Application to remove

Crane 13
New North Quay, St. Helier, Jersey

Prepared by designplus architects

On behalf of PORTS OF JERSEY
YOUR ISLAND GATEWAY
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Crane 13 is located at the southern end of the western shoulder of the operational New North Quay, within the port of St. Helier.
Background

Crane 13 is a 7-ton rail-mounted level-luffing lifting mechanism. The crane was manufactured by crane-makers Stothert & Pitt Ltd of Bath and subsequently installed on the New North Quay at the Port of St. Helier in 1949.

When in use and operational Crane 13 travelled on rails servicing vessels, north and south along the western shoulder of the operational New North Quay at the Port of St. Helier but Crane 13 has been out of operational service for some 20 years during which time its overall condition has significantly deteriorated. The crane is obsolete and fails to meet current operational standards and regulations.

The continually evolving operations of the St. Helier Port and particularly the already congested New North Quay which deals with approximately 98% of the cargo that enters the island, has meant that the limited 7-ton lifting capability of Crane 13 quickly became inadequate, with the growing lifting requirements on New North Quay being provided by two 10.5 tonne Stothert and Pitt rail mounted cranes, and a 35 tonne Butters Derrick crane.

Crane 13 was subsequently de-commissioned circa 2008, but retained in case it was required again in the future. The 35 tonne Butters Derrick crane however was dismantled to make way for a modern Liebherr 250 mobile harbour crane. The arrival of this crane provided the harbour with the ability to meet the growing demands of the modern ‘LoLo’ shipping movements.

Since the arrival of the Liebherr crane there has been no requirement for crane 13 to be introduced back into service. This has meant that crane 13 has become operationally obsolete and presents an obstruction on an already overcrowded working quay, taking up critical operational area.

With larger vessels coming into the operational areas of the port, Crane 13 was posing a danger to the manoeuvring of the vessels themselves and eventually it was moved into its current location, out of the way of the heavy operational zones and for safety and operational reasons. The tracks were either removed or filled in.

In addition to continuing to be an obstruction, Crane 13 is also now structurally unsound posing a health and safety hazard to the people working in the area, as well as a risk to the adjacent occupied warehouse building and the boats in the harbour/marina should it collapse.

In 2014 Ramboll consulting engineers were commissioned by the Ports of Jersey to carry out a study to assess the available options for the future.

Having considered the conclusions of this and other studies and reports prepared on Crane 13 together with the financial implications both in its restoration and onward maintenance, the Ports of Jersey have concluded that the only viable option is to demolish/ dismantle and remove Crane 13. This applications seeks the planning departments approval to do so.
Safeguarding of Workers (Cranes and Lifting Appliances) (Jersey) Regulations 1978

The ‘Safeguarding of Workers (Cranes and Lifting Appliances) (Jersey) Regulations 1978’ set out a great number of regulations and obligations that the owner of any crane or lifting appliance must legally comply with, with the greater part of the regulations referring to issues of health & safety and maintenance. This is not only in relation to the operators of the lifting appliance but equally to the appliance itself and the health & safety of those others working in and about the area of the appliance.

Despite being de-commissioned, Crane 13 has been regularly inspected and any major maintenance issues noted during the inspections have been rectified by TTS under the Service Level Agreement (SLA). However as can be seen below the crane would not be suitable to operate on the quay in its current condition, in fact it would be prohibitively expensive to put the crane back into safe service.
Asbestos

A detailed survey of Crane 13 has detected the presence of asbestos in several areas, which would be expected in a crane of its age. The removal of the asbestos and making safe of the structure to enable personnel access will in any event require considerable destruction of much of the existing structure.

Operational Hazards

As well as the Health & Safety concerns regarding un-safe materials used in its structure, the crane itself now falls outside of the regulations in many aspects that could not be rectified without considerable modification to the existing structure both internally and externally. To meet current regulations, the substantial modifications needed would destroy many or all of any perceived historic features.

Access to and from the cab is restricted/possible unless the crane is properly parked. This means that if the crane breaks down out of position there is no safe access to the cab.

The crane controls are as would be expected of a crane this age but are extremely dated and do not meet current regulations.

The field of vision for the driver is very restricted due to the small glazing panels and the vertical windows. Operation of Crane 13 on such a congested quay would cause considerable Health & Safety issues.

Machinery and 400 volt switching attached to the driver’s controls pedestal do not meet current regulations.
**Background**

Crane 13 was listed at the request of WEB (now States of Jersey Development Company) with the intention of possible use as an iconic structure to be incorporated into the plans associated with the East Of Albert Master Plan concept. The listing states:

The site known as **New North Quay Level Luffing Crane, St Helier Harbour in the Parish of St. Helier** is of special interest.

i) HER Reference: HE1833

ii) Special Interest: HISTORICAL

iii) Special Interest: The oldest surviving crane in St Helier Harbour re-located to its present position at the pier head after the quay was widened in 1975.


v) Location: Plan attached

vi) Restricted Activities: The carrying on, of any of the following activities – to use or operate a device designed or adapted to detect or locate metal or minerals in the ground; to carry on an activity which might injure or deface the site or part of a site.

vii) Listed Status and Non-statutory Grade: Listed Building Grade 2

The master plan never came to fruition and since the merger of the Harbours and Airport in 2011 Ports have been working on and addressing a number of legacy issues around the harbour including Crane 13.

A project to upgrade the New North Quay cranes (cranes 9 and 10) was underway at the time and a feasibility report was undertaken to determine the condition of crane 13 and options for dealing with the crane. This report was issued in January 2014 and identified 3 options: 1) dismantle and scrap; 2) Refurbish in situ and maintain; 3) Dismantle, refurbish and re-erect on another site away from the operational area, but no suitable site was suggested.

As Crane 13 is now operationally obsolete, as well as unsafe and is obstructing the operational use of a much needed area of the New North Quay, options 2 and 3 although considered have had to be discounted as neither deals with the issues of safety and non-compliance as already discussed in the foregoing of this report.

Ports of Jersey have therefore subsequently been in discussions with both the Planning department and Jersey Heritage in an effort to come to mutual agreement of how to deal with the crane. Unfortunately during which time, the condition of the crane has continued to deteriorate.
Consultation

At the request of the Planning department, Ports of Jersey made contact with Jersey Heritage to ascertain the historic value and their interest in Crane 13. While Jersey Heritage did express an interest in the structure, they were however clear that they did not have a site for its relocation and would not cover the cost of moving it to a new location which has been estimated in excess of £250K. This figure being needed to carry out the necessary repairs, its removal and re-instatement of the crane in a new location, then followed by an annual commitment of at least £10k for its on-going maintenance.

When asked for their expression of interest in the crane, Jersey Heritage replied:

“Whilst the organisation would not be able to take on the costs of moving the crane or of its long-term maintenance we would suggest that it be relocated to outside the Maritime Museum where it could become part of the story of Jersey’s maritime past”

Unfortunately like Jersey Heritage, Ports of Jersey have neither the available land to provide a new location for the crane, nor the available funds to cover the costs of doing so and its ongoing maintenance.

It is therefore felt that while considerable consultation and dialog has taken place between Ports of Jersey and both the Planning department and Jersey Heritage, to date neither has been able to suggest a clear way forward in an effort to preserve Crane 13 and cover the cost of doing so.

Relocation

The new location for Crane 13 as suggested by Jersey Heritage, outside the Maritime museum is Ports of Jersey land which is currently used for parking and pedestrian access to the adjacent marina. Locating the crane there would mean an unacceptable loss of parking and amenity space for the marina users. Furthermore and more importantly, the crane would then remain on Ports of Jersey land and POJ would remain the owner under the terms of the Safeguarding of Workers (Cranes and Lifting Appliances) (Jersey) Regulations 1978 as well as taking on the responsibility and liability of public safety too.

The crane currently sits within a protected zone of operational Ports land to which there is no public access. Brining the crane into the public realm would introduce the unacceptable risk of the potential of people trying to climb it and therefore the crane would need to be screened off with a 2.800m high security fence.

Simply moving the crane would also not be feasible as the while the tracks outside of the museum may still be present under the car park surface, the larger section of track between there and the operational quay no longer exists and much of the area has been built on. Furthermore, the structural condition of the crane would not lend itself to being pushed along the rails.
Dangerous Condition

Concerned by the continually deteriorating condition of Crane 13, particularly minded of Health & Safety and the implications of the Safeguarding of Workers (Cranes and Lifting Appliances) (Jersey) Regulations 1978, in Spring of 2015 Ports of Jersey commissioned a structural assessment of the crane by RSA (States of Jersey insurers).

Crane 13 was inspected, surveyed and assessed, and RSA issued their final report in April 2015. A great number of structural issues were highlighted in the RSA report with the main and overwhelming recommendation of the report being to remove the crane as soon as possible on the grounds of health and safety as the bogies on the track were noted to be buckling.

RSA reported “due to the location and condition of the crane and its components we would recommend that the machine is dismantled and removed from the dock side at the soonest point. Any high winds or storms could cause further structural damage to the item. It is noted that there are a number of pleasure craft docked in close proximity to the item which could be in danger of being subjected to falling objects”

“If we had been asked to carry out an insurance risk survey on this equipment rather than a visual survey we would advise our underwriters not to take the insurance risk surrounding this machine”

Given that all of the specialist/ professional recommendations in the various reports have been to remove the crane as soon as possible for safety reasons and the fact that the crane continues to deteriorate in its current location on a live and very congested and busy quay, Ports of Jersey feel that they are left with no option but to make this application to dismantle and scrap crane 13.

There is obviously now great urgency for the removal of crane 13 in light of the numerous concerns recorded in respect of its failing structural stability and the health & Safety issues. To that end the removal work will be carried out immediately on receiving the Planning departments approval to do so and we ask on behalf of Ports of Jersey that for these reasons, this application is expedited and approval given at the very earliest possible date to allow the removal to take place.

Bolts and fixings are completely rusted through making them ineffective.
**Method of Removal**

Due to the structural instability of crane 13, it cannot be simply moved without the likely eventuality of collapse and the risk of injury or damage to the adjacent structures, boats in the marina and/or operational warehouse so careful consideration has had to be given to the safest way of removal of the crane while eliminating or at least reducing the risks. It will be a costly operation, estimated at circa £50K, but is deemed entirely necessary due to the cranes poor structural and overall condition together with other concerns already expressed.

Firstly all affected parts of the crane will need to be dismantled and demolished so that the asbestos can be safely removed and disposed of before the main dismantling process can be undertaken. Due to the significant extent of asbestos products recorded in crane 13 (NAS Laboratories report – Appendix C), it is expected that the removal process will result in considerable damage to both the crane cab and its structure & mechanics.

This work will be carried out by a suitable Licensed Asbestos Removal Contractors such as CAC Environmental.

**Removal**

Once the safe removal of the asbestos has been completed, then the remaining parts of the crane will be dismantled.

Due to the structural instability of the cranes structure, a number of dismantling options have been explored. The preferred option, though the more costly but none the less being exploded for safety reasons, is to bring a barge with an operating crane into the harbour and moor it directly alongside the location of crane 13. Crane 13 would then need to be supported, propped and carefully dismantled. The components would be placed directly on to the barge and the whole will be taken away from the island for scrapping.

Further dismantling options are also being considered as the crane must come down as soon as possible for safety reasons due to the already buckling bogies and the option of a barge may take too long to organise.

Once everything has been dismantled and removed, the site currently occupied by crane 13, which is at present an ‘exclusion zone’ due to health & safety concerns will then be made safe and returned to critical operational use.
Crane 13 to be dismantled
Ramboll Report

Ramboll Group A/S (also known as just "Ramboll") is a consulting engineering group with worldwide operations.

In 2014 Ramboll consulting engineers were commissioned by the States of Jersey to carry out a study to assess the available options for the future.

This is the Ramboll report/ case study referred to in the forgoing text.
JERSEY CRANE
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CRANE 13 - NEW NORTH QUAY
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Prepared By: Scott Carter
Reviewed By: 
Approved By: 

Scott Carter

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1. **INTRODUCTION**

Crane 13 on the New North Quay has been out of service for some years now and during this time it has become a certainty that POJ will never require it for port operations in the future. For this reason Ramboll has been commissioned by the States of Jersey to carry out a study to assess the options for its future.

This report discusses the findings of the study and provides an estimate of cost for the likely options.

1.1 **Description**

Situated on the south of Jersey New North Quay is located within the Port of St Helier.  

![Figure 1 - Location of St Helier](image)

![Figure 2 - Aerial View of St Helier Showing Location of Crane 13 on the New North Quay](image)

In recent years the lifting provision on new North Quay has been provided by two 10.5 tonne Stothert and Pitt rail mounted cranes, a 35 tonne Butters Derrick crane and crane 13, an older Stothert & Pitt rail crane estimated to be 50-60 years old.

Crane 13 was de-commisioned circa 2008, and retained in case it was required in the future. The Derrick crane was dismantled to make way for a modern Liebherr 250 mobile harbour crane. The arrival of this crane provided the harbour with the ability to meet the demands of modern 'LoLo' shipping movements.

Since the arrival of the Liebherr crane there has been no requirement for crane 13 to be introduced back into service. This has meant that crane 13 has become an unnecessary cost to POJ. As well as the cost of the crane being kept safe and maintained it now forms a significant obstruction on an already overcrowded quay.
2. **INSPECTION FINDINGS**

It is understood that crane 13 is regularly inspected and that any maintenance issues noted during the inspections are rectified by TTS under the Service Level Agreement (SLA). As can be seen below it became clear during our inspection that the crane would not be suitable to operate on the quay in its current condition, in fact it would be prohibitively expensive to put the crane back into service.

2.1 **Crane Externals**

The crane has an exposed roller bearing slew ring. This type of slew ring is robust but no longer used for a number of H&S reasons.

The crane also has wooden access platforms that do not comply with current regulations.

There is corrosion to the crane generally due to a lack of maintenance. This could be rectified but will soon become a significant problem.

![Figure 3 - Slew ring and access platform](image)

The timber cladding material is starting to rot due to a lack of maintenance of the paint system.

![Figure 4 - Timber cladding](image)
The crane is disconnected from the 3Phase supply.

The Access ladder does not have a safety cage.

Due to a lack of space on the quay the Crane has crates and boxes stacked round its base.

Access to and from the cab is restricted/not possible unless the crane is properly parked. This means that if the crane breaks down out of position there is no safe access to the cab.

Even when properly parked the access is not suitable for use under current regulations.

The field of vision for the driver is very restricted due to the small glazing panels and the vertical windows.
2.2 Machine House

Visually the machinery seems in generally good order but as previously stated is very dated and does not meet current regulations.

As with other old cranes on Jersey there are asbestos lagged resistors that need to be removed prior to any other works being carried out.

The timber frame is starting to rot and although not serious yet, without attention it will deteriorate further.
2.3 Drivers Cab

The crane controls are as you would expect of a crane this age but are dated and do not meet current regulations.

400volt switching is attached to the driver’s controls pedestal. This does not meet current regulations.
Asbestos or Superlux fitted as heat protection to the cabin roof over the asbestos insulated resistor banks
2.4 Crane Rails

Over the years the areas of crane rail that are no longer used have been built over. Here it can be seen that an oil tank and crash barrier have been fitted over the rails.

Figure 14 - Unusable crane rails

We were informed that the crane rails are still in position but under the block paving / tarmac.

Figure 15 - Old rails built over adjacent to St Helier Marina
3. CONCLUSIONS

The crane is of an age that it is no longer viable to use/maintain in service on the quay. An interest in the historic value of the crane was shown in 2009-2010 when it was listed by the States of Jersey at the request of Waterfront Enterprise Board. In December 2013 POJ contacted Property Holdings and SOJDC (formally WEB) who declared no interest in owning the crane.

POJ understandably want to remove the crane from the quay for a number of reasons; to remove the cost of inspection, maintenance and insurance of the crane. As stated above the crane will soon require considerable work to stop it quickly deteriorating. It makes sense to remove the crane before it becomes a danger. The crane is currently parked in a very congested area and the space that will be freed if the crane is removed will help operationally.

4. RECOMMENDATIONS

We would recommend the crane is removed from the quay. The most cost effective option would be to dismantle and scrap the crane. This would mean the crane could be cut up instead of being dismantled which is much faster.

If this is not an acceptable option due to the listed status or historical interest in the crane we would still recommend moving the crane to a less logistically sensitive part of the quay or preferably off the quay to a location where it can be viewed as a feature of historical interest, eg outside the museum, on a roundabout or by the steam clock.

We have ascertained a rough order of cost for three options as listed below.

1. Make safe the crane in its current location and inspect annually (the Annual cost excludes any works required to the crane following the report).
2. Relocate the crane and inspect annually (the Annual cost excludes any works required to the crane following the report).
3. Scrap the crane

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<td>£6k + Any works required (£3-5k) = £9-11k</td>
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<td>£200k</td>
<td>£6k + Any works required (£3-5k) = £9-11k</td>
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As can be seen the negative of option 1 or 2 is the ongoing costs. We have assumed that the most likely options are to keep the crane on the quay or scrap the crane. As can be seen above the extra initial cost of scrapping the crane (option 3) is paid back against option 2 in 3 years.
RSA Report

RSA Insurance Group plc (trading as RSA, formerly Royal and Sun Alliance) is a British multinational general insurance company headquartered in London. RSA has major operations in the UK & Ireland, Scandinavia and Canada and provides insurance products and services in more than 140 countries through a network of local partners.

RSA are the insurers to the States of Jersey.

This is the RSA report/ case study referred to in the forgoing text.
Report

Mr Paul Clements
Project Manager (Infrastructure)
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JE1 1BY

Scope of Work

We were requested by Mr Paul Clements of Jersey Harbour to carry out a third party independent visual structural survey on one Stothert and Pitt dock side jib crane. Our findings are to be documented in a written report.

Reason for Survey

The survey is to find out the current integrity of the structural components of the crane and to provide recommendations on what remedial action needs to be carried out to ensure confidence in the prolonged life of the structure. It should be noted that the working components of the crane were not included within this survey and the crane was not operated in any aspect of its working envelope. It is understood that this machine has been out of service for a significant period of time.

Plant and Equipment

Type. Dock Side Crane
Make. Stothert and Pitt
Serial No. 13
Safe Working Load. 7.5tonne
Year of Manufacture. Estimated at circa 1940
Conferred With-
Graeme Duxbury      RSA Insurance Group
Brian Keating       Jersey Harbours

Dates and Location of Assessments
19/03/2015 / and 20/03/2015
Jersey Harbours
La route du port de Elizabeth
St Helier
Jersey
JE1 1HB

Assessment of Equipment

Long travel running gear
The crane was not operated within the long travel axis so it is hard to determine the condition of the running components but we can assume due to the surface corrosion and general condition of the power transmission systems that it is likely that the drives are seized in position.

Signs of held water

Picture of trailing wheels
The chassis sections show signs of heavy corrosion, distortion and impact damage. There are areas of this structure where water has been held for some time.

One long travel brake has been removed from the crane and the remainder were clamped in position. These brakes were corroded into their location and could not be operated at the time of the inspection.
**Base Structure / Slew Ring**

The base structure shows various signs of corrosion. There is a heavy wastage of material on a number of structural members and their mechanical fastening components.

The mechanical fasteners had mostly been coated in paint. In many areas the paint had failed and corrosion had propagated heavily. Upon removing paint from a number of the bolts it was found that the bolt heads and nuts had corroded to an extreme extent.

The fixings above have completely wasted away rendering them ineffective.

The fixing plates in most cases had suffered extensive wastage of material. In some areas the fixing plates had stress fractures propagating in areas where the crane is designed to flex.

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General condition of components  
Fracture to one joining plate
The slew ring / spider was not operated so we are unsure of its performance. Many of the components utilised in the slewing operation were varying in degrees of corrosion. The integrity of the slew lock / brake should be checked to ensure that it does not fail in inclement weather.

![Corrosion to load bearing components](image1)

![Corrosion on slew bolts and structure surface](image2)

**Access ladders**

The majority of the access ladders were distorted, heavily corroded and secured via means of severely corroded fasteners. At present we would not deem the current fixed ladders as safe for operational use and a risk assessment should be carried out to ascertain the most appropriate way for accessing and egressing the crane.

Appropriate anchor points and latchway systems should be installed in areas where there is a risk of falling from height.

It should be noted that the installation of “hooped” ladders is not considered as good practice since a recent HSE investigation.
Corroded ladder section fixings and fasteners

Heavy corrosion and wastage on rung sections

Walkways, platforms and railings

The walkways are generally constructed of wood sections which have been subjected to water making them a slip hazard; however their general condition is average. Many of the fixing bolts securing the wood decking are showing a medium level of corrosion. We were unable to extract any of these bolts due to their condition.
The safety railings that are erected in various areas of the machine are in a poor state. In general they are constructed of pipe sections welded to vertical angle iron members. The majority of them show distortion, severe corrosion and missing sections.
Control cab

The cab is constructed of wooden slats bolted on to steel bracings. The slats have been painted on numerous occasions. The paint is flaking in most areas showing exposed areas of damp and rotten wood. The floor of the control cab is also constructed from wooden sections which are in a condition commensurate with the machines age. The drivers screen is comprised of steel frames with single glazed glass throughout. The frame shows minor corrosion.

Machinery room

The machinery room is to the rear of the drivers cab and is constructed of steel bracings clad with wood panels and a wood floor. None of the items in this area were operational and the general condition of the visible structural components was good.

The winding gear, brakes and derricking equipment showed signs of surface corrosion.
Due to the age of this machine and that no upgrades have been made to the electrical control and braking units it is highly likely that there is a form of asbestos present within these areas.

The above photographs show the generally good condition of the internal structure

**Jib Section**

The jib section has been painted on numerous occasions since the crane was brought into service. The corrosion that has been subjected to the jib suggests that the painting process was not carried out correctly. The jib sections shows varying degrees of corrosion from mild paint flaking to heavy wastage of material.
The above photographs show the extent of the corrosion in various parts of the jib

**Ropes**

The ropes were not fully inspected but where seen the rope was of a reasonable standard

**Other components**

Many other non structural components showed heavy corrosion which we feel should be mentioned within this report. These items are likely to fail at some point in the near future causing a hazard of “falling objects”.

The above shows the extent of the corrosion to the bracket that secures the cranes load cell in position.
The above shows the fixings to the cat head sheave guard. Both the fixings and the guard are corroded severely.

**Observations**

The crane and the majority of its components are in a generally poor condition. This is mainly due to the working environment that the machine has been subjected to. The crane has obviously been painted several times but due to the corrosion emanating from beneath the coating we would suggest that this was not in conjunction with the paint manufacturers guidance.

**Recommendations**

If it is deemed that the crane is not to be dismantled and taken out of service we would recommend that the following is carried out as a minimum:

- The jib, chassis and base sections should all be dismantled and stripped back to their parent metals enabling the true extent of the corrosion to be examined and tested.
- The drive systems should be removed and overhauled.
- The slew ring should be removed /opened out and fully assessed for corrosion as this is a major load bearing component. The slew brake / lock should also be overhauled.
- The access ladders should be removed and replaced with new that comply with current standards.
- The walkways should be removed, cleaned off and a non slip surface applied.
- The derricking gear should be removed and fully overhauled.
- A full asbestos survey should be carried out and acted on as necessary.
- All bolts should be replaced and welds tested using NDT methods.
- Once the crane has been re assembled load tests should be carried out.
Conclusion

Due to the location and condition of the crane and its components we would recommend that the machine is dismantled and removed from the dock side at the soonest point. Any high winds or storms could cause further structural damage to the item. It is noted that there are a number of pleasure craft docked in close proximity to the item which could be in danger of being subjected to falling objects.

It is our opinion that once all the load bearing sections are removed from the crane and de-scaled back to the parent material, the true extent of the corrosion will be such that full replacement of all major components will be necessary.

The costs of refurbishing this machine would be substantial enough not to make it a viable option going forward. Spare parts for this item are now obsolete, so both major and minor components would need to be manufactured or fabricated at substantial costs to the business.

It is our recommendation that due to the extensive corrosion that is spread throughout the load bearing components and the cost to bring all these components back to a safe condition it would be prudent to either acquire a new crane or utilise other cranes located on the dock side.

If we had been asked to carry out an insurance risk survey on this equipment rather than a visual survey we would advise our underwriters not to take the insurance risk surrounding this machine.

Declaration
I confirm that this report is a true and accurate account of the equipment inspected.

Report date: 22/04/2015

Graeme Duxbury
Risk Management Consultant
RSA Insurance Group
17 York St
Manchester, M2 3RS

Note: This document is issued subject to a disclaimer of any liability on the part of the Group or its servants or subcontractors for loss of profits or loss of use, however caused, and irrespective of the nature of any default which may have caused or contributed to such loss.
NAS Laboratories are an independent asbestos consultancy and inspection body with their own testing laboratories, serving customers within the UK and the Channel Islands.

NAS Laboratories are accredited by the United Kingdom Accreditation Service (UKAS)

This is the NAS Laboratories report referred to in the forgoing text.
Asbestos Survey Report

Refurbishment and Demolition Survey of Crane 13 on New North Quay St Helier Jersey

Survey report No. 15JB6500/X
Authorised by S Burchell
Date of issue 10th December 2015
Surveyor reference No. SB/0049
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APPENDIX 4 - NON ASBESTOS MATERIALS
APPENDIX 5 - PLANS
1. EXECUTIVE SUMMARY

1.1 This asbestos survey is a refurbishment and demolition survey as described in the Health and Safety Executive (UK) guidance Asbestos: The survey guide (HSG 264:2012), and described as such throughout this report. The scope of the survey is based upon the customer’s request for the following:

- Pre-demolition survey

1.2 The following areas were surveyed within the scope of a refurbishment and demolition survey and the customer’s requirements:

- Crane 13 – all internal and external elements

The following Report for Crane 13, New North Quay (15JB6500/X), has been extrapolated from the contents of the previous Report (15JB6500) at the request of the Client, Paul Clements, Ports of Jersey Ltd.

Specific areas or items within these areas may have been excluded from the scope of the survey upon the request or agreement of the customer and are detailed in section 2 of this report as applicable.

1.3 The following buildings are outside the scope of the survey and therefore not surveyed:

- All other buildings and areas within the site

1.4 The following asbestos containing materials (ACMs) were found within the surveyed areas; ACMs with high material assessment scores (greater than 10) are highlighted in red text:

1.4.1 Crane 13, New North Quay:

<table>
<thead>
<tr>
<th>Location &amp; description</th>
<th>Summary of action required (see Section 4 for further details)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crane 13 Control Room Within Control Panels Board</td>
<td>Remove in accordance with ACoP 8 “Management of Exposure to Asbestos in Workplace Buildings and Structures” prior to the planned refurbishment work. Manage until the asbestos removal work occurs.</td>
</tr>
<tr>
<td>Crane 13 Control Room Main Intake Box Flash Guards Cement</td>
<td>Remove in accordance with ACoP 8 “Management of Exposure to Asbestos in Workplace Buildings and Structures” prior to the planned refurbishment work. Manage until the asbestos removal work occurs.</td>
</tr>
<tr>
<td>Crane 13 Motor Room Electrical Intake Box Flash Guards Cement</td>
<td>Remove in accordance with ACoP 8 “Management of Exposure to Asbestos in Workplace Buildings and Structures” prior to the planned refurbishment work. Manage until the asbestos removal work occurs.</td>
</tr>
<tr>
<td>Crane 13 Control Room Panel to Ceiling Cement</td>
<td>Remove in accordance with ACoP 8 “Management of Exposure to Asbestos in Workplace Buildings and Structures” prior to the planned refurbishment work. Manage until the asbestos removal work occurs.</td>
</tr>
<tr>
<td>Crane 13 Motor Room Panel Around Hatch Cement</td>
<td>Remove in accordance with ACoP 8 “Management of Exposure to Asbestos in Workplace Buildings and Structures” prior to the planned refurbishment work. Manage until the asbestos removal work occurs.</td>
</tr>
<tr>
<td>Crane 13 Motor Room Resistance Banks Internal Lining of Sleeves Rope</td>
<td>Remove in accordance with ACoP 8 “Management of Exposure to Asbestos in Workplace Buildings and Structures” prior to the planned refurbishment work. Manage until the asbestos removal work occurs.</td>
</tr>
<tr>
<td>Crane 13 Control Room Resistance Banks Internal Lining of Sleeves Rope</td>
<td>Remove in accordance with ACoP 8 “Management of Exposure to Asbestos in Workplace Buildings and Structures” prior to the planned refurbishment work. Manage until the asbestos removal work occurs.</td>
</tr>
<tr>
<td>Crane 13 Roof to Motor Room Bitumen / Felt</td>
<td>Remove in accordance with ACoP 8 “Management of Exposure to Asbestos in Workplace Buildings and Structures” prior to the planned refurbishment work. Manage until the asbestos removal work occurs.</td>
</tr>
</tbody>
</table>
1. EXECUTIVE SUMMARY

1.5 The customer and / or duty holder are advised to read this section of the report in conjunction with the following paragraph within Section 2:

- Paragraph 2.4.1 Areas or items outside the scope as requested or agreed by the customer.

The customer and / or duty holder are reminded of their duties as required by current Health & Safety legislation to manage all materials identified or presumed to contain asbestos. Areas or items which could not be accessed at the time of the survey must be presumed to contain asbestos and included in the asbestos register / management plan for the property until proven otherwise.
2. INTRODUCTION

2.1 Paul Clements-Ports of Jersey has commissioned NAS Laboratories to undertake an asbestos survey of the 3 in number Cranes (Derik, Crane 8 & Crane 23) on Victoria Pier, and Crane 13 on New North Quay, all in St Helier, Jersey:

The following Report for Crane 13, New North Quay (15JB6500/X), has been extrapolated from the contents of the previous Report (15JB6500) at the request of the Client, Paul Clements, Ports of Jersey Ltd.

2.2 The type of survey commissioned is a refurbishment and demolition survey as described in the Health and Safety Executive (UK) guidance Asbestos: the survey guide (HSG 264:2012). The purpose of a refurbishment and demolition survey is to locate and describe, as far as reasonably practicable, all asbestos containing materials (ACMs) in the areas where refurbishment work (or in some circumstances, more intrusive maintenance and repair work) will take place, or in the whole building if demolition is planned.

2.3 The site comprises of a cranes on New North Quay.

2.4 The customer has requested that only the following site areas be included within the scope of this survey:

2.4.1 Crane 13, New North Quay:

<table>
<thead>
<tr>
<th>Areas to be surveyed:</th>
<th>All accessible interior &amp; exterior areas of Crane 13 with the exception of those areas or items listed below</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupation at time of survey:</td>
<td>Unoccupied</td>
</tr>
<tr>
<td>Current or former utilisation:</td>
<td>Commercial</td>
</tr>
</tbody>
</table>
| The following areas / items within this area were not surveyed upon the request or agreement of the customer: | • Roof surface to crane 13 as no safe ladder access available  
• Areas / items behind suspect ACMs  
• Concrete beams / columns, and other fixed concrete structures  
• Within internals of sealed Machinery & plant |
| Estimated age of building | • Crane 13 built circa 1950s |
| Brief description of general construction: | Crane 13 is of metal construction on rolling tracks, with the control room accessed via ladders and walkways. |

2.4.2 No other buildings or areas within the site were surveyed.

2.5 The scope of the survey including the exclusion of the areas, items and materials detailed above has been agreed with the customer in accordance with NAS Laboratories survey planning and contract review procedures. The customer is advised that all areas, items and materials excluded from the scope of the survey should be presumed to contain asbestos unless proven otherwise.

2.6 This report has been issued under the following authority:

<table>
<thead>
<tr>
<th>Authorised by:</th>
<th>Signed:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sam Burchell</td>
<td>[Signature]</td>
</tr>
<tr>
<td>Date:</td>
<td>03/12/2015</td>
</tr>
</tbody>
</table>

Technical review by: Teresa Lock

<table>
<thead>
<tr>
<th>Signed:</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Signature]</td>
</tr>
<tr>
<td>Date:</td>
</tr>
</tbody>
</table>
3. SURVEY INFORMATION

3.1 General information

3.1.1 The survey was conducted by Sam Burchell (lead surveyor) for NAS Laboratories on the 15th October 2015. All surveyors employed by NAS Laboratories are by virtue of their qualifications, training, and experience, competent to undertake asbestos surveys and to give expert opinion on asbestos management matters. NAS Laboratories is accredited by UKAS to undertake asbestos surveying, in addition to bulk sampling and analysis, air sampling, 4 stage clearance testing and fibre counting.

3.1.2 The survey was carried out in order that client / dutyholder can comply with its duties under the Health & Safety at Work (Jersey) Law 1989; specifically the Health and Safety at Work (asbestos - licensing) (Jersey) Regulations 2008 and ACoP 8 “Management of Exposure to Asbestos in Workplace Buildings and Structures”; whereby it has a duty to protect the health and safety of its staff and that of others who may be affected by its undertaking.

3.1.3 The purpose of this survey was to locate and assess all practically accessible asbestos containing materials in the building areas within the scope of the survey, to assist the client in costing the removal of the asbestos prior to refurbishment or demolition and to comply with the principles of the current Construction Design and Management Regulations (as applicable within the UK).

3.1.4 From the evidence of the inspections, and the sampling, and the analysis undertaken, it is clear that ACMs are present in the areas detailed in the report.

3.1.5 The method used is an in-house method detailed in the company Technical Procedures Manual section N-11 which is based upon the Health and Safety Executive (UK) guidance Asbestos: The survey guide (HSG 264:2012). The method consists of a visual inspection of all areas within the scope of the survey by a competent asbestos surveyor by means of aggressive and destructive inspection techniques where appropriate, and the identification of ACMs by a combination of the following means as applicable:

- Identified as containing asbestos by sampling and analysis. The surveyor will identify materials suspected of containing asbestos by sampling for analysis to confirm whether the materials contain asbestos or are asbestos free, in accordance with the sampling strategies and procedures within the company’s Technical Procedures Manual and as detailed within the agreed survey plan.

- Identified as strongly presumed to contain asbestos. The surveyor may strongly presume some materials to contain asbestos based upon the experience and knowledge of the surveyor, or confirmed by the analysis of similar materials. This level of presumption can prevent unnecessary exposure of the surveyor to airborne asbestos, particularly where multiple occurrences of similar materials exist. The prefix "SP" has been used within this report to denote materials identified as being strongly presumed to contain asbestos.

- Identified as presumed to contain asbestos. The surveyor may presume some materials to contain asbestos if it is not possible to take samples and there is insufficient evidence to confirm that the material is asbestos free. The prefix "P" has been used within this report to denote materials identified as being presumed to contain asbestos. Rooms, areas and items within the scope of the survey which could not be accessed during the survey due to safety constraints or where physical access is impractical have also been reported as presumed to contain asbestos.

3.1.6 Photographs were taken of the materials sampled with the permission of the customer, including those identified to contain asbestos (by sampling or by presumption), and can be found in Appendix 3 of this report.

3.1.7 Any person undertaking work within the buildings should be informed of the presence of asbestos. This briefing also applies to any other person associated with the site, including staff, subcontractors and others.

3.2 Limitations

3.2.1 The following areas / items within the scope of the survey could not be inspected or fully accessed for inspection due to unforeseen constraints and have therefore been presumed to contain asbestos:

3.2.1.1 Crane 13, New North Quay:

<table>
<thead>
<tr>
<th>Area / Item</th>
<th>Reasons for exclusion / partial accessibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>All areas within the scope of the survey were accessed</td>
</tr>
</tbody>
</table>
3.2.1.2 The customer or dutyholder is advised of the possibility of the presence of asbestos containing materials hidden, and therefore not identified, within areas or items which were not fully accessed; it is strongly recommend that should these areas or items be removed, demolished or otherwise disturbed, that a competent person is employed to oversee such work.

3.2.2 During the course of the survey, all reasonable efforts were made to identify the presence of ACMs within the accessible areas of the building. Historically, asbestos materials were frequently concealed within the fabric of buildings or within sealed building voids. It is now recognised by the Health and Safety Executive (UK) that even with "complete access" surveying all ACMs may not be identified. Therefore, it is not possible to regard the findings of any asbestos survey as being definitive. There always remains a possibility that asbestos containing materials may be found during refurbishment or demolition activities. The customer or dutyholder is advised that further sampling and assessment should be commissioned of any materials suspected of containing asbestos which are uncovered within the listed inaccessible areas or within the areas of the site which were not included in this survey.

3.2.3 The customer or dutyholder is advised that some products containing asbestos were often used repetitively, such as fire protection in pipe penetrations and as gasket material on air conditioning ducting. Not all of these asbestos inclusions may have been specifically identified in this survey. The suspected presence of such materials should be considered and included within the programme of planned asbestos removal as applicable.

3.2.4 Some building surfaces, such as suspended ceilings, partition walls and roof surfaces are often constructed of multiple similar components commonly found to be ACMs (for example ceiling tiles, wall boards, roof files, roof sheets etc). In this circumstance the surveyor will have inspected as much of the entire surface as practical to ascertain its composition, and will have identified ACMs present through sampling / analysis or through presumption as applicable. As it is not practical to sample every tile, panel or sheet in each such surface, the surveyor may have reported an entire surface as containing asbestos where some asbestos-free materials may also be present such as for patch repairs. The customer or dutyholder is advised to regard and manage each identified surface as an ACM (as reported) unless individual components within the surface have been proven to be otherwise.

3.2.5 Where multiple occurrences of similar ACMs are present at different locations within the site the surveyor may have used some discretion to reduce the number of samples taken as so to prevent unnecessary disturbance to the materials. In this circumstance the surveyor will have reported un-sampled materials similar to those sampled and found to contain asbestos as strongly presumed to contain asbestos.

3.2.6 With regard to textured coatings such as Artex, the customer or dutyholder is advised that these materials are often heterogeneous in nature and it is not uncommon for samples taken of visually similar textured coatings within the same site to be found to have differing analysis results (i.e. some samples found to contain asbestos and others found to be asbestos free). In this circumstance and where there is no evidence to indicate that the textured coatings are otherwise different (such as being applied at different times), the surveyor may presume all similar textured coatings as containing asbestos for the purposes of this survey. The customer or dutyholder is advised to commission a further assessment of textured coatings within the site if there is a requirement to remove any ambiguity regarding textured coatings reported as presumed to contain asbestos.

3.2.7 Details of all identified ACMs are marked on plans within Appendix 5, as made by the surveyor; the plans record detail the location of where each sample was taken and where the surveyor has identified ACMs through sampling / analysis or presumption. The plans are provided in this report for cross reference purposes only and are not to scale or NAS Laboratories take no responsibility for the scale of the plans.

3.2.8 Material assessment scores have been provided in this report as a contingency measure for the customer or dutyholder in the event that the recommended asbestos removal work cannot take place for some time. In this event, the customer or dutyholder can use the provided material assessment, priority assessment and risk assessment scores to manage the ACMs in accordance with the Control of Asbestos Regulations 2012 (UK) and associated guidance until the work commences. The customer or dutyholder is advised that the material assessment scores (and therefore also the priority assessment and risk assessment scores) are based upon the surveyor’s assessments on site at the time of the survey and should be regarded as valid only up to a maximum of three months, after which the ACMs should be reassessed if the asbestos work has not yet commenced. The caveat detailed below regarding the limitations of the priority assessment scores (and therefore also the risk assessment scores) is also applicable.
3. SURVEY INFORMATION

3.2.9 Where applicable, the provision of priority assessment and risk assessment scores detailed within this report have been provided upon the request from, and by agreement with the customer, and is outside the scope of the company’s accreditation by UKAS. The priority assessment scores have been calculated using the in-house scoring system described in Appendix 2 of this report using information attained on site by the surveyor and with consultation with the customer wherever possible. As it is usual for the customer or dutyholder to have greater knowledge of the normal occupation of each room and of the activities carried out on the premises, they are strongly advised to check the accuracy of these scores prior to using the scores within their asbestos management plan. The customer or dutyholder is also advised to review the priority assessment and risk assessment scores should there be a significant change in the utilisation of the rooms or areas in which asbestos was detected or if there is any other reason to suspect the assessments are no longer valid.

3.2.10 This survey report has been written with reference to the various Health and Safety Executive (UK) and Health and Safety Inspectorate guidance issued relating to asbestos that were current at the date of surveying. It describes circumstances at the site on the date of the surveying and is provided in accordance with the customer agreements made during the survey planning, our quotation or tender return and our standard terms & conditions as supplied. It is prepared exclusively for the customer and may not under any circumstances be used or relied upon by any third party.

3.2.11 The customer is reminded of their duties and responsibilities during the commissioning of asbestos surveys as detailed within the Health and Safety Executive (UK) guidance Asbestos: The survey guide (HSG 264:2012). NAS Laboratories can accept no responsibility for misinterpretation of this report or failure by the customer to provide correct and complete information during the planning and execution of this survey as required by HSG 264:2012.

3.2.12 This survey report gives a description of where the located asbestos inclusions are to be found. The report also gives a prioritisation of suspected risks associated with these asbestos inclusions. Written method statements regarding recommended work and remedial action are not included with this report.

3.2.13 For reasons set out in this report, the results cannot give an assurance that all asbestos materials have been found and must not be thought to do so.

3.3 Fit for reoccupation checks

3.3.1 During the survey site work, the surveyor will have ensured that uncontrolled disturbance to suspect ACMs was minimised, as in accordance with NAS Laboratories technical procedures. Any dust or debris suspected of containing asbestos that was the unintentional result of inspection or sampling activities will have been removed and affected surfaces cleaned in an appropriate and safe manner by the surveyor prior to the completion of the survey.

3.3.2 No further fit-for-reoccupation checks have been made as the surveyed areas are derelict or not suitable for reoccupation prior to the planned refurbishment / demolition works.

3.3.3 Rooms and areas identified by sampling or presumption as being already contaminated by asbestos dust or debris prior to the survey have been included within the results of this survey report if applicable (refer to Section 1 and Section 4). Such rooms and areas have not been fit-for-reoccupation checked by the surveyor as reoccupation will not be applicable until remedial asbestos decontamination or removal work is commissioned and conducted.
## SURVEY RESULTS

### 4.1 Survey Results

The following asbestos containing materials (ACMs) were found within the surveyed areas of the site:

#### 4.1.1 Crane 13, New North Quay:

<table>
<thead>
<tr>
<th>Location &amp; description of ACM</th>
<th>Product type</th>
<th>Extent</th>
<th>Accessibility</th>
<th>Condition</th>
<th>Surface treatment</th>
<th>Asbestos type</th>
<th>Identification</th>
<th>Sample No. / identifier</th>
<th>Material assessment score</th>
<th>Priority assessment score</th>
<th>Risk assessment score</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crane 13 Control Room Within Control Panels</td>
<td>Board</td>
<td>(x) 4 Units</td>
<td>-</td>
<td>Good</td>
<td>Enclosed within casing</td>
<td>Chrysotile (white)</td>
<td>Strongly Presumed to Sample S01</td>
<td>SP 05</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>A</td>
</tr>
<tr>
<td>Crane 13 Control Room Main Intake Box Flash Guards</td>
<td>Cement</td>
<td>(x) 1 Box</td>
<td>-</td>
<td>Good</td>
<td>Cement</td>
<td>Chrysotile (white)</td>
<td>Strongly Presumed to Sample S09</td>
<td>SP 06</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>B</td>
</tr>
<tr>
<td>Crane 13 Motor Room Electrical Intake Box Flash Guards</td>
<td>Cement</td>
<td>(x) 1 Box</td>
<td>-</td>
<td>Good</td>
<td>Cement</td>
<td>Chrysotile (white)</td>
<td>Strongly Presumed to Sample S09</td>
<td>SP 09</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>B</td>
</tr>
<tr>
<td>Crane 13 Control Room Panel to Ceiling</td>
<td>Cement</td>
<td>2m²</td>
<td>-</td>
<td>Good</td>
<td>Cement</td>
<td>Chrysotile (white)</td>
<td>Sampled</td>
<td>S12</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>B</td>
</tr>
<tr>
<td>Crane 13 Motor Room Panel Around Hatch</td>
<td>Cement</td>
<td>&lt; 1m²</td>
<td>-</td>
<td>Good</td>
<td>Cement</td>
<td>Chrysotile (white)</td>
<td>Strongly Presumed to Sample S12</td>
<td>SP 07</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>B</td>
</tr>
<tr>
<td>Crane 13 Motor Room Resistance Banks Internal Lining of Sleeves</td>
<td>Rope</td>
<td>(x) 3 Units</td>
<td>-</td>
<td>Low Damage</td>
<td>Bonded</td>
<td>Chrysotile (white)</td>
<td>Sampled</td>
<td>S13</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>B</td>
</tr>
<tr>
<td>Crane 13 Control Room Resistance Banks Internal Lining of Sleeves</td>
<td>Rope</td>
<td>(x) 3 Units</td>
<td>-</td>
<td>Good</td>
<td>Bonded</td>
<td>Chrysotile (white)</td>
<td>Strongly Presumed to Sample S13</td>
<td>SP 08</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>B</td>
</tr>
<tr>
<td>Crane 13 Roof to Motor Room</td>
<td>Bitumen / Felt</td>
<td>15m²</td>
<td>-</td>
<td>Good</td>
<td>Bonded</td>
<td>Chrysotile (white)</td>
<td>Presumed</td>
<td>P01</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>C</td>
</tr>
</tbody>
</table>

#### 4.1.2 The customer and / or duty holder are advised to read this section of the report in conjunction with the following paragraph within Section 2:

- Paragraph 2.4.1 Areas or items outside the scope as requested or agreed by the customer.

The customer and / or duty holder are reminded of their duties as required by current Health & Safety legislation to manage all materials identified or presumed to contain asbestos. Areas or items which could not be accessed at the time of the survey must be presumed to contain asbestos and included in the asbestos register / management plan for the property until proven otherwise.
4.2 **Recommendations:**

<table>
<thead>
<tr>
<th>Recommendation reference</th>
<th>Recommendation</th>
</tr>
</thead>
</table>
| A                        | - Remove prior to demolition work.  
  - Removal of this material can be done without a licence on the provision that the encasement is removed with the material still in place, and on the provision that it is done in compliance with ACoP 8 “Management of Exposure to Asbestos in Workplace Buildings and Structures” and applicable regulations. Any employer conducting this work should be adequately insured to work with asbestos.  
  - If the above cannot take place then commission removal by contractor licensed by the Minister of Social Security / Jersey HSI approved Guernsey or UK HSE licensed contractor prior to demolition work.  
  In the event that the asbestos removal work cannot take place within 3 months, the following additional recommendations should be considered:  
  - Include within the asbestos register  
  - Label or mark the material as containing asbestos (in accordance with the dutyholder’s asbestos management plan)  
  - Re-inspect within 12 months |
| B                        | - Remove prior to demolition work. Work with this material does not normally require a license on the provision that it is done in compliance with ACoP 8 “Management of Exposure to Asbestos in Workplace Buildings and Structures” and applicable regulations. Any employer conducting this work should be adequately insured to work with asbestos.  
  In the event that the asbestos removal work cannot take place within 3 months, the following additional recommendations should be considered:  
  - Include within the asbestos register  
  - Label or mark the material as containing asbestos (in accordance with the dutyholder’s asbestos management plan)  
  - Re-inspect within 12 months |
| C                        | - Consider sampling when safe access is available to confirm or deny the presence of asbestos.  
  - Remove prior to demolition work. Work with this material does not normally require a license on the provision that it is done in compliance with ACoP 8 “Management of Exposure to Asbestos in Workplace Buildings and Structures” and applicable regulations. Any employer conducting this work should be adequately insured to work with asbestos.  
  In the event that the asbestos removal work cannot take place within 3 months, the following additional recommendations should be considered:  
  - Include within the asbestos register  
  - Label or mark the material as containing asbestos (in accordance with the dutyholder’s asbestos management plan)  
  - Re-inspect within 12 months |

4.3 No further asbestos inclusions could be reasonably located within the confines of a refurbishment and demolition survey as described by the Health and Safety Executive (UK) guidance *Asbestos: The survey guide* (HSG 264:2012).

4.4 The customer or dutyholder is advised to read this section of the report in conjunction with Sections 2 and 3 which detail the scope of the survey and its limitations.

4.5 NAS Laboratories can produce an asbestos register for the customer if required. This will include details of all the asbestos inclusions, the management plan, the inspection schedules, staff training notes and details of any removal or remedial actions taken.

4.6 NAS Laboratories can also supply the independent management of and hygiene cover for any asbestos removal work or necessary remedial action.
APPENDIX 1

BULK ANALYSIS CERTIFICATES
# Certificate of Analysis for Bulk Asbestos Identification

<table>
<thead>
<tr>
<th>Number</th>
<th>Origin/Location of sample</th>
<th>Material</th>
<th>Asbestos Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Crane 8 - Control room within control panels</td>
<td>Board</td>
<td>Chrysotile (White)</td>
</tr>
<tr>
<td>02</td>
<td>Crane 8 - Motor room - within simple electrical box</td>
<td>Sealant</td>
<td>Chrysotile (White)</td>
</tr>
<tr>
<td>03</td>
<td>Crane 8 - Motor room - Flash guards to electrical boxes</td>
<td>Cloth</td>
<td>Chrysotile (White)</td>
</tr>
<tr>
<td>04</td>
<td>Crane 8 - Motor room - panels to ceiling around skylight</td>
<td>Board</td>
<td>None Detected</td>
</tr>
<tr>
<td>05</td>
<td>Crane 8 - Roof to control and motor rooms</td>
<td>Bitumen</td>
<td>None Detected</td>
</tr>
<tr>
<td>06</td>
<td>Deck - Motor room - Flash guard in hoisting electrical box</td>
<td>Cement</td>
<td>Chrysotile (White)</td>
</tr>
<tr>
<td>07</td>
<td>Deck - Motor room - Cloth cover to steel rope inlet</td>
<td>Cloth</td>
<td>None Detected</td>
</tr>
<tr>
<td>08</td>
<td>Deck - Roof to motor and control room</td>
<td>Bitumen</td>
<td>None Detected</td>
</tr>
<tr>
<td>09</td>
<td>Crane 23 - Motor room - Electrical intake box on mezzanine level - Flash guards</td>
<td>Cement</td>
<td>Chrysotile (White)</td>
</tr>
<tr>
<td>10</td>
<td>Crane 23 - Roof over motor room</td>
<td>Bitumen</td>
<td>None Detected</td>
</tr>
<tr>
<td>11</td>
<td>Crane 23 - Motor room - Electrical intake box on mezzanine level - w/asp to cabin</td>
<td>Rope</td>
<td>Chrysotile (White)</td>
</tr>
<tr>
<td>12</td>
<td>Crane 13 - Control room - Panel to ceiling</td>
<td>Cement</td>
<td>Chrysotile (White)</td>
</tr>
<tr>
<td>13</td>
<td>Crane 13 - Motor room - Resistance banks - internal lining of alcove</td>
<td>Rope</td>
<td>Chrysotile (White)</td>
</tr>
</tbody>
</table>

**Notes:**
1. Sampling conducted by NAS Laboratories (if applicable) has been in accordance with HSE guidance HSG 148 and HSG 264 as applicable and in-house Technical Procedures Manual section N-4.
2. NAS Laboratories accepts no responsibility for sampling activities undertaken by the customer.
3. All analysis has been conducted in accordance with HSE guidance HSG 264 and in-house Technical Procedures Manual section N-4.
4. The material description (*) shall be regarded as tentative and is not included in the UKAS accreditation for this laboratory. Opinions and interpretations are outside the scope of accreditation for this laboratory.

**Comment details of sample preparation:**

**Report Ends**

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**Survey report No.: 15JB650/X**
**Customer:** Ports of Jersey
**Site:** Crane 13 on New North Quay, St Helier, Jersey
**Template issue date:** May 2015
**Issued by:** RS (QM)
APPENDICES

APPENDIX 2

PRIORITISATION FOR THE PURPOSE OF ASBESTOS MANAGEMENT
APPENDICES

PRIORITISATION FOR THE PURPOSE OF ASBESTOS MANAGEMENT

Material assessment algorithm:

<table>
<thead>
<tr>
<th>Level</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>High risk</td>
<td>10 – 12</td>
</tr>
<tr>
<td>Medium risk</td>
<td>7 – 9</td>
</tr>
<tr>
<td>Low risk</td>
<td>5 – 6</td>
</tr>
<tr>
<td>Very low risk</td>
<td>2 – 4</td>
</tr>
</tbody>
</table>

The material assessment algorithm is determined by adding together four parameter scores of high, medium and low scoring 3, 2 and 1 respectively. Two categories allow a 0 score. The four parameters are:

- Product type;
- Extent of damage/deterioration;
- Surface treatments;
- Asbestos type.

The material assessment will give a good indication of the ability of the located asbestos inclusion to release fibre, and is in itself a good indicator for a prioritised management programme.
APPENDICES

APPENDIX 3

PHOTOGRAPHS OF IDENTIFIED ACMS AND ALL OTHER SAMPLED MATERIALS
<table>
<thead>
<tr>
<th>Sample No. / inclusion reference:</th>
<th>15JB6500 – SP05</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Location &amp; description of material:</strong></td>
<td>Crane 13 Control Room Within Control Panels</td>
</tr>
<tr>
<td>Material type</td>
<td>Board</td>
</tr>
<tr>
<td>Asbestos:</td>
<td>Yes (Strongly Presumed)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sample No. / inclusion reference:</th>
<th>15JB6500 – SP06</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Location &amp; description of material:</strong></td>
<td>Crane 13 Main Intake Box Flash Guards</td>
</tr>
<tr>
<td>Material type</td>
<td>Cement</td>
</tr>
<tr>
<td>Asbestos:</td>
<td>Yes (Strongly Presumed)</td>
</tr>
<tr>
<td>Sample No. / inclusion reference:</td>
<td>15JB6500 – SP09</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>----------------</td>
</tr>
</tbody>
</table>
| Location & description of material: | Crane 13  
Motor Room  
Electrical Intake Box  
Flash Guards |
| Material type | Cement |
| Asbestos: | Yes (Strongly Presumed) |

<table>
<thead>
<tr>
<th>Sample No. / inclusion reference:</th>
<th>15JB6500 – S12</th>
</tr>
</thead>
</table>
| Location & description of material: | Crane 13  
Control Room  
Panel to Ceiling |
| Material type | Cement |
| Asbestos: | Yes |

<table>
<thead>
<tr>
<th>Sample No. / inclusion reference:</th>
<th>15JB6500 – SP07</th>
</tr>
</thead>
</table>
| Location & description of material: | Crane 13  
Motor Room  
Panel Around Hatch |
| Material type | Cement |
| Asbestos: | Yes (Strongly Presumed) |
### APPENDICES

<table>
<thead>
<tr>
<th>Sample No. / inclusion reference:</th>
<th>15JB6500 – S13</th>
</tr>
</thead>
</table>
| **Location & description of material:** | Crane 13  
Motor Room  
Resistance Banks  
Internal Lining of Sleeves |
| **Material type** | Rope |
| **Asbestos:** | Yes |

<table>
<thead>
<tr>
<th>Sample No. / inclusion reference:</th>
<th>15JB6500 – SP08</th>
</tr>
</thead>
</table>
| **Location & description of material:** | Crane 13  
Control Room  
Resistance Banks  
Internal Lining of Sleeves |
<p>| <strong>Material type</strong> | Rope |
| <strong>Asbestos:</strong> | Yes (Strongly Presumed) |</p>
<table>
<thead>
<tr>
<th>Sample No. / inclusion reference:</th>
<th>15JB6500 – P01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location &amp; description of material:</td>
<td>Roof to Motor Room</td>
</tr>
<tr>
<td>Material type</td>
<td>Bitumen / Felt</td>
</tr>
<tr>
<td>Asbestos:</td>
<td>Yes (Presumed)</td>
</tr>
</tbody>
</table>
APPENDIX 4

NON ASBESTOS MATERIALS
Non asbestos materials

The presence and location of materials which are highly unlikely to contain asbestos such as wood, glass, stone and plasterboard have not been included within this report for the sake of clarity.
APPENDICES

APPENDIX 5

PLANS
APPENDICES

KEY:

\[\text{\#} \quad \text{\#} \quad \text{\#} = \text{Location of asbestos containing materials}\]

\[\text{S01, SP01, P01} = \text{Sample number or identifier number of asbestos containing materials}\]

CRANE 13:

[Diagram showing the locations of asbestos containing materials labeled S01, SP01, P01 on a control room and motor room layout.]