



# Part D: Specification and Selections

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Part D: 'Specification and Selections' outlines material selections, design components and their associated considerations, and specifications of the streetscapes, and designated POS areas.





# (D) GENERAL SPECIFICATION

## 1.0 General Specification and Requirements

### Part 1 - Vision

To create a vibrant landmark destination that is connected, diverse and accessible.

ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
1.0	Furniture and Fixtures				
1.1	Generally 'Furniture and Fixtures' refers to all outdoor furniture and fixtures included within the public realm intended for public use.	Provide elements that embody the industrial and military heritage of the area through form and material selection. Ensure appropriate placement of thematic selections as per Parts B and C of the PRDG. These elements are critical to establishing the identity of each precinct and sub-precinct	<p>Ensure that the significant coastal exposure of this precinct is addressed in both material selection and furniture placement</p> <p>Ensure that potential vandalism issues are addressed to minimise on-going maintenance costs</p> <p>Comply with all relevant Australian Standards</p> <p>Ensure all furniture and fixtures are readily available from local suppliers or distributors.</p> <p>Custom elements must:</p> <ul style="list-style-type: none"> <li>- use readily available local materials</li> <li>- meet all construction and safety standards</li> <li>- meet the thematic requirements set out in this document</li> <li>- minimise maintenance</li> <li>- embody design excellence</li> </ul> <p>Equal access should be considered in the selection of furniture. Preference will be given to furniture that is accessible for wheelchair-bound visitors.</p> <p>Furniture is to be located where appropriate for its function. CPTED principles to be considered in the placement of furniture.</p> <p>Preference will be given for furniture designs that employ sustainable materials</p>		



ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
2.0	Lighting				
	Generally 'Lighting' refers to public lighting within the public realm, including but not limited to: - Area lighting - Pedestrian lighting - Feature lighting - Sports lighting - Solar lighting	Lighting is a key component of the activation and livability of the area. Careful consideration should be given to the placement, aesthetics and management of design choices to ensure the lighting design fulfills the safety and activation requirements.	<p>Comply with all relevant Australian Standards</p> <p>Ensure all lighting poles and fixtures are readily available from local suppliers or distributors.</p> <p>Lighting is to be low energy use, long life LED lighting.</p> <p>Designers must refer to the City of Cockburn - Open spaces Lighting Guidelines for additional information.</p> <p>Ensure that potential vandalism issues are addressed to minimise on-going maintenance costs</p> <p>Area lighting is not to be located within 10m of residential properties (streets excluded)</p> <p>Lighting adjacent to bushland is to be located and specified to minimise light spill into habitat areas.</p> <p>A 'PE' cell and timer control system is to be installed for all lighting. All control gear is to be easily accessible for maintenance</p> <p>Only fittings specifically designed for outdoor conditions shall be used</p> <p>In-ground feature lighting is to be installed flush with the surrounding surface, but not supported in streetscapes. To be installed only around areas of interest.</p> <p>Preference to be given to lighting powered by renewable energy sources (solar and wind)</p> <p>CPTED principles to be considered throughout the design</p>		



# GENERAL SPECIFICATION

ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
3.0	Play Spaces				
	Generally 'Play space' refers to areas within a landscape of which the primary function is to provide play value for children	Play spaces are to be multi functional and cater to a variety of age groups and abilities. Play spaces are key to the activation, education and livability of the development and should embody the thematic components of each precinct.	<p>Comply with all relevant Australian Standards</p> <p>Play spaces are to be designed to encourage a variety of sensory experiences and will incorporate various play opportunities including:</p> <ul style="list-style-type: none"> <li>- active / physical play</li> <li>- cognitive play</li> <li>- social play</li> </ul> <p>Equal opportunity for access should be considered in the design and location of play spaces.</p> <p>Play spaces should provide risk and challenge, however are safe and free of hazards.</p> <p>Play spaces are to be located a minimum of 8m away from roads and water bodies.</p> <p>Both custom and off-the-shelf play equipment may be included in a play space</p> <p>Locate play spaces to ensure adequate shade provision. Design to minimise the necessity for solid or tensile shade structures where possible</p> <p>Play spaces to be designed to accommodate a variety of age groups. However consideration to be given to ensuring sufficient separation between user groups to avoid conflicts.</p> <p>Preference is to be given to washed play sand and play mulch over wet-pour rubber soft fall</p> <p>CPTED principles to be considered throughout the design</p> <p>Maintenance and emergency services access to play space areas should be incorporated into the placement of play space areas</p>		



ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
4.0	Public Art				
	<p>'Public Art' refers to artworks within the public realm, including but not limited to:</p> <ul style="list-style-type: none"> <li>- Sculptures</li> <li>- Lighting Installations</li> <li>- Temporary interventions</li> <li>- Way Finding</li> <li>- Landmark Artworks</li> <li>- Landscape Art</li> <li>- Built form interventions</li> <li>- Gateway Icons</li> <li>- Interpretative artworks</li> <li>- Heritage Markers</li> <li>- Way Finding</li> </ul>	<p>Public Artworks are to be designed to express the cultural and historical past of the site, specifically highlighting areas of interest as well as helping form precincts within the development.</p> <p>Public art can be used as a mechanism for educating and way finding, and enhance the overall cultural aspect of the development.</p>	Refer to Appendix A: Place Partners document 'Place Making Strategy for guidelines.		
			All artworks should comply with Australian Standards		
			All artworks should be designed to encourage a variety of sensory experiences		
			All artworks should be designed to promote the historical, social and cultural context of the site		
			All artworks should contribute to creating a sense of place within the various precincts as well as specific areas of interest		
			Should have area lighting to the appropriate standards. Refer to Item 2.0: Lighting for further information		
			Ensure universal access is accommodated where required.		
			Access for maintenance is considered		
		All sculptures to be constructed shall obtain a Certificate of Design Compliance by an independent registered building surveyor prior to lodging a building permit application			



# GENERAL SPECIFICATION

ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
5.0	Signage				
	Signage' refers to all permanent and temporary within the development, including but not limited to: - Way Finding - Interpretive signage - Advertising - Marketing	Signage is to be designed in such as way that it assists with the functionality of the development, both internally and the broader area ie Fremantle, Kwinana, Port Coogee	All signage should comply with the appropriate standards		
			Signage for advertising purposes shall be of a temporary nature and subject to planning approval		
			Ensure that potential vandalism issues are addressed to minimise on-going maintenance costs		
			Materials proposed shall be durable and hard-wearing, sustainable and readily available from local sources		
6.0	Structures				
	Generally  Structures refer to all vertical built form elements within the public realm	Structures	Comply with all relevant Australian Standards		
			All structures to be constructed shall obtain a Certificate of Design Compliance by an independent registered building surveyor prior to lodging a building permit application		
			Materials proposed for use in structures shall be durable and hard-wearing, sustainable and readily available from local sources		
			Ensure siting of structures considers: - universal access - views to and from the structure - servicing requirements		
			Structures are to incorporate the character intent of the precinct		
			Ensure structures allow for all weather conditions		
			Incorporate 3phase power connection and water connection into each shelter		



ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
7.0	Surface Treatments (Hard)				
	Generally		Comply with all relevant Australian Standards		
			Adhere to the themes, colours and materials as indicated in this document		
			Provide high quality functionality without compromising the aesthetic standards required		
			All paved surfaces are to be graded to drain to turf and planting areas		
			Paths are generally to be located to accommodate natural pedestrian desired lines of travel		
			All concrete, asphalt and paving within the public realm shall be designed to be trafficable by maintenance vehicles		
			Paving areas and pedestrian paths shall be a minimum width of 1500mm. Designated dual-use (pedestrian and cyclist) paths shall be a minimum width of 3500mm.		
			Loose granular surfaces are not supported for pedestrian areas, unless stabilised		
			Be cost effective in supply, installation and ongoing maintenance		
			Ensure liaison with infrastructure engineers to minimise conflicts between services and paved areas		
			Transitions between precincts to be based on the design rational establishes in this document		



# GENERAL SPECIFICATION

ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
8.0	Surface Treatments (Soft)				
	Generally Soft surface treatments refers to all trees, shrubs and grass surfaces that form part of the public realm	The softworks elements of the project have been designed to ensure a distinctive and coherent sense of place, character and image for the Cockburn Coast. The provision of a sustainable and high integrity soft landscape is critical to the definition of the project. In this regard emphasis has been placed on the use of climatically appropriate species that respond to the micro-climate conditions produced by the development and provide a high level of amenity within the public realm.	<p>Adhere to the themes and aspirations as indicated in parts B and C of this document</p> <p>Ensure liaison is undertaken with services, alignments/pits, crossover locations and lighting</p> <p>Ensure existing vegetation to be retained is protected and managed during construction</p> <p>Review the availability of plant stock early in each development phase and assess the need for contract growing/per-ordering</p> <p>Ensure planting does not compromise vehicle sight lines or pedestrian/cyclist safety</p> <p>Ensure maintenance requirements are considered within the design</p> <p>Ensure planting is designed to minimise water consumption where possible</p> <p>Salvaging of materials unable to be retained during construction is preferred</p> <p>Crime Prevention Through Environmental Design (CPTED) principals shall be considered in the design</p>		





ITEM	FUNCTION	DESIGN INTENT	CONSIDERATIONS/OBJECTIVES	ADDRESSED	
				Y	N
9.0	Water Elements				
	Generally	The design of water elements needs to be considered on a location-by-location basis. Potential water features and drainage areas have been identified for a number of locations within the various precincts. These elements are critical to the character, ecology and activation of the spaces.	<p>Comply with all relevant Australian Standards</p> <p>Ensure filtration/aeration/circulation of water is adequate to provide an acceptable level of water quality for the proposed purpose</p> <p>Ensure gradients into water bodies (permanent and seasonal) are at 1:4 for a minimum of 3 metres</p> <p>Ensure water depths do not exceed 400mm at edges for a minimum of 1 metre at edges</p> <p>Ensure water bodies have adequate balustrading to address safety issues where the above requirements of water edge depths and slope gradients into water bodies cannot be achieved</p> <p>Ensure pump and filtration systems are adequately housed to reduce noise issues (to Australian Standards) and are visually integrated into the surrounding landscape</p> <p>Provide edge treatment appropriate to use, which provides highest quality aesthetic outcome</p> <p>Ensure that potential vandalism issues are addressed to minimise on-going maintenance costs</p> <p>Ensure best practice Water Sensitive Urban Design principles are embedded in all design outcomes</p>		



# SELECTIONS

## 2.0 Selections - Hilltop

Vision - Contained - Shared - Prospect

The Hilltop Precinct will draw on the industrial and military heritage of the site to inform how the spaces are created and feed into the adjacent landscape precincts. It will look to utilise views towards the west to maximise a response from the proposed building developments.

Other key ideas include:

- Prospect - maximise the broad views both from and into the precinct. Create sheltered intimate refuges as counterpoint
- Landscape Art as integrated landmarks.
- Contained and shared spaces that offer a variety of public spaces – passive, reflective, interpretive
- Military and industrial materiality, formal setting (planted avenues) contrasted with soft surfaces and comfort.

## Furniture and Fixtures

### BBQ

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?			YES / NO		

### DESIGN INTENT

- To provide BBQ's that are in keeping with the thematic character of the precinct of sub-precinct

### CONSIDERATIONS/OBJECTIVES

- Incorporate the character intent of the precinct/sub-precinct within the BBQ selection or design
- Ensure BBQ material is of an appropriate durability for location
- Consider mitigating 'hot to touch' surfaces
- Consider lockability of access doors
- Consider location to roads/accessibility/potential views back to ocean

### MATERIAL OPTIONS

- Exposed Concrete
- Stone
- Tile
- Steel

### FINISH

- Class 2 finish Concrete
- Rough cut/sawn
- Glazed
- Galvanised/Stainless Steel

### Balustrade

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?			YES / NO		

### DESIGN INTENT

- To provide balustrades that are robust, functional and easily maintained.

### CONSIDERATIONS/OBJECTIVES

- Incorporate the character intent of the precinct/sub-precinct within the balustrade design
- Ensure balustrade material is of an appropriate durability for location
- Finish to all balustrade systems to be minimum standard Hot dip galvanised steel.

### MATERIAL OPTIONS

- Timber
- Steel

### FINISH

- Oiled
- Powder coat
- Hot Dip Galvanised
- Stainless Steel

## Bike Racks

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?			YES / NO		

typical bike racks for:

- ♦ emplacement crescent
- ♦ military park
- ♦ hill top park
- ♦ green link 1
- ♦ green link 2



### DESIGN INTENT

- To provide bike racks which are functional and easily maintained
- To provide an urban element that has a sculptural approach and contributes to the thematic character of the precinct or sub-precinct

typical bike racks for:

- ♦ green link 1
- ♦ green link 2



### CONSIDERATIONS/OBJECTIVES

- Assess the location of bike rack to the following criteria:
- Proposed planning uses
- Destinations
- Access
- Material selections, alignment and form should reflect the character of the precinct/sub-precinct

### MATERIAL OPTIONS

- Steel

### FINISH

- Powder coat
- Hot Dip Galvanised
- Corten Steel



## Bin Surrounds

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?			YES / NO		

### DESIGN INTENT

- Provide bin surrounds to meet the requirement of the management authority
- Utilise colour variation to signify changes in precinct

### CONSIDERATIONS/OBJECTIVES

Assess the location of bins to the following criteria:

- Accessibility for servicing
- Located within main circulation associated with seating/nodal areas
- Site away from seating areas
- Bins adjacent to paths to be located in hardstand areas. Minimum hardstand dimensions to be 500 x 500mm
- Ensure adequate allowance is made for recycling collection/sorting as per local authorities requirements.

### MATERIAL OPTIONS

- Steel

### FINISH

- Powder Coat
- Painted Steel
- Corten Steel



# SELECTIONS



typical bin surrounds for:  
 ♦ emplacement crescent  
 ♦ emplacement local streets



typical bin surrounds for:  
 ♦ military park  
 ♦ hill top park  
 ♦ green link 1  
 ♦ green link 2

## Bollard

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?			YES / NO		

### DESIGN INTENT

- To provide an attractive bollard to be installed into tree wells within road reserves
- To contribute to the character of the precinct through material, colour and design resolution

### CONSIDERATIONS/OBJECTIVES

- Bollards to be located to protect trees in road reserves and to have reflectors to Main Roads WA standards

### MATERIAL OPTIONS

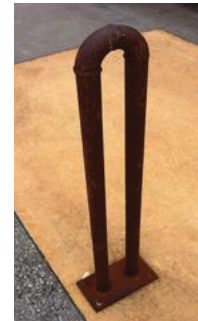
- Steel
- Timber

### FINISH

- Powder coat
- Galvanised
- Painted Steel
- Painted
- Oiled



typical bollard for:  
 ♦ military park



typical bollard for:  
 ♦ green link 1



typical bollard for:  
 ♦ hill top park  
 ♦ green link 2



### Drinking Fountain

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?			YES / NO		



typical drink fountain for:

- ♦ military park
- ♦ hill top park
- ♦ green link 1
- ♦ green link 2

#### DESIGN INTENT

- Provide a contemporary drinking fountain that contributes to the precinct character and thematic ideas

#### CONSIDERATIONS/OBJECTIVES

Drinking Fountains to be located as follows:

- Locate on major circulation routes and at key nodal locations
- Locate where practical to access potable water
- Locate to ensure accessibility outcomes are achieved
- Ensure pet drinking options are incorporated
- Minimise maintenance and vandalism opportunities
- Filtered water option preferable
- Water bottle fill up option preferable

#### MATERIAL OPTIONS

- Steel

#### FINISH

- Powder coat
- Galvanised

### Flag Poles

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓			
ADDRESSED?			YES / NO		

#### DESIGN INTENT

- To provide an attractive and functional pole fit for intended purpose

#### CONSIDERATIONS/OBJECTIVES

- 

#### MATERIAL OPTIONS

- Steel

#### FINISH

- polished stainless steel



# SELECTIONS

## Handrails

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?			YES / NO		

### DESIGN INTENT

- To provide an attractive and functional handrail that is robust and that contributes to the character of the precinct through material selection

### CONSIDERATIONS/OBJECTIVES

- Incorporate the character intent of the precinct/sub-precinct within the handrail design
- Ensure balustrade material is of an appropriate durability for location
- Finish to all handrail systems to be minimum standard Hot dip galvanised steel.
- Handrail should have strong aesthetic correlation to balustrade design

### MATERIAL OPTIONS

- Steel
- Timber

### FINISH

- Powder coat
- Hot Dip Galvanised
- Stainless steel
- Oiled

## Planter Boxes

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?			YES / NO		

### DESIGN INTENT

- To contribute to the character of the precinct through material selection and utilise colour variations

### CONSIDERATIONS/OBJECTIVES

- Consider form of existing historical features of the precinct, i.e. gun plinth, and work with similar forms
- Ensure material is of an appropriate durability for location

### MATERIAL OPTIONS

- Steel/concrete

### FINISH

- rough texture



## Seats and Tables

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?			YES / NO		

### DESIGN INTENT

- To contribute to the character of the precinct through material selection whilst being robust with a long life cycle

### CONSIDERATIONS/OBJECTIVES

- Incorporate the character intent of the precinct/sub-precinct within the furniture selection
- Ensure seats and table material is of an appropriate durability for location
- Should have strong correlation to benches and streetscape furniture suite

### MATERIAL OPTIONS

- Steel
- Timber
- Concrete

### FINISH

- Hot Dip Galvanised steel
- Corten Steel
- Painted Steel
- Powder Coat
- Oiled
- Formed



typical table and bench seat for:

- ♦ military park
- ♦ hill top park
- ♦ green link 1
- ♦ green link 2



typical bench seat for:

- ♦ emplacement crescent
- ♦ emplacement local street
- ♦ military park
- ♦ hill top park
- ♦ green link 1
- ♦ green link 2



# SELECTIONS

## Skate deterrents

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?			YES / NO		

### DESIGN INTENT

- To provide an attractive and robust solution to protecting furniture from skate and BMX vandalism

### CONSIDERATIONS/OBJECTIVES

- Ensure material is robust.
- Ensure visual appearance does not dominate custom furniture design.
- Opt for integral option rather than fixed option

### MATERIAL OPTIONS

- Steel

### FINISH

- stainless steel/iron
- 



integral skate deterrent

## Tree Grates

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓		✓	✓
ADDRESSED?			YES / NO		

### DESIGN INTENT

- To contribute to the character of the precinct through customisation, patterning etc.

### CONSIDERATIONS/OBJECTIVES

- Minimise maintenance and vandalism opportunities.
- Allow for an appropriate amount of permeability in grates to allow water permeation.
- Allow for segmental design to allow for maturation of tree specimen.
- Ensure finish meets trafficable and slip rating requirements
- Ensure irrigation is integrated and seamless
- Allow for root control barriers in accordance with the City's requirements.

### MATERIAL OPTIONS

- Steel

### FINISH

- Corten steel
- Iron



typical custom tree grates with specific patterning depending on precinct and theming area





Service Pit Covers

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
✓	✓	✓	✓	✓	✓
ADDRESSED?			YES / NO		

DESIGN INTENT

- To be well presented, aligned with paving treatment and in keeping with industrial nature of the precinct

CONSIDERATIONS/OBJECTIVES

- Must meet vehicle loading requirements

MATERIAL OPTIONS

- Steel

FINISH

- Iron

Lighting

Street Lighting

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
✓	✓				
ADDRESSED?			YES / NO		

DESIGN INTENT

- To be well presented, easily maintained and discrete on the street

CONSIDERATIONS/OBJECTIVES

- Must meet local authorities requirements for performance and maintenance
- Single outreach, tapered light pole with oval shaped light encasing and LED light fixture
- Street lighting including suitable illumination of traffic management treatments, to the newly created subdivision is to be provided in accordance with Western Power Corporation specification for illumination levels, materials and installation. Lighting design shall be in accordance with the latest edition of Australian Standards AS 1158-2005 and light pole types, colours and light fixtures to be similar and consistent with the adjoining development and approved separately by the City.
- Council is moving towards sustainable street lighting, the developer will therefore be encouraged to liaise with Western Power to use fluorescent street

lighting, compact fluorescent (CFL) street lighting to reduce energy and green house gas emissions.

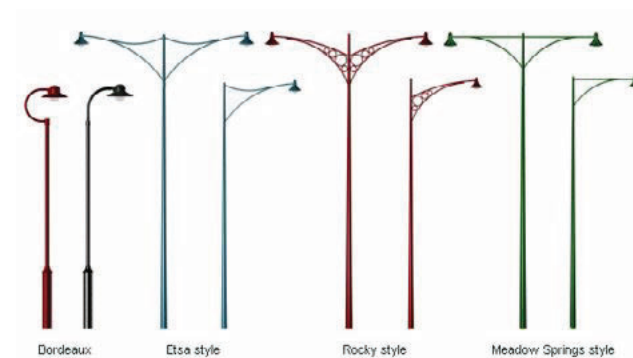
- Illumination is not to spill beyond the front building line of the adjacent properties unless required for security purposes. development and approved separately by the City.
- Uplighting on streetscapes is not supported.
- Developer is to refer to the Local Authority Lighting Policy for further guidelines.
- All street lights to be Western Power standards.

MATERIAL OPTIONS

- Steel

FINISH

- Galvanised Steel
- Painted Steel
- Powder Coat



typical street lighting for:

- ♦ emplacement crescent
- ♦ emplacement local street



# SELECTIONS

## POS Lighting

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?			YES / NO		

### DESIGN INTENT

- To be well presented, easily maintained, decorative and enhance the themes of the precinct or sub-precinct

### CONSIDERATIONS/OBJECTIVES

- Must meet local authorities requirements for performance and maintenance
- Single outreach, tapered light pole with oval shaped light encasing and LED light fixture
- Flush uplighting at street edge of POS to create distinct entry to parks
- Single outreach, tapered light pole with oval shaped light encasing and LED light fixture. Solar lighting to be considered
- POS lighting to be lit until 11pm each night for activation and security purposes
- Consider powder coating poles to give each POS a distinct character
- Bollard lighting not to be used for maintenance and performance reasons

- lighting, compact fluorescent (CFL) street lighting to reduce energy and green house gas emissions.
- Illumination is not to spill beyond the front building line of the adjacent properties unless required for security purposes.
- Uplighting in POS is general not supported, however consideration will be given to feature uplighting on submission of lighting designs.
- Developer is to refer to the Local Authority Lighting Policy for further guidelines.
- Designers must refer to the City of Cockburn - Open spaces Lighting Guidelines for additional information.

### MATERIAL OPTIONS

- Steel

### FINISH

- Galvanised Steel with powder coat option



typical street lighting for:

- ♦ military park
- ♦ hill top park
- ♦ green link 1
- ♦ green link 2

## Play Elements

### Adventure Play

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓		✓	
ADDRESSED?			YES / NO		

### DESIGN INTENT

- To create play environments that blend natural materials, features, and indigenous vegetation with creative landforms to create purposely complex interplays of natural, environmental objects in ways that challenge and fascinate and educate children
- To enhance the overall themes of the precinct or sub-precinct

### CONSIDERATIONS/OBJECTIVES

- To be located in key positions relative to pedestrian access, vehicles networks and POS location
- Ensure playground is integrated with sheltered areas that protect from sun and rain
- The design of playgrounds should minimise maintenance and vandalism opportunities
- Design of the playground should strongly reflect the themes and character of the precinct
- All playgrounds should have appropriate structural engineering sign off
- Meet Australian Standards
- Explore opportunities to integrate artwork, seating,

- bbq's, bins, picnic settings etc.
- Play components may include earth shapes (sculptures), environmental art, indigenous vegetation, boulders or other rock structures, dirt and sand, natural fences (stone, willow, wooden), textured pathways, and natural water features
  - Equal opportunity for access should be considered in the design and location of play spaces.

**MATERIAL OPTIONS**

- Timber
- Steel
- Concrete
- Stone
- Found objects

**FINISH**

- Rustic



**Playgrounds**

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
				✓	
ADDRESSED?			YES / NO		

**DESIGN INTENT**

- To create play environments that promote community engagement, interaction, education, development of physical coordination, strength, and flexibility, as well as providing recreation and enjoyment
- To enhance the overall themes of the precinct or sub-precinct

**CONSIDERATIONS/OBJECTIVES**

- To be located in key positions relative to pedestrian access, vehicles networks and POS location
- Ensure playground is integrated with sheltered areas that protect from sun and rain
- The design of playgrounds should minimise maintenance and vandalism opportunities
- Design of the playground should strongly reflect the themes and character of the precinct
- All playgrounds should have appropriate structural engineering sign off
- Should be meet Australian Standards
- Should explore opportunities to integrate artwork, seating, bbq's, bins, picnic settings etc.

- Should consider proximity and integration of additional elements such as exercise equipment, sports facilities (soccer pitches, half basketball courts etc) to further promote a community feel
- Equal opportunity for access should be considered in the design and location of play spaces.

**MATERIAL OPTIONS**

- Sustainable plastics
- Steel
- Concrete
- Stone
- Found objects

**FINISH**

- As per manufacturers specifications





# SELECTIONS

## Public Art Public Art

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
			✓	✓	✓
ADDRESSED?			YES / NO		

### DESIGN INTENT

- The Public Art Strategy shall set out the framework to enhance precinct through the appropriate integration of public art within the Development Area by detailing the following:
  - (i) Influences for public art and possible public art themes for each precinct;
  - (ii) Indicative locations for artworks where they will enhance the amenity and the interpretation of the public realm, contribute to way-finding, and enhance the sense of place;
  - (iii) Management arrangements and responsibilities for public art

### CONSIDERATIONS/OBJECTIVES

- Should consider covering a broad range of options for artists to interact with the built and natural environment across the Cockburn Coast development.
- This includes options for the integration of artworks into the fabric of buildings and urban infrastructure of all types.

- Developing integrated options for artworks for building facades, streetscape elements and road infrastructure can provide a cost effective option with the artwork funds value adding to the capital works budget.
- Integrated artworks should result from collaboration between artist and architect, urban designer or landscape architect.
- The approach to stand alone projects should have a strong focus on the quality of the artist's concept and sense of place. Such works as sculptural features and landmarks can provide significant focal points and precinct identifiers.
- In addition to the direct interpretation of a place and its history through interpretive signage and commemorative features, there is a role for artworks that creatively explore a place's past and the stories of a community. Artists can be commissioned to create works that, while not addressing history in a didactic form, explore themes of relevance to local histories.
- Consultation required with the Cockburn Aboriginal Reference Group for all major artworks.
- Consultation required with the Cockburn Reference Group for all major artworks.
- Ensure artworks are in keeping with heritage items and 'add value' to its location and the precinct as a whole.
- Ensure materials are sustainable and maximise opportunities to recycle/up cycle where possible.
- Ensure local artists are engaged where appropriate

### MATERIAL OPTIONS

- Refer to 'Cockburn Coast Public Art Strategy' by Place Partners, March 2012 for exemplars and additional information.

### FINISH

- Refer to 'Cockburn Coast Public Art Strategy' by Place Partners, March 2012 for exemplars and additional information.



## Signage

### Street Signage

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
✓	✓				
ADDRESSED?			YES / NO		

#### DESIGN INTENT

- To provide effective street signage that meets the requirements of the local authority

#### CONSIDERATIONS/OBJECTIVES

- Street name plates be constructed using 200mm blades with 100mm or 150mm letters, coloured with blue letters on a reflective white background and, where practical, incorporating 50mm blue house numbers and Council's Corporate Logo (as per City of Cockburn Specification Policy).
- Minimise clutter
- Integrate way finding and interpretive artwork into signage strategy

#### MATERIAL OPTIONS

- Steel

#### FINISH

- As required

### POS signage

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?			YES / NO		

#### DESIGN INTENT

- To provide effective signage to each POS that clearly defines and identifies the POS and its location within the precinct.

#### CONSIDERATIONS/OBJECTIVES

- The subdivision developer shall furnish and install a park name sign for each new POS site developed by the subdivision process.
- The City has resolved in its Aboriginal Reconciliation Action Plan to list an Aboriginal/English dictionary the reverse side of its parks name sign.
- Minimise clutter
- Integrate way finding and interpretive artwork into signage strategy

#### MATERIAL OPTIONS

- Timber
- Steel
- Concrete

#### FINISH



# SELECTIONS

## Structures

### Shelters

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?			YES / NO		

#### DESIGN INTENT

- To provide shelters that are unique to the precinct or sub-precinct and enhance the overall character of the precinct
- To provide public amenity that contributes to the activation of Public Open Space

#### CONSIDERATIONS/OBJECTIVES

- To be located in key positions relative to pedestrian access, vehicles networks and POS location
- Ensure shelter materials are of an appropriate durability for location
- The design of shelters should minimise maintenance and vandalism opportunities
- Design of the shelter should strongly reflect the themes and character of the precinct
- All shelters should have appropriate structural engineering sign off
- Should be meet Australian Standards
- Should explore opportunities to integrate artwork, seating, bbq's, bins, picnic settings etc.

#### MATERIAL OPTIONS

- Timber
- Steel
- Concrete

#### FINISH

- Rustic



### Walls

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?			YES / NO		

#### DESIGN INTENT

- To reflect the strong heritage of the site
- To reflect the existing materiality of the site
- Theming and character of the precinct

#### CONSIDERATIONS/OBJECTIVES

- All walls to have appropriate structural engineering sign off
- Ensure wall materials are of an appropriate durability for location
- Should explore opportunities to integrate seating, wall mounted bins, signage and artwork
- Should be meet Australian Standards
- Consider and adopt skate-able edges to walls.

#### MATERIAL OPTIONS

- Concrete
- Stone
- Gabion
- Corten Steel

#### FINISH

- Varying

HILLTOP PRECINCT WALL TYPES



wall material\_  
formed concrete walls



wall material\_  
gabion walls



wall material\_  
corten steel cladding

Stairs

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?			YES / NO		

DESIGN INTENT

- To reflect the strong heritage of the site
- To reflect the existing materiality of the site
- To be located where views are maximised back to ocean

CONSIDERATIONS/OBJECTIVES

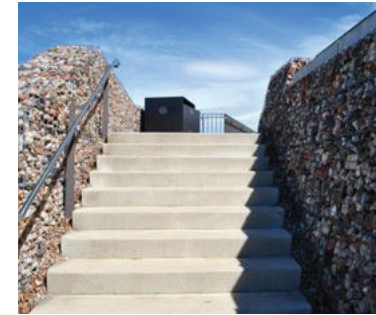
- All stairs to have appropriate structural engineering sign off
- Ensure stair materials are of an appropriate durability for location
- Should explore opportunities to integrate seating, signage and artwork
- Should be meet Australian Standards
- Should have varying degrees of formality, i.e. stone clad stairs vs. informal timber and stabilised gravel stairs

MATERIAL OPTIONS

- Timber
- Steel
- Concrete

FINISH

- Oiled
- Galvanised
- formed





# SELECTIONS

## Bridges/Boardwalks

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
				✓	✓
ADDRESSED?			YES / NO		

### MATERIAL OPTIONS

- Timber
- Steel and steel meshes
- Composite Timbers

### FINISH

- Oiled
- Galvanised

### DESIGN INTENT

- To enhance the overall character of the precinct or sub-precinct
- Should provide passage through drainage basins and maximise opportunities to pause and ponder

### CONSIDERATIONS/OBJECTIVES

- All bridges to have appropriate structural engineering sign off
- Ensure bridge materials are of an appropriate durability for location
- Should explore opportunities to integrate seating, signage and artwork, shelters
- Meet Australian Standards
- Should take interesting paths through site rather than be lineal and straight
- Should explore use of sustainable materials
- Incorporation interpretive/information signage where appropriate







## Surface Treatments (Hard)

### Edge restraints

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?			YES / NO		

#### DESIGN INTENT

- To provide a robust and durable solution to separating surfaces varying in materiality

#### CONSIDERATIONS/OBJECTIVES

- Ensure materials are of an appropriate durability for location
- Should be meet Australian Standards
- Should minimise maintenance and vandalism opportunities
- Should explore use of sustainable materials
- Should explore opportunities to be custom designed in key locations to add to the overall character of the precinct or sub-precinct

#### MATERIAL OPTIONS

- Concrete
- Steel

#### FINISH

### Paving

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
✓	✓	✓	✓	✓	✓
ADDRESSED?			YES / NO		

#### DESIGN INTENT

- To provide adequate surface finishes that meet the requirements of varying uses such as pedestrian activity, cycleways and vehicles
- Should be of varying materials, finishes and patterns to establish streetscape and POS hierarchy's within the precinct

#### CONSIDERATIONS/OBJECTIVES

- Ensure materials are of an appropriate durability for location
- Should be meet Australian Standards
- Should minimise maintenance and vandalism opportunities
- Should explore use of sustainable materials
- Should explore opportunities to integrate artwork
- Should clearly establish and help delineate between differing uses, i.e. cycle path vs. pedestrian path
- Should be sufficiently engineered to withstand service vehicle loadings
- Should meet the appropriate slip ratings

#### MATERIAL OPTIONS

- Poured concrete
- Decorative poured concrete
- Decorative concrete pavers
- Liquid limestone
- Red asphalt
- Stabilised gravel

#### FINISH

- Broom
- Washed aggregate
- Milled
- Compacted



# SELECTIONS

## EMPLACEMENT CRESENT



shared path\_  
brushed concrete

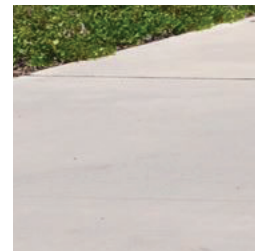


road surface\_  
asphalt



parking bays\_  
red asphalt

## HILLTOP LOCAL STREET



shared path\_  
brushed concrete



road surface\_  
asphalt

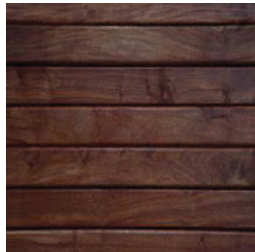


parking bays\_  
red asphalt

## MILITARY PARK



shared path\_  
washed aggregate concrete



shared path\_  
timber boardwalks

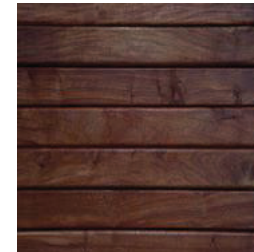


surface treatment\_  
stabilised gravel

## HILL TOP PARK



shared path\_  
washed aggregate concrete



shared path\_  
timber boardwalks

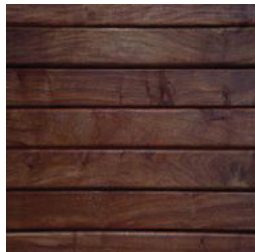


surface treatment\_  
stabilised gravel

## GREEN LINK 1



shared path\_  
washed aggregate  
concrete



shared path\_  
timber boardwalks

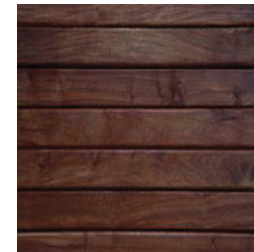


surface treatment\_  
stabilised gravel

## GREEN LINK 2



shared path\_  
washed aggregate  
concrete



shared path\_  
timber boardwalks



surface treatment\_  
stabilised gravel



## Surface Treatments (Soft)

### Turf

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?			YES / NO		

#### DESIGN INTENT

- To provide a low cost surface treatment to POS areas which allows activity to occur

#### CONSIDERATIONS/OBJECTIVES

- Should be adequately irrigated
- Should be meet Australian Standards

#### MATERIAL OPTIONS FINISH

- Concrete
- Steel

### Mulch

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
✓	✓	✓	✓	✓	✓
ADDRESSED?			YES / NO		

#### DESIGN INTENT

- To provide an organic matter that promotes growth in planted areas

#### CONSIDERATIONS/OBJECTIVES

- Should be meet Australian Standards

#### MATERIAL OPTIONS FINISH

- Wood Chip
- Granitic sands

### Shrub Planting

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
✓	✓	✓	✓	✓	✓
ADDRESSED?			YES / NO		

#### DESIGN INTENT

- To provide planted areas that promote flora and fauna biodiversity
- Planting palettes should enhance the character of the precinct of sub-precinct

#### CONSIDERATIONS/OBJECTIVES

- Should be meet Australian Standards
- Should minimise maintenance and vandalism opportunities
- Should assist in surveillance within POS areas, i.e. does not interfere with sight lines through POS
- Should consider interface with property boundaries and streetscapes
- Should be adequately irrigated and promote Water Sensitive Urban Design principles

#### MATERIAL OPTIONS FINISH

- Mix of native and exotic species suited to conditions



# SELECTIONS

## Tree Planting

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
✓	✓	✓	✓	✓	✓
ADDRESSED?			YES / NO		

### DESIGN INTENT

- To provide trees that promote flora and fauna biodiversity
- Tree planting palettes should enhance the character of the precinct of sub-precinct

### CONSIDERATIONS/OBJECTIVES

- Should be meet Australian Standards for planting
- Should minimise maintenance
- Should assist in surveillance within POS areas, i.e. does not interfere with sight lines through POS
- Should consider interface with property boundaries and streetscapes
- Should be adequately irrigated and promote Water Sensitive Urban Design principles

### MATERIAL OPTIONS FINISH

- Mix of native and exotic species suited to conditions

## Additional Drainage Basins

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
		✓	✓	✓	✓
ADDRESSED?			YES / NO		

### DESIGN INTENT

- To provide locations for water inundation that assist with the development functionality with a naturalistic aesthetic, and helps promote flora and fauna diversity.

### CONSIDERATIONS/OBJECTIVES

- Public health and safety
- Should be meet Australian Standards
- Consider pedestrian networks
- Ensure planting selections are able to withstand water inundation
- Ensure planting selections promote diversity and encourage fauna habitation.
- Ensure design promotes the themes of the precinct or sub-precinct
- Ensure adequately lit, using sustainable lighting sources, to allow night activation
- Ensure standing/still water is filtrated
- Consider water circulation





Swales

EMPLACEMENT CRESENT	LOCAL STREET	MILITARY PARK	HILL TOP PARK	GREEN LINK 1	GREEN LINK 2
✓	✓	✓	✓	✓	✓
ADDRESSED?			YES / NO		



DESIGN INTENT

- To provide locations for water inundation that assist with the development functionality with a naturalistic aesthetic, and helps promote flora and fauna diversity.

CONSIDERATIONS/OBJECTIVES

- Public health and safety
- Should be meet Australian Standards
- Consider pedestrian networks
- Ensure planting selections are able to withstand water inundation
- Ensure planting selections promote diversity and encourage fauna habitation.
- Ensure design promotes the themes of the precinct or sub-precinct
- Ensure adequately lit, using sustainable lighting sources, to allow night activation
- Ensure standing/still water is filtrated
- Consider water circulation

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