

PORT NOTICE

Crane Operations at Darwin Port Assets

PN/010

OPS-LEG-10

General Manager, Operations

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PREFACE

This Port Notice is issued pursuant to Section 57 of the *Ports Management Act 2015 (NT)*.

SCOPE

This Port Notice applies to all port users operating on East Arm Wharf (EAW) and Fort Hill Wharf (FHW).

DEFINITIONS

Term	Definition
Crawler Crane	Tracked crane
Critical Lift	<p>Any lifts that:</p> <ul style="list-style-type: none"> Involve a complex sequence of crane manoeuvres; Require lifting over operating equipment; Require outriggers not to be fully extended; Require lifting personnel in a work box; Require lifting near overhead power lines; Involve multiple cranes; Involves lifting on suspended or floating surfaces; and Require lifting to or from water. <p>Any loads that:</p> <ul style="list-style-type: none"> Are greater than 75 per cent of the load chart capacity; Are difficult to sling; and Contain more than 1,000 litres of liquid.
EAW	East Arm Wharf
FHW	Fort Hill Wharf
Mobile Crane	Rubber tyred cranes utilising outriggers
Mobile Harbour Crane	Crane designed and approved only to use for quayside operations
Third Party Crane	Any crane that is not a Darwin Port 'approved crane' for EAW & FHW

DIRECTION

This Port Notice documents the requirements for port users to ensure the safe operation of mobile harbour cranes, crawler cranes and other transportable crane platforms in the common user areas at EAW and FHW.

All crane operations at EAW and FHW are considered high risk activities and are therefore subject to the Darwin Port Permit to Work requirements in PN/026 [Permit to Work System](#). Additional administrative controls are required for third party contracted cranes at both sites.

Stevedores and contractors must submit a weekly forecast of all crane movements to the Wharf and Bulk Materials Superintendent weekly on Mondays before 1200hrs.

A Darwin Port [Permit to Work Form](#) (Crane Operations) and lift plan attached, similar to Annexure 1 is required for all crane operations occurring involving Darwin Port Infrastructure.

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All crane operations involving plant and equipment which has not been previously authorised for site use by the Wharf and Bulk Materials Superintendent is subject to a Darwin Port [Permit to Work Form](#) (Crane Operations) to confirm the integrity of the wharf is maintained at all times. No exemptions apply to this requirement.

EXEMPTIONS

Stevedores, where specifically authorised through their formal arrangements with Darwin Port, with “approved” cranes may be exempt from the permit to work to operate. Stevedores seeking to obtain additional exemptions must apply to the Wharf and Bulk Materials Superintendent in writing at least seven (7) days before the planned operation.

CRANE OPERATIONS AT EAST ARM WHARF

Mobile Harbour Cranes

Mobile harbour crane operations are permitted at:

- berths 1 and part of berth 2 between the 0 and 170m mark; and
- part of berth 4 from the 380m mark through to the BLB at a maximum of 730m.

Within those allowable working areas there are some further restrictions that are applied. These are described below:

- Crane operations are permitted between the **0** and **170m** mark with the seaward outrigger pads 4m behind the “old” crane rail. If, however trucks will be passing between the crane and the wharf’s edge, the outrigger pads must be >8m behind the rail;
- Crane operations are permitted between the **380** and **600m** mark with the seaward outrigger pads 4m behind the “old” crane rail. If, however trucks will be passing between the crane and the wharf’s edge, the outrigger pads must be >8m behind the rail;
- Crane operations are permitted between **600** and **730m** mark are to have the outriggers centred within the wharf deck area;
- “Shaded Areas” between **600** and **730m** are clearly marked along the wharf, except adjacent to **680m** where there is an expansion joint, and outriggers are not to straddle this expansion joint; and
- Outriggers can be placed on the “shaded areas” either side of the expansion joint at the 680m mark.

Annexure 2 to this Port Notice sets out the permitted operational zones along EAW and Annexure 2 to this Port Notice set out the mobile harbour crane permitted outrigger locations.

OUTRIGGERS, TRACKS and WHEELS MUST NEVER BE PLACED ON WHARF RAIL (OLD CRANE RAIL) OR ANY SERVICE PIT COVERS

Mobile Harbour Crane Storage

Mobile harbour cranes can only be operated along the designated areas illustrated in Annexure 2 and within the structural thresholds of the wharf areas.

Cranes not staged for use must be returned to the formally designated storage area as soon as practicable upon completion of operations. Should a crane be required again within a period of 24 hours, it can remain in position following written approval from Darwin Port Wharf and Bulk Materials Superintendent.

Mobile Harbour Cranes and Main Access Road

To transfer a mobile harbour crane along the main access road you must provide written notice to the Wharf and Bulk Materials Superintendent and Landside Officer in accordance with the following requirements:

- The application to relocate a mobile harbour crane must be submitted >24 hours in advance;
- A traffic management plan submitted with the application to move in line with P/N 015 [Vehicle Traffic Management](#);
- Two vehicles with flashing roof mounted lights identifying the hazard are required as escorts and provide direction in accordance with the approved traffic management plan; and
- A water truck must be used to minimise damage to bitumen when temperature exceeds 35°C.

Crawler Crane Operations

Crawler cranes with an operating weight of up to 180T are permitted at berths 1 and part of berth 2 between the 0 and 170m mark, part of berth 4 from the 380m mark through to the BLB at a maximum of 730m. Within those allowable working areas there are some further restrictions that are applied. These are described below:

- Crane operations are permitted between the **0** and **170m** mark with the tracks parallel to and 5m behind the “old” crane rail;
- Crane operations are permitted between the **380** and **600m** mark with the tracks parallel to and 5m behind the “old” crane rail; and
- Crane operations are permitted anywhere between **600** and **730m** mark however tracks are not to be on the “old” crane rail.

Annexure 4 to this Port Notice sets out the permitted operational zones along EAW for the 180t crawler crane.

Crawler cranes with an operating weight up to 120T (including fodder loading) are permitted at berths 1 and part of berth 2 between the 0 and 170m mark, part of berth 4 from the 380m mark through to the BLB at a maximum of 730m. Within those allowable working areas there are some further restrictions that are applied. These are described below:

- Crane and fodder operations are permitted between the **0** and **170m** mark with the tracks parallel to and 4m behind the “old” crane rail;
- Crane and fodder operations are permitted between the **380** and **600m** mark with the tracks parallel to and 4m behind the “old” crane rail;
- Crane operations are permitted anywhere between **600** and **730m** mark however tracks are not to be on the “old” crane rail; and
- Fodder is permitted to be loaded along the ship loader berth between the **170** and **380m** marks.

Annexure 5 to this Port Notice sets out the permitted operational zones along EAW for the 120 and 110t crawler cranes and the exception between 170 and 380m mark where fodder can be loaded.

OUTRIGGERS, TRACKS and WHEELS MUST NEVER BE PLACED ON WHARF RAIL (OLD CRANE RAIL) OR ANY SERVICE PIT COVERS

Crawler Cranes and Main Access Road

To transfer a crawler crane along the main access road you must provide written notice to the Wharf and Bulk Materials Superintendent and Landside Officer in accordance with the following requirements:

- The application to relocate a crawler crane must be submitted >24 hours in advance;
- A traffic management plan must be submitted with the application to move in line with P/N 015 [Vehicle Traffic Management](#);
- Two vehicles with flashing roof mounted lights identifying the hazard are required as escorts and provide direction in accordance with the approved traffic management plan; and
- Load distribution pads must be used to minimise damage to bitumen (wooden sleepers are ideal).

Mobile Crane Operations

Due to the large number of available crane sizes and configurations, the crane hirer is responsible for providing evidence that the restrictions below are complied with prior to a permit to work approval being given:

- Crane operations are permitted between the **0** and **170m** mark with the seaward outrigger pads 5m behind the “old” crane rail, minimum pad spacing parallel to the wharf of 7m, minimum outrigger pad size of 2.4m², maximum outrigger load of 115T and Maximum pad bearing pressure of 200Kpa;
- Crane operations are permitted between the **380** and **600m** mark with the seaward outrigger pads 5m behind the “old” crane rail, minimum pad spacing parallel to the wharf of 7m, minimum outrigger pad size of 2.4m², maximum outrigger load of 115T and maximum pad bearing pressure of 200Kpa;
- Crane operations are permitted between **600** and **730m** mark with outriggers centred within the wharf deck area, maximum outrigger load of 115T and maximum pad bearing pressure of 200Kpa.

Mobile Crane operations permitted in other locations within East Arm Wharf on evidence pad bearing pressure do not exceed 200Kpa.

OUTRIGGERS, TRACKS and WHEELS MUST NEVER BE PLACED ON WHARF RAIL (OLD CRANE RAIL) OR ANY SERVICE PIT COVERS

CRANE OPERATIONS AT FORT HILL WHARF

Mobile Crane Operations

Due to the large number of available crane sizes and configurations, the crane hirer is responsible for providing evidence that the restrictions below will be complied with prior to a permit to work approval being given:

- Crane operations are permitted between the **0** and **150m** mark with a maximum outrigger load of 50T and minimum outrigger pad size of 2.4m²; and
- Crane operations are permitted between the **150** and **300m** mark with a maximum outrigger load of 30T and minimum outrigger pad size of 2.4m².

Mobile Crane operations permitted in other locations within Fort Hill Wharf on evidence pad bearing pressure do not exceed 200Kpa.

Annexure 6 to this Port Notice illustrates the permitted operational zones along FHW illustrating the maximum outrigger loads.

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OUTRIGGERS MUST NEVER BE PLACED ON ANY SERVICE PIT COVERS.

REVIEW STATEMENT

This Port Notice will be reviewed biennially by the Port Management Officer.

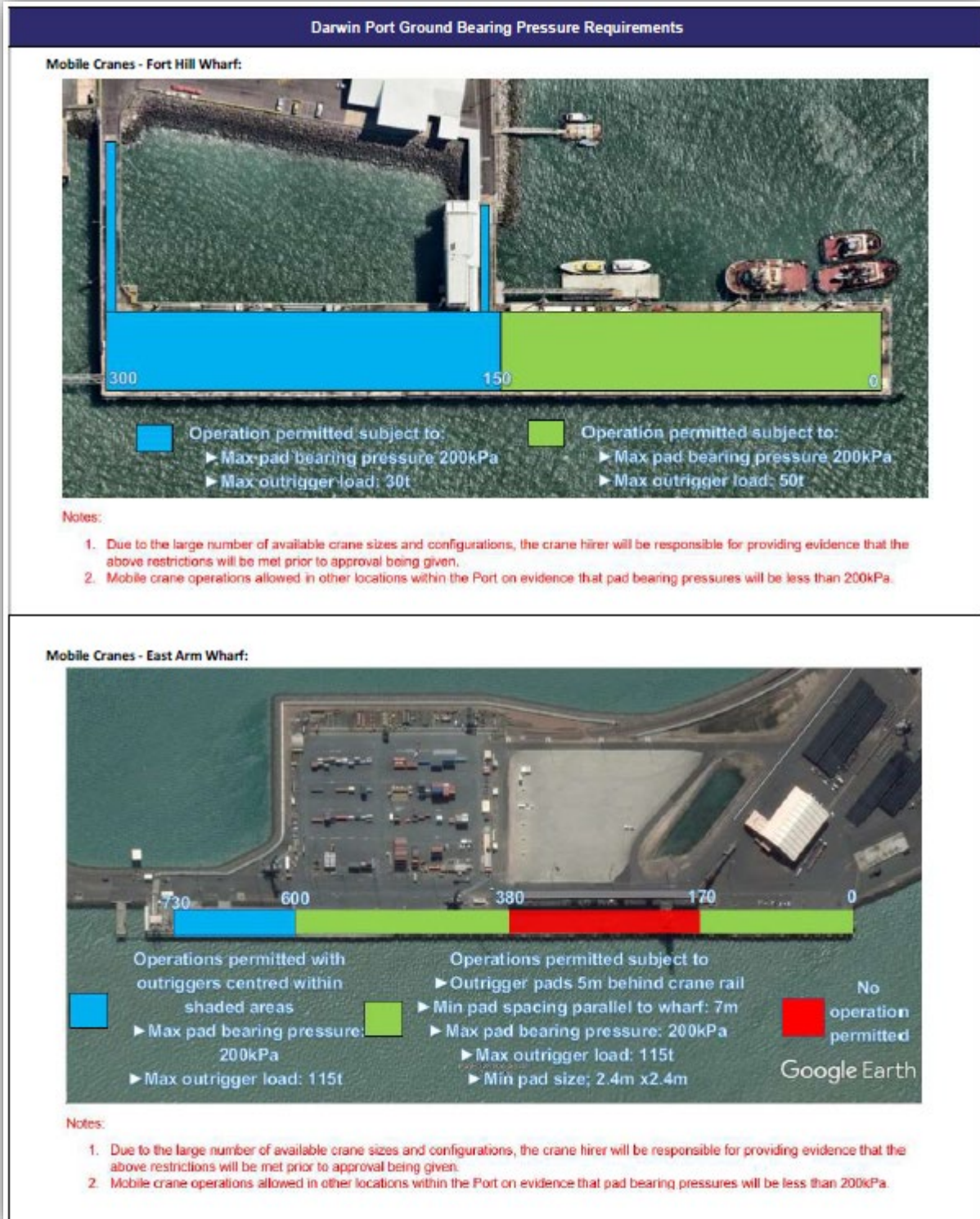
REFERENCES

- PN015 Vehicle Traffic Management
- Port Management Act NT (2015)
- Work Safe Australia
- PN026 Permit to Work

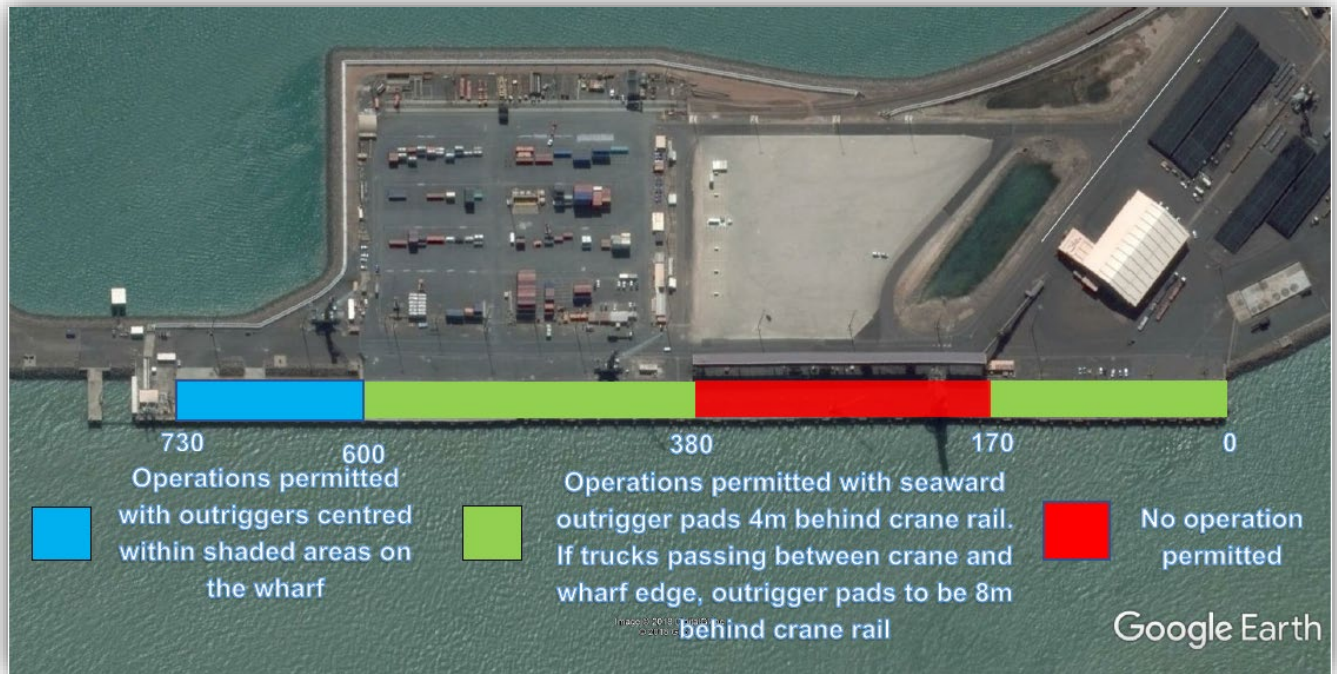


PETER DUMMETT
Port Operator
Darwin Port
05 December 2023

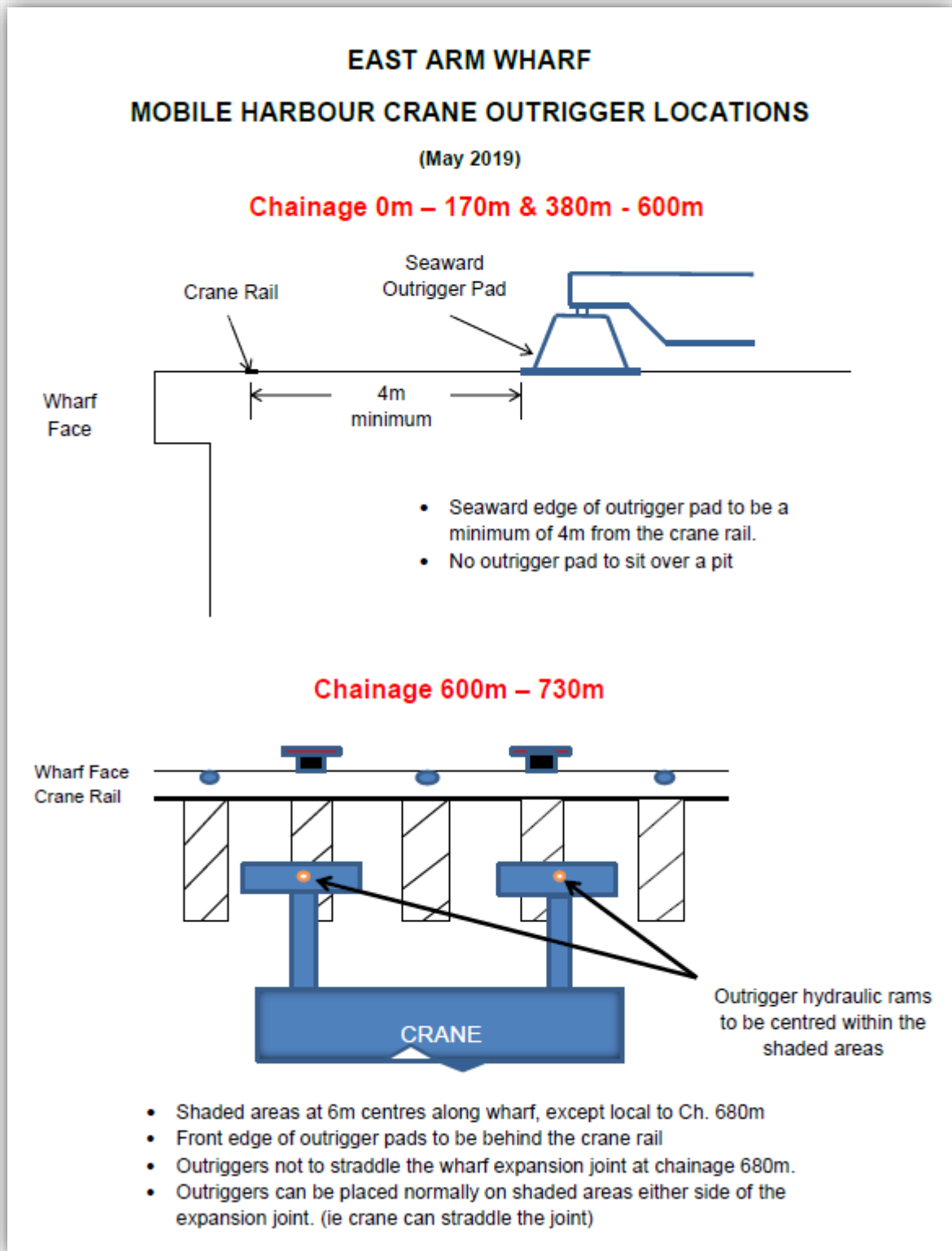
Annexure 1: MOBILE CRANE LIFT PLAN REQUIREMENTS



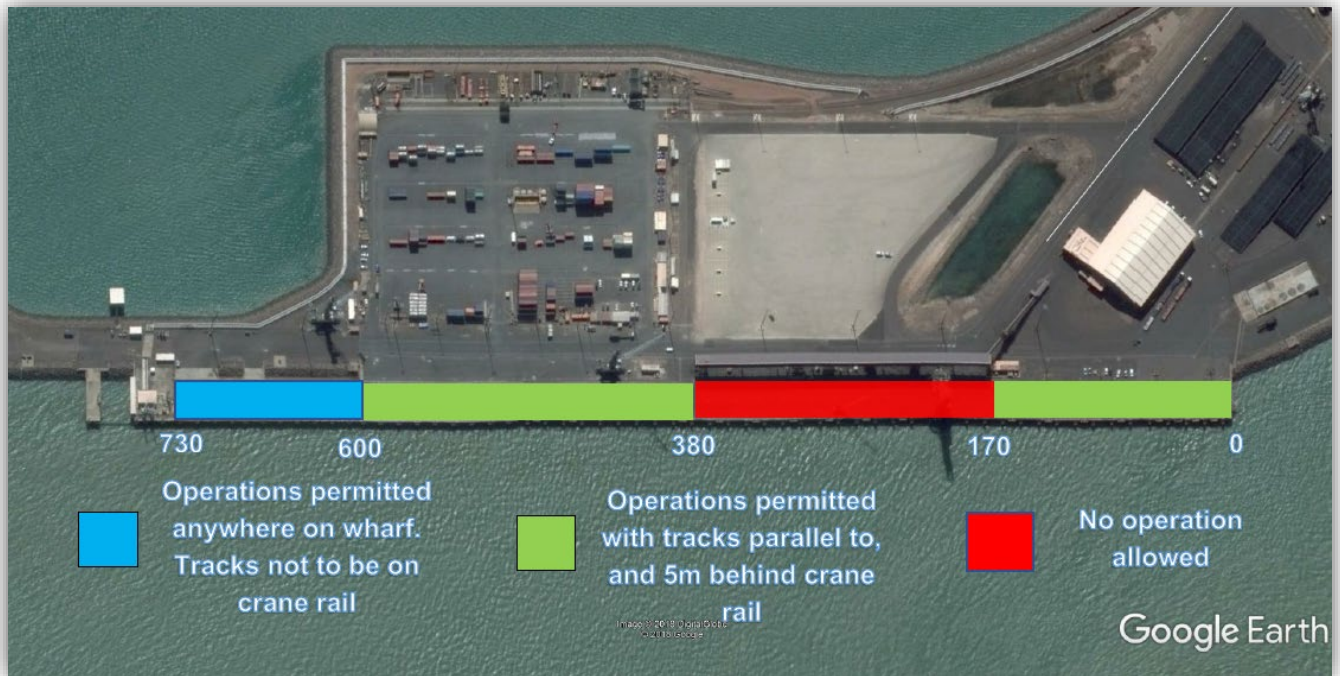
Annexure 2: EAST ARM WHARF CRANE OPERATIONAL RESTRICTIONS FOR MOBILE HARBOUR CRANES



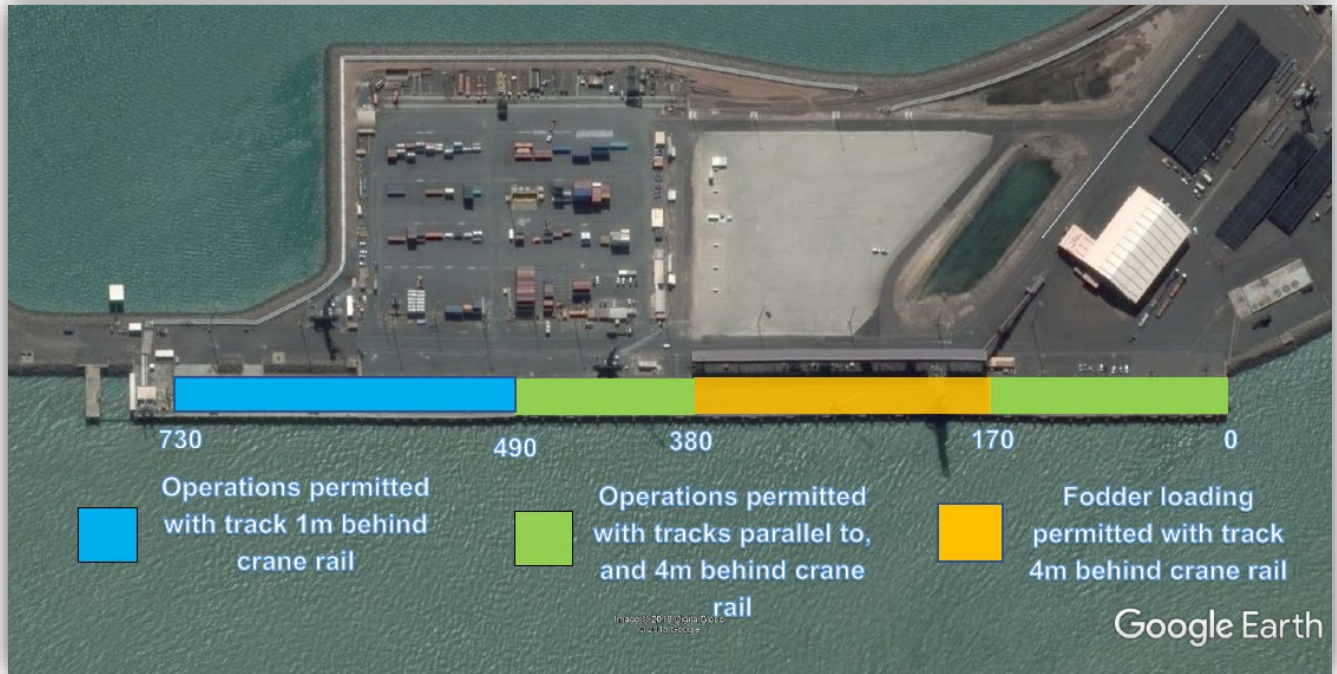
Annexure 3: MOBILE HARBOUR CRANE OUTRIGGER LOCATIONS AT EAST ARW WHARF



Annexure 4: EAST ARM WHARF C RANE OPERATIONAL RESTRICTIONS FOR 180T CRAWLER CRANE



Annexure 5: EAST ARM WHARF C RANE OPERATIONAL RESTRICTIONS 120T CRAWLER CRANE



Annexure 6: FORT HILL WHARF CRANE OPERATIONAL RESTRICTIONS FOR MOBILE CRANES

