

Clyde Quay Boat Harbour Restoration Project Master Plan

Connecting Wellingtonians to Wellington Harbour



ROYAL PORT NICHOLSON YACHT CLUB

Established 1883

APPENDIX 1

Absolutely

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ME HEKE KI PŌNEKE
WELLINGTON CITY COUNCIL **Wellington**

Connecting Wellingtonians to Wellington Harbour

The Clyde Quay Boat Harbour Restoration Project aims to restore the boat harbour to once again be the jewel in the crown of the Wellington Waterfront, fit for purpose as a primary means of connecting Wellingtonians to Wellington Harbour.

The purpose of this document is to consolidate information from a number of key documents such as the Clyde Quay Boat Harbour Conservation plan, the Royal Port Nicholson Yacht Club Statement of Intent, the Wellington Central City Framework, the Clyde Quay Precinct Plan and the WCC-RPNYC Memorandum of Understanding in order to communicate a Master Plan describing:

- *What activities will take place in and around the Clyde Quay Boat Harbour*
- *How the Clyde Quay Boat Harbour will be laid out*
- *How the project works will be phased*
- *How much the project is likely to cost*
- *Who will be responsible for funding the various elements of the project*

Activities in and around the Clyde Quay Boat Harbour

1. Public Amenity, Harbour Accessibility & Heritage Celebration

The Clyde Quay Boat Harbour Restoration Project is primarily a social restoration project aimed at providing greater public amenity within the Clyde Quay Boat Harbour, increasing public access to Wellington Harbour and celebrating the boat harbour's nationally significant heritage values. This will be achieved through the following elements:

- Public plazas in the centre of the harbour and its north-eastern edge
- A western park integrating the harbour coherently into the Wellington Waterfront
- Enhanced entrance ways on western and eastern edges drawing people into the harbour
- Widened concrete promenade clearly connecting western edge to central public plaza
- Legible connections to the boat harbour via improved entrance steps off Oriental Parade
- A promenade clearly connecting the central plaza to Oriental Bay beach
- Restoration of heritage elements including heritage interpretation areas and a cluster of heritage yachts

2. Royal Port Nicholson Yacht Club

In the centre of the harbour is the Royal Port Nicholson Yacht Club. Along with its primary function of running yachting programmes, the Clyde Quay Boat Harbour Restoration Project will see the club increasingly taking on a significant public amenity role. This will be achieved through the following elements:

- A Royal Yacht Club providing a comprehensive year round sailing programme
- A centre for the delivery of significant ocean water sports events for Wellington
- A Remote Control Yacht attraction for public to sail model yachts in the boat harbour
- A Harbour Sails attraction for public to take sailing excursions on the Wellington harbour
- A waterfront cafe and a fine dining restaurant
- A venue for meetings, seminars and other social engagements

3. Wellington Ocean Water Sports Centre

The Wellington City Council and SPARC have begun a three year project to establish Ocean Water Sports programmes in and around the Clyde Quay Precinct. The project is an “active communities” initiative aimed at increasing the number of Wellingtonians actively participating in ocean water sports. A purpose built Wellington Ocean Water Sports Centre will be developed as part of the Clyde Quay Boat Harbour Restoration Project. This will include the following elements:

- Classrooms for the delivery of ocean water sports courses
- Office space for ocean water sports administration
- Changing rooms including drying space for wet weather and safety clothing
- Storage space for equipment such as kayaks, windsurfers, paddle boards, etc
- Storage space for rescue and coaching craft
- Enhanced access to the harbour for a range of ocean water sports

4. Clyde Quay Marina

A further component of the Clyde Quay Boat Harbour Restoration Project is the upgrading of marina facilities within the boat harbour. The harbour is now over a 100 years old and in that time has had very little upgrading. The project will see the functionality of the boat harbour greatly improved for the recreational sport of yachting along with other ocean water sports. The capacity of the boat harbour will be increased by 33%. This will be achieved through the following elements:

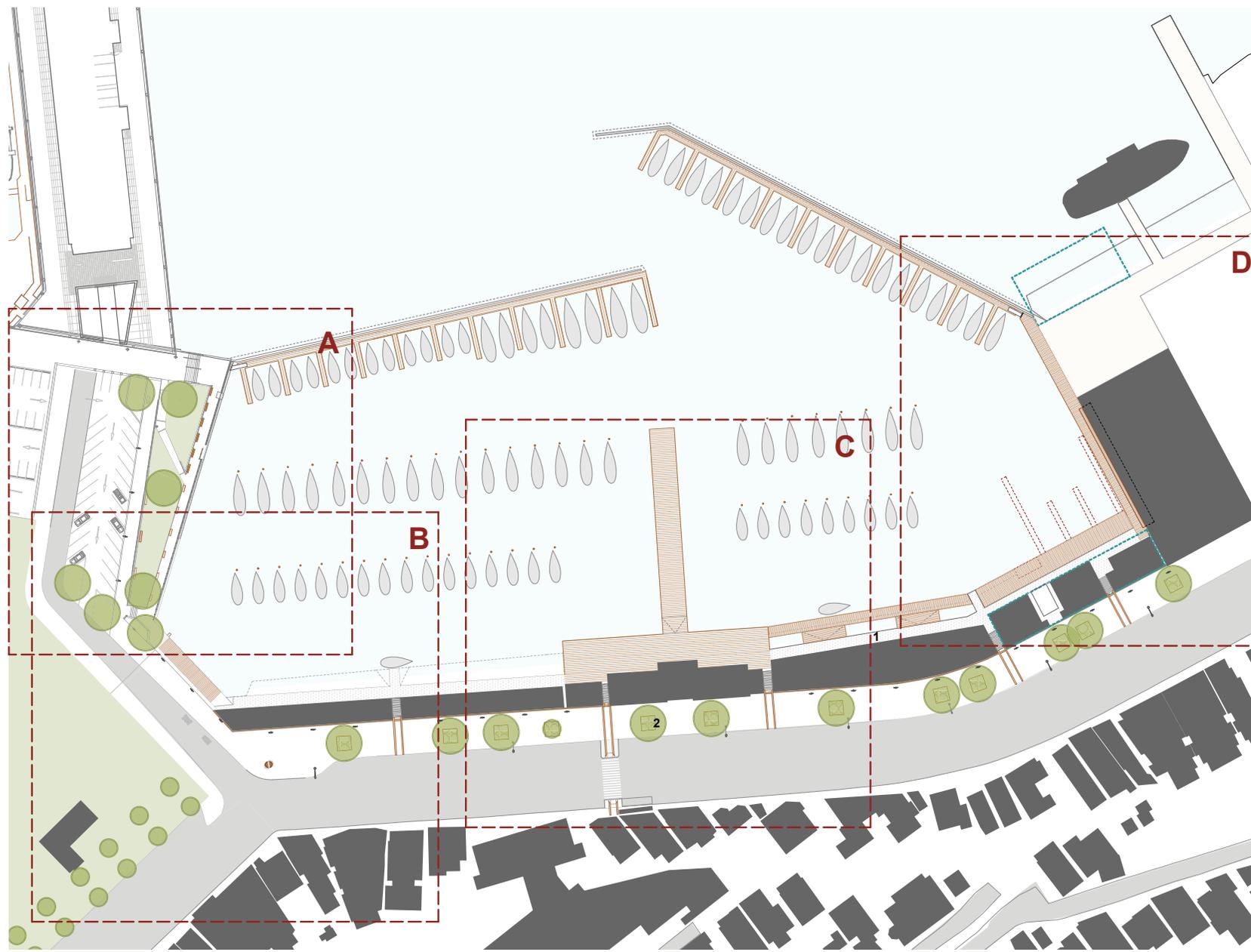
- Removal of mooring blocks from harbour floor
- Selective dredging to increase depth in key areas
- Installation of rock anchor fore and aft mooring systems
- Installation of surge protection system
- Installation of walk on marina berths along the eastern and western breakwaters

As part of the marina upgrade RPNYC will develop a business case exploring the economies of scale that could be achieved through the centralisation of management of the Clyde Quay and Chaffers Marinas under the auspices of the club.

5. Powered by the Wind Education Centre

A Powered by the Wind Education Centre is proposed to be established in the precinct in order to capitalise on Wellington's unique wind advantage and New Zealand's competitive edge in innovative design and use of high tech materials in the marine and renewable energy sectors. The Powered by the Wind Education Centre could contribute to the city's Smart Capital vision through the following elements:

- A programme for Wellington schools designed to improve science and technology literacy of Wellington children
- A tertiary level qualification programme focusing on the design and engineering of structures using high technology materials for wind energy generation and yacht design
- An annual competition focusing on improving the efficiency and effectiveness of wind energy generation technologies
- An annual international competition aimed at designing, creating and testing craft that can beat the world speed sailing record



Notes:

- A** - Western Edge; by OPT
 - B** - Ramp connecting Promenade to Clyde Quay
 - C** - Clyde Quay Central; Yacht Club
 - D** - Eastern Edge; by Freyberg Pool
- 1 - Access arrangements into sheds to be confirmed with user group at detailed design
 - 2 - Investigate costing for one additional tree to match existing

Legend:

- Stairs connecting boardwalk and street levels
- Wooden slabs boardwalk / jetty
- New materials to aide wayfinding
- Proposed walk on berths
- Proposed mooring
- Potential location for Wellington Ocean Water Sports Centre
- Existing sculpture



REV	DATE	BY	REASON
A	03.10.2011	SU	CONCEPT DESIGN

Project:
CLYDE QUAY PRECINCT PLAN

Drawing Title:
PROPOSED PLAN

Drawn	SU	Checked	
Date	03.10.2011		
Cadfile			
Scale	1:1000 @ A3		
Job No:		Drawing No:	
		Revision:	

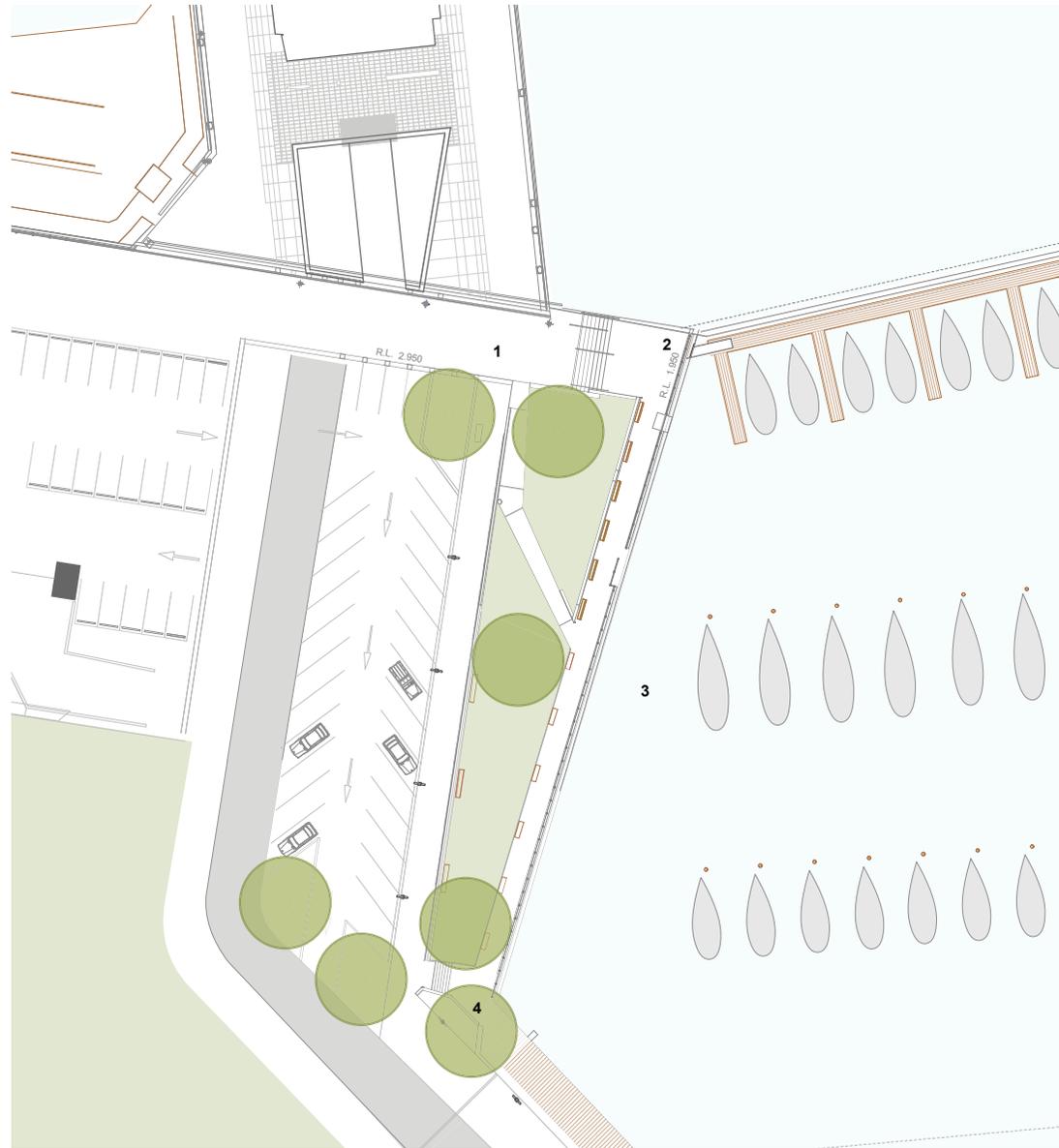
PD-005 A

PD-005 Proposed Plan
1:1000



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Notes:

Proposed temporary landscape in relation to Overseas Passenger Terminal (OPT) development.

Potential building footprint for Powered by the Wind Education Centre to be confirmed with Wellington Waterfront Ltd.

- 1 - This drawing indicates the relocation of crocs bikes
- 2 - Access gate to proposed berths
- 3 - Heritage yachts cluster
- 4 - Enhanced entranceway

Legend:

- Proposed stairs
- Proposed wooden boardwalk
- Street furniture - Types of light



REV	DATE	BY	REASON
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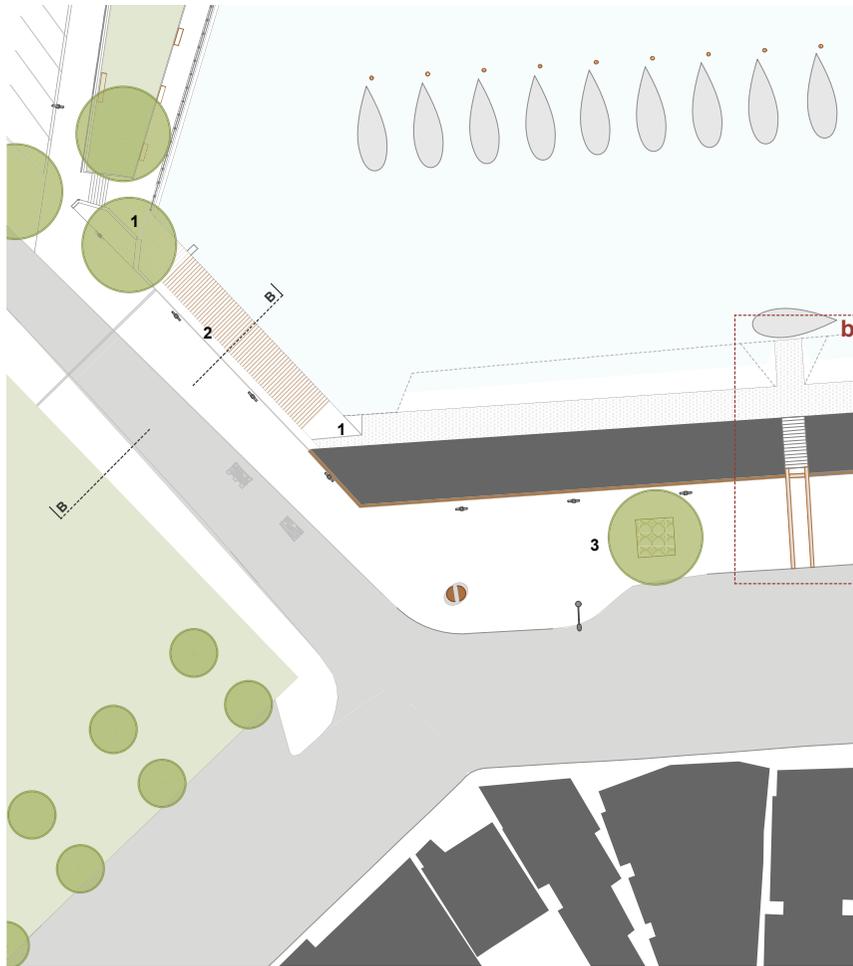
Project:
CLYDE QUAY PRECINCT PLAN

Drawing Title:
FOCUS PLAN A - WESTERN EDGE

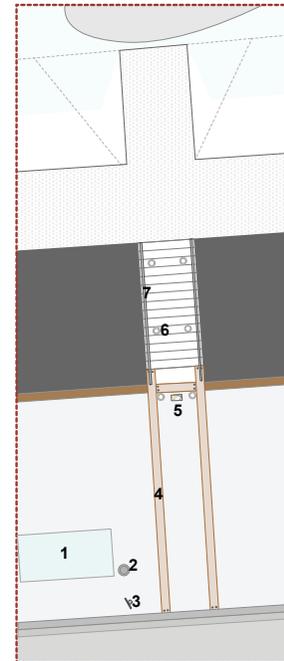
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Job No:	Drawing No:	Revision:	

PD-101 A

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PD-102 Focus Plan B - Ramp connection
 1:500



PD-202 Detail b
 1:200



PD-202 Section BB
 1:200

Notes:

- 1 - Specific junction design is required for ramp. This will also need to determine extent of modification to existing concrete.
- 2 - Consider lighting strategy for heritage wall
- 3 - Removal of existing planters; remain trees

Legend:

-  Improve access stairs
-  Existing sculpture
-  Street light

Notes to Detail b:

- 1 - Bus shelter - Adshel
- 2 - Rubbish bin Waterfront
- 3 - Bus stop post
- 4 - Timber sleeper inlay
- 5 - Plaque
- 6 - Inground light
- 7 - Handrail Waterfront

Refer to material/furniture palette

REV	DATE	BY	REASON
A	03.10.2011	SU	CONCEPT DESIGN

Project:
CLYDE QUAY PRECINCT PLAN

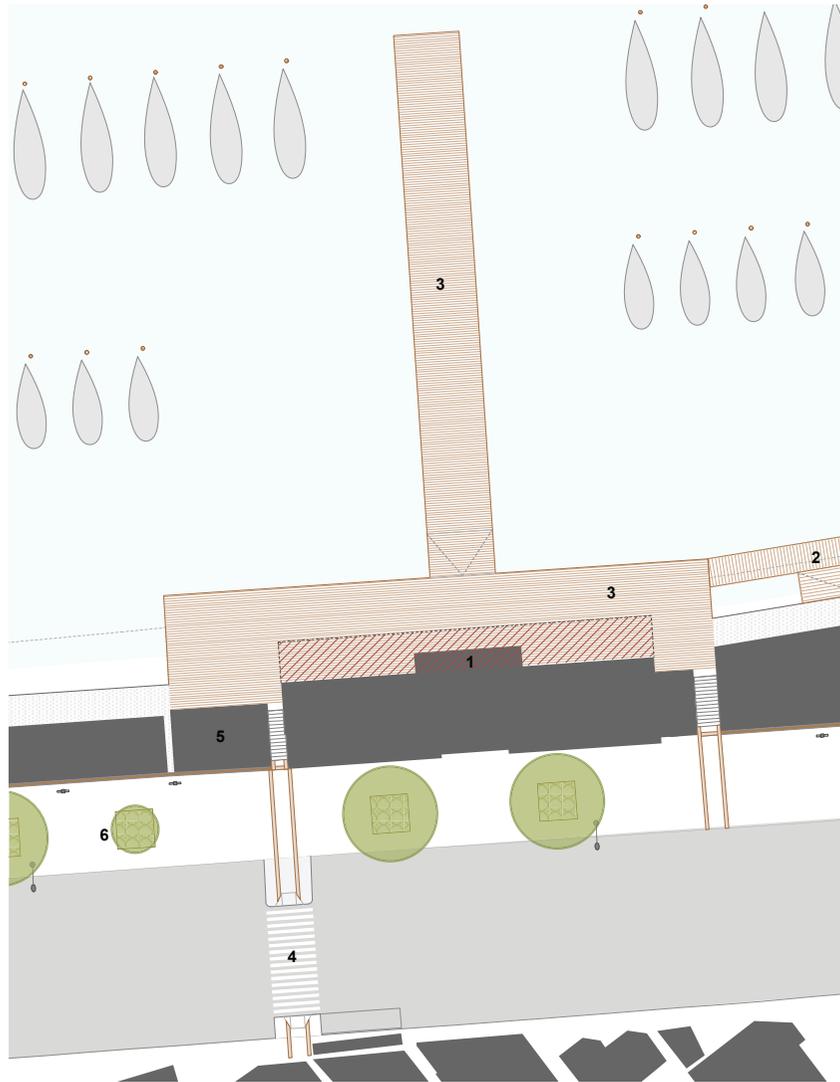
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FOCUS PLAN B - RAMP CONNECTION

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Date	03.10.2011		
Cadfile			
Scale	Plan 1:500 / Detail plan & section 1:200 @ A3		
Job No:	Drawing No:	Revision:	

PD-102 A

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Notes:

- 1 - Proposed space for harbour side cafe and shelter
- 2 - Upgrade breastwork and add floating pontoons
- 3 - Proposed new water level public plaza & jetty including public seating & shelter
- 4 - Proposed pedestrian crossing improvement
- 5 - Potential base for harbour sails & remote control yachts
- 6 - Removal of existing planters; retain trees

Legend:

- Improve access stairs
- Finger jetty and shared space
- Proposed pavement detail with sleeper inlays
- Street light
- Indicative zone for potential modification to the facade of the Yacht Club to create a better public/private interface



REV	DATE	BY	REASON
A	03.10.2011	SU	CONCEPT DESIGN

Project:
CLYDE QUAY PRECINCT PLAN

Drawing Title:
FOCUS PLAN C - CLYDE QUAY CENTRAL

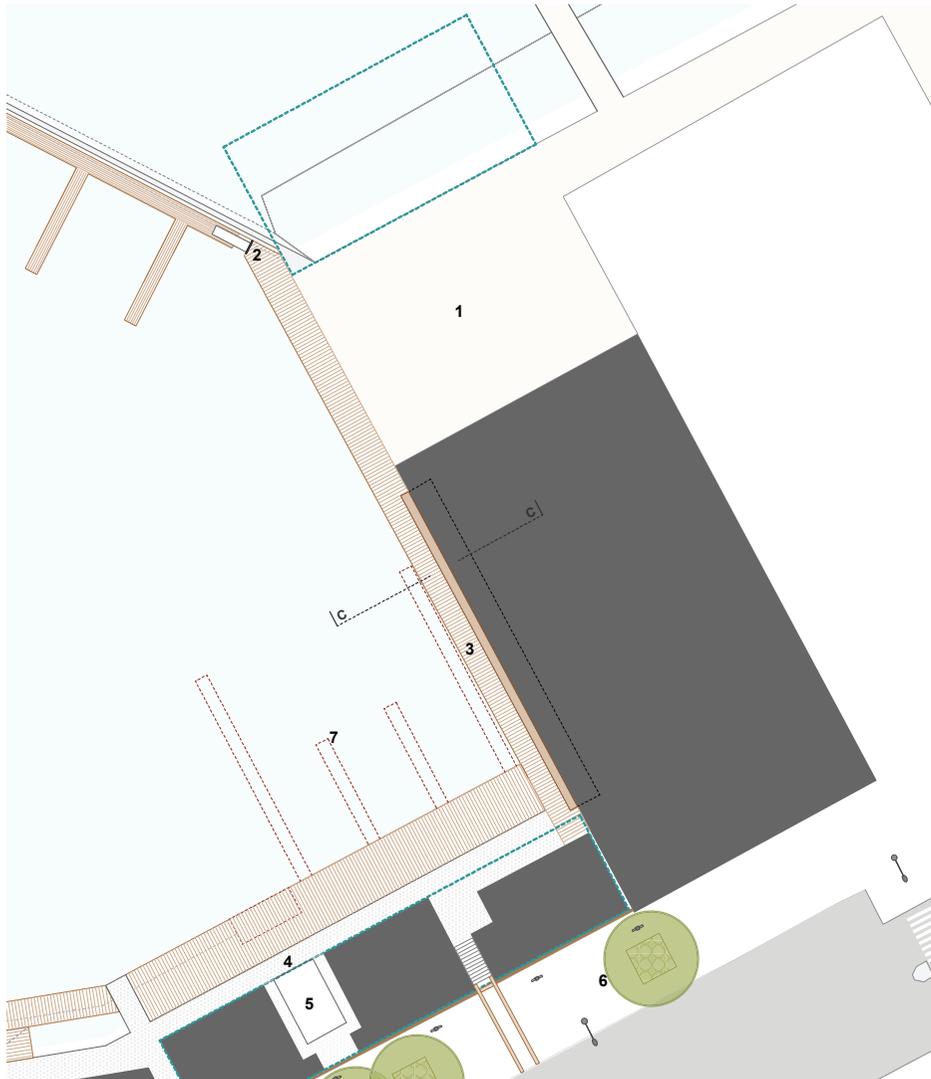
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Job No:	Drawing No:	Revision:

PD-103 A

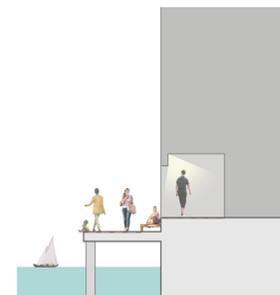
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PD-103 Focus Plan C - Clyde Quay Central
1:500

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PD-104 Focus Plan D - Eastern Edge
 1:500



PD-204 Section CC
 1:200

Notes:

- 1 - Proposed public open space
- 2 - Access gate to proposed berths
- 3 - Extended walkway alongside Freyberg Pool
- 4 - Access way over old slipway
- 5 - Potential location for rescue boats
- 6 - Removal of existing planters; remain trees
- 7 - Indicative finger jettys

Legend:

- Improve access stairs
- Proposed wooden boardwalk
- Tiered seating
- Proposed pavement detail with sleeper inlays
- Street light
- Potential location for Wellington Ocean Water Sports Centre including access ramp into lagoon



REV	DATE	BY	REASON
A	03.10.2011	SU	CONCEPT DESIGN

Project:
CLYDE QUAY PRECINCT PLAN

Drawing Title:
FOCUS PLAN D - EASTERN EDGE

Drawn	SU	Checked	
Date	03.10.2011		
Cadfile			
Scale	Plan 1:500 / Section 1:200 @ A3		
Job No:	Drawing No:	Revision:	

PD-104 A

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Notes:

Stages do not reflect proposed timing but grouping of construction elements

Legend:

- Phase 1**
 - Pathway works
 - Promenade
 - Connecting stairs
 - Concrete alignment/ modification
 - Public plaza
 - Jetty
 - Boardwalks
 - Renovation of Coene sheds
- Phase 2**
 - Breakwater berths
 - Fore-Aft moorings
 - Selective dredging
- Phase 3**
 - Clyde Quay West
 - East public plaza
 - Wellington Ocean Water Sports Centre WOWSC*
 - Renovation of Sailing Academy
- Potential location for WOWSC and its needs



REV	DATE	BY	REASON
A	10.10.2011	SU	CONCEPT DESIGN

Project:
CLYDE QUAY PRECINCT PLAN

Drawing Title:
STAGES

Drawn	SU	Checked
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Date 10.10.2011

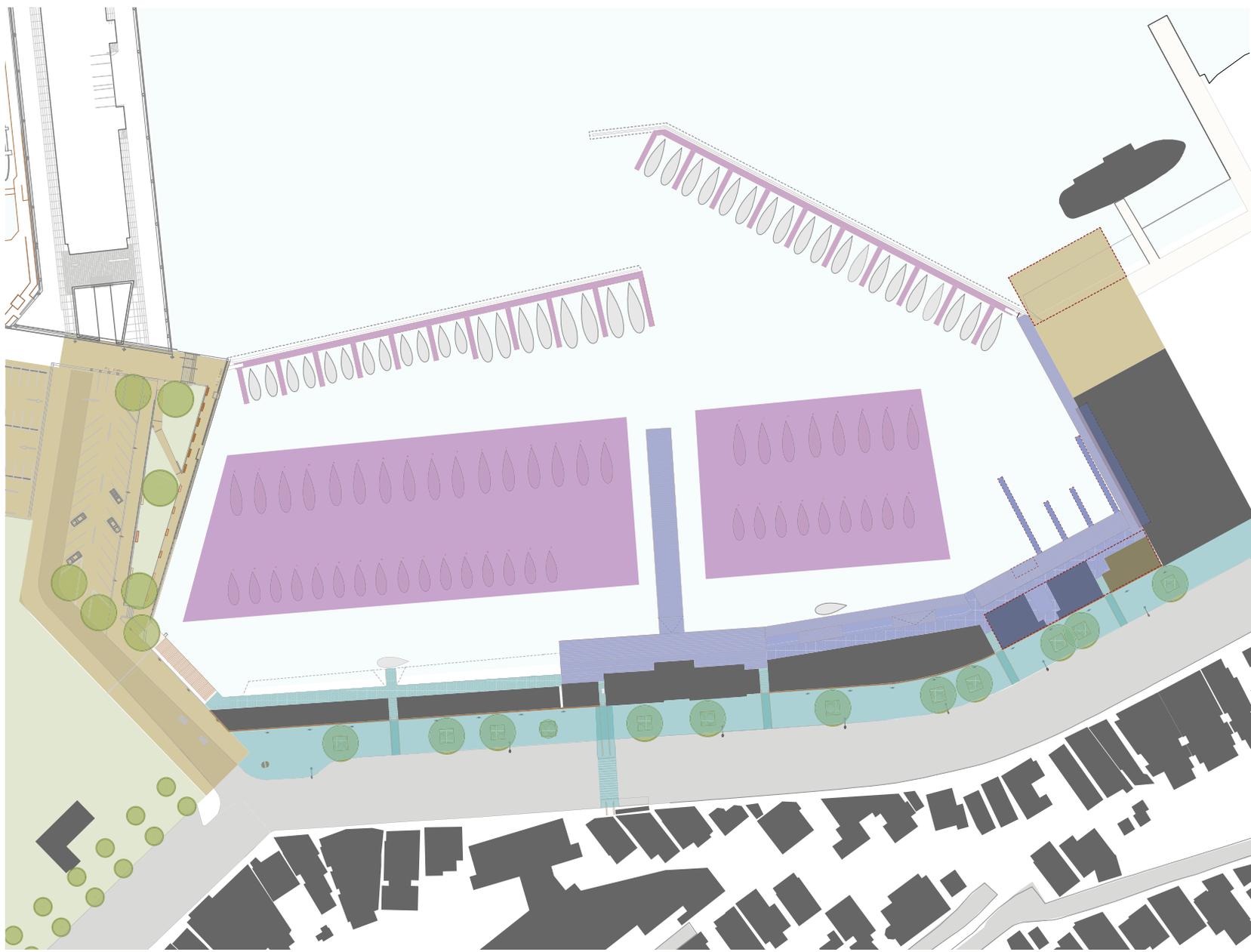
Cadfile

Scale 1:1000 @ A3

Job No: Drawing No: Revision:

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PD-006 Stages
1:1000



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Tasks In Each Phase & Proposed Dates Of Completion

The Clyde Quay Boat Harbour Restoration Project is planned to be completed over a five year period beginning in July 2012.

The first year of the project through to June 2013 will involve feasibility, detailed design, consenting and costing. During this phase key feasibility investigations will be completed. The preliminary designs will be worked up into detailed designs suitable for consenting purposes and for finalising project costings.

The first construction phase of the project involves elements which will provide the greatest public amenity. During this phase the central plaza will be constructed providing the public with amenities such as the harbour sails and remote control yacht attractions, a harbour side cafe, areas to rest and socialise and greatly enhanced access to the harbour. The first phase will also see the initial development of facilities to support the delivery of ocean water sports programmes through the joint WCC-SPARC active communities initiative.

The second construction phase of the project involves the upgrade of the marina facilities in the Clyde Quay Boat Harbour. During this phase walk on marina berths will be established along both the eastern and western breakwaters and the fore & aft mooring systems will receive a long overdue upgrade. This will increase the quality and usability of the harbour and will increase the number of boats able to be stored within it by 33%.

The third construction phase of the project will complete both the eastern and western entrance ways to the harbour and will finalise the integration of the harbour into the overall Wellington Waterfront. During this phase a purpose built classroom and administration facility for the Wellington Ocean Water Sports Centre will be constructed along with a public plaza in the north eastern corner of the harbour. Also during this phase a Powered by the Wind Education Centre will be constructed in the western end of the harbour, subject to its feasibility study providing a positive outcome.

Feasibility, Detailed Design, Consenting and Costing - Completed June 2013

- Investigations into wave height mitigation systems
- Geotechnical appraisal and assessment of harbour floor
- Detailed design of Clyde Quay central plaza elements including central promenade, central pontoons, harbour sails base, remote control yacht base, RPNYC alterations and access ways from Oriental Parade
- Detailed design of Clyde Quay south east elements including promenade, Wellington Ocean Water Sports Centre small craft storage, rescue boat storage, small craft ramps and access ways from Oriental Parade
- Detailed design of Clyde Quay marina elements including surge protection system, walk on marina berths, fore & aft moorings, and Wellington Ocean Water Sports Centre pontoons
- Consenting for works associated with Clyde Quay central plaza, Clyde Quay south east and Clyde Quay marina
- Conceptual design for Clyde Quay north east including Wellington Ocean Water Sports Centre and public plaza
- Conceptual design for Clyde Quay west including promenade and harbour entrance
- Powered by the Wind Education Centre feasibility study

Phase 1: Clyde Quay Central and Clyde Quay South East - Completed June 2014

- Selective dredging along southern edge, eastern edge and central section of CQBH
- Construction of Clyde Quay central plaza
- Construction of promenade in front of eastern heritage sheds
- Alterations to integrate RPNYC into central plaza including harbour side cafe and shelter
- Establishment of Remote Control yachts attraction in central plaza
- Establishment of Harbour Sails attraction in central plaza
- Installation of central pontoons
- Reconfiguration of eastern Coene shed into ocean water sports craft storage and workshop
- Reconfiguration of western Coene shed into ocean water sports craft storage
- Reconfiguration of existing slipway into shed to house rescue craft
- Construction of Wellington Ocean Water Sports Centre deck space in CQBH
- Construction of Wellington Ocean Water Sports Centre ramp into CQBH
- Installation of Wellington Ocean Water Sports Centre floating pontoons
- Construction of promenade along eastern edge of CQBH adjacent to Freyberg Pool
- Construction of Wellington Ocean Water Sports Centre ramp into Oriental Bay lagoon
- Detailed design for Clyde Quay north east including Wellington Ocean Water Sports Centre, public plaza and cafe
- Detailed design for Clyde Quay west including Powered by the Wind Education Centre, promenade and harbour entrance
- Detailed design of surge protection system

Phase 2: Clyde Quay Marina - Completed June 2015

- Installation of surge protection system
- Selective dredging along eastern breakwater and along eastern edge of CQBH
- Construction of walk on marina berths along eastern breakwater
- Selective dredging along western breakwater and along western edge of CQBH
- Construction of walk on marina berths along western breakwater
- Removal of mooring blocks and jetsam from eastern section of CQBH
- Installation of fore & aft moorings in eastern section of CQBH
- Removal of mooring blocks and jetsam from western section of CQBH
- Installation of fore & aft moorings in western section of CQBH
- Consenting for works associated with Clyde Quay west and Clyde Quay north east

Phase 3: Clyde Quay West and Clyde Quay North East - Completed June 2017

- Construction of Clyde Quay west promenade and entrance way
- Reconfiguration of slipway in front of western heritage sheds
- Construction of Powered by the Wind Education Centre
- Construction of north east plaza
- Construction of Wellington Ocean Water Sport Centre

Indicative Costings & Funding Responsibility by Project Phase

The project has five distinct cost centres, each with their own funding strategy. These include: public access and amenity to be funded by the Wellington City Council; Royal Port Nicholson Yacht Club facilities to be funded by the club; the Clyde Quay marina to be 100% funded by its own business case; The Wellington Ocean Water Sports Centre to be funded partly by the council and partly by community facilities grants; and, the Powered by the Wind Education Centre to be funded by the partners involved in its development. During 2011 a range of companies have provided indicative costings for the three construction phases as outlined below. Costings in these phases are to be used as a guide only until the feasibility, detailed design, consenting and costings processes are completed.

Feasibility, Detailed Design, Consenting, Costing

Project Element	Cost	Funding Responsibility
• Feasibility investigations into deflected wave mitigation system	52,000	Marina Business Case
• Geotechnical appraisal and assessment of harbour floor	72,000	Marina Business Case
• Initial investigations - surveying, structural engineering, services, silting & contamination	33,000	Wellington City Council
• Detailed design of Clyde Quay central plaza, Clyde Quay south east and Clyde Quay marina elements	170,000	Wellington City Council and RPNYC
• Consenting for works associated with Clyde Quay central plaza, Clyde Quay south east and Clyde Quay marina (assumes no hearing required)	42,000	Wellington City Council and RPNYC
• Conceptual design for Clyde Quay north east and Clyde Quay west including Powered by the Wind Education Centre	35,000	Wellington City Council
• Contingency (20%)	80,800	Wellington City Council
TOTAL	484,800	

Phase 1: Clyde Quay Central and Clyde Quay South East

Project Element	Cost	Funding Responsibility
• Oriental Parade street-edge works, connecting stairs and concrete alignment/modification	200,000	Wellington City Council
• Selective dredging along southern edge, eastern edge and central section of CQBH	75,000	Marina Business Case
• Construction of Clyde Quay central plaza	510,000	Wellington City Council
• Construction of promenade in front of eastern heritage sheds	300,000	Wellington City Council
• Alterations to integrate RPNYC into central plaza including harbour side cafe and shelter	350,000	RPNYC
• Establishment of Remote Control Yachts attraction in central plaza	15,000	RPNYC
• Establishment of Harbour Sails attraction in central plaza	15,000	RPNYC
• Installation of central pontoons	270,000	Wellington City Council
• Reconfiguration of eastern Coene shed into ocean water sports craft storage and workshop	60,000	Wellington City Council
• Reconfiguration of western Coene shed into ocean water sports craft storage	60,000	Wellington City Council
• Reconfiguration of existing slipway into shed to house rescue craft	75,000	RPNYC
• Construction of promenade in front of Wellington Ocean Water Sports Centre in CQBH	345,000	Wellington City Council
• Construction of ramp into CQBH in front of Wellington Ocean Water Sports Centre	150,000	Wellington City Council
• Installation of floating pontoons in front of Wellington Ocean Water Sports Centre	135,000	Wellington City Council
• Construction of promenade along eastern edge of CQBH adjacent to Freyberg Pool	200,000	Wellington City Council
• Construction of ramp into Oriental Bay lagoon from end of promenade	150,000	Wellington City Council
• Detailed design for Clyde Quay north east and Clyde Quay west elements	75,000	WCC and Education Centre Partners
• Consenting for works associated with Clyde Quay north east and Clyde Quay west elements (assumes no hearing required)	30,000	WCC and Education Centre Partners
• Project design and management fees (10%)	301,500	Wellington City Council
• Contingency (20%)	603,000	Wellington City Council
TOTAL	3,919,500	

Phase 2: Clyde Quay Marina

Project Element	Cost	Funding Responsibility
• Installation of deflected wave mitigation system (already allows for a 50% contingency)	500,000	Marina Business Case
• Selective dredging of CQBH & removal of mooring blocks and jetsam	425,000	Marina Business Case
• Construction of walk on marina berths including installation of services	708,000	Marina Business Case
• Installation of fore & aft moorings	290,000	Marina Business Case
• Project design and management fees (10%)	142,300	Marina Business Case
• Contingency (20%)	284,600	Marina Business Case
TOTAL	2,349,900	

The Clyde Quay Marina will be funded through its own business case where by the short and long term leasing of berths and sheds is used to pay off 100% of the initial capital costs and 100% of ongoing operational expenses of the marina over a thirty year period. The capacity of Clyde Quay Boat Harbour will increase by 33% to house close to 100 boats when completed. Around 45% of these boats will be berthed on walk-on marina berths adjacent to the two existing breakwaters. The remaining 55% of boats will be moored on new fore-aft moorings which utilise a contemporary rock anchor system. Selective dredging and the removal of mooring blocks and jetsam from the harbour floor will greatly enhance the usability of the harbour.

Phase 3: Clyde Quay West and Clyde Quay North East

Project Element	Cost	Funding Responsibility
• Construction of Clyde Quay west promenade and entrance way including reconfiguration of slipway in front of western heritage sheds	450,000	Wellington City Council
• Construction of Powered by the Wind Education Centre	5,000,000	Education Centre Partners
• Construction of north east plaza and integration of north east elements with Oriental Bay beach	250,000	Wellington City Council
• Construction of Wellington Ocean Water Sport Centre and cafe	2,000,000	Wellington City Council and Communities Facility Grant
• Project design and management fees (10% excluding costs associated with Powered by the Wind Education Centre)	270,000	Wellington City Council
• Contingency (20% excluding costs associated with Powered by the Wind Education Centre)	540,000	Wellington City Council
TOTAL	8,510,000	

Funding Responsibility by Funding Years

	2012-2013	2013-2014	2014-2015	2015-2017	Total
Powered by the Wind Education Centre - Project Partners		35,000		5,000,000	5,035,000
Public Access and Public Amenity - Wellington City Council	298,800	3,354,500		1,510,000	5,163,300
Yacht Club Facilities - Royal Port Nicholson Yacht Club	27,000	455,000			482,000
Clyde Quay Marina - Business Case which ensures 100% cost recovery over 30 year period	159,000	75,000	2,349,900		2,583,900
Wellington Ocean Water Sport Centre new facility - Wellington City Council proportion				1,000,000	1,000,000
Wellington Ocean Water Sport Centre new facility - Community Funding Grants proportion				1,000,000	1,000,000
GRAND TOTAL	484,800	3,919,500	2,349,900	8,510,000	15,264,200
Total Wellington City Council including CQBH Marina Costs	457,800	3,429,500	2,349,900	2,510,000	8,747,200

The total Wellington City Council contribution over 5 years (less the cost of the self funding Marina upgrade) will be \$6.2M

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