



NOTICE OF MEETING

NOTICE IS HEREBY GIVEN that of a meeting of **PUBLIC DOMAINS ADVISORY COMMITTEE** will be held:

DATE: WEDNESDAY 21 August, 2013
TIME: From 5.30pm to 7.30pm – maximum 2 hours
PLACE: Training Room
1 Belgrave Street Manly

COMMITTEE MEMBERS:

Councillors

Mayor Jean Hay AM (ex officio)	Manly Council
Clr Barbara Aird	Manly Council
Clr Candy Bingham	Manly Council
Clr Hugh Burns	Manly Council
Clr Cathy Griffin	Manly Council
Clr Adele Heasman	Manly Council
Clr Alan LeSurf	Manly Council
Clr Steve Pickering	Manly Council

Other Representatives

Doug Sewell	Community member
Phil Jacombs	Community member
Peter Monckton	Community member
Kyeema Doyle	Community member
Evelyn Shervington	Community member
Mark Baxter	Community member

Council Staff

Beth Lawsen	Deputy General Manager, People Place and Infrastructure
Kara Nunan	Civic and Urban Services Office Manager

All other Councillors are free to attend as observers and are invited to do so and to engage in discussions, but not in voting, on any matter before the Committee.

Beth Lawsen

Deputy General Manager, Lisbeth Lawsen

People Place and Infrastructure Deputy General Manager

Date: 14th August 2013
People Place Infrastructure
Manly Council



AGENDA

PUBLIC DOMAINS ADVISORY COMMITTEE

**Meeting To Be Held On Wednesday 21st August, 2013 at 5.30pm
The Training Room, Manly Town Hall, 1 Belgrave Street, Manly**

- ITEM 1** Apologies and leave of absence
- ITEM 2** Declarations of Interest: Pecuniary
Non- Pecuniary
- ITEM 3** Confirmation of Minutes of 19th June 2013
- ITEM 4** Short Street Plaza
- ITEM 5** East and West Esplanade Infrastructure Report
- ITEM 6** Marine Parade Landscape Master Plan – supporting document as lodged for grant application July 2013.
- ITEM 7** Management and Conservation Plan of Coastal Norfolk Island Pines within Manly Council LGA – report from committee members
- ITEM 8** Ausgrid Guidelines – Pruning of Street Trees
- ITEM 9** Manly 2015
- ITEM 10** General Business brought to the attention of the Chair prior to the meeting and approved for consideration -
- ITEM 11** **Date of Next Meeting:**
 - Date:** 16th October 2013
 - Time:** 5.30pm
 - Venue:** The Councillors' Room, Manly Town Hall,
1 Belgrave Street, Manly



TO: Public Domains Advisory Committee

MEETING DATE: 21st August 2013

AUTHOR: Beth Lawsen

SUBJECT: **ITEM 6 REPORT – MARINE PARADE MASTER PLAN**
(supporting document as amended July 2013 for lodgment of a grant application.)

SUMMARY

In response to the request from the Committee in April 2013, a report is brought back to the Committee regarding the grant application lodged in July 2013 for Projects previously identified by Staff and the Committee. A grant opportunity to seek grant funding arose in June and this grant application for the public domain general upgrade responded to the brief and the committee's previously identified concerns to improve the public domain of Marine Parade. Staff lodged the application and awaits determination.

REPORT

Staff prepared site specific projects as part of the Grant application and include:

- Paving for the full length of walkway
- Upgrade of all public domain furniture, including bins, bubblers, tables and seating
- Adaptive of existing handrail in order to improve safety and provide opportunity for natural heritage signage
- Lighting to be improved for the full length of walkway
- Public amenity improvement around the Fairy Bower pool
- Improve the amenity to edges surrounding pool, drains, entry points
- Enhancement of nodal points, including intersection of Bower Lane and Marine Parade
- Proposed improvement to the storage shed on walkway

The Public Domains improvement project supporting document is circulated to committee members.

RECOMMENDATION

That the Committee receive and note the report; and provide advice to Council regarding the support document as lodged with the grant application.

Beth Lawsen
Deputy General Manager
People Place & Infrastructure
15th August 2013

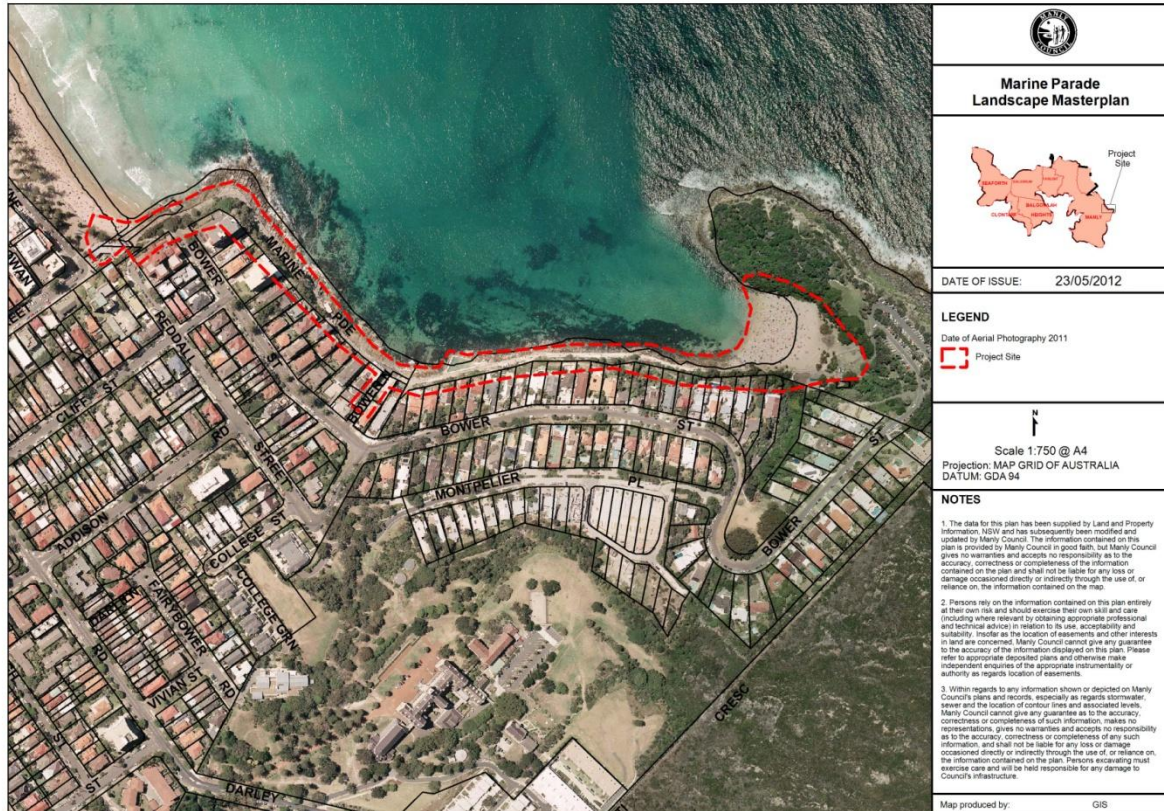
Public Domains Advisory Committee – 21st August 2013
MC/13/98436

Marine Parade Landscape Master plan- Public Domain Improvements Project- Manly Council July 2013

SUPPORTING DOCUMENTATION



Marine Pde –Day trippers on their way to Fairy Bower late 1800's or early 1900's



Aerial photo of the project site



Map of Cabbage Tree Bay Aquatic Reserve

Business Case

Business/Project Plan

1. Background

Manly experiences approximately seven million international and domestic visitors each year. Marine Pde is an important draw cards to visitors and locals alike and the condition of this important pedestrian link has an influence on the perception of Manly.

The proposed works will provide a much needed upgrade to a approx 837 metre shared path. The proposal would see improved amenity, lighting, landscape and pathway material along its length.

The landscape and amenity works aim to enhance and improve the attractiveness, health, safety and amenity of this shared path.

Manly Council at its 3rd June 2013 meeting adopted minutes from the Public Domains Committee and consequently endorsed the proposal to go ahead with the Landscape Improvements proposal at Marine Pde Manly.

2. Project description

3.1 Landscape Improvements including:

- Provision of new paving
- Picnic settings
- Resurfacing of bicycle and pedestrian paths
- Provision of drinking fountains
- New lighting
- .

The project cost of \$2,541,000 will have a multiplier effect of 5 with the assumption of .8 as the **marginal propensity to consume (MPC)**.

$\$2,541,000 + \$2,541,000 \times .8 + \$2,541,000 \times .8^2 + \dots$ to infinity.

$$= \frac{2,541,000}{(1-.8)} = \$12,705,000$$

- Increased full-time, part-time and casual employment by local business in all sectors of the markets.

- Improved risk management and , amenity and protection for locals and visitors during major storm events.
- provide the community and visitors with sustainable leisure facilities
- Will encourage public use and enjoyment of the Community and Crown Land by all user groups and stakeholders.
- Improve health, safety and general amenity of Marine Pde.

The project will see the upgrade and improvement of the deteriorated public domain components of Marine Parade pathway.

Marine Pde is an historical and iconic walkway, and given its 837m length is a huge public domain area within the Manly Council LGA.

The shared path has been maintained in its present deteriorating state for many years (and the planted areas are beautifully kept by Councils Parks Staff) but the walkways paths seating and handrails and have now reached a point where only and influx of substantial funding will be able to allow real improvement as a public domain area that Sydney can be proud of..It has literally been loved almost to death..

It is now time more than ever to look at improving this important public path that links Manly Beach to Shelley Beach.

Marine Pde is one of the most popular walks in the LGA and is used by locals and visitors alike.

Where the Path intersects with Bower Lane, approximately half way along its length, there is an important public space area. It accommodates outdoor eating associated with a restaurant; the activities of people entering the water at FairY Bower Beach ;, a take away cafe and two small shops.

Other than from the two ends of the pathway walkers also enter and leave the path in this location at Bower Lane.

Further East the walkway heads to Iconic Shelley Beach past the ‘ No Take’ Marine Sanctuary of Cabbage Tree Bay and on to a large restaurant (housed in a Council owned Heritage listed old boatshed) past a café , a public amenities building and up the hill to the large public car park and to Shelley Beach Headland.

The path in its present state is made up of various surface treatments There is an areas of asphalt (now approx 10 years old) of approx 400metres in length and the rest of the path is much older areas of concrete (in various states of repair) and at the South Steyne end of the path there is a short stretch of outdated interlocker concrete pavers.

The image overleaf shows an example of how the concrete path has become worn and eroded out over time .Other than through saw cutting and replacement, or patching, this type of failure (ie erosion of joints and ongoing cracking) is impossible to repair seamlessly. The top edge of the sandstone seawall can also be seen in this

photo. The seawall itself is in a stable state; however some areas of the sandstone block seawall are eroding and will need to be replaced



Original concrete pathway slabs now due for replacement



An example of deteriorating storm water infrastructure and unsightly asphalt at the Bower Lane Marine Pde intersection



Areas of asphalt at this Bower Lane location are patched and not the quality of ground treatment appropriate for this important public space.



A typical example of deterioration of paved areas associated with public seating spaces. This photo also highlights the need to now replace the outdated furniture type



Example of area of concrete pathway suffering from ongoing seepage that now needs to be dealt with effectively and holistically .This ongoing issue would be dealt with as part of the proposed works.



Exposed, deteriorating and patching of storm water infrastructure. The potentially dangerous drop off from post and rail handrail on the walkway to rock surfaces below , typical along the entire walkway on this seaside, would be addressed in the upgrade proposal (The Project Management Plan section in this document showing proposed treatment)



Outdated and maintenance hungry painted public seating now needs replacing. Seating areas should be more accessible (The Project Management Plan section in this document indicates replacement furniture proposed). Painted centre line marking in existing paving is heavy handed. and older style interlocker pavers shown here in this section of the pathway are no longer used by Council.



Exposed and deteriorating public domain areas associated with the Fairy Bower Ocean pool (directly associated with Marine Pde and part of the project area) represent potential public risk and if properly treated could add significant public domain opportunity allowing path and pool users to be down near to pool and the bay (see '*3.Project Management Plan – Project Scope*' in this document for proposed treatment to this area)

2. Project Management Plan

Project Objectives:

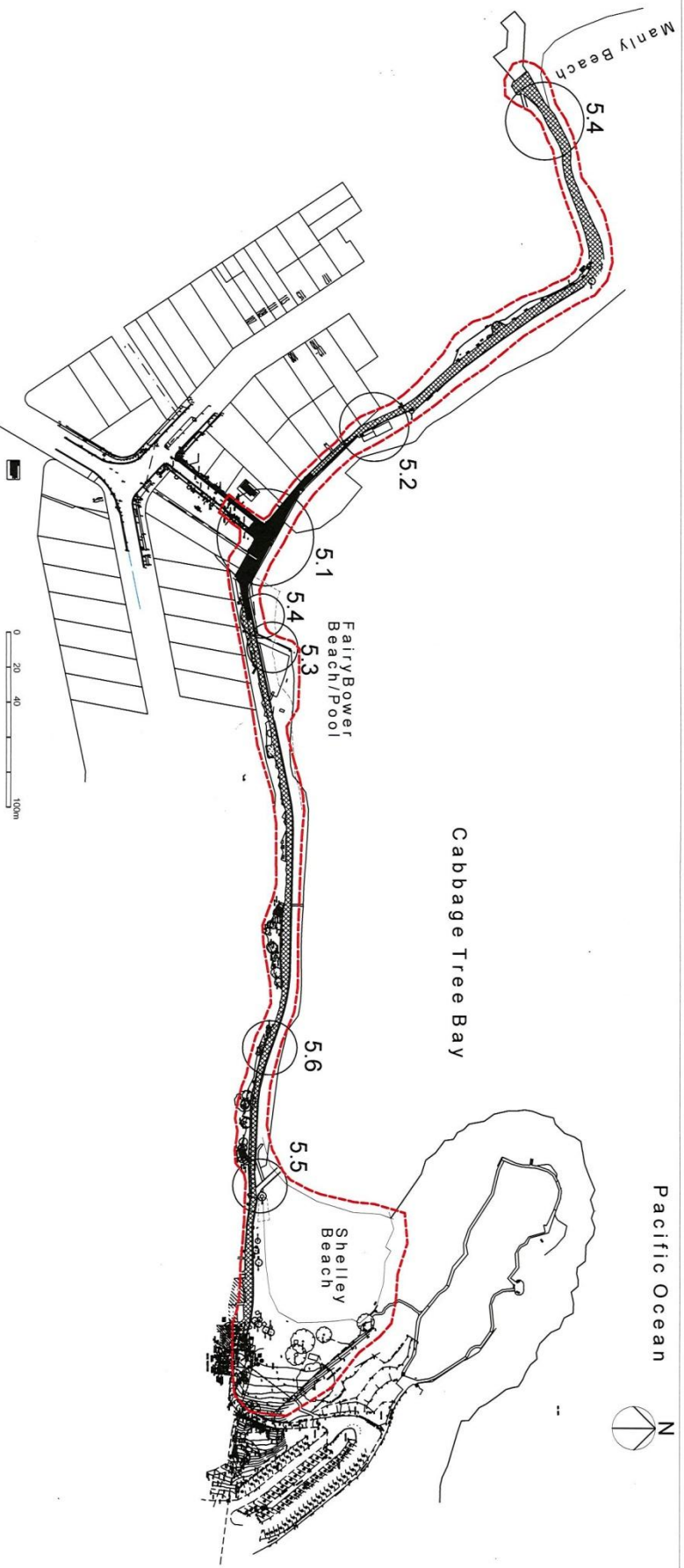
- The project will see the upgrade of the nationally significant Marine Pde shared Path that connects Manly Ocean Beach Promenade and Shelley Beach
- Implementation of the components of the proposal set out in the 'Project Scope' below would see it brought up to a level of finish ,detail and amenity expected for a public domain pathway of its status.
-
-

Project Scope: See the plan overleaf showing the Key Plan of the project site and the location of the works proposed



Marine Parade Public Domain Improvements Project Landscape Masterplan - Site/Key Plan

"the pathway to the fairy bower and the sanctuary..."



KEY

GENERAL UPGRADE WORKS (To full length of Marine Pde)

1. New Paving
2. Furniture Upgrade
3. Handrail modification
4. Public solar Lighting
5. SITE SPECIFIC UPGRADE WORKS
 - 5.1 Public Seafront Plaza (intersection Bower Lane/MarinePde)
 - 5.2 Public Viewing Platform
 - 5.3 Deck spaces at Fairy Bower Pool
 - 5.4 Boardwalk/seating over stormwater drains
 - 5.5 Shower at Shelley Beach
 - 5.6 Rectification of seepage over pathway

LEGEND

- Project area
- new general walkway paving
- Bower Lane/Marine Pde
- Oceanfront Plaza paving



GENERAL UPGRADE WORKS

Proposed refurbishment and upgrade of existing infrastructure includes the following:-..

1.New Paving

New granite exfoliated cobbled paving to the length of the shared path to replace older asphalt and deteriorating concrete slab areas

2. Furniture Upgrade

Like for like replacement of old outdated painted timber seats and tables on gal frames along the walkway with new modern cast aluminium seating and, table and bench settings

3. Handrail modification

Adaptive reuse and modification to existing painted 'heritage' hardwood post and rail balustrade to the entire ocean side of the walkway so that it is safer and able to accommodate natural anodized site specific natural and historical heritage signage (specifically reference to 'marine sanctuary' and. 'no-take 'fishing area requirements).

4.Public Lighting

Propose solar public space pathway lighting to replace odd outdated and insufficient road pole lights in order to enhance public amenity for night use of this important public pathway link

5. SITE SPECIFIC UPGRADE WORKS

The following projects have been identified as important site specific upgrade works and they include the following :-

5.1 Public Seafront Plaza

- Improve Public space at Bower Lane Marine Pde intersection to make a public ocean edge plaza ([see page for detail of proposed treatment](#))

5.2 Public viewing platform

- Refurbishment of existing storage shed and provide public viewing platform on roof of same shed on rocks beside Marine Ppe ([see page for detail of proposed treatemnt](#))

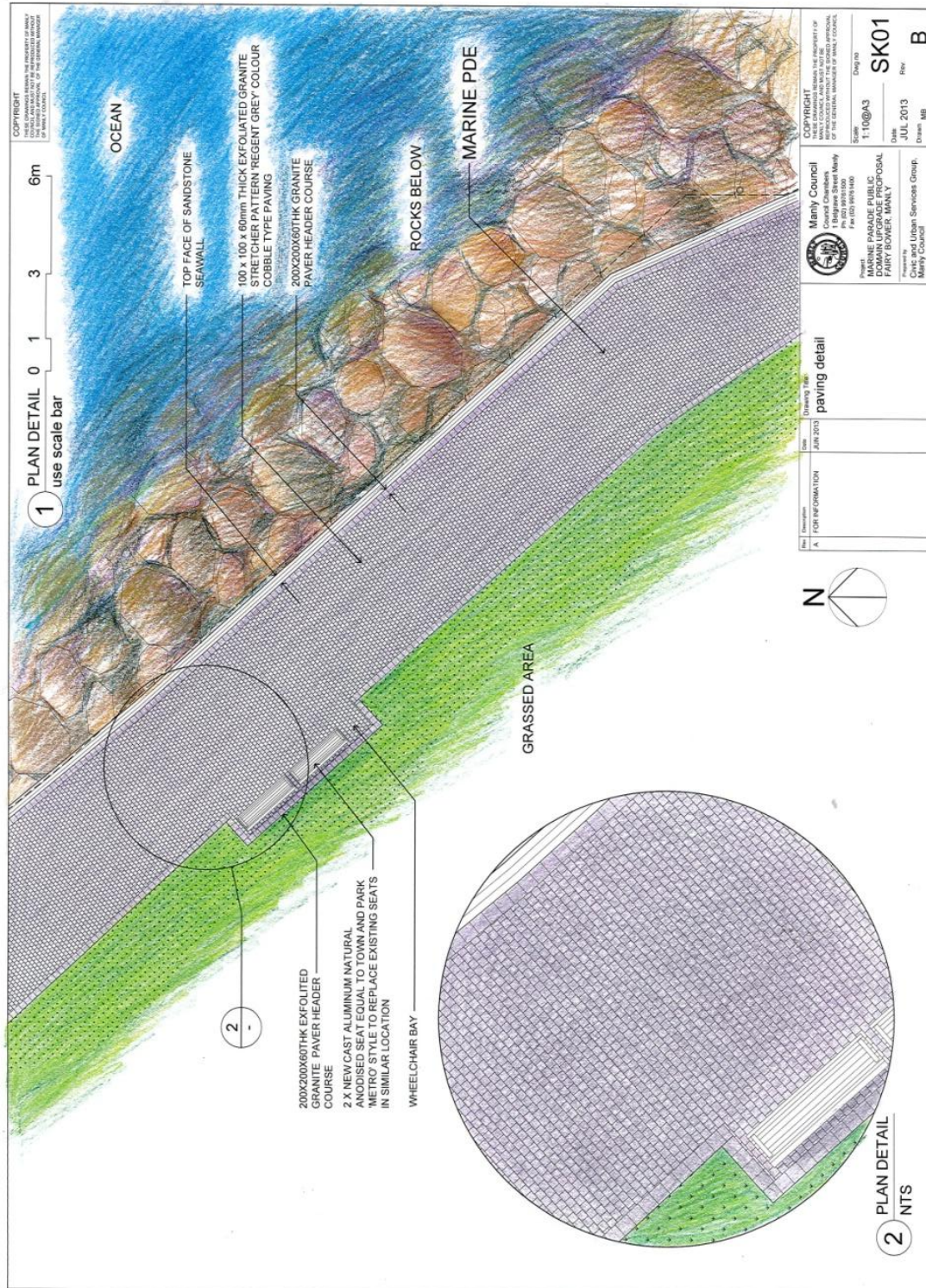
5.3 Deck spaces at Fairy Bower Pool

- Provide hardwood decking platforms at Fairy Bower Pool and down from Marine Pde to it as new public domain use areas. ([see page for detail of proposed treatment](#))

5.4 Boardwalk/seating over stormwater drains

- Provide Hardwood seating/boardwalk to conceal storm water drain at bottom of seawall near South Steyne Surf Cub and Fairy Bower Pool (see page for detail of proposed treatment)
-
- **5.5 Shower at Shelley beach**
- Modifications to shower facility at Shelley Beach to improve accessibility .(see drawing on page- showing proposed treatment)
-
- **5.6 Rectification of seepage over pathway**
- Provide grated drain to path as required to ensure below ground seepage does not damage path in future .(see drawing on page- showing proposed treatment)
-
- **NOTE: Drawings and details associated with the 'General Upgrade Works' and 'Site Specific' works are set out here**

- **1.New Paving**
- The plan below shows paving treatment proposed and typical for the entire length of the pathway (other than at Marine Pde Bower Lane plaza





100X100X 60mm thick exfoliated 'Regent Grey' colour granite cobble type stretcher pattern paving. proposed for the body paving to the entire pathway

2. . Furniture Upgrade

Replacement of old outdated painted timber seats and tables on galvanised frames along the walkway with new modern cast aluminium seating and, table and bench settings (see models proposed overleaf)



existing path and painted, outdated furniture .Note also wear at base of seats and no wheelchair use seating area off path



Picnic table settings proposed to replace existing outdated model



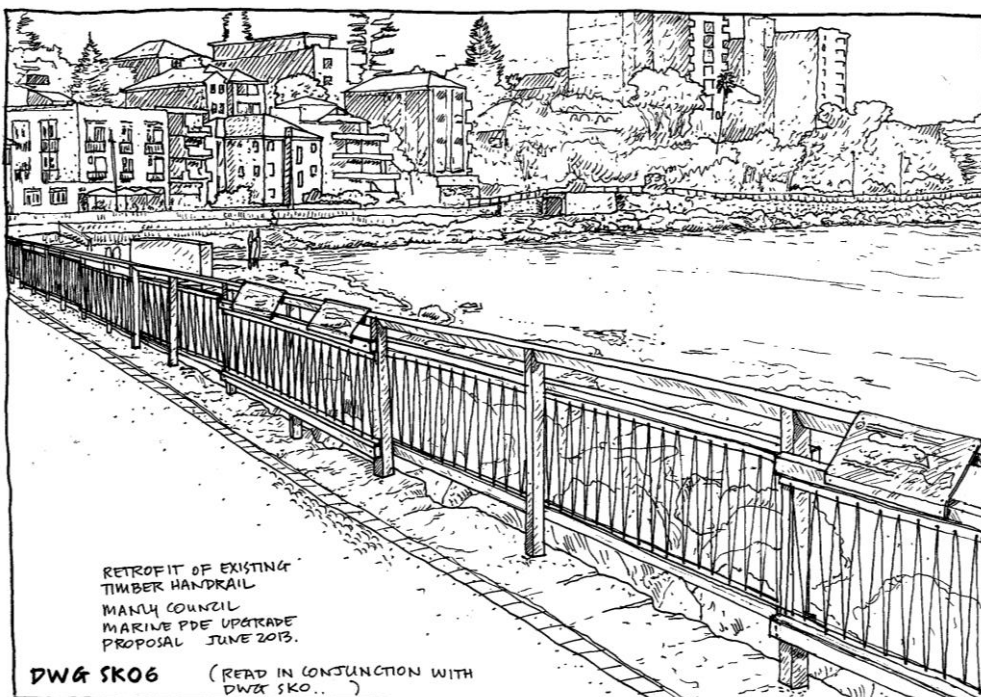
Seat type proposed to replace existing outdated model

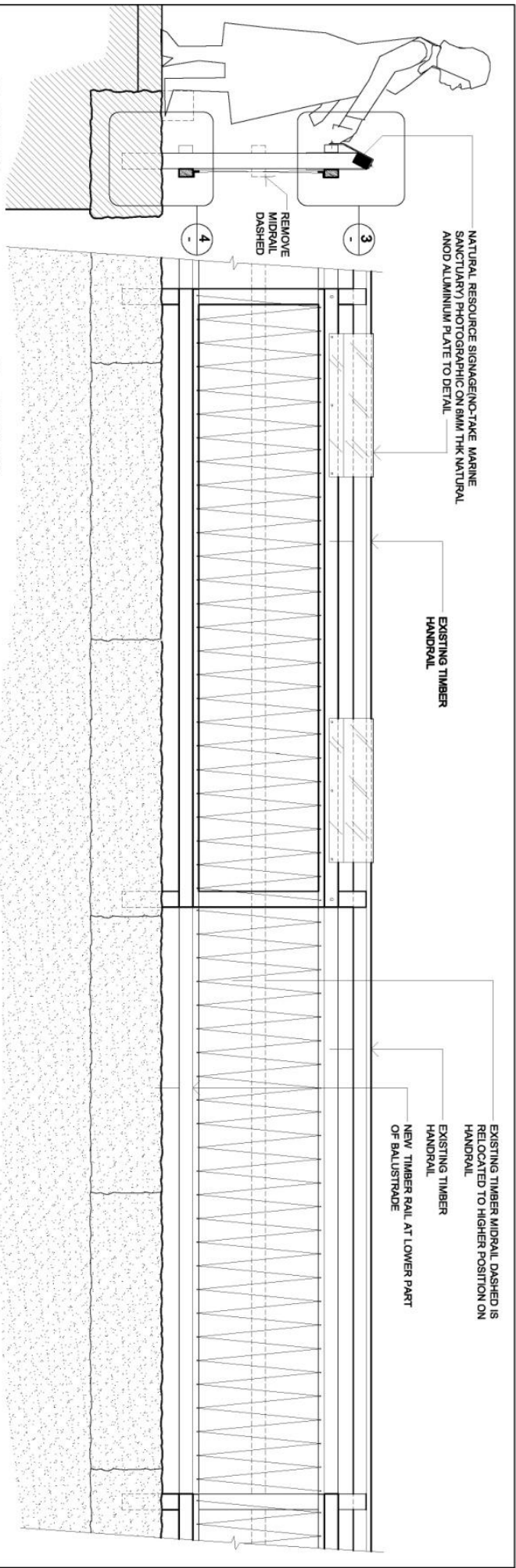
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3. Handrail modification



Photo of existing handrail arrangement. (See overleaf for detailed drawing of proposed treatment). Sketch below shows proposed modification to handrail that allows sturdy heritage hardwood timber handrail to be retained while its public safety improved and interpretive signage opportunity created.





1 SECTION
1:20 @ A3

2 ELEVATION
1:20 @ A3

0 500mm

DRAFT



EXAMPLE OF STAINLESS STEEL WIRE BALUSTRADE

3 DETAIL NTS	5 DETAIL NTS	6 DETAIL NTS
4 DETAIL NTS	6 DETAIL NTS	6 DETAIL NTS

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Prepared by:
**Civic and Urban Services Group,
Manly Council**

Rev	Description	Date
A	FOR INFORMATION	JUN 2013

Manly Council
Council Chambers
1 Belgrave Street Manly
Ph (02) 99761500
Fax (02) 99761400

Project:
**MARINE PARADE PUBLIC
DOMAIN UPGRADE PROPOSAL
FAIRY BOWER, MANLY**

Drawing Title:
**RETROFIT EXISTING HANDRAIL
TO IMPROVE SAFETY
SECTION ELEVATION/DETAILS**

Scale:
1:20@A3

Date:
JUN 2013

Drawn:
MB

Dwg No.
SK07

Rev.
B

4. Public Lighting

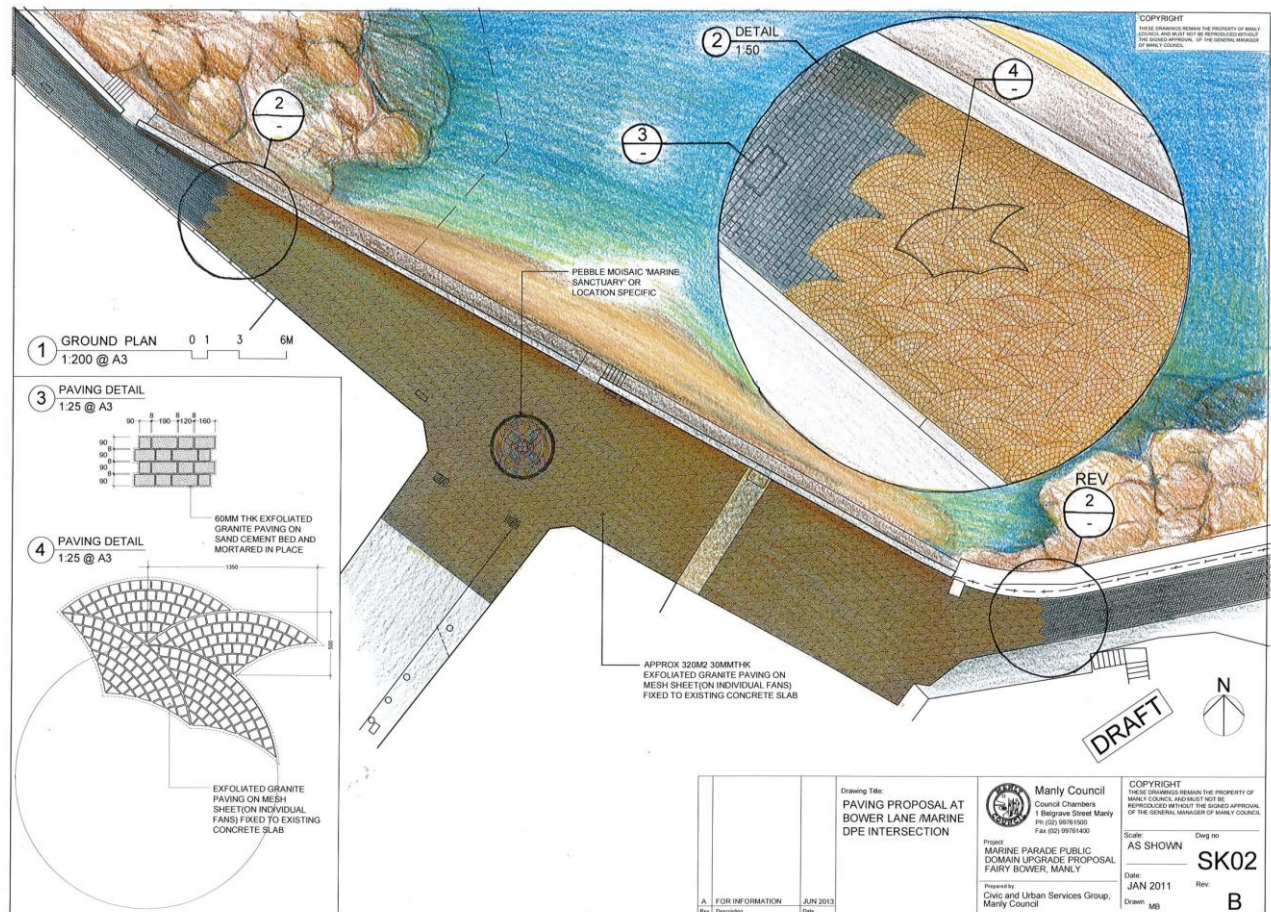


type of solar public
pathway lighting proposed to length of Marine Pde at 25m intervals

5. SITE SPECIFIC UPGRADE WORKS

5.1 Public Seafront Plaza

Plan here shows proposed fan, shell or scale shaped granite paving area where Marine Pde and Bower Lane to create a special space at this important intersection.





Shell, scale or wave fan shaped pattern of exfoliated granite paving proposed for public space at intersection of Bower Lane and Marine Pde



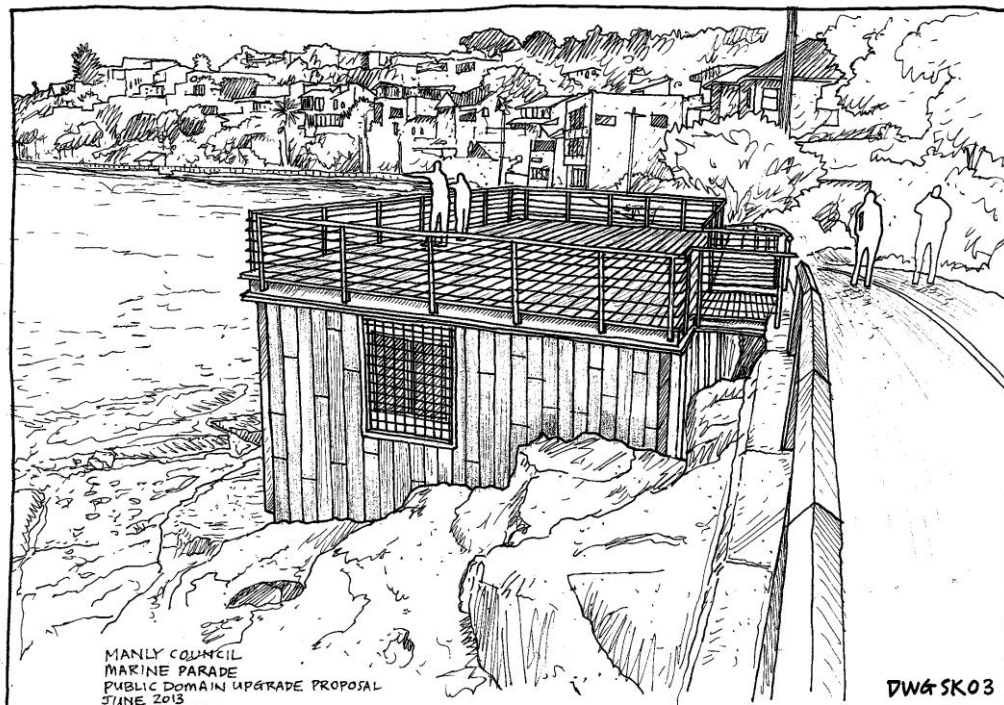
Potential to create a wonderful ocean front plaza space in this area

5.2 Public Viewing platform

The existing shed on the walkway

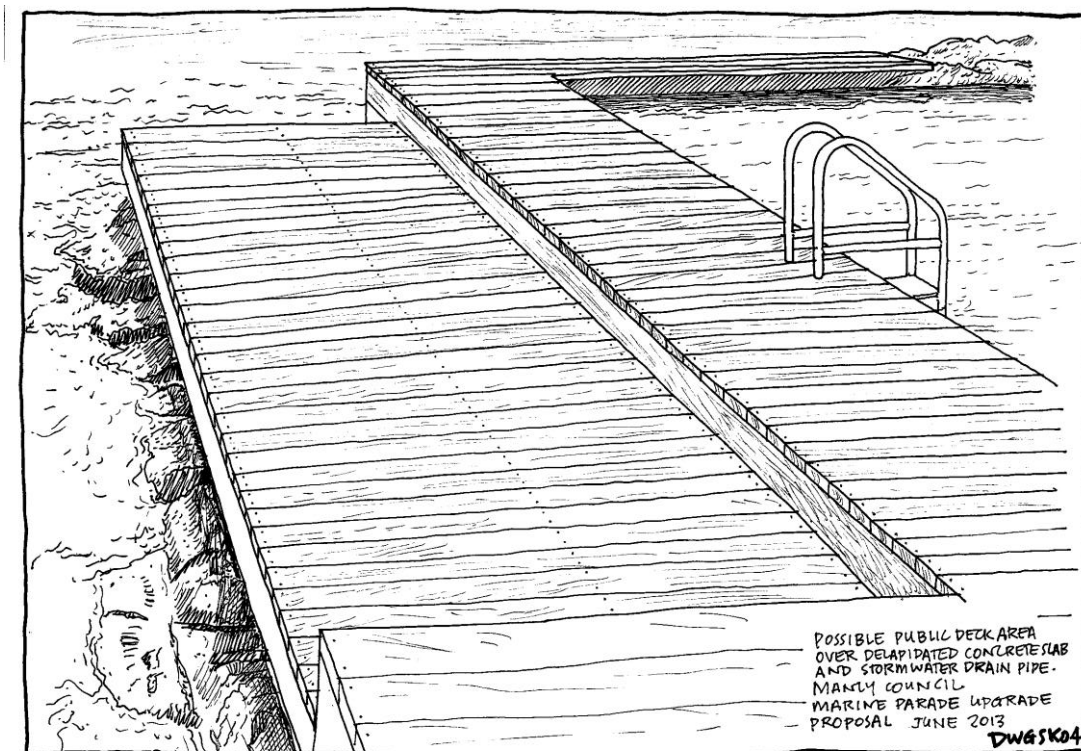


Sketch below shows a refurbished shed with viewing platform on top (structure for viewing platform including new perimeter stainless steel handrail would be independent of fabric of existing shed)

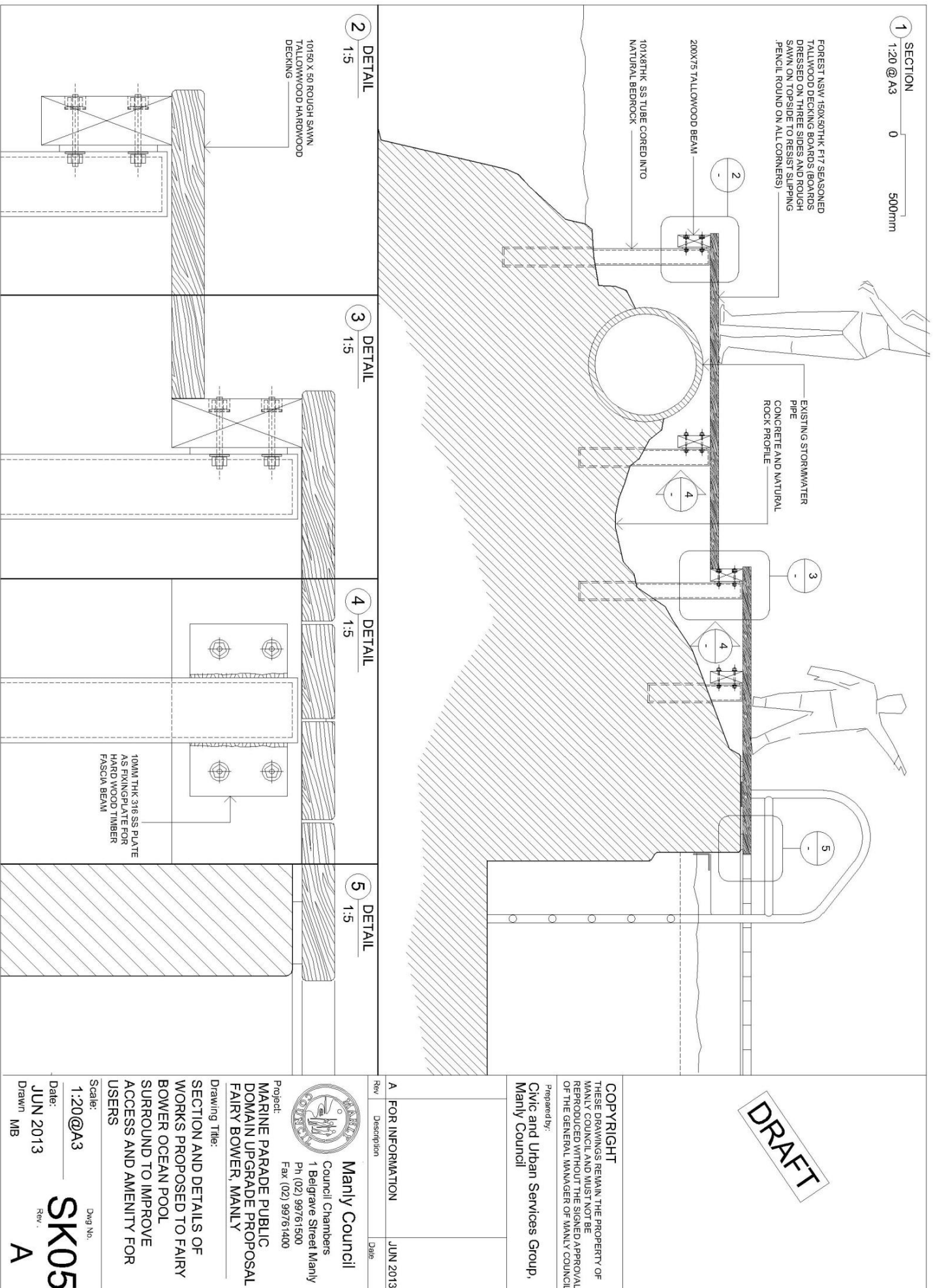


5.3 Deck spaces at Fairy Bower Pool

Existing pool surrounds are deteriorating and potentially dangerous for public use



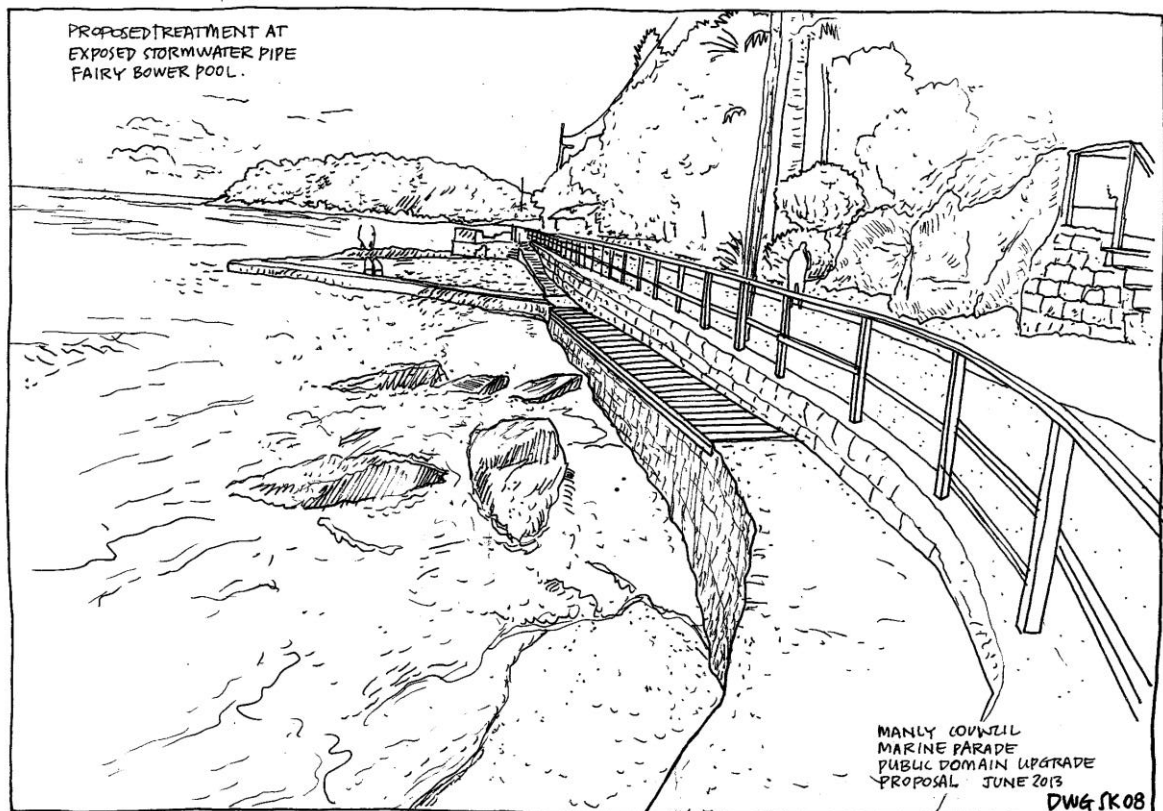
Sketch above shows hardwood Tallowwood boardwalk decks/ platforms around pool edges to improve area for public use and access. Drawing overleaf shows detailed section of treatment.

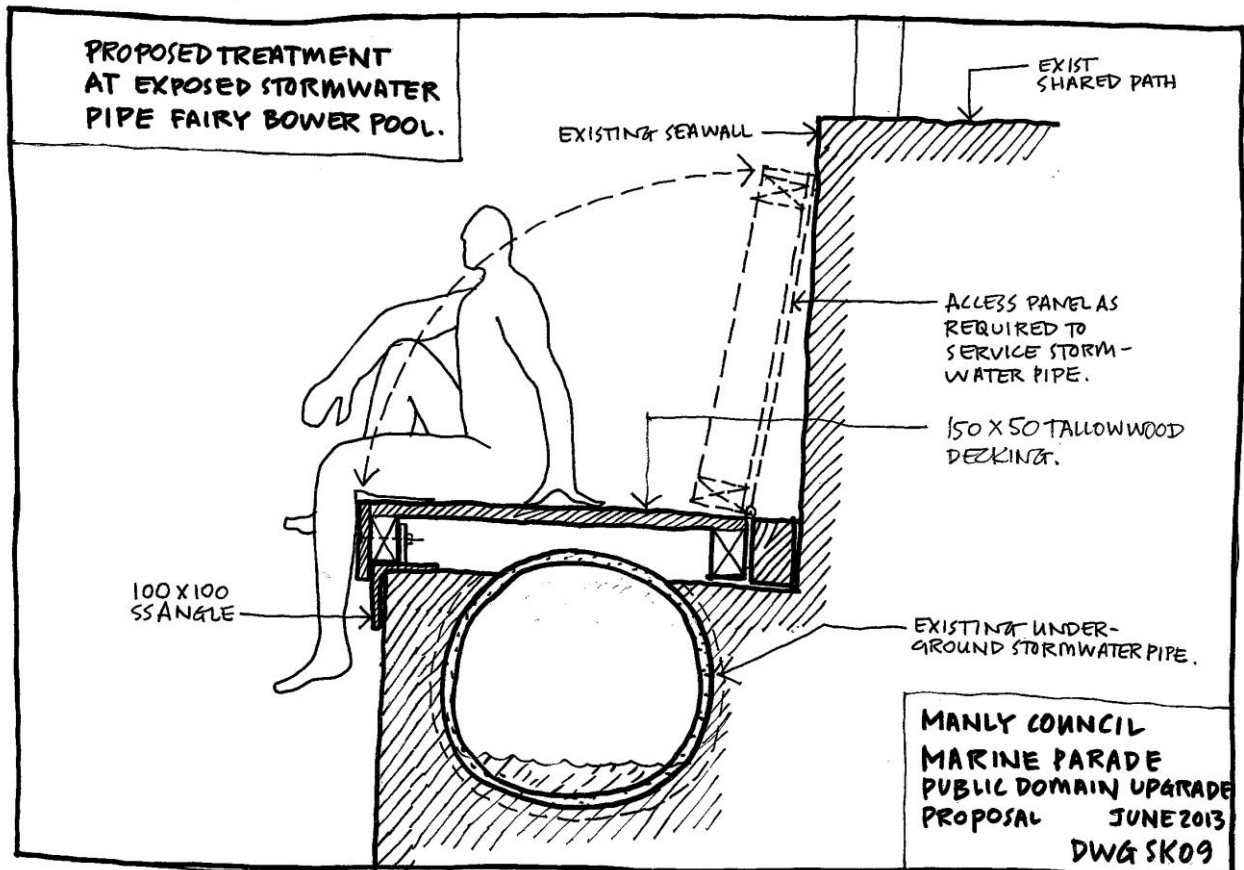


5.4 Boardwalk/seating over stormwater drains



Photo showing exposed stormwater pipe below walkway near Fairy Bower Pool
sketch below shows proposed treatment to create public use walkway/seating area





Sketch above shows public deck boardwalk to cover exposed stormwater drain to improve or public use.

5.5 Shower at Shelley beach

Photos below shows existing situation. Propose to create stairs from beach up to shower and cut opening in the low wall to side of ramp to create an at grade entry to shower from Marine Pde



5.6 Rectification of seepage over pathway



DETAILED COST ESTIMATE					
MARINE PDE PUBLIC DOMAIN IMPROVEMENTS PROJECT					
Item No	Description	Quantity	Unit	Rate	Amount
1	Site Establishment				\$67,828
1.1	Safety Fencing as required	100	m	18	\$1,800
1.2	Provide pollution/environmental control	847	lin m	24	\$20,328
1.3	Provide site office and facilities	34	wks	800	\$27,200
1.4	Provide pedestrian control	1	item	10,500	\$10,500
1.5	Provide survey control	1	item	8,000	\$8,000
2	Preliminaries				\$22,700
2.1	Sydney Water Fees (New connections)	1	item	1,500	\$1,500
2.2	Inspection Fees	1	item	1,200	\$1,200
2.3	Provide insurance of the works	1	item	20,000	\$20,000
3	Demolition and disposal				\$109,450
3.1	remove existing asphalt, concrete and paved areas	2965	m2	30	\$88,950
3.2	remove existing seats, picnic settings, bin and bubbler)	45	ea	100	\$4,500
3.3	ongoing waste removal from site during works	2000	tonne	8	\$16,000
4	Preparation of subgrade, construction of base, and drainage works				\$593,350
4.1	Basecourse on prepared subgrade incl excavation	2965	m2	40	\$118,600
4.2	New paving (supply and lay on sand cement)	2965	m2	150	\$444,750
4.3	preparation for stormwater drains rectification works,	30	ea	1,000	\$30,000
5	Landscape Works				\$519,800
5.1	grated drains along path at seepage areas	30	m	300	\$9,000
5.2	Paved bases for picnic settings and seats	240	m2	140	\$33,600
5.3	Cost to supply new paving	2965	m	80	\$237,200
5.4	Remove, import topsoil, regrade and lay new turf	1000	m2	30	\$30,000
5.5	Viewing platform and rectify exist ski store shed	1	item	200,000	\$200,000
5.6	stairs and handrail to Shelley Beach shower	1	item	10,000	\$10,000
5.7	modifications to existing handrail	730	lin m	130	\$94,900
5.8	boardwalk and decks (inc sub structure + ss metalwork)	180	m2	400	\$72,000
6	Park Furniture/Features				\$180,900
6.1	Beach shower upgrade works	1	No	10,000	\$10,000
6.2	Bench seats (inc install)	48	No	1,550	\$74,400
6.3	Bike racks (at Bower Lane and Shelley Beach)	10	No	500	\$5,000
6.4	Bins (inc install)	6	No	2,000	\$12,000
6.5	Drinking fountains	2	No	2,800	\$5,600
6.6	Picnic settings	3	No	2,300	\$6,900
6.7	Public Art mosaic in Marine Bower Square	1	No	55,000	\$55,000
6.8	Heritage and 'Marine Sanctuary' and 'No take' signage	10	No	1,200	\$12,000
7	Electrical Work				\$281,000
7.1	Provide utg power connection incl switch cabinets	1	item	105,000	\$105,000
7.2	Install new light poles and fittings	40	No	4,400	\$176,000
8	stormwater				\$10,000
8.1	provide stormwater drains to path where required	20	item	500	\$10,000
9	Service Adjustments				\$55,000
9.1	Utility adjustments	1	item	35,000	\$35,000
9.2	Replace gal water service	1	item	20,000	\$20,000
10	Site Disestablishment				\$20,000
10.1	Reinstatement of damaged surfaces	1	item	20,000	\$20,000
	SUB TOTAL				\$1,860,028
	Detail survey incl services search,				
11	design & documentation 3.3%	1	item	145,000	\$145,000
12	Construction supervision/project management 3.8%	1	item	167,000	\$167,000
	PLUS 18% CONTINGENCY				\$369,222
	TOTAL PROJECT ESTIMATED COST (ex GST)				\$2,541,250
Prepared by: Michael Biddulph		Checked by: Fred Thinnesh			
Designer Civic and Urban Services		Manager and Structural Engineer Civic and Urban Services			
Date: 18 July 2013		Date: 18 July 2013			

- **Governance and Organisational Structures:**
- Full and detailed documentation for the project will be completed by Civic and Urban Services Group at Manly Council and Manly Council will project manage the construction process. This being the same model used to implement the recent Stage 4 component of the Ocean Beach Promenade upgrade successfully completed within time and budget
-
- **An Operational approach for the Execution of the Project:**
- A successful grant application would see immediate commencement of detailed design drawings by relevant council staff .These drawings identifying the proposed works would then be put on Public Exhibition for 28 days for comment. During this time the proposal would be presented to Council for final endorsement and to all relevant Special Purpose Committees and Precinct Community Forum Groups.
- Comments would be taken on board and drawings modified if required.
-
- It should be noted that there is a strong drive from all these relevant groups to see public domain improvements take place at Marine Pde (that is why this project is being put forward by Council for grant funding consideration) so it is not expected there will be opposition to the improvements proposed .
-
-
- Following completion of detailed construction documentation the major components of the project would then be put to competitive tender
-
-
- **Resourcing:**
- The Civic and Urban Services Group Manly Council has sufficiently skilled people who would be able to expeditiously produce the detailed design, public exhibition and construction drawings required to allow the project to commence in a timely manner
-
-
- **Approvals:**
- -Given the nature and scale of the proposed works a DA is not required however Manly Council would still prepare an REF and or Part 5 report for the proposal.
- -Approvals from National Parks, RMS and Sydney Water for relevant components of the project would be sought as required
-
- -Drawings outlining the proposed works would also be served on the Crown Lands Department as required as Manly Council is in care Control and Management of some parts of the project site area where works are proposed.
-
- **Compliance:**
- All works undertaken, will, as they are required , comply with the relevant Australian Standards and the NCC and the BCA

- Manly Council's compliance department in conjunction with the Project Manager from Manly Council's Special Projects Department will ensure ongoing compliance in this regard
-

- **Audit and performance reporting:**

-
- Ongoing performance and work quality will be monitored by the Project Manager and relevant senior staff at Manly Council
-

- **4. Risk Management Plan**

RISK ASSESSMENT

A risk assessment will be undertaken by both Council and the Contractor prior to work commencing and a project specific risk management plan will be developed, taking into account the high public usage of the area surrounding the site.

The highest risk item has been determined as possible pedestrian incidents caused by pedestrians entering site without permission or pedestrians being injured by construction machinery. This risk will be managed and controlled by ensuring that the works are conducted inside perimeter fences and pedestrian barriers and other appropriate measures taken by the Contractor and the Project Manager.

Traffic control devices meeting the requirements of the code of practice shall be installed in accordance with the layout and dimensions depicted upon the Traffic and Pedestrian Control Diagram submitted by the Contractor.



TO: Public Domains Advisory Committee

MEETING DATE: 21st August 2013

AUTHOR: Beth Lawsen

SUBJECT: **ITEM 8 REPORT - AUSGRID GUIDELINES – PRUNING OF STREET TREES**

SUMMARY

The Committee recommended from its minutes on the 19th June 2013 that a report be brought back to the Committee's next meeting outlining Ausgrid's guidelines for pruning street trees. These guidelines are the subject of this report.

REPORT

The document has been circulated to committee members.

RECOMMENDATION

That the Committee receive and note the report and provide any relevant comments.

Beth Lawsen
Deputy General Manager
People Place & Infrastructure
15th August 2013



Network Asset Relocation and Undergrounding Policy Guidelines

June 2010



SCOPE

This publication outlines Ausgrid's policy for dealing with requests from local councils, resident groups or any other party to relocate its existing distribution assets, including requests to underground its existing bare overhead assets or to replace them with insulated overhead cables.

INQUIRIES

For all inquiries in relation to this policy, refer to the Ausgrid contact details for the relevant area on pages 9 & 10 of this document.

WARNING

It is the responsibility of the user to ensure that only the current version of this policy is being used.

Ausgrid may amend this document at any time without notice.

Any cost estimates provided in this document are indicative only.

DOCUMENT AND AMENDMENT HISTORY

Version no.	Publish Date	Author	Summary of Changes
0.9	August 2005	Alex Miller	Circulated widely to key internal stakeholders.
1.0	October 2005	Alex Miller	Version for Network Management approval. Includes comments from key internal stakeholders.
1.1	November 2005	Alex Miller	Version approved by Network Management Group, November 2005, incorporating changes discussed at meeting on 13 October 2005.
1.2	January 2006	Alex Miller	Version for planned approval from Network Executive.
1.3	March 2006	Alex Miller	Including comments from Network Alliance Manager and Strategic & Executive Services Manager.
1.4	May 2006	Alex Miller	Approved for public release without alteration by Network Planning Sub-committee.
1.5	December 2008	Tony Markus	Updated version, to reflect latest market conditions.
1.6	1 June 2010	Tony Markus	Cost sharing provisions have been removed and minor editorial amendments have been made throughout the document. The policy now also applies to relocations or undergrounding at any voltage.

The latest version of this document can be freely downloaded from www.ausgrid.com.au

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Network Asset Relocation and Undergrounding
Policy Guidelines
June 2010

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1 Purpose

Ausgrid receives requests from customers to relocate its existing distribution assets, place its overhead power lines underground, or replace its bare overhead power lines with insulated overhead cables. The purpose of this document is to outline Ausgrid's policy for dealing with these requests from local councils, resident groups or any other party (referred to hereafter as "the proponent"). In this document, the terms "asset relocation" or "relocation" will be used to denote either the re-positioning of an asset or the replacement of an overhead power line with either underground cables or insulated overhead cables.

2 Overview

The features of Ausgrid's policy are:

- Ausgrid will consider all requests for relocation of its distribution assets and will determine each request on a case by case basis in accordance with this policy,
- If Ausgrid agrees to the request, proponents will be required to meet the full cost of the works,
- Relocation works consist of a design component and a construction component,
- Generally, the construction component will be treated as contestable. (Ausgrid's policy on the contestability of these projects is set out in section 4),
- The proponent will be required to engage a Level 1 Accredited Service Provider (ASP) to construct the works in accordance with Ausgrid's contestability guidelines,
- If Ausgrid decides that the design is to be regarded as contestable, the proponent will be required to engage a Level 3 ASP to design the works,
- Ausgrid may choose to carry out the design of the distribution works and charge a fee to recover the cost incurred. Ausgrid will always carry out the design of small relocation projects, and
- In some circumstances Ausgrid may choose to prepare the design and carry out the construction and will charge a fee to recover the full cost of design and construction (refer to section 5.2 for the pricing principles that apply in this regard).

Whilst Ausgrid will endeavour to agree to existing network asset relocations, in some circumstances it may be necessary to refuse relocation requests on safety or operational grounds. For further details see section 5.1.

Ausgrid is a regulated monopoly business and there is no scope for its network and general customer base to subsidise or contribute financially to projects where the benefits accrue solely to the direct beneficiaries of relocation works.

Proponents need to consider that construction works may vary significantly from location to location, depending on a range of factors including local network design constraints, geography, soil type, access, existence of other utility infrastructure and local traffic conditions. Therefore, actual costs and the specific approach adopted may vary significantly from project to project.

Ausgrid has decided to regard most asset relocation work as contestable, on the basis outlined in section 4. However, where the work cannot be made contestable, proponents should be aware that Ausgrid gives priority to network planning, augmentation and maintenance activities needed to maintain system reliability. Hence, Ausgrid will endeavour to provide realistic assessments of its capacity to undertake relocation projects and whether it is feasible to meet the proponent's timetable.

3 Undergrounding – General Principles

Ausgrid's policy is to require cables to be placed underground at the developer's cost in new developments and urban subdivisions. All new developments and urban subdivisions must also meet the requirements of the relevant local council.

Ausgrid's document ES 10 *Requirements for Electricity Connection to Developments*, which is available on Ausgrid's website www.ausgrid.com.au includes the following stipulations relevant to undergrounding existing assets:

- Extensions to or relocations of the high voltage (11kV) network in urban areas shall be of underground construction with at least one spare conduit. Exceptions may be authorised in special cases, such as in flood prone areas and for minor extensions (nominally less than 100 metres), relocations or upgrading existing overhead network construction subject to a satisfactory evaluation of environmental impacts,
- All low voltage service mains in urban areas shall be underground in areas supplied by underground low voltage distribution mains, and
- New premises located in an urban overhead distribution mains area must make provision for (i.e. be capable of) connection to future underground distribution mains.

Where existing overhead assets are placed underground, street poles or columns are still required for the purpose of street lighting, hence not all street poles and columns can be removed as part of an undergrounding project. In addition, undergrounding will also normally require new street furniture in the form of above ground low voltage pillars for the connection of customers' new underground service cables to the new underground low voltage distribution cables.

The undergrounding of distribution lines is around five to seven times more costly than installing overhead cables, although it should be noted that this varies significantly between areas depending on ground conditions.

4 Contestability of Design and Construction

Once Ausgrid has determined that the relocation is acceptable in principle it must also determine whether the design and construction will be contestable, i.e. whether the design and construction can be carried out by a person other than AusgridAustralia.

While Ausgrid is not obliged under the Electricity Supply Act or its regulatory determinations to make asset relocation works (such as the undergrounding of existing aerial mains) a contestable service, it has decided that such works will in general be treated as contestable.

It is important to note that relocation works and the undergrounding of existing overhead lines in particular usually affects the supply to adjacent customers as well as those for whom the undergrounding is being provided, and can involve significant technical and safety issues.

In determining whether a project should be made contestable, Ausgrid will need to ensure that the following conditions are satisfied:

- There will be no adverse impacts on adjacent customers (those customers not a party to the proposal) as a result of changes to supply arrangements; and
- Safety, technical, network performance or maintenance issues can be properly assessed and managed.

In some circumstances Ausgrid may determine that the associated risks are too great to allow the project to be contestable. In any event the design component of small relocation projects will not be made contestable.

The contestability process to be followed is based on Ausgrid's document ES 10 *Requirements for Electricity Connection to Developments* and is summarised below.

Ausgrid will on receipt of the proposal and adequate supporting information:

- Provide necessary Design Information to assist with the contestable design process (if the design is made contestable);
- Check and certify the design to ensure it has been completed in accordance with the Design Information, technical standards and to ensure there are no security, safety, technical or reliability issues;
- Require the proponent and (for large jobs - the proponents chosen ASP) to enter into an appropriate agreement similar to Ausgrid's document ES 9 *Agreement for Connection of Developments* modified to be relevant to asset relocation rather than customer connection;
- Require the proponent to make the arrangements with other interested parties as set out elsewhere in this document; and
- Conduct site inspections at various stages of the construction phase and facilitate the commissioning of the project.

Ausgrid will charge a fee to recover the cost of providing these facilitating services on a cost recovery basis

5 Ausgrid's Commitments and Terms and Conditions

5.1 A Particular Asset Relocation Proposal may not be Approved

At the outset, proponents should be aware that some relocation proposals may not be acceptable to Ausgrid. The safe and reliable operation of the network is a key obligation under Ausgrid's licence to operate as a Distribution Network Service Provider; consequently, any asset relocation proposal that conflicts with these obligations will be refused. After evaluating a specific request and based on a consideration of risk and feasibility, Ausgrid will advise the proponent whether or not it is possible to undertake the proposed project.

Note: Although Ausgrid may agree to a relocation request, it may decide for the reasons of safety and reliability, to carry out the work itself rather than allow it to be contestable. For further details see section 4.

5.2 Pricing Principles Applicable when the Work is not made Contestable

Fees charged by Ausgrid for the design or construction of customer requested asset relocation works where this work cannot be made contestable for safety or other reasons are currently based on well recognised pricing principles. These works are classified as unregulated distribution services under the Australian Energy Regulator (AER) regulatory framework and will be subject to the pricing principles previously applied to excluded distribution services in the Independent Pricing and Regulatory Tribunal (IPART) Rule 2004/1 Regulation of Excluded Distribution Services. These pricing principles remain applicable to these services now classified as unregulated distribution services under the Transitional Rules applicable for the 2009-2014 regulatory period.

Information on these pricing principles can be found on Ausgrid's website.

5.3 Stages of a Relocation Project

There are generally three main stages to a project:

5.3.1 Initial Assessment

The proponent will be required to fund an initial assessment and indicative cost estimate of the project by Ausgrid in order to determine its broad requirements, scope and overall feasibility. In most cases the initial assessment work will require substantial time to prepare.

Ausgrid usually charges a standard fee of **\$1,700** to process an initial request, but the fee may vary depending on the scale of the proposed project.

5.3.2 Detailed Design

If the initial assessment and indicative estimate are acceptable and a decision is made to proceed with the project, the process in section 4 must be followed for contestable components of the project.

If design is **not contestable** it will be undertaken by the relevant staff in Ausgrid's local Customer Operations office. Ausgrid charges approximately **\$130 per hour** to perform this service. (This is a cost reflective rate). The total design cost will vary depending on the complexity of the job, but usually, small projects involve at least 40 hours work and 200 hours or more are required to design a large-scale project. The design charge covers site visits, searches, service undergrounding investigations, design plan and contract and preparation of an Environmental Impact Assessment, which is a mandatory requirement for Ausgrid under the planning laws.

5.3.3 Construction

The construction phase typically consists of the following broad cost components:

- Trenching and boring;
- Installation of assets;
- Service connections;
- Roadway/footpath reinstatement;
- Relocation of streetlights to dedicated street light poles or standards;
- Reconnection and possible relocation of substations;
- Dismantling and relocation and/or removal/disposal of overhead infrastructure; and
- Relocation of other utilities' assets.

(a) Relocation of Low Voltage and/or High Voltage Overhead Assets

Construction costs can vary significantly depending on site conditions and the extent of the network required to be relocated. Undergrounding of low voltage overhead assets (below 1,000 Volts) for instance, usually involves a minimum of two to three spans of an overhead line section. It is more expensive to underground both low and high voltage overhead assets.

Indicative costs for undergrounding small sections of the network, taken from Ausgrid's website, are shown in Table 1 below. These are Ausgrid's own indicative costs and it should be understood that: they are given here as no more than a general guide for information purposes; each job is priced according to local conditions; and for contestable jobs, the cost to the proponent will be the cost quoted by the proponent's chosen ASP, as well as fees and charges charged by Ausgrid to facilitate the work and to carry out any non-contestable work as described in section 6.

Table 1: Indicative low voltage undergrounding costs from Ausgrid's website

Option	Indicative Costs	Comment
Replacing overhead wiring with underground cables	\$56,000 - \$80,000 per span. (Typically 8 customers per span at \$7,000 - \$10,000 per customer)	Costs may vary significantly depending on location

In a typical suburban street, the indicative costs per span would underground the wires in front of approximately eight houses. The indicative costs represent the estimated costs taking into account the cost of new equipment and the cost to reinstate footpaths and roadways. (As noted, the actual costs will vary widely from location to location).

It should be noted that this indicative cost makes no allowance for:

- Unusual ground/site conditions;
- The cost of undergrounding the house service line (the wire from the street to the house); and
- Reconfiguration of any street lighting infrastructure.

Other factors that may result in additional costs to relocate network assets include:

- Traffic control on main roads;
- Reinstatement of footpaths (varies between local councils);
- Whether telecommunications cables are attached to the power poles;
- Within the proponent's specific area, the cost of undergrounding services may also be affected by the necessity to replace or relocate meter boards, access to narrow footways and large trees with extensively compacted root systems; and
- Excavation around significant trees.

Ausgrid will work with the proponent to develop a solution that optimises rollout costs and future maintenance costs.

(b) House service lines

The cost of undergrounding house service lines varies widely depending on the ground conditions and layout.

(c) Relocation of other assets

Where the project involves the relocation of additional assets (e.g. a pole transformer or the infrastructure of other utilities) there will be further significant additional cost.

(d) Additional technical and safety considerations

Technical and safety considerations may require more extensive ancillary work than may be requested or apparent at first. In particular, the introduction of short sections of high voltage underground cables which may eventuate from undergrounding projects could lead to earth potential rise problems.

(e) Write-off of existing assets

Where a relocation project requested by a proponent involves the early retirement and write-off of an existing asset, Ausgrid will generally recover this economic cost from the proponent.

5.4 Terms and Conditions

Customers are required to enter into standard commercial contracts for the provision of services provided by an ASP and/or by Ausgrid. These contracts include Ausgrid's terms and conditions for the project.

If the works are not contestable, Ausgrid provides written quotations to customers on request and these are generally valid for a period of one month. Customers must provide a signed 'Acceptance of Offer' (thereby constituting a contract) before the project can proceed. Written quotations for the construction phase can only be prepared after the proponent has paid for the design component of the project. A fixed price quote will include a 10% contingency allowance on the total direct labour charges.

5.4.1 Form of Payment

In most cases, payment for a project will be in the form of a fixed fee. The applicable form of payment will depend on contractual conditions, whether the project is contestable and the degree of uncertainty associated with the project.

5.5 Costs

Relocation projects are currently classified by the economic regulator as customer specific services and in accordance with that classification, it is standard Ausgrid policy to require that all project costs are fully borne by the proponent.

5.6 Telecommunications Infrastructure

Where overhead power lines are shared with telecommunications infrastructure such as broadband cables, indicative costs may be significantly higher due to the need to also relocate the telecommunications cables.

If a telecommunications company's cables are present on Ausgrid's poles, legal and safety requirements make it essential that these cables are removed before overhead mains and poles are removed. Ausgrid has no specific authority to force telecommunications companies to agree to the removal of their cables. The proponent will need to negotiate with the relevant telecommunications company to gain their approval to remove their existing overhead construction and provide written confirmation of this approval to Ausgrid.

5.7 Cost Reduction Opportunities

Opportunities for cost savings may arise in certain relocation projects. Such opportunities include situations where underground trenches are already required for sewerage, gas, or other utility works in the area, thereby enabling the undergrounding of electricity services at a lower incremental cost (e.g. reduced excavation and reinstatement costs) and with less disruption to residents. The potential for undergrounding of electricity supply to take advantage of such situations will be assessed on a case by case basis, after carefully considering policy differences between the utilities involved (e.g. distance from houses, depth of trenches etc.).

Although Ausgrid is able to participate in such arrangements, the proponent would need to assume responsibility for coordinating the process.

5.8 Service Connections

It is the responsibility of the proponent to make suitable arrangements (including funding) with individual customers to organise alterations to their individual service connections if they are affected by the proposal. Individual customer connections are a contestable service that may be undertaken by an ASP.

6 Proponent Responsibilities

The proponent shall be responsible for the following:

- **Identify exact assets to be relocated** – in order to provide an accurate cost estimate (if requested) and assess all planning and safety requirements, Ausgrid needs to be given accurate information on the actual network assets to be relocated or undergrounded. Ausgrid may not agree to the full extent of the individual requests or, conversely, it may specify an extension of the requested works due to technical and safety considerations,
- **Write to Ausgrid regarding the specific relocation proposals** – the proponent should direct all correspondence to the local Ausgrid Customer Operations office,
- **Formally accept quotes provided by Ausgrid for work which is not made contestable** (this applies in the event that Ausgrid determines that all or a portion of the work will not be contestable). For the project to proceed, the proponent must formally accept Ausgrid's quote for all non-contestable components. Following acceptance of a cost estimate from Ausgrid in respect of the actual work, the proponent will be issued with the relevant standard contract for the construction phase,
- **Comply with the contestability procedures outlined in section 4 for projects that are contestable,**
- **Engage an ASP to carry out the contestable works**
- **Obtain permission from all affected parties to the proposal** - it is the proponent's responsibility to:
 - obtain written agreement to the relocation from all affected parties, including all residents whose service cables will need to be undergrounded as a result of the proposal; and
 - advise Ausgrid when this has been done.

The proponent should be aware that this is a prerequisite to the project proceeding as planned,

- **Liaise with telecommunications companies** – the proponent will need to negotiate with the relevant telecommunications companies to gain approval to remove their existing overhead construction and provide written confirmation of this approval to Ausgrid,
- **Liaise with other utilities where cost saving opportunities may arise** – as outlined above, where underground trenches are already required for work conducted by other utilities, the proponent shall coordinate the process of investigating cost savings opportunities, and
- **Single point of contact to be responsible for payment to Ausgrid for services performed** – for any project, Ausgrid will only deal with a single entity, who must assume responsibility for payment.

7 Suggested Way Forward

For proponents interested in pursuing a specific relocation project, Figure 1 provides a broad overview of the next steps.

Ausgrid will work with the proponent to assist it in achieving its objectives, subject to commercial considerations, availability of staff and network planning requirements and priorities.

Proponents who have any further queries, or wish to lodge a formal request should contact the planning engineer from Ausgrid's local Customer Operations region in the first instance. For more information, please refer to the relevant local Customer Operations office (contact details shown below).

TUGGERAH

Serving customers in the NSW Central Coast area.

Office Location: Unit 1, 14 Pioneer Ave, Tuggerah
 Postal Address: PO Box 3744, Tuggerah NSW 2259
 Office Hours: 7.30am to 4.00pm (Monday to Friday).

Contact Details

Customer Inquiries (02) 4399 8000
 General Facsimile (02) 4399 8001

HORNSBY

Serving customers from south of the Hawkesbury River to the north side of Sydney Harbour and the Parramatta River.

Office Location: Building 2, 51-59 Bridge Rd near Sherbrook Rd, Hornsby
 Postal Address: GPO Box 4009, Sydney NSW 2001
 Office Hours: 8.00am to 4.30pm (Monday to Friday).

Contact Details

Customer Inquiries (02) 9477 8201
 General Facsimile (02) 9477 8207

MUSWELLBROOK

Serving customers in the Muswellbrook, Scone, Merriwa and Singleton areas.

Office Location: 41 Thomas Mitchell Dr, Muswellbrook
 Postal Address: PO Box 196 Muswellbrook 2333
 Office Hours: 7.00am to 3.30pm (Monday to Friday).

Contact Details

Customer Inquiries (02) 6542 9017
 General Facsimile (02) 6542 9037

OATLEY

Serving customers in the Inner West and Southern Suburbs of Sydney

Office Location: 33-45 Judd Street, Oatley (Building No. 1),
south western corner of the ground floor of the Administration
Building

Postal Address: GPO Box 4009 Sydney NSW 2001

Office Hours: 7.30am to 4.00pm (Monday to Friday).

Contact Details

Customer Inquiries	(02) 9585 5774
General Facsimile	(02) 9585 5817

WALLSEND

Serving customers in the Cessnock, Lake Macquarie, Newcastle, Maitland and Port Stephens areas.

Office Location: 145 Newcastle Road, Wallsend

Postal Address: PO Box 487, Newcastle NSW 2300

Office Hours: 7.30am to 4.00pm (Monday to Friday).

Contact Details

Customer Inquiries	(02) 4951 9930
General Facsimile	(02) 4951 9934

SYDNEY CITY

Serving customers in the Sydney CBD and eastern suburbs within the local government areas of City of Sydney, Woollahra, Waverley, Marrickville, Randwick and Botany.

Office Location: 130 Joynton Ave, Zetland (Building No. 4)

Postal Address: GPO Box 4009 Sydney NSW 2001

Office Hours: 8.00am to 4.30pm (Monday to Friday).

Contact Details

Customer Inquiries	(02) 9663 9332
General Facsimile	(02) 9663 9499

8 Figure 1: Overview of Way Forward for Proponent Relocation Requests

