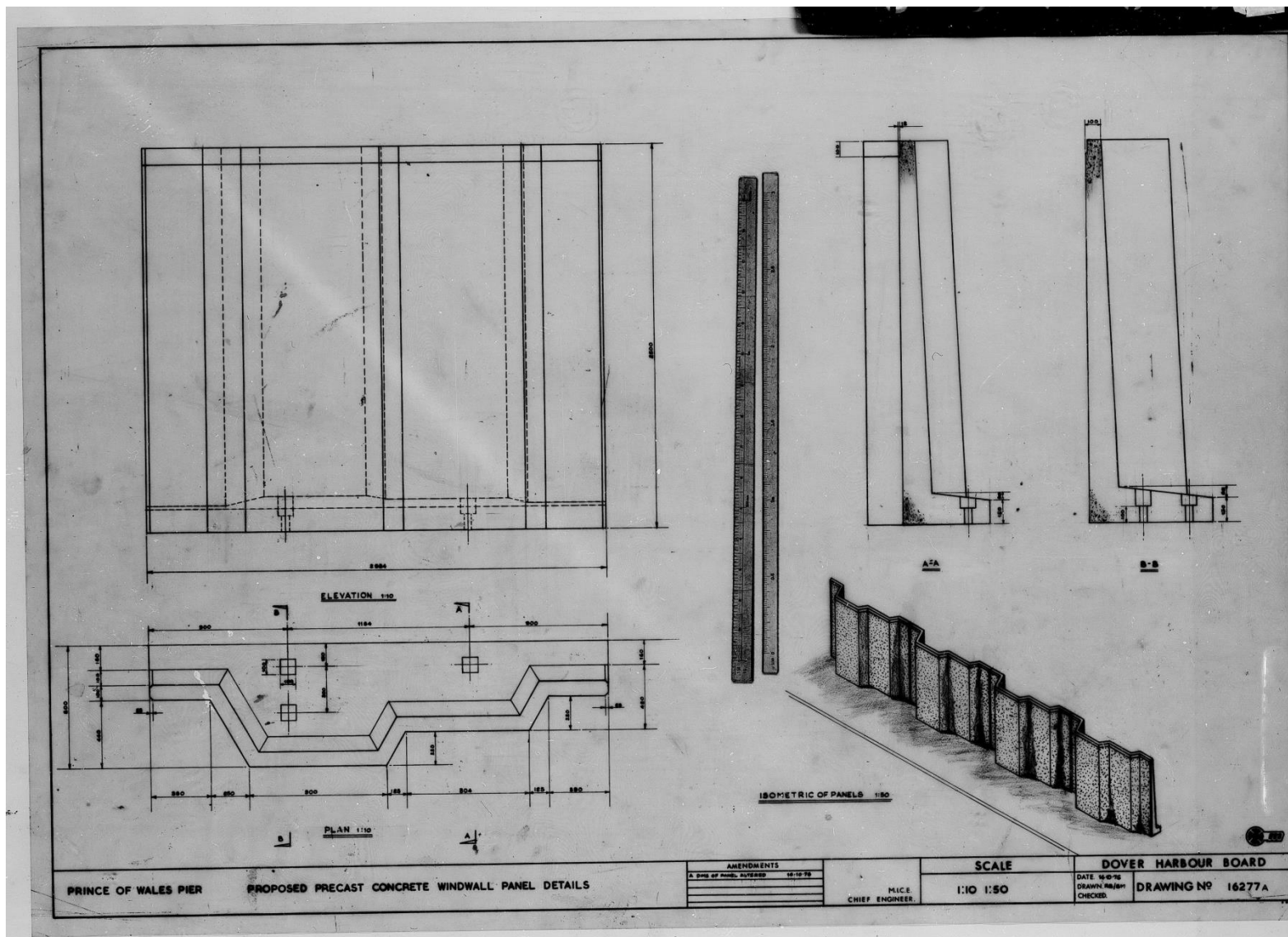


Figure 52: Western Docks Hovercraft Apron, precast concrete wind wall panel details, 23/09/1976, DHB Historical Archive Ref: 16277.

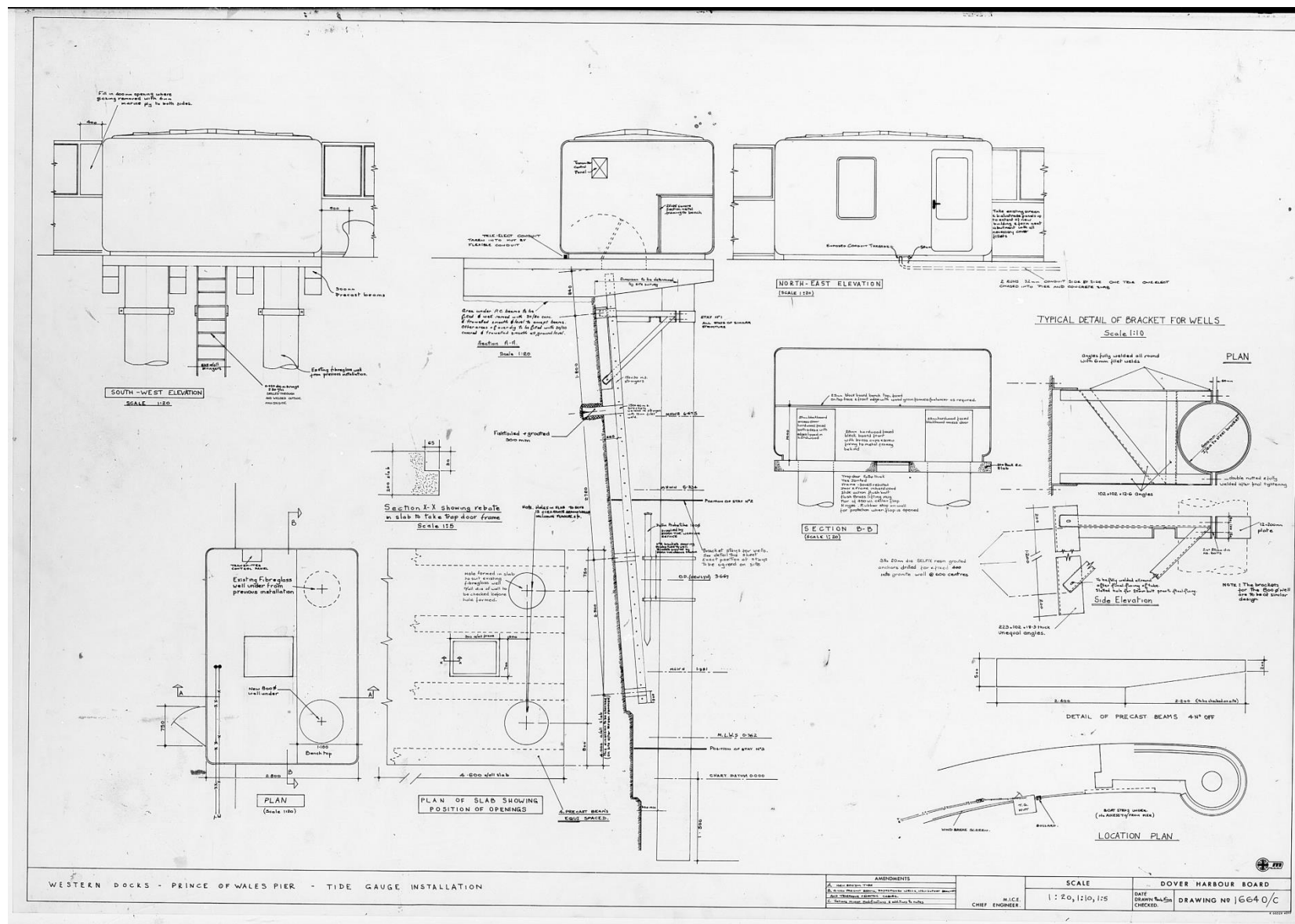


Figure 54: Western Docks Hovercraft Apron, Tide Gauge Installation, No Date, DHB Historical Archive Ref: 16640.

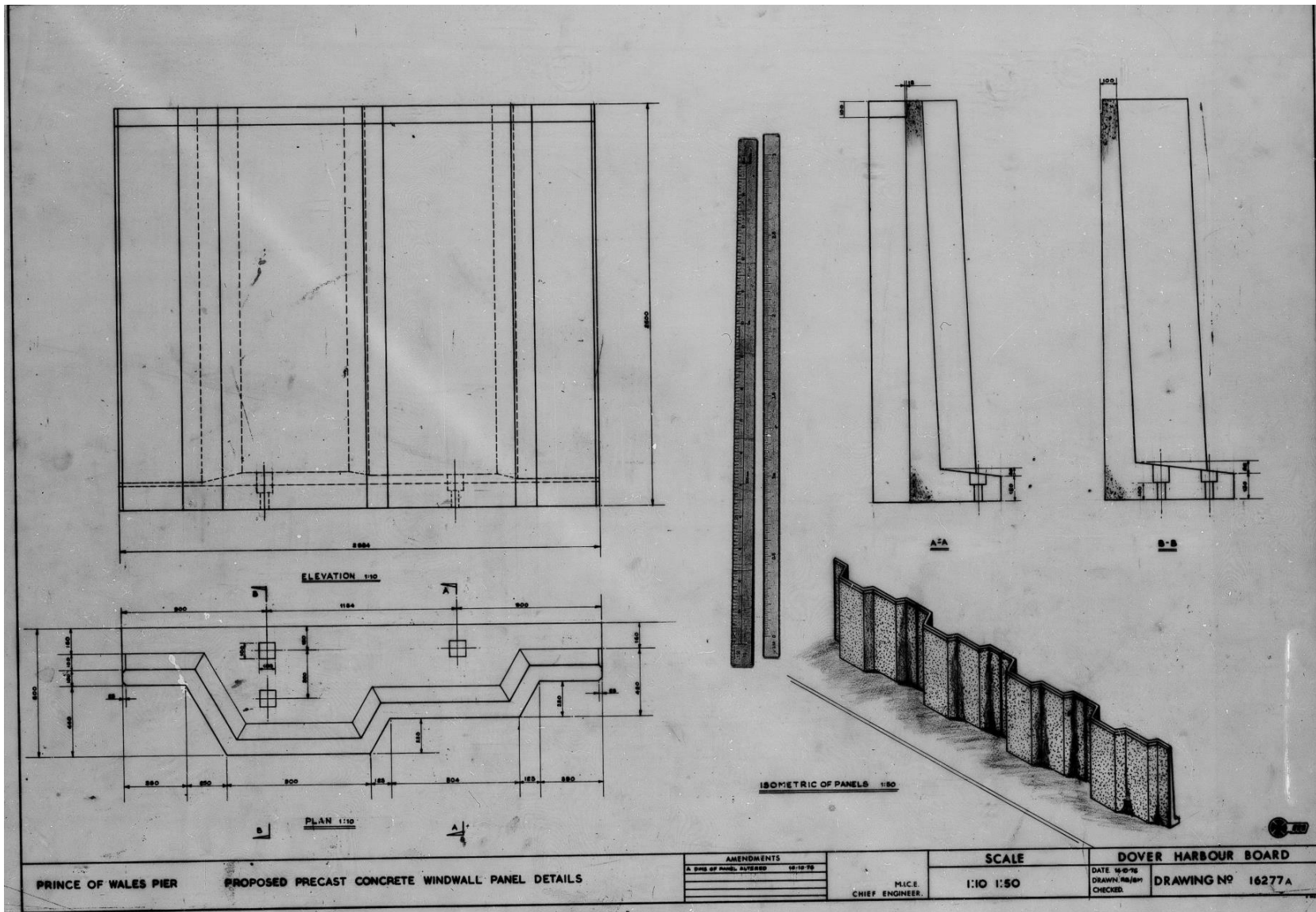


Figure 56: Prince of Wales Pier, Proposed Precast concrete wind wall panel details, 14/10/76, DHB Historical Drawings Archive Ref: 16277a.

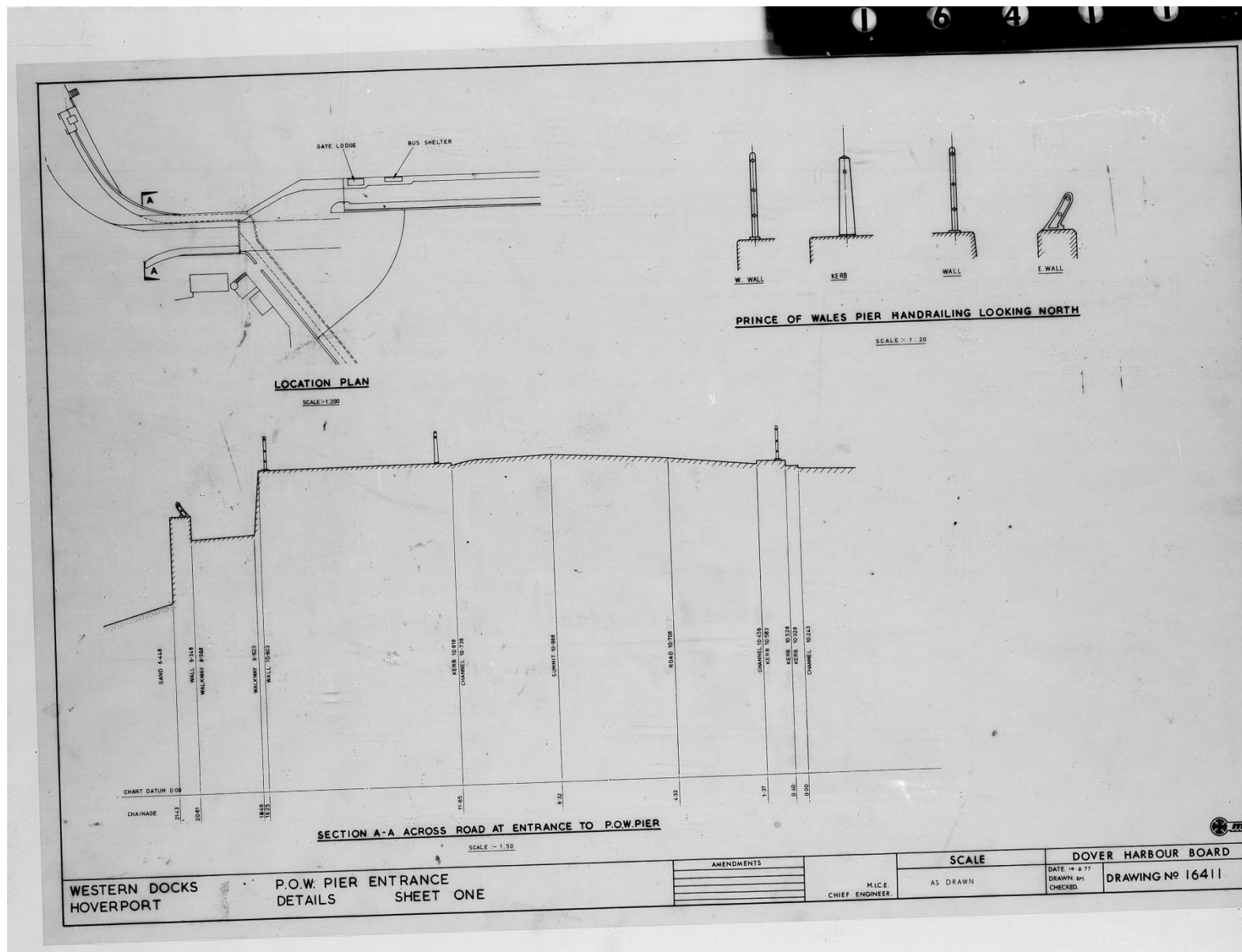


Figure 58: Prince of Wales Pier, Entrance Details Sheet One, 14/02/1977, DHB Historical Drawings Archive Ref: 16411.

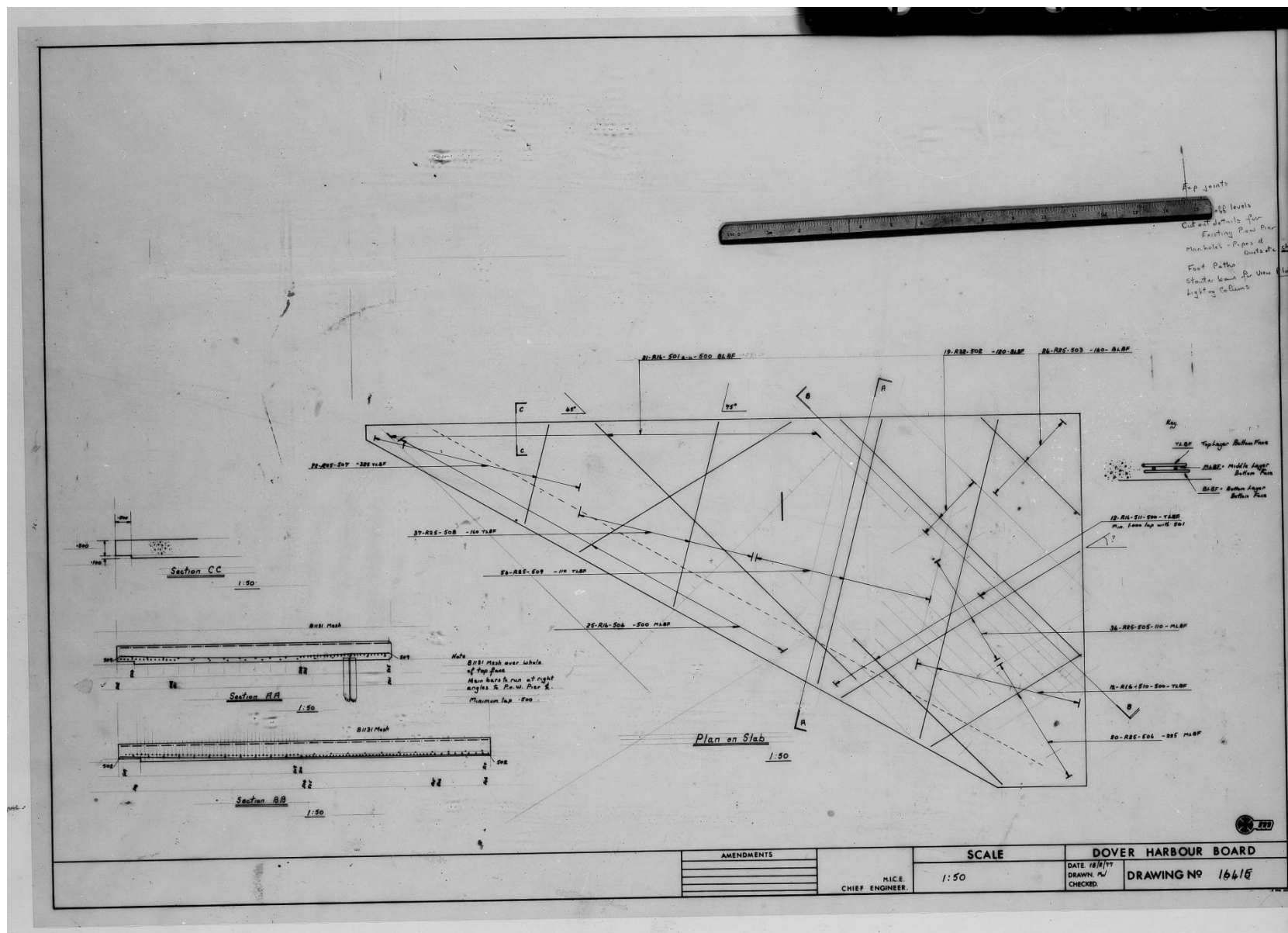


Figure 59: Prince of Wales Pier, Window Panel Detail, 18/02/1977, DHB Historical Drawings Archive Ref: 16425.

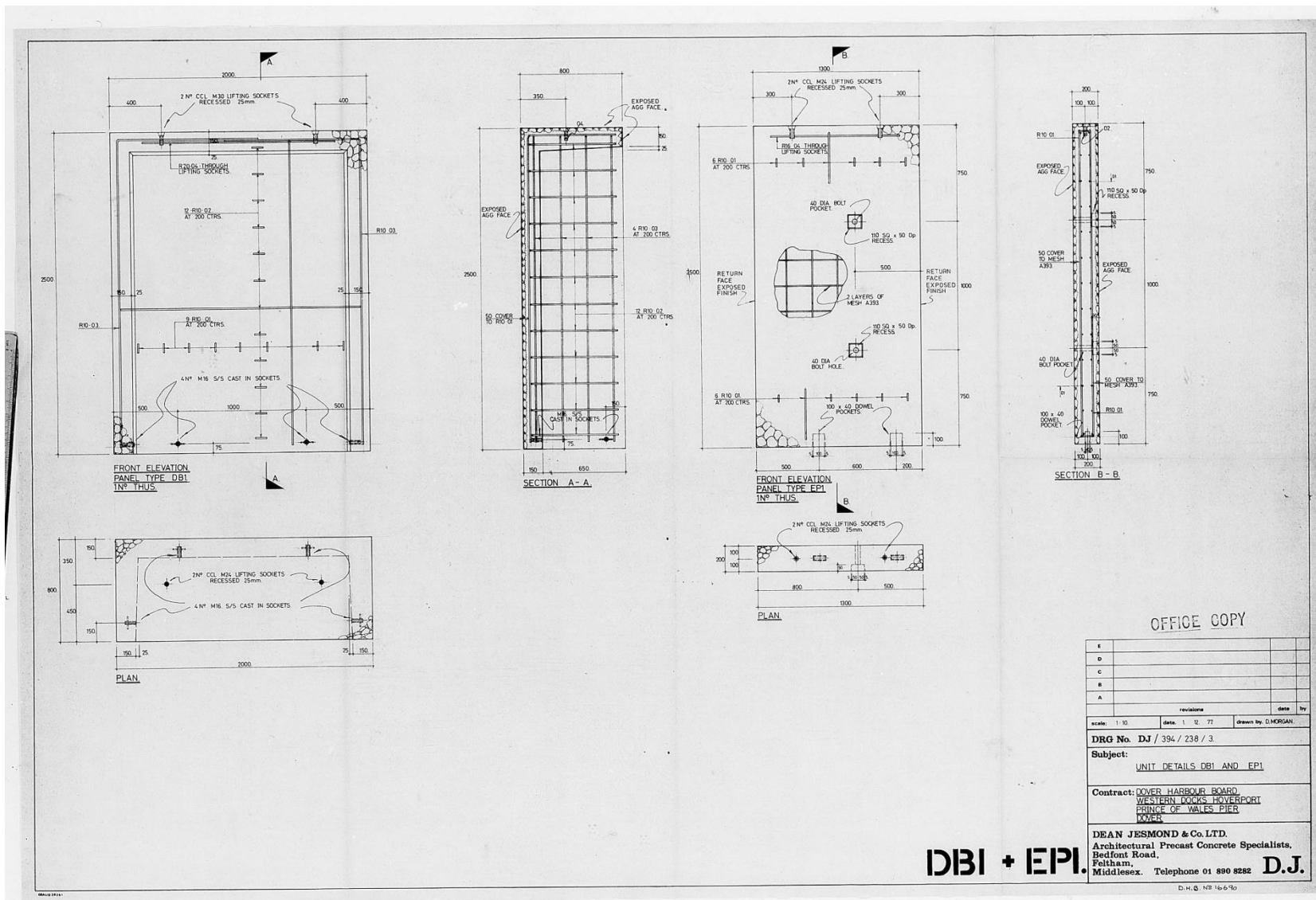


Figure 61: Prince of Wales Pier, RC Windwall detail, 01/12/1977, DHB Historical Drawings Archive Ref: 16690.

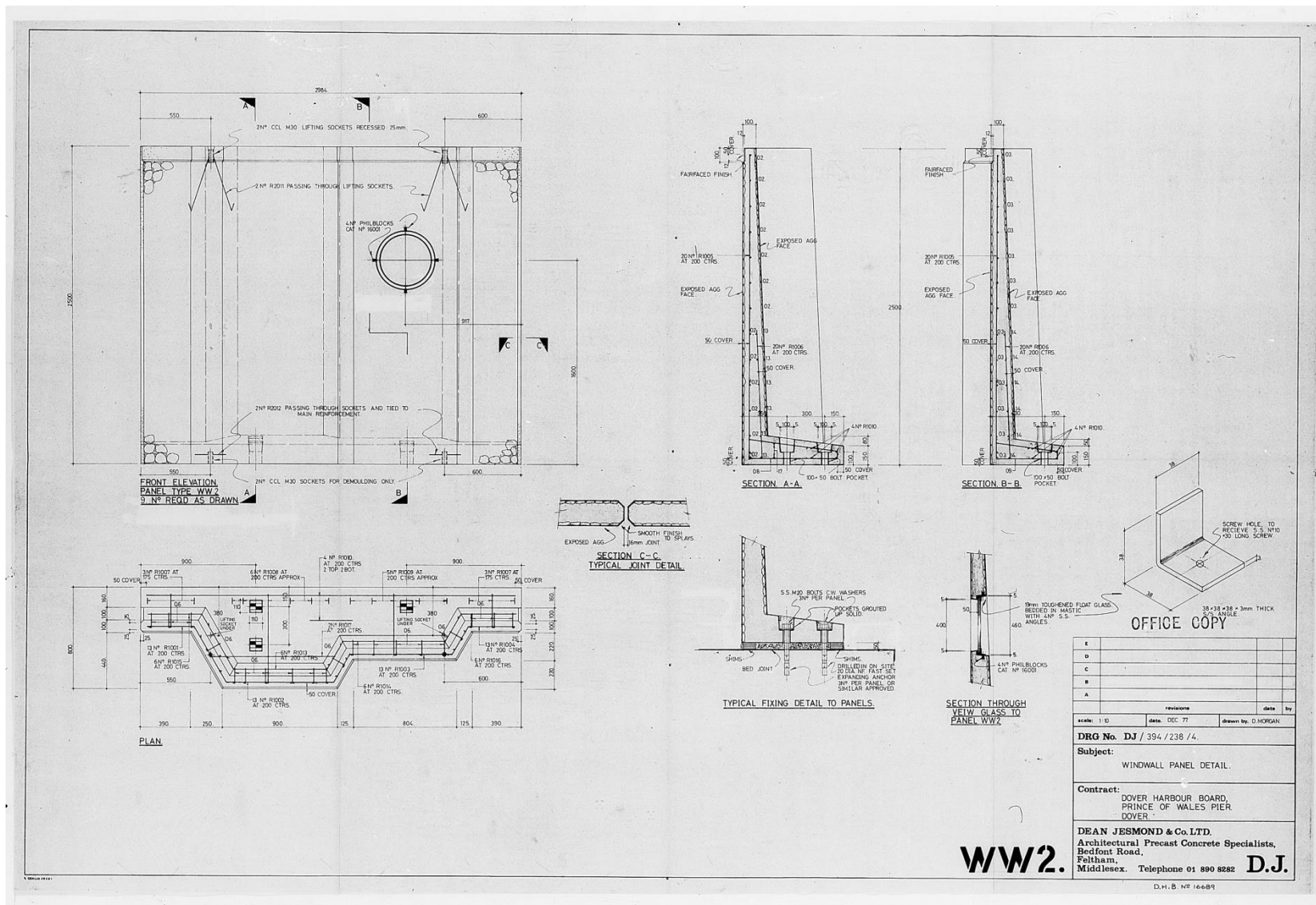


Figure 62: Prince of Wales Pier, Windwall panel detail, 18/02/1977, DHB Historical Drawings Archive Ref: 16425.

Figure 63: *Prince of Wales Pier, Windwall panel detail , 01/12/1977, DHB Historical Drawings Archive Ref: 16689.*

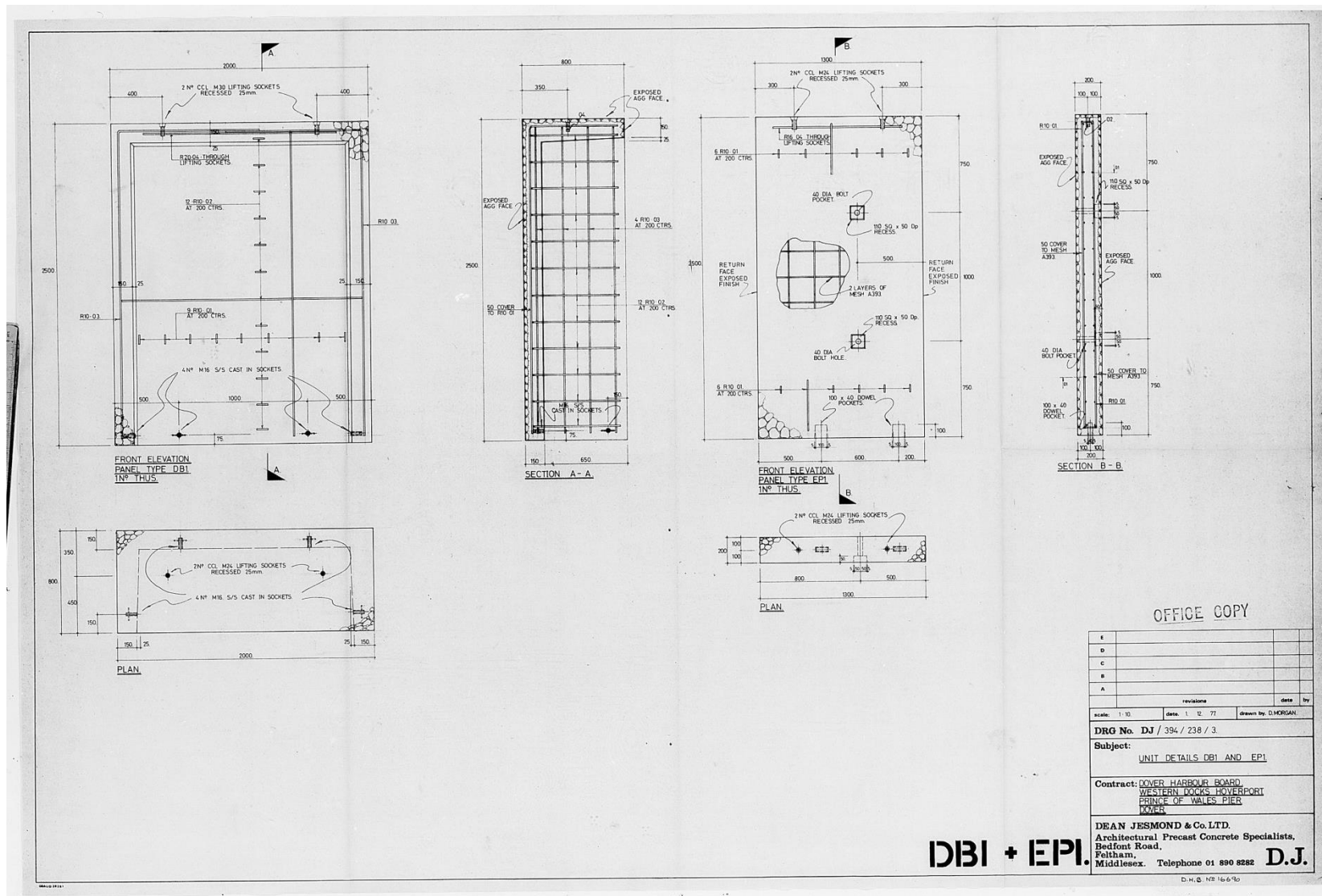


Figure 64: Prince of Wales Pier, Unit Details DB1, EP2 01/12/1977, DHB Historical Drawings Archive Ref: 16690.

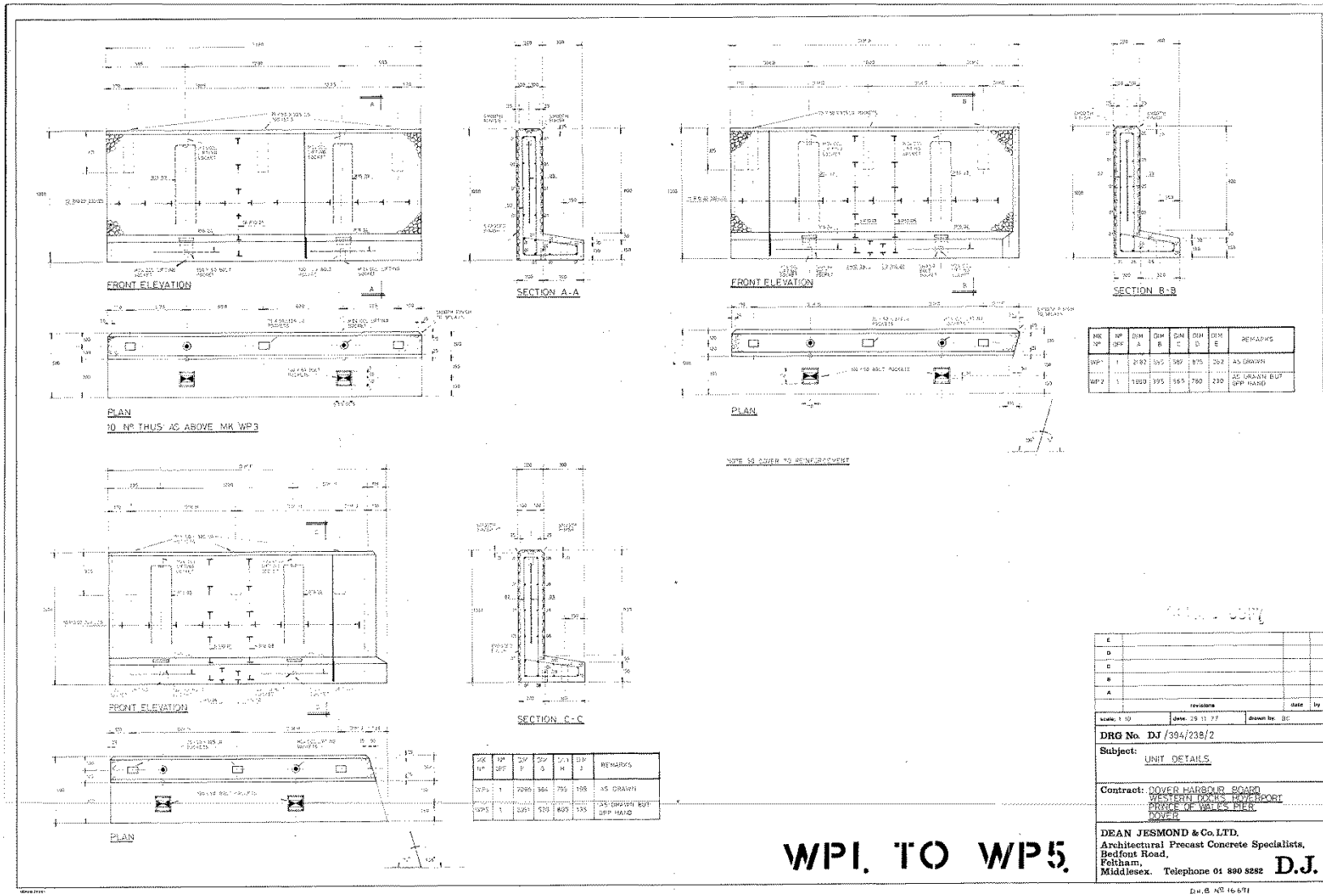


Figure 65: Prince of Wales Pier, Unit Details, 19/11/1977,DHB Historical Drawings Archive Ref: 16691.

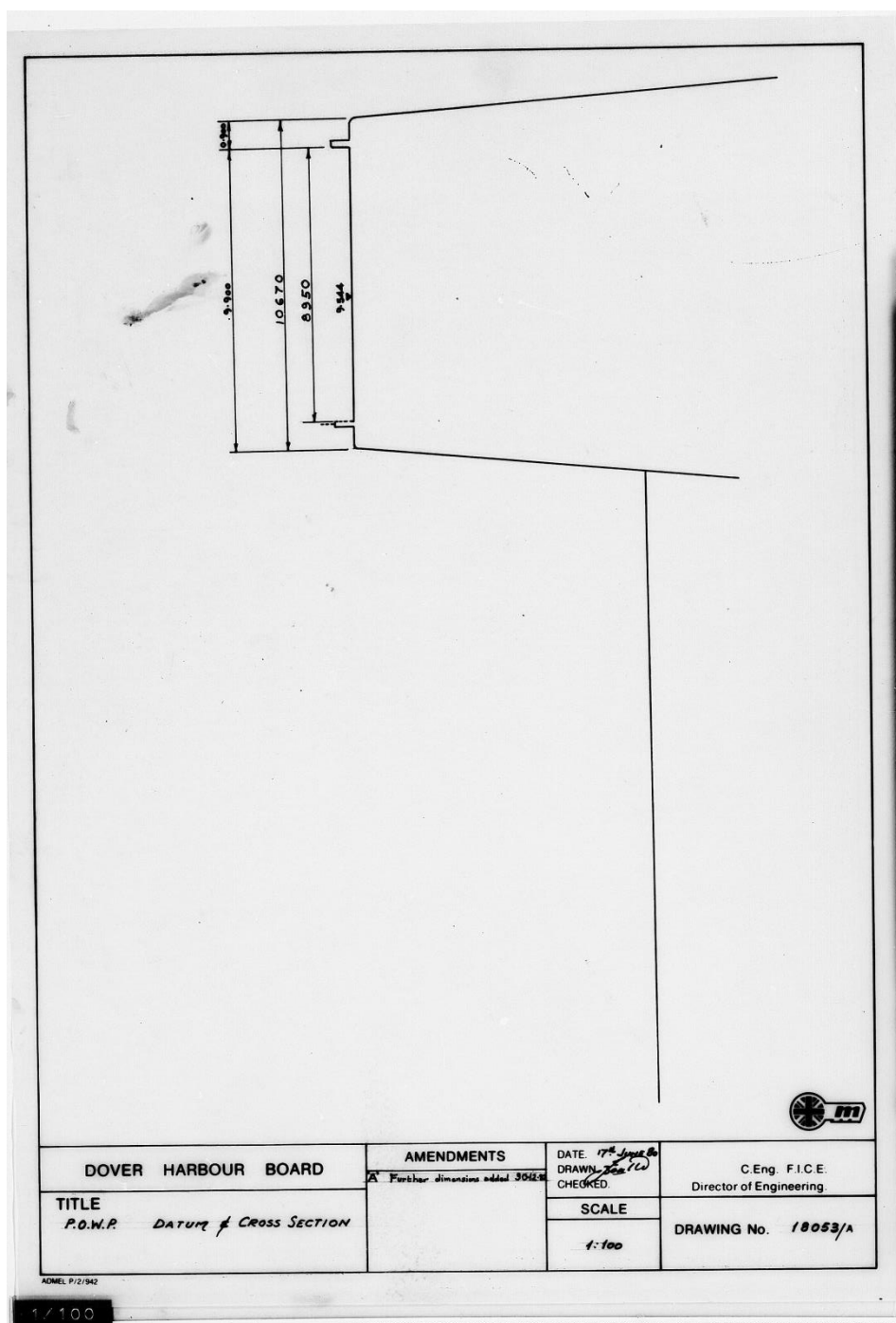


Figure 66: Prince of Wales Pier, Datum and cross section, 17/06/1980, DHB Historical Drawings Archive Ref: 18053.

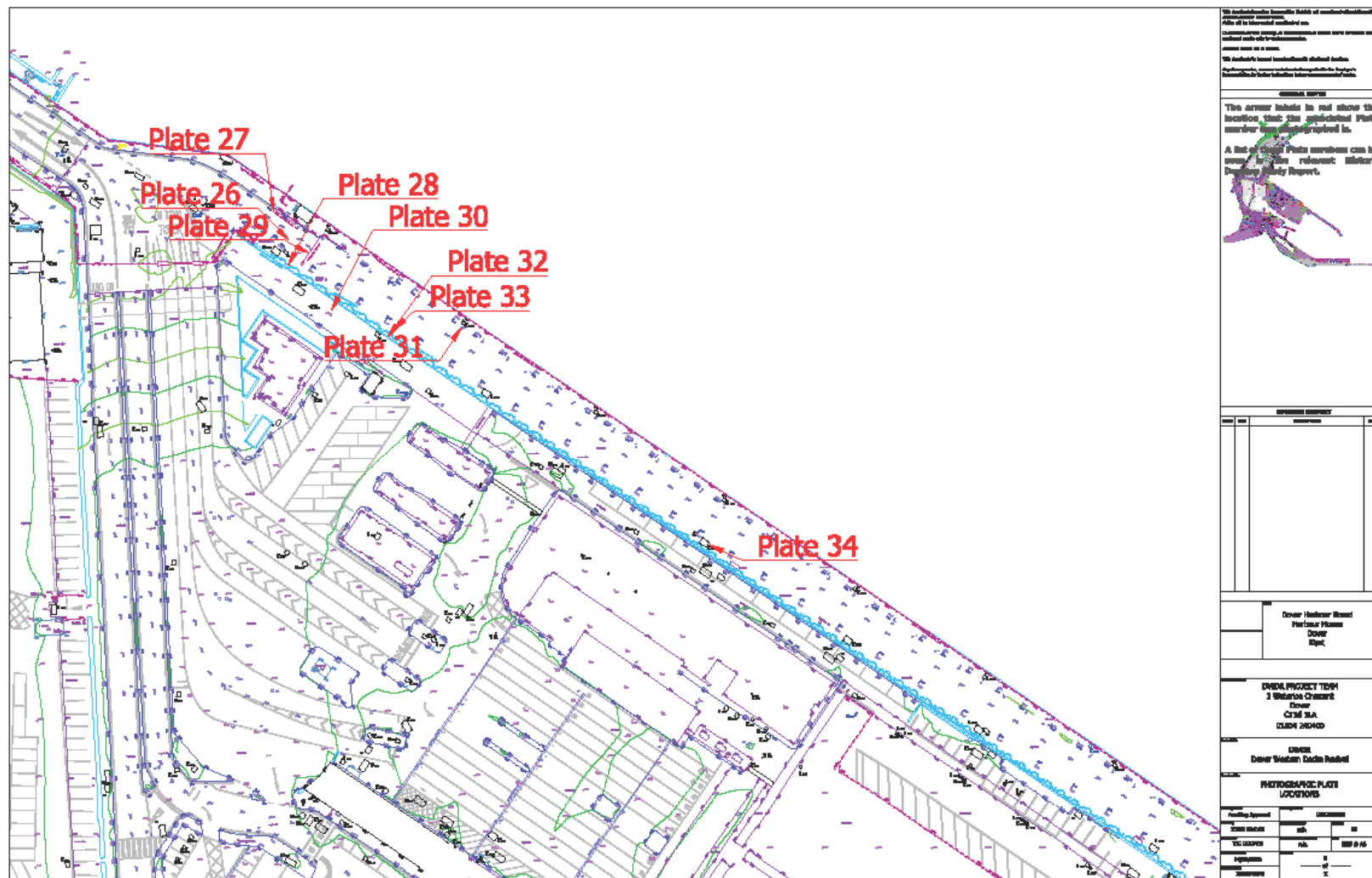


Figure 67: Location map for current photographs, 1/3, Created 31/10/2016, DWDR.

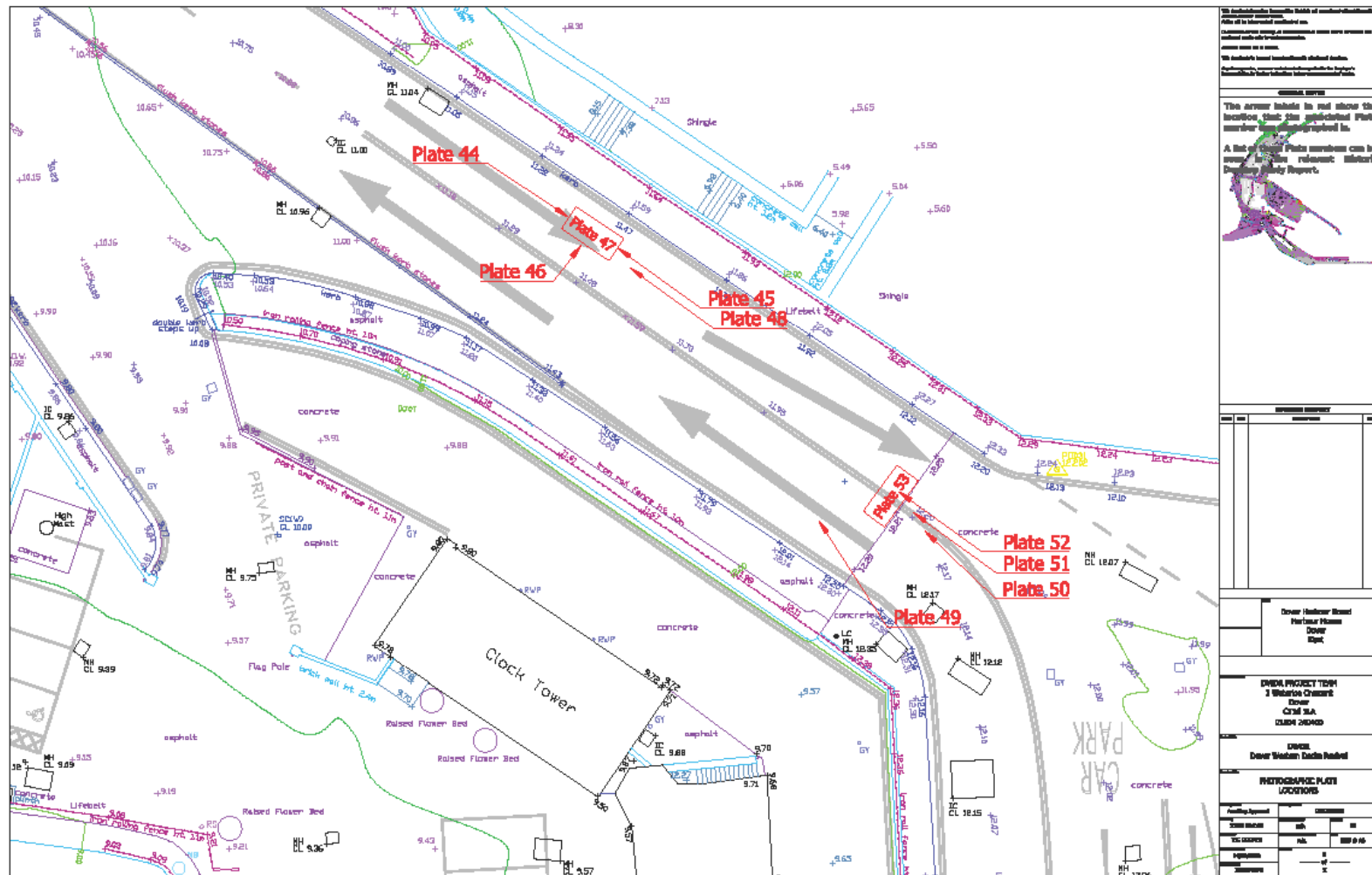


Figure 70: Location map for the discoveries found whilst undertaking height reduction works of the Prince of Wales Pier, includes photograph locations, Created 31/10/2016, DWDR.

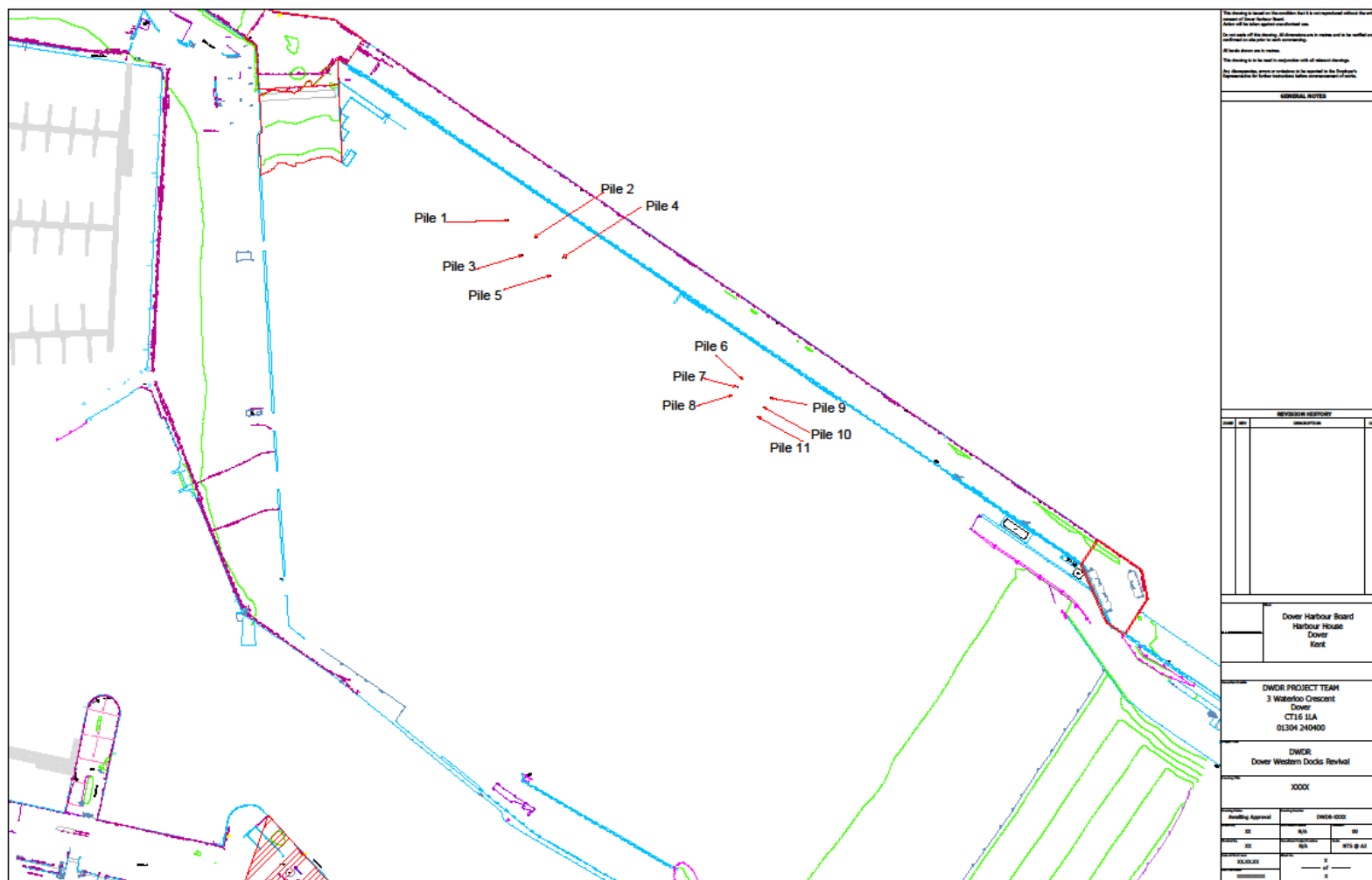


Figure 71: Approximate locations for where the original piles of the pier were found, Created 31/10/2016, DWDR.



APPENDIX 002- HOVERPORT IMAGES

1976-1977

**This document is to be read in conjunction with the
Prince of Wales Pier Desktop Study**



Figure 1: The reclamation of land with the use of sand before the main construction of the hoverport apron could start, looking north-west, 13/01/1976, DHB.



Figure 2: The land which has been reclaimed in order to create a foundation for the rest of the works, looking West, 13/01/1976, DHB.



Figure 3: View from the Admiralty pier, of the Prince of Wales Pier before the reclamation works had started, the original Victorian lattice structure can be seen clearly, looking north-west, 05/04/1976, DHB.



Figure 4: The Prince of Wales Pier before the reclamation works had started, looking South, 05/04/1976, DHB.



Figure 5: Looking back on sea that will be reclaimed whilst standing on the North pier, looking West, 05/04/1976, DHB.



Figure 6: The original lattice steel structure that would have formed a large section of the Prince of Wales Pier, looking south-east, 05/04/1976, DHB.



Figure 7: One of the shelters present on the pier, the original design for the seating can also be seen here, looking north-west, 05/04/1976, DHB.



Figure 8: Lifting cranes for use within the construction of the Hoverport, looking North, 28/4/1976, DHB.



Figure 9: The beginnings of the sheet piling being installed to cover the original structure, looking South, 18/06/1976, DHB.



Figure 10: Sheet piling being put into place, seating is again visible here, looking West, 18/06/1976, DHB.



Figure 11: Pile foundations being installed, 18/06/1976, DHB.



Figure 12: Site works for the Hoverport development, looking north-east, 18/06/1976, DHB.



Figure 13: Pile foundations, looking North, 18/06/1976, DHB.



Figure 14 Piling preparation works, 18/06/1976, DHB.



Figure 15: Staging for the construction works, 02/08/1976, DHB.



Figure 16: Work has progressed here with the majority of the landward end of the pier being covered, 02/08/1976, DHB.



Figure 17: Sheet piling has been installed, the clock tower and waterloo crescent are also visible here, looking north-west, 02/08/1976, DHB.



Figure 18: Construction workers attaching the sheet piling, 02/08/1976,, DHB.



Figure 19: Both original and added material to the pier, concrete and steel structures can be seen, looking North, 02/08/1976, DHB.



Figure 20: Sand being unloaded into the space to be reclaimed behind the Prince of Wales Pier, looking West, 14/09/1976, DHB.