

BEACON POINT RESERVE MASTER PLAN

IMPLEMENTATION SCHEDULE Prepared by TBLD P/L for City of Greater Geelong March 2013 Refer Drawing No BPMP-01, 02 and 03. Note preliminary opinion of probable cost estimates are for planning purposes only and subject to detailed design.

No.	Issue	Recommendation	Amount	Item	Rate	Cost Estimate	Priority	Predecessors	Asset Manager	Partners	Annual Maintenance Estimate
1.0 - CULTURAL HERITAGE											
1.1	There are registered sites of Aboriginal cultural significance at Beacon Point Reserve and along Scarborough Creek.	Undertake ongoing repair and maintenance of fencing to the cliff top to restrict access down the cliff and protect Aboriginal archaeological scatters present along the cliff. Refer 2.1.	1	Item			Mandatory	2.1	Environment	WAC	\$500
		A Cultural Heritage Management Plan may be required for any ground disturbing works in Beacon Point Reserve including new beach access, paths, wetland/drainage and picnic area works. NOTE: Cost estimate for CHMP is approximate only and must be confirmed with a qualified archaeologist, subject to the extent of works to be undertaken.	1	Item		\$15,000-\$50,000	High	None	Environment	WAC	
SUB TOTAL CULTURAL HERITAGE						\$50,000				MAINTENANCE	\$500
2.0 - ENVIRONMENT											
2.1	Areas of indigenous vegetation on the coastal cliff slopes need to be protected. The steep and highly eroded coastal cliffs present a significant risk to the public.	Extend existing fence along the coastal foreshore to Scarborough Creek	250	lin.m	\$25	\$6,250	Mandatory	1.1	Environment		\$125
		Install additional warning signage regarding the use of informal tracks on the cliff.	2	No.	\$250	\$500	Mandatory	1.1	Environment		
		Relocate the existing fence away from the cliff edge a further 2-3m.	350	lin.m	\$25	\$8,750	Medium	1.1	Environment		\$175
		Revegetate to increase buffer zone to the cliff edge using low indigenous vegetation to maximise cliff stability and habitat values while retaining coastal views.	1,800	m2	\$30	\$54,000	Medium	1.1	Environment	FOBP	\$1,080
2.2	Existing weed invasion in some sections of steep coastal cliffs is extensive but may also assist with cliff stability and provide habitat in the absence of other vegetation. Future removal is a high risk activity and may potentially disturb Aboriginal archaeological values, cause erosion and potentially loss of habitat.	Undertake staged weed control using specialist contractors. Weed control to utilise minimum disturbance techniques. Undertake works in a staged manner and when cliffs are dry. All works on cliffs must meet relevant Occupational Health and Safety (OHS) standards and codes of practice (working at heights) requirements. Specific Job Safety Assessments must also be carried out prior to the commencement of any works.	5000	m2	\$10	\$50,000	Low	None	Environment		\$1,000
2.3	Pest animals including rabbits and foxes within Scarborough Creek and the narrow coastal reserve may contribute to accelerated erosion and loss of indigenous fauna.	Monitor rabbit and foxes. If numbers increase, liaise with adjoining landholders to implement a control program.	1	Item		N/C	Ongoing	None	Environment	DPI / Landholders	
2.4	Lack of overstorey vegetation in the Beacon Point Reserve.	Liaise with adjoining landholders and the local community to carefully plant additional indigenous trees and shrubs along private property boundaries to improve habitat values and landscape amenity while maintaining views and passive surveillance of the adjoining coastal reserve.	1	Item		\$20,000	Medium	None	Environment	FOBP	\$600
2.5	Weeds including Gorse along Scarborough Creek. Future removal is a high risk activity and may potentially disturb Aboriginal archaeological values, cause erosion and potentially loss of habitat.	Undertake staged weed control using specialist contractors. Weed control to utilise minimum disturbance techniques. Undertake works in a staged manner and when cliffs are dry. Undertake next stage of removal works only when completed revegetation works provide equivalent habitat cover and cliff stability. All works on cliffs must meet relevant Occupational Health and Safety (OHS) standards and codes of practice (working at heights) requirements. Specific Job Safety Assessments must also be carried out prior to the commencement of any works. Liaise with adjoining landholders to coordinate weed control and revegetation.	5000	m2	\$10	\$50,000	Low	None	Environment	Landholder	\$1,000
2.6	Coastal erosion is impacting on the beach in particular areas west of Beacon Point. Temporary fencing is currently used to restrict public access and to prevent beach goers walking under steep eroded sections the cliff at high tide.	A beach renourishment program is being conducted along the stretch of beach between the Edgewater Drive access ramp and Beacon Point by CoGG in partnership with DSE. The works include new rock revetment, a new access ramp and stairs system to the beach to replace the existing stairs at Cantata Way.				N/C	Ongoing	None	DSE	CoGG	
2.7	Water quality in Scarborough Creek	Monitor water quality in Scarborough Creek. Review the need for at source water quality treatment if the water quality data reveals that poor water quality is likely to impact on the health of adjoining Seagrass beds and the Clifton Springs Aquaculture Fisheries Reserve.	1	Item			High	None	Environment	CCMA	\$500

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2.8	Untreated urban stormwater runoff from the existing drains discharge into the bay at Beacon Point and potentially affects the coastal values and use of the swimming beach.	Investigate establishment of an off line water quality treatment wetland at Beacon Point Reserve. Provisional sums for works include:	1	Item Investigation		\$15,000	Medium	None	Environment	Engineering	
		Establish a low flow diversion pipe from the existing pit system in the reserve and from Beacon Point Road and utilise a cut/fill balance to minimise earthworks. A new off line weir pit to retain control of water levels and return flow to existing pipe network. Assume a clay liner will be required.	1	Item Civil Works		\$200,000	Medium	1.1	Environment	Engineering	
		Planting to be completed using indigenous aquatic and ephemeral species with local seed collection from Scarborough Creek/ McLeods Waterholes if possible.	1	Item Planting		\$50,000	Medium	1.1	Environment	Engineering	\$1,000
2.9	Beacon Point, like other coastal areas along the Bellarine Peninsula is directly threatened by the impacts of climate change. The specific threats to Beacon Point are from rising sea levels and more violent storm patterns contributing to accelerated coastal erosion.	Ensure investigation and design of future beach access infrastructure considers the impacts of climate change.				N/C	Mandatory	None	Environment	Engineering	
SUB TOTAL ENVIRONMENT						\$454,500				MAINTENANCE	\$5,480
3.0 - RECREATION											
3.1	Lack of all ability walking access at Beacon Point Reserve.	Undertake staged development of 1.5m wide unsealed all ability walking access tracks including:									
		Establish new walking trail from Beacon Point car park to Cantata Way beach access.	360	lin.m	\$100	\$36,000	High	1.1	Environment	Sport & Rec	\$720
		Establish new walking trail from Beacon Point car park to High Ridge Drive, including link to potential new beach access.	450	lin.m	\$100	\$45,000	Low	1.1	Sport & Rec	Environment	\$900
		As outlined in the Clifton Springs Coastal Management Plan continue staged establishment of walking trail links along the coastal reserve from Edgewater Drive/ Beacon Point to The Dell and the Clifton Springs Boat Harbour.				N/C	Ongoing	None	Environment	Sport & Rec	
		Retain as grass only informal walking link to and along Scarborough Creek.					Ongoing	None	Environment	Parks Unit	\$500
3.2	There is no footpath link from Drysdale to the coast and few footpaths in Clifton Springs. The existing concrete footpath along Beacon Point Road from Drysdale ends at Bay Shore Road.	Improve walking links from Drysdale to the coastal reserve by extending the 1.5m wide concrete footpath on the west side of Beacon Point Road from Bay Shore Road to the Beacon Point Reserve car park.	1,800	lin.m	\$100	\$180,000	Low	None	Engineering		
3.3	The beach to the east of Beacon Point Road is inaccessible at High Tide. Informal access to this beach at high tide is via a steep and eroding informal track near Scarborough Creek.	Investigate access down to the beach east of Beacon Point, between Beacon Point and Scarborough Creek. The beach access design is subject to geotechnical and cultural heritage investigations and will not be able to achieve all-ability access due to height of the cliffs.	1	Item Investigation/ Design		\$50,000	High	None	Environment	WAC / DSE	
		Any beach access structure is to meet the Siting and Design Guidelines for the Victorian Coast to minimise visual impact and disturbance to indigenous vegetation and potential cultural heritage values.	1	Provisional Construction		\$500,000	Medium	1.1, 2.9 & Beach Access Investigation	Environment	WAC / DSE	
3.4	There are limited facilities at Beacon Point. The provision of safe beach access at Beacon Point Reserve will significantly increase visitation and use levels of the reserve.	As identified in the Bellarine Leisure Needs Study and the Clifton Springs Coastal Management Plan, provide a new picnic area with upgraded picnic facilities including picnic tables and shade tree planting if beach access is provided at Beacon Point Reserve.	1	Item		\$20,000	High	1.1 & 3.1	Sport & Rec	Environment	\$400
		New picnic tables to replace the existing recycled plastic tables with more natural materials such as timber to retain informal coastal character.	4	No.	\$2,500	\$10,000	High	1.1 & 3.1	Sport & Rec	Parks Unit	\$200
		Investigate the need for additional picnic and BBQ facilities adjacent to the existing car park.				N/C	Low	1.1, 3.1 & 3.3	Sport & Rec	Parks Unit	
3.5	There are no toilet facilities on site. The nearest toilet facilities are located at The Dell (approx 1.5km from Beacon Point Reserve) and at the Drysdale town centre.	Provision of safe beach access at Beacon Point Reserve (refer 3.3) will significantly increase visitation and use levels of the reserve and beach. Investigate installation of a new toilet block adjacent to the existing sewerage pumping station (subject to provision of beach access).	1	Item		\$250,000	Low	1.1, 3.1 & 3.3	Sport & Rec	Environment / Barwon Water	\$5,000
3.6	Lack of seating in the Beacon Point Reserve and along the coastal reserve west of Beacon Point.	Install new seats at key locations in Beacon Point Reserve and along the coastal reserve, in association with new walking paths. Replace existing recycled plastic seats with more natural materials such as timber to retain informal coastal character. Locate seats in the shade where possible and to maximise views.	6	No.	\$1,250	\$7,500	High	1.1	Environment	Parks Unit	\$150
3.7	There is informal walking access along the west bank of Scarborough Creek but no link to Geelong-Portarlington Road or through to High Ridge Drive.	If properties along Panorama Court or on the east bank of Scarborough Creek are redeveloped in the future, investigate opportunities to provide a walking trail link to Geelong-Portarlington Road and High Ridge Drive.				N/C	Low	None	Planning	Sport & Rec	

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3.8	The existing sewerage pumping station is an important Barwon Water asset located in the reserve to service Drysdale and Clifton Springs.	Liaise with Barwon Water to investigate potential improvements to the exterior of the pumping station. Options could include use of timber cladding or integrated public art to soften its visual impact on views from the reserve.				N/C	Low	3.5	Barwon Water	FOBP	
3.9	Beacon Point Reserve is the largest area of flat open space in Clifton Springs and is popular for informal use however the existing open grassed area surface is rough and uneven. The Bellarine Peninsula Recreation & Leisure Needs Study 2005 concluded that Drysdale and Clifton Springs were adequately serviced by existing recreation reserves, including Drysdale Recreation Reserve, and additional formal recreation reserves were not required.	Maintain management levels of spring/summer grass mowing and improve the central area of the grassed open space including minor top dressing (50mm) to improve surface for informal games and recreation only and allow additional mowing and consider establishment of drought tolerant turf.	20,000	m2	\$3	\$60,000	Medium	None	Sport & Rec	Parks Unit	\$5,000
		Management of slashed areas of grassed open space, including Scarborough Creek corridor and Edgewater Drive road reserve (4-6 cuts per year).	80,000	m2			Ongoing	None	Parks Unit		\$5,000
3.10	There are no playground facilities at Beacon Point Reserve however there are local playground facilities within 500m of the reserve at Country Club Drive and Tanderra Court.	Playground facilities are not required at Beacon Point unless there is a significant increase in visitation following establishment of the beach access. Refer 3.3.				N/C	Low	3.3	Sport & Rec	Parks Unit	
3.11	There is no directional and regulatory signage at Beacon Point Road car park.	Upgrade directional and regulatory signage at the main entry points to the reserve.	1	Item		\$10,000	Medium	None	Sport & Rec	Environment	\$200
3.12	There is no interpretive signage. There has been suggestions for establishment of a cultural/ sculpture trail.	Investigate preparation and installation of interpretive signage for natural values. Liaise with the Wathaurung to develop interpretation signage regarding cultural values if appropriate.	1	Item		\$5,000	Medium	None	Environment	WAC	
3.13	The reserve is popular for dog walking and the potential increase in use levels of the park will require provision of additional plastic bag dispensers and bins.	Provide additional dog bins and biodegradable plastic bags to encourage dog owners to clean up after their dogs in accordance with Council's Domestic Animal Management Plan.	2	No.	\$400	\$800	High	None	Environment	Parks Unit	\$200
		Investigate formalisation of open grass areas away from the new picnic area as 'dog off lead' in accordance with the current City of Greater Geelong Domestic Animal Management Plan.				N/C	High	None	Environment	Sport & Rec	
3.14	The existing reserve fence at High Ridge Drive and Beacon Pt Road is dated.	Upgrade the reserve fence at High Ridge Drive with new post and rail fence including pedestrian access point.	185	lin.m	\$50	\$9,250	Medium	None	Sport & Rec	Parks Unit	\$200
		Upgrade the reserve fence along Beacon Point Road with new post and rail fence including pedestrian access points.	120	lin.m	\$50	\$6,000	Medium	None	Sport & Rec	Parks Unit	\$200
3.15	The grassed foreshore reserve along Edgewater Drive is unfenced and could potentially be accessed by vehicles for unpermitted parking.	Liaise with CoGG Traffic Engineering to investigate the need for additional vehicle control barriers along Edgewater Drive.				N/C	Low	None	Sport & Rec		
3.16	The existing drain pits in the reserve are required to receive and discharge stormwater.	Liaise with CoGG Engineers to investigate the potential to improve the safety of the grills at existing pits.				N/C	Medium	None	Engineering	Sport & Rec	
SUB TOTAL RECREATION						\$1,189,550				MAINTENANCE	\$18,670
4.0 - ADJOINING LAND USE											
4.1	Planting of new trees as recommended in the Clifton Springs Coastal Management Plan and this master plan may impact on coastal views from adjoining residential properties.	Liaise with adjoining landholders and the local community to carefully site planting areas for additional indigenous trees and shrubs along private property boundaries. Works aim to improve habitat values and landscape amenity while maintaining views and passive surveillance of the adjoining coastal reserve.				N/C	High	2.4	Environment	Sport & Rec	
4.2	The residential boundary fencing in some areas adjoining Scarborough Creek is inconsistent with the transparent fencing along the creek corridor.	Liaise with the adjoining landowners to require use of transparent post and mesh fencing to retain passive surveillance of the reserve while restraining domestic pets and animals.				N/C	Ongoing	None	Environment	Local Laws	
4.3	Some adjoining residential properties have no fencing along their boundary to the public reserve.	Liaise with adjoining landholders to establish boundary fencing consistent with existing post and mesh fencing along Scarborough Creek.	200	lin.m	\$25	\$5,000	Low	None	Environment	Planning	\$100
4.4	Planting of exotic species in adjoining residential properties contribute to further invasion of weeds into sensitive coastal and riparian vegetation.	Liaise with adjoining landholders to coordinate weed control and revegetation using indigenous species.				N/C	Ongoing	None	Environment		
4.5	The farm land to the east of Scarborough Creek is used for grazing and values of the creek along the east bank require protection.	Liaise with the land owners to investigate installation of stock fence along the east bank of Scarborough Creek to protect the environmental values of the creek.	1000	lin.m	\$25	\$25,000	Low	None	Environment	Land Owner	\$500
SUB TOTAL ADJOINING LAND USE						\$30,000				MAINTENANCE	\$600
SUBTOTAL PROJECT WORKS (ex GST)						\$1,724,050	TOTAL ANNUAL MAINTENANCE				\$25,250
Detailed Design / Contract Administration (10%)						\$172,405					
Contingencies (10%)						\$172,405					
TOTAL WORKS (Incl GST)						\$2,068,860					