



Flinders Ports Berth Loading Limits



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Revision Status

Revision	Date	Description	Originated by	Reviewed by	Approved by
0	04 Feb 22	For Review	ED	PC	LK
1	15 Mar 22	For Use	ED	PC	LK
2	26 Aug 22	For Use	PC	AW	LK
3	04 Jul 23	For Use	ED	PC	PC
4	16 Jan 25	For Use	ED	PC	PC
5	24 Jan 25	For Use	ED	PC	PC

Disclaimer

All loads are indicative only and use of Flinders Ports' premises or facilities (including without limitation any wharves, jetties, land, equipment, buildings or roads) ("Premises") is subject to the terms and conditions of the agreement for use which a user has entered into, or that apply to the Premises.

Conventional demands and loading expectancies are nominally defined in this document and communicated via the Flinders Ports website (<https://www.flindersports.com.au/>), please check the website for the latest version of this document. It is important to note that the Flinders Ports Berth Loading Limits is a "guide" only and any operations are to be managed with appropriate knowledge and appreciation of customary operational constraints.

The Flinders Ports Berth Loading Limits was correct at the time of publication and may be subject to variation. All publicised load limit information is governed by the following disclaimer:

Flinders Ports (including its directors, officers, employees, agents or representatives) do not give any promise, representation, warranty or undertaking as to suitability of the Premises or facilities for any use or business to be carried on by a user of the Premises.

Guidelines on Load Limitations

All port users and stakeholders should be aware of load limitations and access restrictions through the Flinders Ports' induction process and signage.

A permit is required for all cranes lifting equipment (EWPs, Boom Lifts etc.), Low Loader Trailers, SPMTs, bulk loading (stacked pallets, stockpiles), and any vehicle requiring a road going permit or load bearing structure. **Cranes will be stopped at Flinders Ports security gates and will not be permitted access without a permit.**

Road going trucks, EWPs and Boom Lifts also need to be checked in some locations as some the infrastructure has load capacities lower than the standard 12t axle load that is allowed on roads; These are:

- Port Adelaide Outer Harbor Berth 2 Passenger Terminal (12t axles – Limited Access to Equipment)
- Port Adelaide Outer Harbor Berth 4 (1t axles – Light Vehicles Only)
- Port Adelaide Osborne Berth 2 (No Vehicle or Pedestrian Access)
- Port Adelaide Osborne Berth 1 Northern Wingwall (Light Vehicle Access Only)
- Port Adelaide Inner Harbour Oil Berth M & N (No Vehicle Access)
- Port Adelaide Inner Harbour Oil Berth K Berth Timber Wharf
- Wallaroo (6.5t axle limit)
- Port Giles (8t axle limit)
- Port Lincoln (8t axle limit)
- Kirton Point (1.9t axle limit)
- Port Pirie Berth 2 Timber Wharf (No Vehicle or Pedestrian Access)
- Port Pirie Berth 1 & 2 Wharf (No Vehicle Access Subject to Risk Assessment)
- Thevenard Timber: (7.5t axle limit)

In the event of unique and atypical access a permit request is to be made to Flinders Ports Holdings (Group.Admin@fphgroup.com.au). Prior to providing access consent, port users will be required to execute a Deed of Indemnity (Access) and Flinders Ports' Senior Engineer may require users to engage a suitably qualified independent engineer (at the user's expense) to provide a report assessing the load (see note below).

Flinders Ports will (unless otherwise notified) provide necessary drawings and documents to the independent engineer. Use of Flinders Ports' intellectual property ("IP") is subject to Flinders Ports' approval, any conditions specified at the time and for the sole purpose of undertaking structural analyses. Flinders Ports reserves the right to at any time, for any reason require the immediate return or destruction of all IP (including drawings and documents) provided.

Note: Flinders Ports has an existing arrangement with WGA to provide design checks to port users at market rates and in a reasonable timeframe. The user may choose to engage WGA or an alternative suitably qualified independent engineer for a design check. Such engagement will be between the user and the independent engineer and will not involve Flinders Ports.

Contact details for WGA:

Alastair Oliver
08 8223 7433
AOLiver@wga.com.au

Guidelines on Pick & Carry (Franna) Cranes

Franna Cranes are widely used throughout the Ports for many different purposes.

All port users and stakeholders should be aware of load limitations and access restrictions through the Flinders Ports' induction process and signage.

As all Franna Cranes come under the category of lifting equipment a Permit is required for all site access.

Cranes will be stopped at Flinders Ports security gates and will not be permitted access without a permit.

A permit for Franna cranes can be applied for a period of one year for general access to Flinders Ports Wharves. This permit will not apply to all sites as some sites are not suitable to support these vehicles.

A permit can be quickly issued for the associated cranes in the below locations. For heavier pick and carry cranes or cranes to be used in other locations an assessment will likely need to be done at a cost to the applicant.

Franna Cranes:

AT-12, 14, 15, 18, 20,

MAC 25

AT-40 (in yard areas only) *

Locations:

Adelaide Outer Harbor Berth 01,

Adelaide Outer Harbor Berth 2/3 RoRo Pad,

Adelaide Outer Harbor Berth 3/4 RoRo Deck,

Adelaide Outer Harbor Flinders Adelaide Container Terminal (Berth 6 & 7)

Adelaide Inner Harbor Berth 18-20

Adelaide Inner Harbor Berth 25

Adelaide Inner Harbor Berth 27

Adelaide Inner Harbor Berth 29

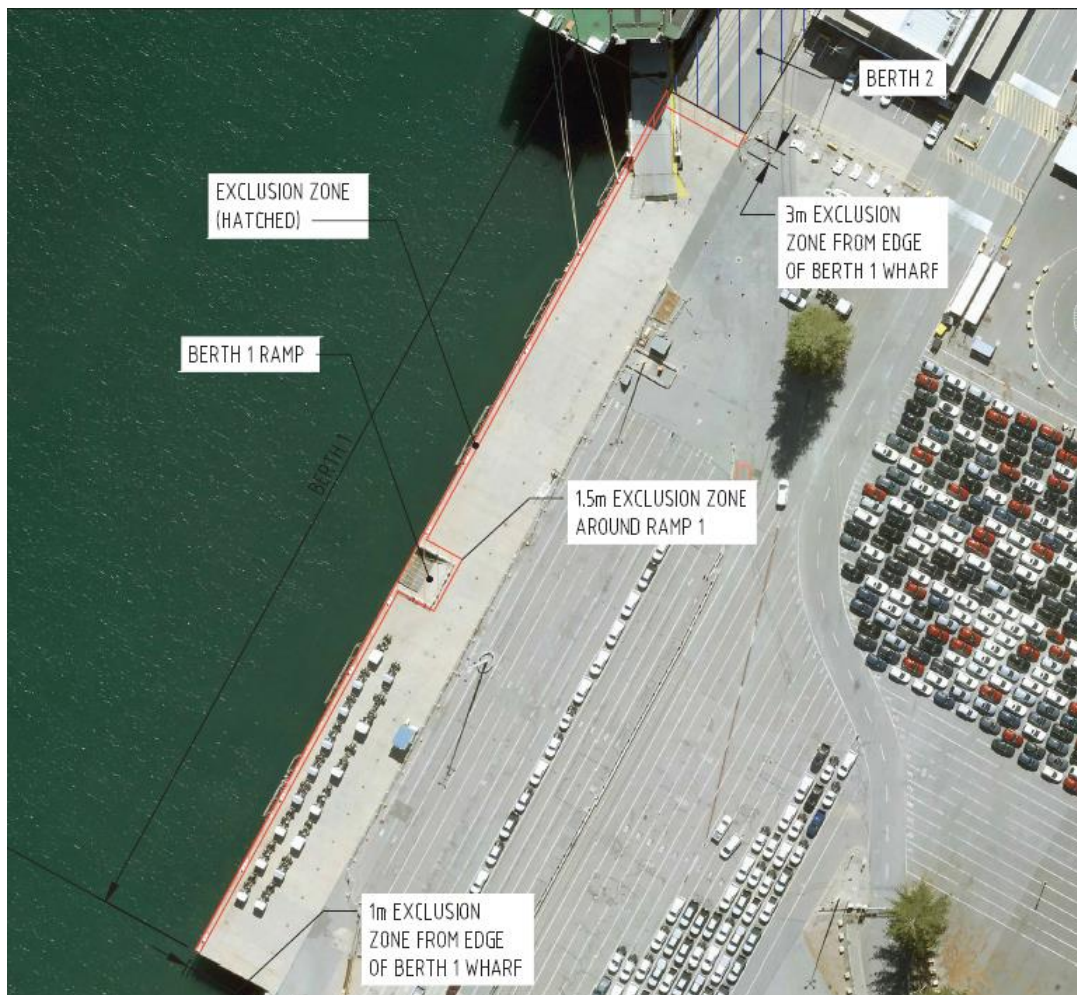
Osborne Berth 01

Flinders Ports request applicants to attempt to plan their works such that they select the above approved Franna Crane models at locations listed for ease of approval. Other Franna Crane models/locations will require further engagement for approval.

Port Adelaide

	Axle Loads					
	A	B	C	D	E	F
	SINGLE	TANDEM	TRI-	FORKLIFT	SURCHARGE	NOTES
	AXLE	AXLE	AXLE	AXLE	AREA	
LOCATION/FACILITY	(t)	(t)	(t)	(t)	(t/m ²)	
OH1 Wharf apron	50	60		50	2.1	
OH2 Wharf apron	12	12	18	12	2.1	
OH2/3 RoRo Pad	66.7	89.6	99	66.7t	6.1	
OH3 Wharf apron (north end)	50	60		50	2.1	
OH3/4 RO/RO Pad	66.7	89.6	99	66.7t	6.1	
OH4 Concrete RoRo Deck	50	60		50	2.1	
Berth 04 Loading platform				100	2.5	
OH4 Timber wharf deck	6*	6*	6*	6*		Pedestrian loading only at northern end of timber wharf. Refer to page 12*
OH6 Wharf apron	113	170	240	113	2.7	
OH7 Wharf apron	45	72	102	42	3.5	
OH8 Wharf apron	8	16.5	20	50	1.5	
Osborne 1 Wharf apron	40	50	96	40	1.0	6m from wharf edge
Osborne 2 Wharf apron						Not safe for pedestrian or vehicle traffic
M Timber jetty/T-Head	2.5 (LVs Only)	NA	NA	2.5	0.5	
K Timber wharf platform	2.5 (LVs Only)	NA	NA	2.5	0.5	
K Wharf apron	25	32	48	25	2.1	3m from wharf edge
H Vehicular Bridge	8					
18-20 Wharf apron	25	32	48	25	1.0	3m from wharf edge
25 Wharf apron	25	32	48	25	2.1	3m from wharf edge
27 Wharf apron	25	32	48	25	2.1	3m from wharf edge
29 Wharf apron	90	115	180	100	2.1	6m from wharf edge
UNLESS OTHERWISE NOTIFIED ALL LOADS ARE ONLY APPLICABLE 6m FROM EDGE OF WHARF (SEE SPECIFIC SITE PLANS)						

Adelaide Outer Harbor 01

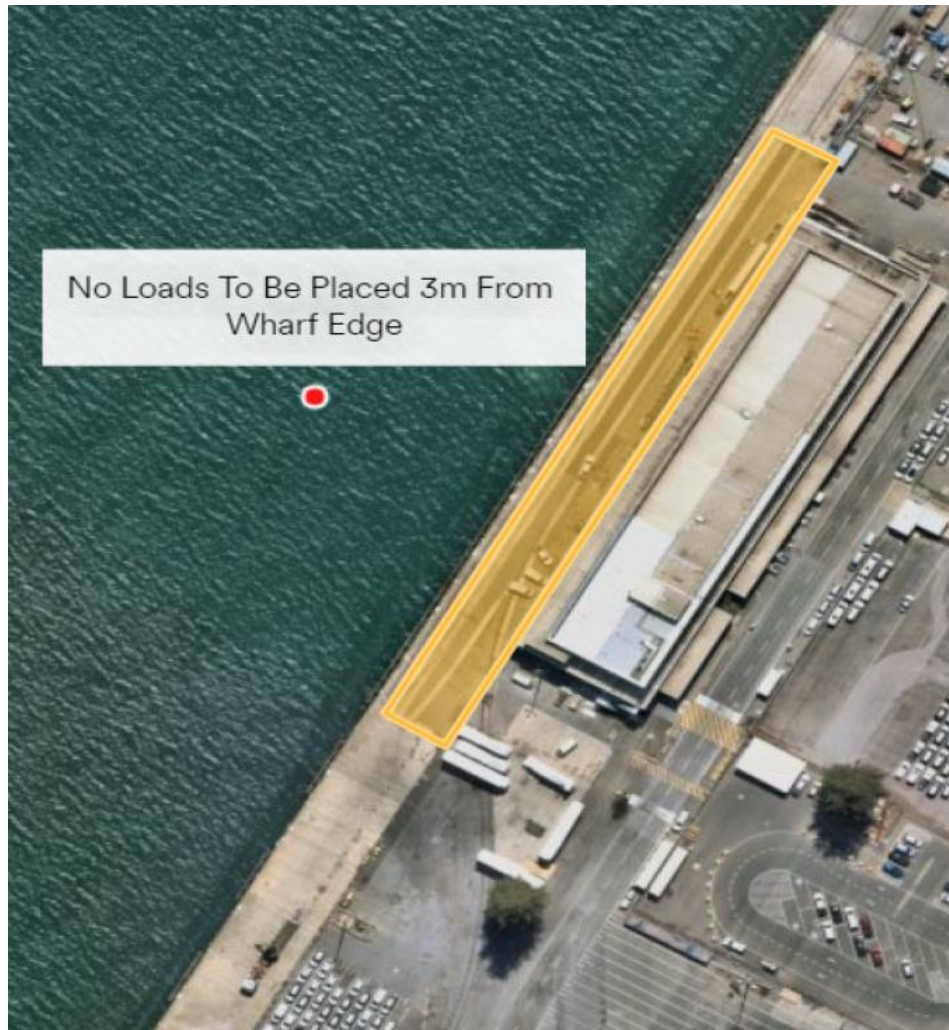


AREA		
STANDARD LOADS	PEDESTRIAN	YES
	LIGHT VEHICLE (<3t GROSS)	YES
	AMBULANCES	YES
	FIRE TRUCKS	YES
UNIFORMLY DISTRIBUTED LOADS (UDL)	BULK MATERIALS, CONDENSED STORAGE	21.5 kPa
POINT LOADS	OUTRIGGERS ON PADS, SPREADER MATS	42t (7m x 7m OUTRIGGER SPACING ON 1m x 1m SPREADER MAT)
AXLE LOADS	TRUCKS - SINGLE AXLE (AXLE SPACING 4m)	50t AXLE
	TRUCKS - DUAL AXLE (AXLE SPACING 1.25m, 4m TO ADJ. GROUP)	50t AXLE GROUP
	TRUCKS - DUAL AXLE (AXLE SPACING 1.25m, 7.6m TO ADJ. GROUP)	60t AXLE GROUP
	TRUCKS - DUAL AXLE (AXLE SPACING 1.25m, 9.5m TO ADJ. GROUP)	76t AXLE GROUP
	HLP/SPMT'S (AXLE SPACING 1.8m)	21t AXLE
	FORKLIFTS	50t AXLE
	FRANNA CRANES	25t FRANNA
	STACKERS	50t AXLE

NOTE:

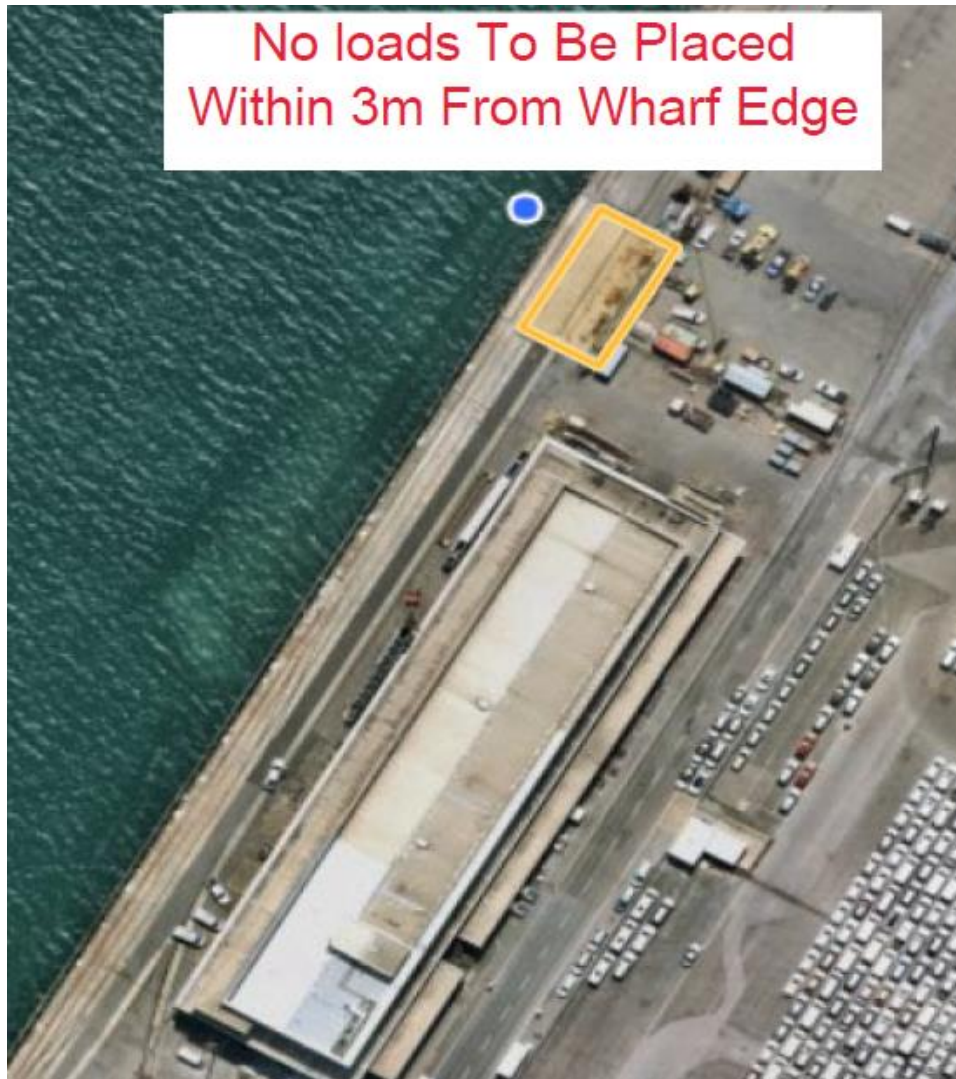
- LOADS PRESENTED ON FACT SHEET ARE NOT TO BE PLACED ON EXCLUSION ZONE (HATCHED REGION)
- LOADS ARE PRESENTED FOR WHARF STRENGTH CAPACITY AND HAVE NOT BEEN LIMITED TO AS4997 BAR STRESS LIMITATIONS

Multi User Facility Berth 2



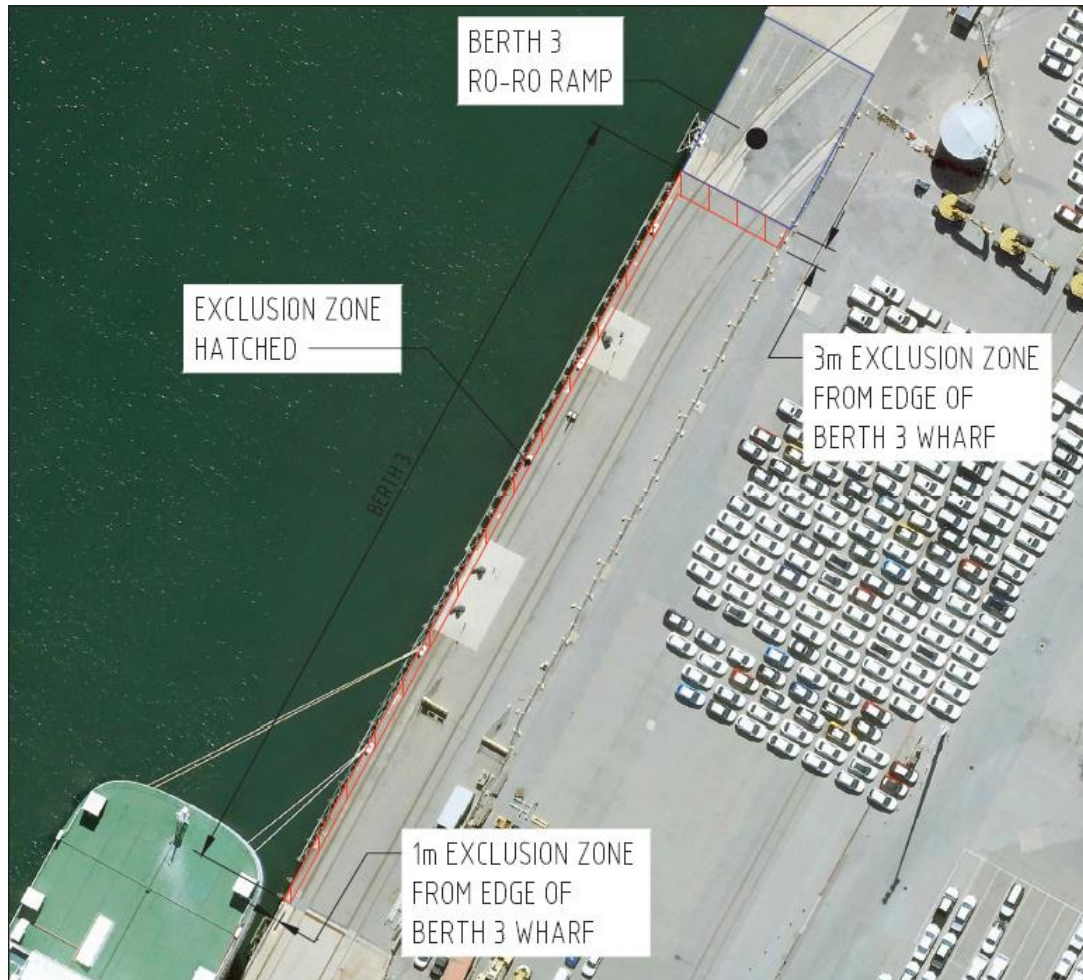
Outer Harbor Berth 2 Deck		
Standard Loads	Pedestrian	YES
	Light Vehicles (<3t Gross)	YES
	Ambulances	YES
	Fire Trucks	YES
Uniformly Distributed Loads (UDL)	Bulk Materials, Condensed Storage	2.1t/m2
Point Loads	Crane Outriggers, Dunnage, Columns	17t
	Outriggers on Pads, Spreader Mats	4t/m2 - only load within 4.5m
Axle Loads	Trucks (Single Axle, 4m to next axle)	12t
	Trucks (Double Axle Group Axle @1.25)	12t group (6t per axle)
	Trucks (Triple Axle Group @1.25m)	18t group (6t per axle)
	Quad axle or more e.g heavy load platforms and SPMTs (1.4m spacing)	6t per axle
	Mobile Cranes (axles at 1.5m)	12t
	Forklifts (Min Axle Spacing 3.2m)	12t
	Franna Cranes (Min Axle Spacing 3.2m)	18t
	Stackers (Min Axle Spacing 3.2m)	18t

Multi User Facility Berth 2 – 3 RoRo Pad



Outer Harbor Berth 2-3 RoRo Pad		
Standard Loads	Pedestrian	YES
	Light Vehicles (<3t Gross)	YES
	Ambulances	YES
	Fire Trucks	YES
Uniformly Distributed Loads (UDL)	Bulk Materials, Condensed Storage	6.1t/m2
Point Loads	Crane Outriggers, Dunnage, Columns	80t
	Outriggers on Pads, Spreader Mats	80t/m2 - only load within 4.5m
	Trucks (Single Axle, 4m to next axle)	66.7t
Axle Loads	Trucks (Double Axle Group Axle @1.25)	89.6t group (44.8t per axle)
	Trucks (Triple Axle Group @1.25m)	99t group (33t per axle)
	Quad axle	118.4t group (29.6t per axle)
	Heavy Load platforms and SPMTs (1.4m spacing)	29t per axle
	Mobile Cranes (axles at 1.5m)	29.6t per axle
	Forklifts (Min Axle Spacing 5.75m)	66.7t
	Franna Cranes (Min Axle Spacing 5.75m)	66.7t
	Reach Stackers (Min Axle Spacing 5.75m)	66.7t
Heavy Load Trailers	Samson S1 Bogie Axle	83t group (41.5 per axle)
	Samson S1 Bogie Axle	87.4t group (43.7t per axle)
	Samson S1 Bogie Axle	87.6t group (43.8t per axle)

Adelaide Outer Harbor 03

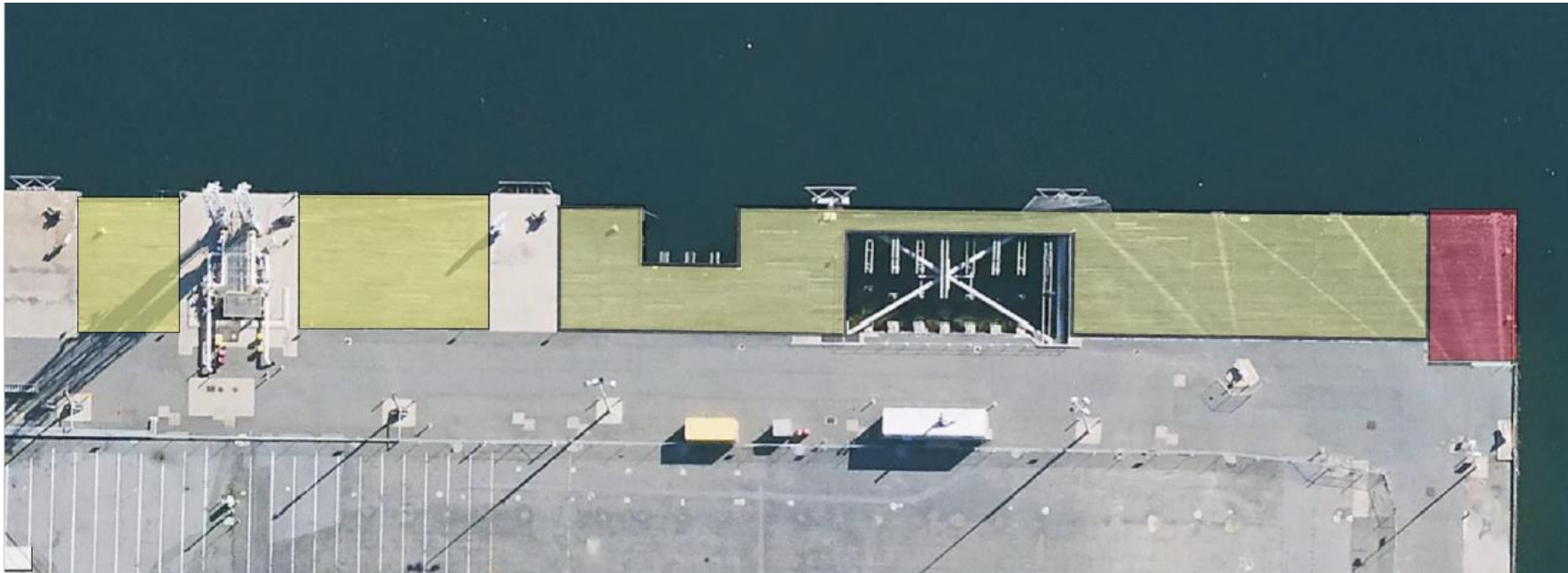


AREA		
STANDARD LOADS	Pedestrian	YES
	LIGHT VEHICLE (1-3t GROSS)	YES
	AMBULANCES	YES
	FIRE TRUCKS	YES
UNIFORMLY DISTRIBUTED LOADS (UDL)	BULK MATERIALS, CONDENSED STORAGE	21.5 kPa
POINT LOADS	OUTRIGGERS ON PADS, SPREADER MATS	42t (7m x 7m OUTRIGGER SPACING ON 1m x 1m SPREADER MAT)
AXLE LOADS	TRUCKS - SINGLE AXLE (AXLE SPACING 4m)	50t AXLE
	TRUCKS - DUAL AXLE (AXLE SPACING 1.25m, 4m TO ADJ. GROUP)	50t AXLE GROUP
	TRUCKS - DUAL AXLE (AXLE SPACING 1.25m, 7.6m TO ADJ. GROUP)	60t AXLE GROUP
	TRUCKS - DUAL AXLE (AXLE SPACING 1.25m, 9.5m TO ADJ. GROUP)	76t AXLE GROUP
	HLP/SPMT'S (AXLE SPACING 1.8m)	21t AXLE
	FORKLIFTS	50t AXLE
	FRANNA CRANES	25t FRANNA
	STACKERS	50t AXLE

NOTE:

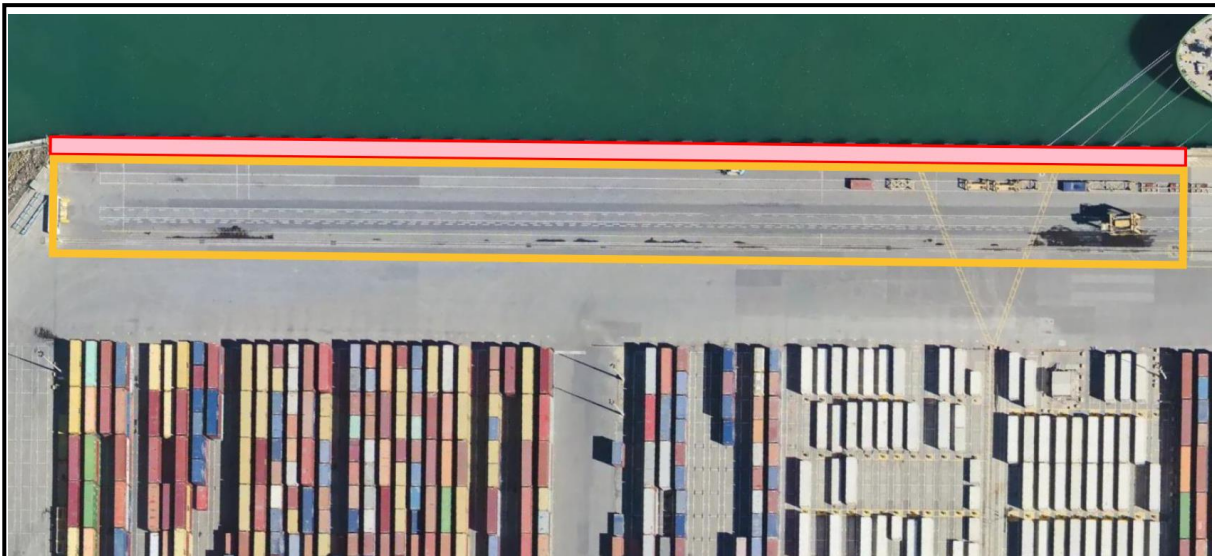
- LOADS PRESENTED ON FACT SHEET ARE NOT TO BE PLACED ON EXCLUSION ZONE (HATCHED REGION)
- LOADS ARE PRESENTED FOR WHARF STRENGTH CAPACITY AND HAVE NOT BEEN LIMITED TO AS4997 BAR STRESS LIMITATIONS

Adelaide Outer Harbor 04 – Timber Wharf



Timber Wharf Area	Allowable Loads
	Pedestrian Loading Only
	Maximum 6t Axle Load

Adelaide Outer Harbor 06

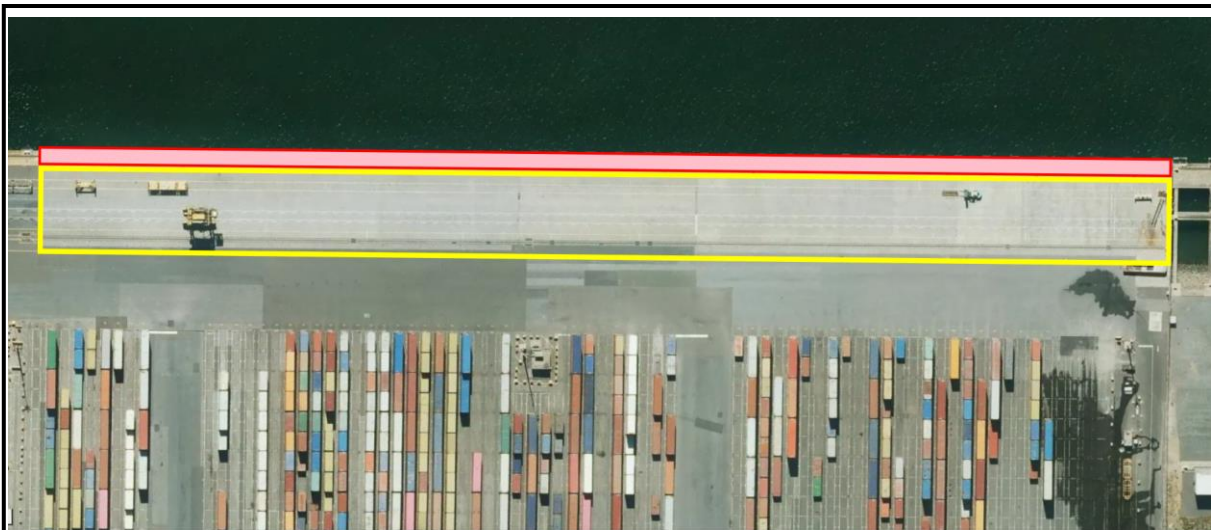


Wharf Structural Capacity Assessment Vehicle Results

VEHICLE	ALLOWABLE LOAD	GOVERNING COMPONENT
Single Axle	113t / axle	Landside crane beam
Dual Axle	85t / axle	Landside crane beam
Triple Axle	80t / axle	Landside crane beam
Quad Axle	68t / axle	Landside crane beam
SPMT / HLP	50t / axle	Sheet pile wall
Mobile cranes on axles	75t / axle	Sheet pile wall
Crane Outrigger* (includes LTM1250)	250t over 1m x 1m pad 7m pad spacing	Sheet pile wall
Frannas	40t Capacity Franna	Landside crane beam
Forklifts	20t Capacity Forklift	Landside crane beam
Stacker	113t (front axle)	Landside crane beam
Straddle Carrier	33t / axle	n/a (max load of vehicle)
UDL	26.8kPa	Sheet pile wall

- ***Assumed pad/outrigger is not located on the landside crane beam***
- ***No loads to be placed within 5.5m of wharf edge***

Adelaide Outer Harbor 07



Wharf Structural Capacity Assessment Vehicle Results

VEHICLE	ALLOWABLE LOAD	GOVERNING COMPONENT
Single Axle	45t / axle	Slab
Dual Axle	36t / axle	Slab
Triple Axle	34t / axle	Slab
Quad Axle	33t / axle	Slab
SPMT	33t / axle	Slab
Franna (including AT40 Franna)	47t (front axle)	Slab
Forklift	42t (front axle)	Slab
Crane Outrigger* (includes LTM1250)	80t over 1m x 1m pad 7m pad spacing assuming spreader beams to load over piles only	Piles
Stacker	42t (front axle)	Slab
Straddle Carrier	33t / axle	Slab
UDL	34.0kPa	Slab

- **Assumed pad/outrigger is not located on the landside crane beam**
- **No loads to be placed within 5.5m of wharf edge**

Osborne Berth 1



SETBACK FROM EDGE OF WHARF				OSBORNE BERTH 1		
0-2.2m	2.2-2.7m	2.7-6.2m	>6.2m			
				STANDARD LOADS	PEDESTRIAN	YES
					LIGHT VEHICLE (<3t GROSS)	YES
					AMBULANCES	YES
					FIRE TRUCKS	YES
				UNIFORMLY DISTRIBUTED LOADS (UDL)	BULK MATERIALS, CONDENSED STORAGE	20 kPa
				POINT LOADS	OUTRIGGERS ON PADS, SPREADER MATS	70t (7m x 7m OUTRIGGER SPACING) ON A 1m x 1m SPREADER MAT
				AXLE LOADS	TRUCKS - SINGLE AXLE (AXLE SPACING 4m)	40t AXLE
					TRUCKS - DUAL AXLE (AXLE SPACING 1.25m, 4m TO ADJ. GROUP)	50t AXLE GROUP
					TRUCKS - TRIPLE AXLE (AXLE SPACING 1.25m, 7.6m TO ADJ. GROUP)	66t AXLE GROUP
					TRUCKS - QUAD AXLE GROUP (AXLE SPACING 1.25m, 9.5m TO ADJ. GROUP)	96t AXLE GROUP
					HLP/SPMTs (AXLE SPACING 1.4m)	20t AXLE
					MOBILE CRANES (AXLE SPACING 1.5m)	18t AXLE
					FORKLIFTS (AXLE SPACING 3.7m)	40t AXLE
					FRANNA CRANES (AXLE SPACING 4.75m)	45t AXLE
					STACKERS (AXLE SPACING 6.2m)	70t AXLE
SETBACK FROM EDGE OF WHARF				OSBORNE BERTH 1 (NORTHERN SHEETPILE WALL AREA)		
0-5.2m				LIGHT VEHICLE ACCESS ONLY PERMITTED. NO HEAVY/LONG TERM LOADING.		

NOTES

- ALL SETBACKS ARE FROM THE WATERSIDE EDGE OF THE CONCRETE WHARF WALL.
- LOADS ARE FROM ASSESSMENT OF WHARF STRUCTURE ONLY. WHARF PAVEMENT CAPACITY SHOULD BE ASSESSED SEPARATELY.
- ALL SPECIFIED LOADS (EXCLUDING UDL) ARE FROM THE A 2.7m SETBACK FROM WHARF EDGE CALCULATIONS.

Inner Harbour Berths 18-20








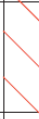


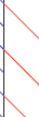


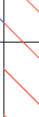
SETBACK FROM EDGE OF WHARF				INNER HARBOUR BERTH 18-20		
0-1.5m	CO	2-5.5m	>5.5m			
STANDARD LOADS				PEDESTRIAN	YES	
				LIGHT VEHICLE (~3t GROSS)	YES	
				AMBULANCES	YES	
				FIRE TRUCKS	YES	
				UNIFORMLY DISTRIBUTED LOADS (UDL)	BULK MATERIALS, CONDENSED STORAGE	
					10 kPa	
				POINT LOADS	OUTRIGGERS ON PADS, SPREADER MATS	
					- 35t (5m x 5m OUTRIGGER SPACING) ON A 0.7m x 0.7m SPREADER MAT - 50t (7m x 7m OUTRIGGER SPACING) ON A 1m x 1m SPREADER MAT	
AXLE LOADS				TRUCKS - SINGLE AXLE (AXLE SPACING 4m)	25t AXLE	
				TRUCKS - DUAL AXLE (AXLE SPACING 1.25m, 4m TO ADJ. GROUP)	32t AXLE GROUP	
				TRUCKS - TRIPLE AXLE (AXLE SPACING 1.25m, 7.6m TO ADJ. GROUP)	48t AXLE GROUP	
				TRUCKS - QUAD AXLE GROUP (AXLE SPACING 1.25m, 9.5m TO ADJ. GROUP)	64t AXLE GROUP	
				HLP/SPMTs	14M AXLE SPACING	3.6m WIDE TRAILER 13t AXLE GROUP
					1.8M AXLE SPACING	3.6m WIDE TRAILER 17.5t AXLE GROUP
						3.7m - 4.2m WIDE TRAILER 18.5t AXLE GROUP
						>4.2m WIDE TRAILER 19.5t AXLE GROUP
				MOBILE CRANES (AXLE SPACING 15m)	14t AXLE	
				FORKLIFTS (AXLE SPACING 3.7m)	35t AXLE	
				FRANNA CRANES (AXLE SPACING 4.75m)	42t AXLE	
				STACKERS (AXLE SPACING 6.2m)	63t AXLE	

NOTES

- ALL SETBACKS ARE FROM THE WATERSIDE EDGE OF THE CONCRETE WHARF WALL.
- LOADS ARE FROM ASSESSMENT OF WHARF STRUCTURE ONLY. WHARF PAVEMENT CAPACITY SHOULD BE ASSESSED SEPARATELY.

Inner Harbour Berth 29



SETBACK FROM EDGE OF WHARF			INNER HARBOUR BERTH 29		
0-3m	3-6m	>6m			
			STANDARD LOADS	PEDESTRIAN	YES
				LIGHT VEHICLE (~3t GROSS)	YES
				AMBULANCES	YES
				FIRE TRUCKS	YES
			UNIFORMLY DISTRIBUTED LOADS (UDL)	BULK MATERIALS, CONDENSED STORAGE	215 kPa
			POINT LOADS	OUTRIGGERS ON PADS, SPREADER MATS	100t (7m x 7m OUTRIGGER SPACING ON A 1m x 1m SPREADER MAT
			AXLE LOADS	TRUCKS - SINGLE AXLE (AXLE SPACING 4m)	90t AXLE
				TRUCKS - DUAL AXLE (AXLE SPACING 1.25m, 4m TO ADJ. GROUP)	115t AXLE GROUP
				TRUCKS - TRIPLE AXLE (AXLE SPACING 1.25m, 7.6m TO ADJ. GROUP)	180t AXLE GROUP
				TRUCKS - QUAD AXLE GROUP (AXLE SPACING 1.25m, 9.5m TO ADJ. GROUP)	215t Axle Group
				HLP/SPMTs (AXLE SPACING 1.4m)	50t Axle
				MOBILE CRANES (AXLE SPACING 1.5m)	50t Axle
				FORKLIFTS (AXLE SPACING 3.7m)	100t AXLE
				FRANNA CRANES (AXLE SPACING 4.75m)	25t FRANNA
				STACKERS (AXLE SPACING 6.2m)	100t AXLE

NOTES

- DO NOT LOAD DIRECTLY ONTO CONCRETE CAPPING BEAM
- LOADS ARE FROM ASSESSMENT OF WHARF STRUCTURE ONLY. WHARF PAVEMENT CAPACITY SHOULD BE ASSESSED SEPARATELY.

Port Pirie

	Axle Loads					
	A	B	C	D	E	F
	SINGLE	TANDEM	TRI-	FORKLIFT	SURCHARGE	NOTES
	AXLE	AXLE	AXLE	AXLE	Area	
LOCATION/FACILITY	(t)	(t)	(t)	(t)	(t/SM)	
No. 1 Wharf apron						To be closed off to vehicles, LV access only subject to risk assessment
No. 2 Wharf apron						24t outrigger load 10m+ from sheet pile is acceptable
No. 2 Timber platform	No Vehicle Loading - Pedestrian access only, and only in areas without significant rot of timber deck determined by inspection a <u>Subject to Risk Assessment</u>					
No. 4 Wharf apron	40*	70*	90*	45*	From Edge of Wharf: • 0-10m: 2.1t/m ² **	
Nos. 5-10 Wharf apron	40*	70*	90*	45*	From Edge of Wharf: • 0-9m: 2.1t/m ² ** • 9m+: 5.6t/m ² • 14m+: 16.8t/m ²	Gottwald G HMK 6407 B Mobile Harbour Crane – 9m Komatsu HM400-3 Articulated Dump Truck Min 4m from wharf edge Translifter Liftec LTH 90R with Kalmar TT618i Tow Tractor Min 4m from wharf edge
No. 11 Timber jetty	No Vehicle Loading - Pedestrian access only, and only in areas without significant rot of timber deck determined by inspection a <u>Subject to Risk Assessment</u>					

*No closer than 3m from wharf edge

**For berths 5-10 no bulk storage loads to be within 0-6m from wharf edge.

Port Pirie Berths 01 & 02



Timber Wharf

No Vehicle Access

Pedestrian access
subject to risk
assessment













Light Vehicle
Access Subject to
Risk Assessment,
Pedestrian Access
Only

Port Pirie Berths 05-10



PLAN

ENLARGEMENT PART PLAN

SETBACK FROM EDGE OF WHARF			PORT PIRIE BERTHS 5 -10		
0-3m	3-6m	>6m			
			STANDARD LOADS	PEDESTRIAN	YES
				LIGHT VEHICLE (<3t GROSS)	YES
				AMBULANCES	YES
				FIRE TRUCKS	YES
			UNIFORMLY DISTRIBUTED LOADS (UDL)	BULK MATERIALS, CONDENSED STORAGE	215 kPa (<1 WEEK ONLY)
			POINT LOADS	OUTRIGGERS ON PADS, SPREADER MATS	100t (7m x 7m OUTRIGGER SPACING) ON A 1m x 1m SPREADER MAT
			AXLE LOADS	TRUCKS - SINGLE AXLE (AXLE SPACING 4m)	40t AXLE
				TRUCKS - DUAL AXLE (AXLE SPACING 1.25m, 4m TO ADJ. GROUP)	70t AXLE GROUP
				TRUCKS - TRIPLE AXLE (AXLE SPACING 1.25m, 7.6m TO ADJ. GROUP)	90t AXLE GROUP
				TRUCKS - QUAD AXLE GROUP (AXLE SPACING 1.25m, 9.5m TO ADJ. GROUP)	110t AXLE GROUP
				HLP/SPMTs (AXLE SPACING 1.4m)	22.5t PER AXLE
				MOBILE CRANES (AXLE SPACING 1.5m)	22.5t PER AXLE
				FORKLIFTS (AXLE SPACING 3.7m)	45t AXLE
				FRANNA CRANES (AXLE SPACING 14.75m)	25t FRANNA
				STACKERS (AXLE SPACING 6.2m)	100t AXLE

NOTES

- DO NOT LOAD DIRECTLY ONTO CONCRETE CAPPING BEAM
- LOADS ARE FROM ASSESSMENT OF WHARF STRUCTURE ONLY. WHARF PAVEMENT CAPACITY SHOULD BE ASSESSED SEPARATELY.

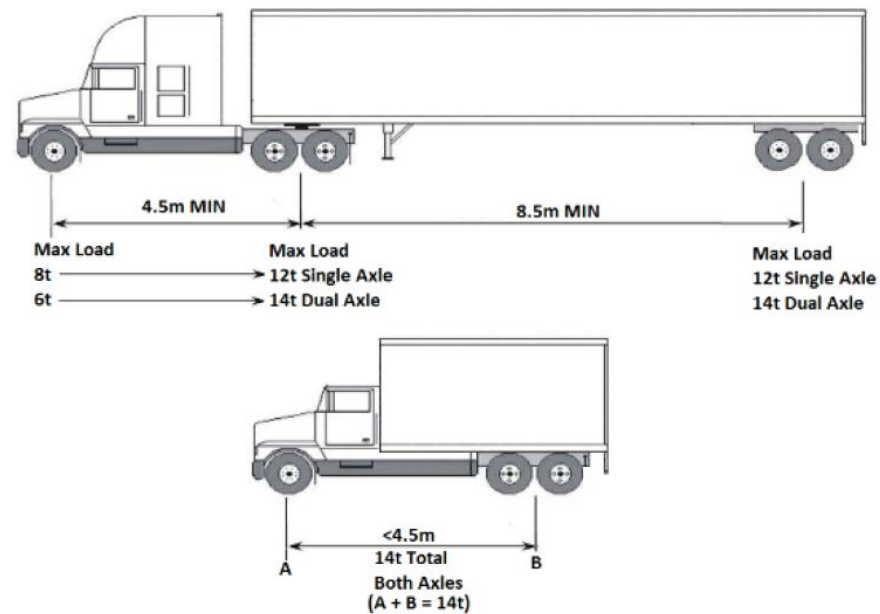
Port Lincoln

	Axle Loads						
	SINGLE	TANDEM	TRI-	FORKLIFT/FRANNA (Front/Rear)	Crane Outrigger	SURCHARGE	Gross Vehicle Mass (GVM)
	AXLE	AXLE	AXLE	AXLE			Total
LOCATION/FACILITY	(t)	(t)	(t)	(t)	(t/SM)	(t/SM)	(t)
Jetty Berth 3-7	8	16	16				38
Coastal wharves (Berths 8-10)	12*	24*		23*/4*	2.1	2.1	54
Kirton Point Jetty	1.9						3.3

*No vehicle tyre, crane outrigger or outrigger spreading mat to be within 3m of wharf edge

Port Giles

	Axle Loads					
	A	B	C	D	E	F
	SINGLE	TANDEM	TRI-	FORKLIFT	SURCHARGE	NOTES
	AXLE	AXLE	AXLE	AXLE		
LOCATION/FACILITY	(t)	(t)	(t)	(t)	(t/SM)	
Jetty	11	16.5	20			Design Vehicles <ul style="list-style-type: none"> Lima Crane 55-T-101 HS-20-44 Wheel Loading

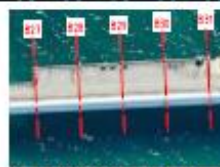


Port Giles



PARKING BAY 1

N.T.S.



PARKING BAY 2

N.T.S.

AREA		GENERAL
STANDARD LOADS	PEDESTRIAN	YES
	LIGHT VEHICLE (<3t GROSS)	YES
	AMBULANCES	YES
	FIRE TRUCKS	YES
AXLE LOADS	TRUCKS - SINGLE AXLE (AXLE SPACING 4m)	11t AXLE
	TRUCKS - DUAL AXLE (AXLE SPACING 1.25m, 4m TO ADJ. GROUP)	16.5t AXLE GROUP
	TRUCKS - TRIPLE AXLE (AXLE SPACING 1.25m, 8.2m TO ADJ. GROUP)	20t AXLE GROUP
	TRUCKS - QUAD AXLE (AXLE SPACING 1.25m, 9.5m TO ADJ. GROUP)	27t AXLE GROUP
	HLP/SPMT'S	NO
	FORKLIFTS (KOMATSU FD135-0) ⁽¹⁾	26.5t FRONT AXLE, 2.5t REAR AXLE
	FRANNA CRANE (AT15-3 CRANE) ⁽¹⁾	27.2t FRONT AXLE, 3.0t REAR AXLE
	MOBILE CRANE (AXLE SPACING 3.6m)	12t AXLE GROUP
	DUST TRUCK ⁽²⁾	YES
	EWP (HAULOTTE HA20RTJ PRO)	6.1t FRONT AXLE, 4.8t REAR AXLE
	LIMA CRANE ⁽¹⁾	YES
	HS20-44 ⁽¹⁾	YES
POINT LOAD	OUTRIGGERS ON PADS/SPREADER MATS ⁽³⁾	20t (4.0m x 4.0m SPACING, ON A 0.4m x 0.7m MAT)

⁽¹⁾ - DESIGN VEHICLE USED IN ANALYSIS, SIMILAR ARRANGEMENT AND AXLE LOAD SUITABLE.

⁽²⁾ - REFER TO SHEET 3 FOR ARRANGEMENT.

⁽³⁾ - TO ONLY BE POSITION BETWEEN BENTS 42-61.

Port Giles



TURNING BAY

N.T.S.

AREA		GENERAL
STANDARD LOADS	PEDESTRIAN	YES
	LIGHT VEHICLE (-3t GROSS)	YES
	AMBULANCES	YES
	FIRE TRUCKS	YES
AXLE LOADS	TRUCKS - SINGLE AXLE (AXLE SPACING 4m)	1t ¹ AXLE
	TRUCKS - DUAL AXLE (AXLE SPACING 1.25m, 4m TO ADJ. GROUP)	16.5t AXLE GROUP
	TRUCKS - TRIPLE AXLE (AXLE SPACING 1.25m, 0.2m TO ADJ. GROUP)	20t AXLE GROUP
	TRUCKS - QUAD AXLE (AXLE SPACING 1.25m, 9.5m TO ADJ. GROUP)	27t AXLE GROUP
	HLP/SPMT'S	NO
	FORKLIFTS (KOMATSU FD135-8) ¹¹¹	26.5t FRONT AXLE, 2.5t REAR AXLE
	FRANNA CRANE (AT15-3 CRANE) ¹¹¹	27.2t FRONT AXLE, 3.0t REAR AXLE
	MOBILE CRANE (AXLE SPACING 3.6m)	12t AXLE GROUP
	DUST TRUCK ¹²¹	YES
	EWP (HAULOTTE HA20RTJ PRO)	6.1t FRONT AXLE, 4.0t REAR AXLE
	LIMA CRANE ¹¹¹	YES
	HS20-44 ¹¹¹	YES
POINT LOAD	OUTRIGGERS ON PADS/SPREADER MATS ¹³¹	20t (4.0m x 4.0m SPACING, ON A 0.4m x 0.7m MAT)

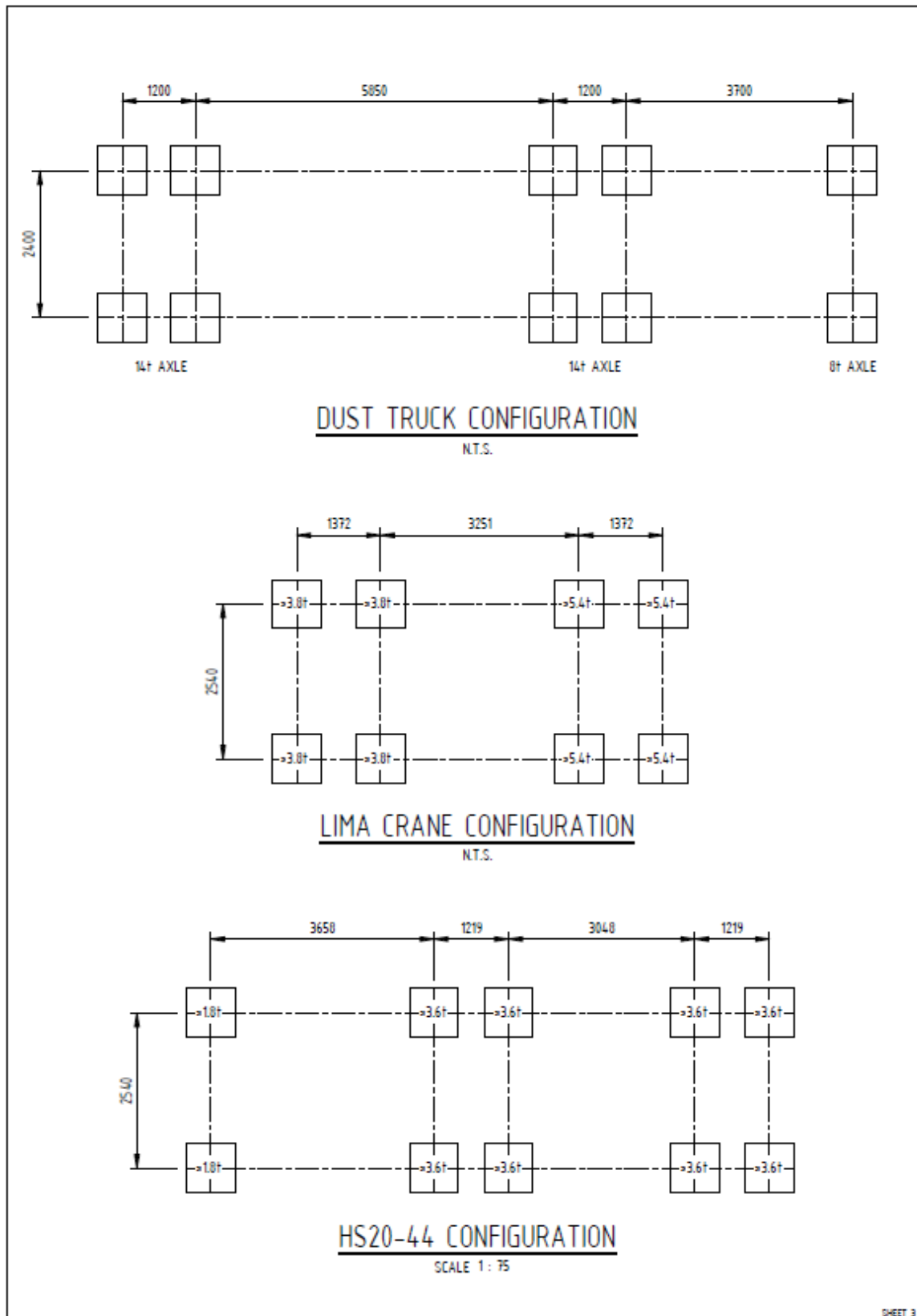
¹¹¹ - DESIGN VEHICLE USED IN ANALYSIS, SIMILAR ARRANGEMENT AND AXLE LOAD SUITABLE.

¹²¹ - REFER TO SHEET 3 FOR ARRANGEMENT.

¹³¹ - TO ONLY BE POSITION BETWEEN BENTS 42-61.

SHEET 2

Port Giles



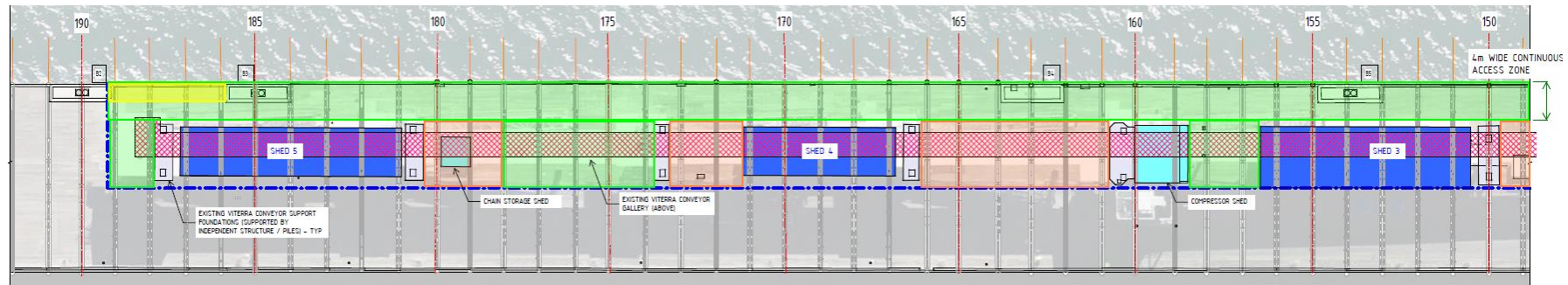
Klein Point

	Axle Loads					
	A	B	C	D	E	F
	SINGLE	TANDEM	TRI-	FORKLIFT	SURCHARGE	NOTES
	AXLE	AXLE	AXLE	AXLE		
LOCATION/FACILITY	(t)	(t)	(t)	(t)	(t/SM)	
Klein Point Jetty/Walkways	Vehicles prohibited (pedestrians only)				0.152	Maximum Point Load = 1.1kN (112kg) on a minimum 100mm x 100mm outrigger pad

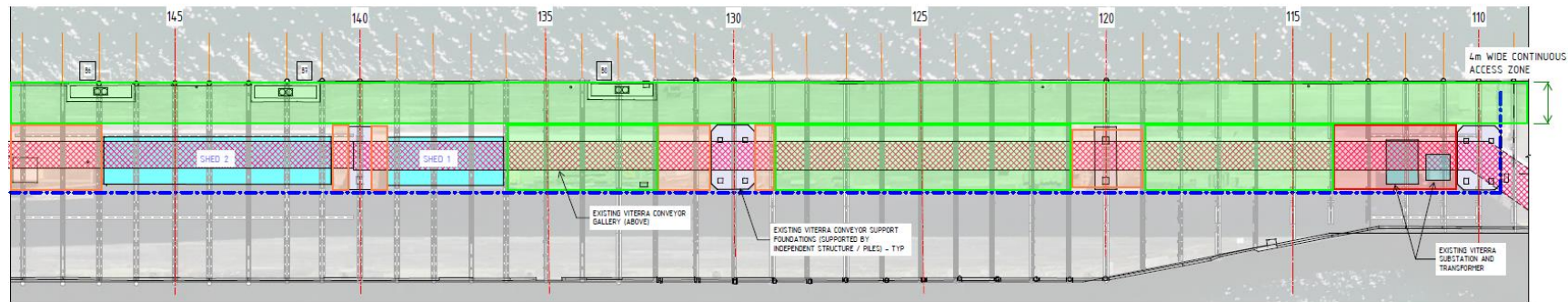
Wallaroo

	Axle Loads			
	A	B	D	F
	SINGLE	TANDEM	FORKLIFT	NOTES
	AXLE	AXLE	AXLE	
LOCATION/FACILITY	(t)	(t)	(t)	
WALLAROO				Refer to “Load Restrictions” below for areas of no allowable/restricted loading.
Jetty - between yellow lines	6.5	7		*Excluding no loading zones
Jetty - other areas	3	4		*Excluding no loading zones

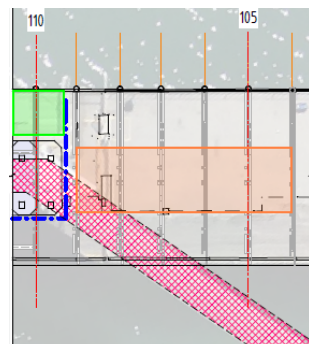
Wallaroo Jetty – Vehicular Load Restrictions



PART PLAN (BENTS 190-149)



PART PLAN (BENTS 149-110)



PART PLAN (BENTS 110-105)

LEGEND

- NO FURTHER RESTRICTION BEYOND EXISTING PUBLISHED LOAD LIMITS (REFER TABLE 1). VEHICULAR (WITHIN LIMITS STATED) AND PEDESTRIAN LOADS ACCESS PERMITTED.
- DECK AREA VERTICALLY SUPPORTED BY DETERIORATED STEEL TRUSSES. DECK AREA PLANNED TO BE REMOVED AS PART OF UPCOMING WORKS. NO VEHICLES PERMITTED. PEDESTRIAN ONLY (MAX. 3 PERSONNEL WITHIN ANY 5m x 5m ZONE)
- DECK AREA VERTICALLY SUPPORTED BY DETERIORATED STEEL TRUSSES AND POOR CONDITION TIMBER STRINGERS. AREA PLANNED TO BE REMEDIATED AS PART OF UPCOMING SUBSTATION STRENGTHENING WORKS. NO VEHICLES PERMITTED. PEDESTRIAN ONLY (MAX. 3 PERSONNEL WITHIN ZONE)
- ISOLATED STRINGERS IN POOR CONDITION. REPLACEMENT REQUIRED. NO VEHICLES PERMITTED. PEDESTRIAN ONLY (MAX. 3 PERSONNEL WITHIN ZONE)

TABLE 1 - VEHICULAR LOAD LIMITS (WHERE PERMITTED)

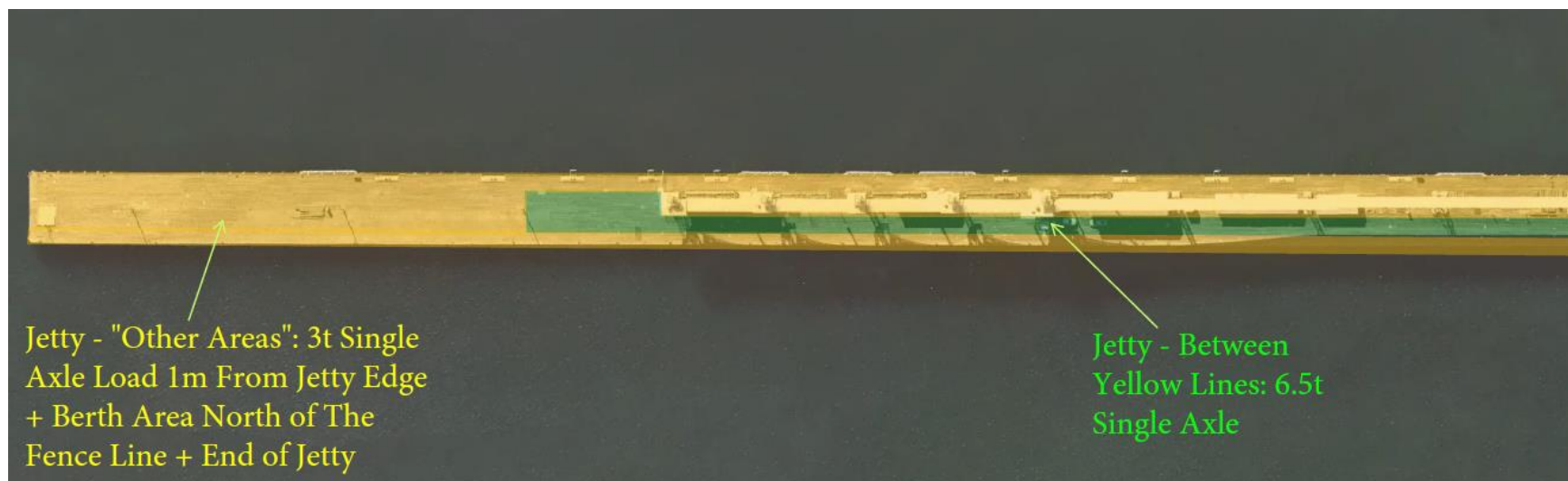
	Axle Loads				E	F
	A	B	C	D		
	SINGLE	TANDEM	TRI-	FORKLIFT		
	AXLE	AXLE	AXLE	AXLE	SURCHARGE	NOTES
LOCATION/FACILITY	(t)	(t)	(t)	(t)	(t/SM)	
WALLAROO						
Jetty - between yellow lines	6.5	7				
Jetty - other areas	3	4				

NOTES:
FOLLOWING VEHICLES HAVE BEEN ASSESSED BY WGA AND CONFIRMED TO BE WITHIN THE LOAD RATING ASSESSMENT / LIMITS PRESENTED IN TABLE 1:
- CROWN FORKLIFT - MODEL C350S-5
- TOYOTA FORKLIFT - MODEL 80-1P025

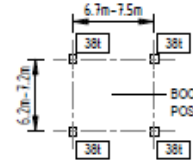
Wallaroo Jetty Chainage 0 – 500m



Wallaroo Jetty Chainage 500m – 870m



Thevenard

	Axle Loads					
	A	B	C	D	E	F
	SINGLE	TANDEM	TRI-	FORKLIFT	SURCHARGE	Comments
	AXLE	AXLE	AXLE	AXLE		
LOCATION/FACILITY	(t)	(t)	(t)	(t)	(t/SM)	
Timber Jetty	7.5	10				
2020 Concrete Access Jetty	12	18	22	22		<p>Jetty designed to achieve a class 15 deck classification to AS4997 (UDL=15kPa).</p> <p>Design Vehicle Loads:</p> <ul style="list-style-type: none"> - 20t Self Propelled Knuckle Boom - 22t Franna Pick and Carry 8t @3m from front axle (22t front axle, 6t rear) - Maintenance areas (over existing concrete caissons only) – 50t All Terrain Crane set up with full outriggers lifting 20t load <p>- MAINTENANCE AREAS (OVER EXISTING CONCRETE CAISSONS ONLY) - 50T ALL TERRAIN CRANE SET UP WITH FULL OUTRIGGERS LIFTING 20T LOAD:</p>  <p>NOTE: OUTRIGGERS REACTIONS ALREADY INCLUDE A 10% DYNAMIC FACTOR. THE ABOVE ARE MAXIMUM OUTRIGGER REACTIONS AND ACTUAL REACTIONS WILL VARY DEPENDING ON BOOM AND RADIUS.</p>
Sheet Pile Wharf	12	19.2	21.6		2.1	

Load Limit Permit Application – Mobile Crane OR Heavy Load

This PERMIT is required to use/land a mobile crane or heavy load on a Flinders Ports wharf. Send this completed permit application to FLINDERS PORTS HOLDINGS Email: Group.Admin@fphgroup.com.au. Any enquiries can be directed to Group Assets Engineering via Group Administration Ph: (08) 8447 0611. **Additional information or advice may be requested to support this application. This PERMIT must be approved before a mobile crane or heavy load is given permission to access the wharf. Group Assets Engineering will acknowledge this application within 3 working days.**

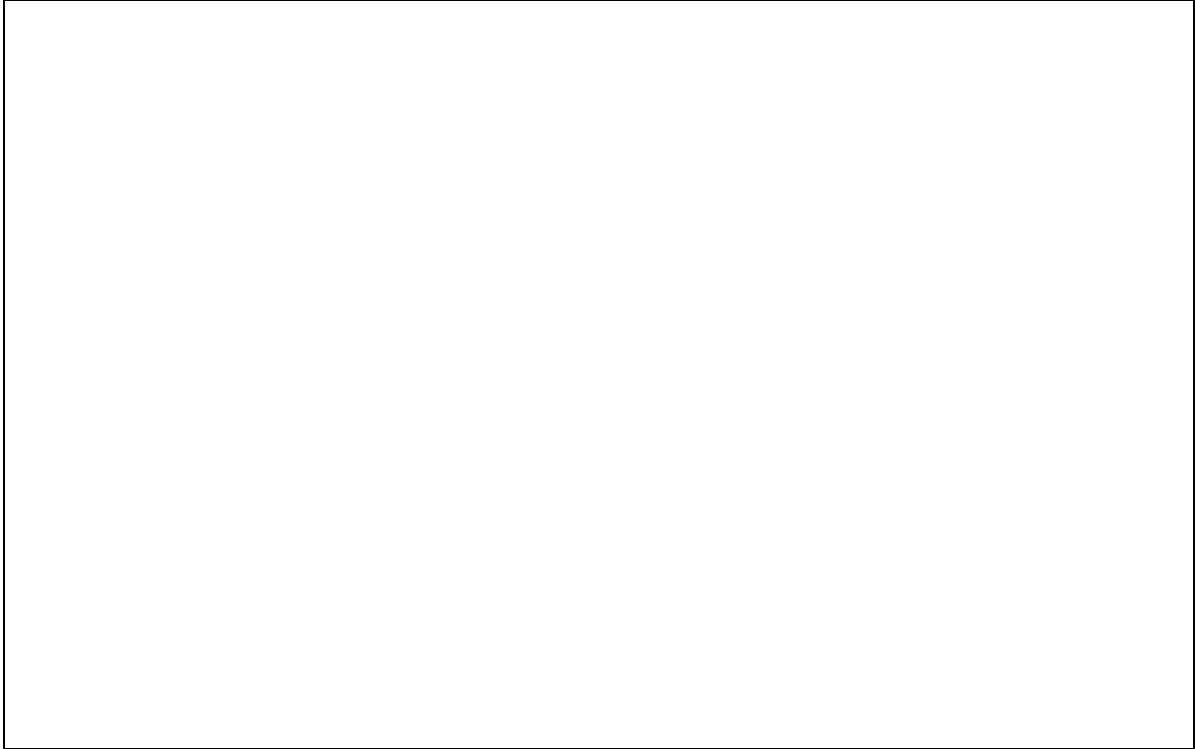
New Application	YES <input type="checkbox"/>	NO <input type="checkbox"/>	Ongoing Application	YES <input type="checkbox"/>	NO <input type="checkbox"/>
APPLICATION DETAILS					
APPLICANT NAME					
APPLICATION POSITION					
EMAIL / PHONE NUMBER					
COMPANY					
WHARF LOCATION					
VESSEL NAME					
STEVEDORING COMPANY					
SHIPPING AGENCY NAME		CONTACT PERSON			
ARRIVAL DATE:		DEPARTURE DATE			
CRANE DETAILS (Please attach diagrams and supporting information)					
MAKE		MODEL			
LICENCE PLATE		TARE WEIGHT of crane including counterweights			
Maximum GROSS weight to be lifted by crane		Maximum outreach when lifting load			
Outrigging Spacing PARALLEL to Wharf		Outrigging Spacing PERPENDICULAR to Wharf			
Outrigger Pad Size (m ²)					
MAX Pad Loads – Seaward	PAD 1		PAD 2		
MAX Pad Loads - Landward	PAD 3		PAD 4		

TRUCK/TRAILER DETAILS (Please attach diagrams and supporting information)

MAKE		MODEL	
LICENCE PLATE		Total Number of Axles	
Truck/Trailer Tare Weight		Axle Spacing	
Maximum GROSS Weight to be on Trailer		Axle Loading	
Ground Contact Width			

HEAVY LOAD DIAGRAM (Crane Lift Study OR Truck/Trailer Configuration Details)


LOCATION MAP OF BERTH WITH LOAD POSITION DETAILED



WHARF LOAD LIMITS

For current wharf load limits please also refer to www.flindersports.com.au (Ports/Berth Information).
Flinders Port Holdings reserves the right to decline an Advanced Notice for a mobile crane or heavy load.

**This completed permit must be scanned and emailed to Flinders Ports Holdings
Group.Admin@fphgroup.com.au.**

You must not proceed without confirmation from Flinders Ports this Permit has been approved

FLINDERS PORT HOLDINGS PERMIT APPLICATION APPROVAL

This Permit is valid for 12 months from Approval Date

Approver's Name:		Approver's Signature:	
Approver's Position:		Approval Date:	

SEND COPY OF APPROVED PERMIT TO APPLICANT VIA EMAIL PROVIDED ON THIS PERMIT.