

**DC Submission For
Pedestrian Overhead Bridge, Covered
Linkway**

NParks

CONTENTS

PART 1 INFORMATION REQUIREMENTS

1. Plans, Application Form and Checklist

A registered architect / professional engineer is required to submit and sign all layers of drawing digitally, a completed NParks' application form, relevant checklist and enclose the letter of authorization from the developer :

The plans should comprise of :

- (a) Key and location plans of the development site (scale 1 : 10000 or 1 : 5000) with access to the site from a street or road
- (b) Site plan (scale 1 : 500, 1 : 200 or 1 : 100)
- (c) Location of the proposed pedestrian overhead bridge/covered linkway
- (d) Cross section of proposed pedestrian overhead bridge and troughs (scale 1:50 or 1:100)
- (e) Cross section of proposed covered linkway (scale 1:50 or 1:100)
- (f) Address of the development site (if applicable)

2. Site Information

		Layout Plan	Cross Sectional Drawing
(a)	Alignment of proposed overhead bridge, the spans of the proposed planting troughs and schematic engineering drawing with dimensions of the pedestrian overhead bridge and foundation.	Indicate	
(b)	Alignment of proposed covered linkway and schematic engineering drawing with dimensions of the covered linkway.	Indicate	
(c)	Road reserve lines of existing / proposed roads verged in red	Indicate	Indicate
(d)	Location and dimensions of carriageway, roadside drain, existing/proposed roadside tree planting verge (coloured green), service verge (coloured green) and footpath.	Indicate	
(e)	Location of existing and proposed lamp posts, OG boxes, SCV boxes, TAS manholes, sewer lines and manholes, electrical posts, fire hydrants, traffic lights, authorised signs and etc.	Indicate	
(f)	Locations of proposed fire engine hardstandings (if applicable)	Indicate	
(g)	Location of proposed water tanker lay-by, as approved at pre-consultation stage	Indicate	
(h)	Planting beds beneath pedestrian overhead bridge staircases. The beds are to be coloured on plan	Indicate	
(i)	Section drawing should show: <ul style="list-style-type: none"> • Boundary line, road reserve line, carriageway, roadside drain, tree planting verge, service verge and footpath with dimensions. • Existing carriageway, roadside drain, tree planting verge and footpath to be demolished in yellow broken line. • Details of footings and the clearance from existing trees and roadside drain • Roof dimension and the clearance from existing trees • Depth and types of existing/proposed underground services 	Indicate Indicate Indicate Indicate Indicate	Indicate Indicate Indicate Indicate

3. Existing Roadside Trees / Palms / Shrubs

		Layout Plan	Cross Sectional Drawing
(a)	Trees / palms / shrubs abutting the site boundary and up to 10m on both sides of the boundary are shown on plan:	Indicate	

- species
- girth (for tree/ single-stem palm; measured 1.0m from the ground)
- height (if available) and number of cluster palm / shrub

		Layout Plan	Cross Sectional Drawing
(b)	All trees / palms should be uniquely numbered and be consistent throughout the project. No prefix is to be attached.	Indicate	
(c)	Trees / palms should be indicated in Annex 1, 2 & 3. Photographs to be provided, if available.		

Note:

Refer to Annexes 4-1 to 4-4 on method of measuring girth of a tree/single-stem palm

		Layout Plan	Cross Sectional Drawing
(d)	The colour code for existing trees / palms / shrubs is as follows	Indicate	

Table 3d – Colour Code for existing trees/palms/shrubs

Status of existing trees/Palms / shrubs	Outline Colour
To be retained	Green
To be removed	Yellow
Removed without written approval	Red
Removed with written approval	*Yellow (indicate approval date in the tree schedule)
Non existence after inspection	Indicate a 'cross' on tree symbol

		Layout Plan	Cross Sectional Drawing
(e)	For existing trees / palms on footpath, the existing unpaved areas and loose paved PC slabs around the trees / palms are to be shown.	Indicate	

PART II Division 4A Regulatory Requirements

1 Retention of Roadside Trees / Palms

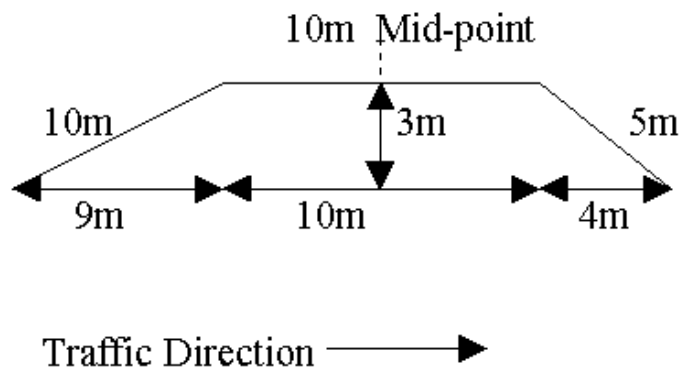
	Layout Plan	Cross Sectional / Detail Plan
Proposed roadside elements shall be constructed at minimum distances away from existing tree, as stipulated in Table 1. If there are constraints on design that require tree to be felled, approval has to be obtained from NParks.	Indicate	

Table 1 – Required clearance of proposed roadside elements from existing trees

Clause	Proposed Structures	Required clearance of object from existing :		
		Palm	Small to medium size tree	Large tree
1.1	Linkway/ pedestrian overhead bridge column footing	at least 1.0m	at least 1.5m	at least 2.5m
1.2	Linkway roof eaves to the lowest branching of a tree	at least 0.3m		
1.3	Roadside drain (from its external wall) and road kerb	at least 0.8m	at least 0.8m	at least 1.5m
1.4	Scupper pipe / drain	at least 1.0m	at least 1.5m	at least 2.5m
1.5	Lamp Post	at least 4.0m	at least 4.0m	at least 6.0m
1.6	OG box, TAS manhole, sewer line and manhole, electric post, fire hydrant and traffic light	at least 2.0m	at least 2.0m	at least 2.5m
1.7	Cement crossing (e.g. pushcart ramp for bin centre)	at least 1.5m		

2 Water Tanker Lay-by

		Layout Plan	Cross Sectional / Detail Plan
2.1	A lay-by of 23m long and 3m wide is to be provided for water tanker, unless there is a paved shoulder. (A letter from the authority indicating no objection for the use of paved area is attached)	Indicate	
2.2	Location of the water tanker lay-by has to be within a radius of 8m from the coupling point (at the column of the bridge or housed in a pit) to the mid- point of the lay-by.	Indicate	
2.3	Dimension of Water Tanker Lay-by :	Indicate	



Annex 3 Existing Roadside Trees / Palm / Shrubs

Abutting The Development Boundary And Up To A Distance Of 10m On Both Sides of Boundary

Serial No.	Tree / No.	Botanical Name of Trees / Single Stem Palms	Girth Size (m)		Trees proposed to remove		Trees proposed to retain		*Reasons for removal / retention
			=< 1.0m (a)	> 1.0m (b)	DC (c)	BP (d)	DC (e)	BP (f)	
Total Nos. of Trees / Single Stem Palms									

Serial No.	Palm / Shrub	Botanical Name of Cluster Palms and Shrubs	Height (m)	Nos	Trees proposed to remove		Trees proposed to retain		*Reasons for removal / retention
					DC (c)	BP (d)	DC (e)	BP(f)	
Total Nos. of Cluster Palms / Shrubs									

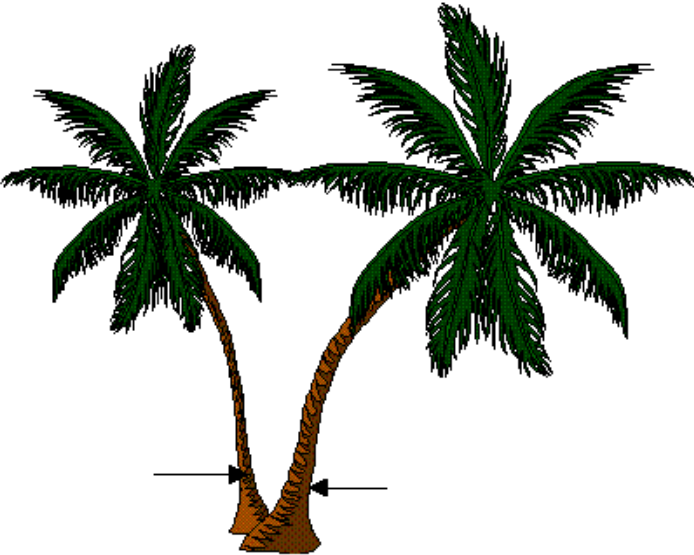
* Please refer to [Annex 3-1](#) for list of reasons

Annex 3-1 Reasons for Removal/Retention

Reasons for Removal		Reasons for Retention
main covered structure (ms)		good/rare species (gs) within the buffer zone (bz) uncovered structures (us) within road widening plot (wp)
Ancillary buildings		
e.g substation guard house bin centre	ss	
Outdoor recreational facilities		
e.g swimming pool tennis courts playground car park	ou	
Vehicular access		
driveway, fire engine access access to bin centre, substation footpath fire hardstanding area (fa)	va	
Other construction activities		
roadside drain, surface drain (dn) boundary wall (bw) retaining wall (rw) basement encroachment into green verges (bv) basement outside green verges (bo) construction (temp) activities (ca) sewer line & manhole (sw) soil profile change in height (sc)		
Health of tree		
strike by lightning, wind throw (sl) unhealthy (decay, rot) (uh) poor form (pf) hazard (hz)		

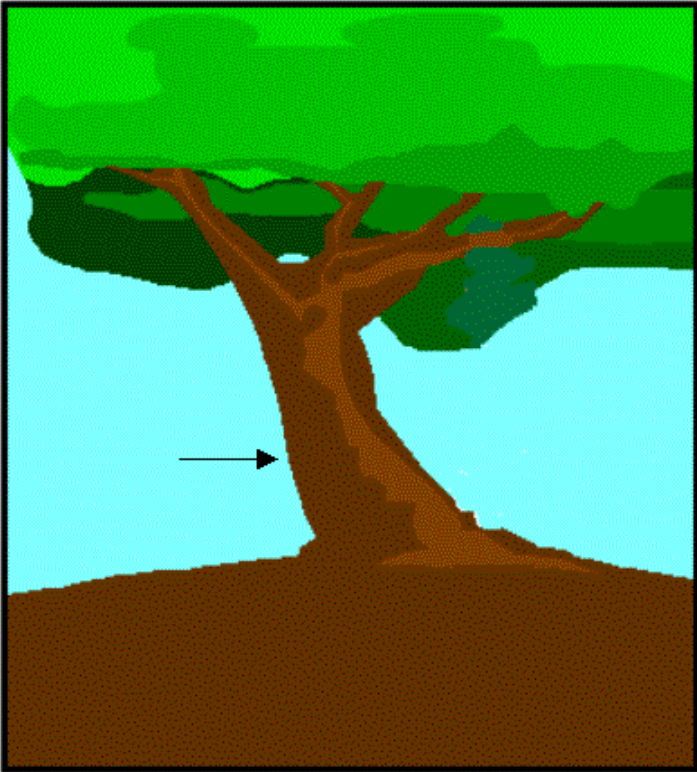
Annex 4-1 Girth Measurement for Multi-leader Tree (leaders sprout from collar)

For this type of multi-leader tree where the leaders sprout from the collar, measure the girth of each individual stem, and treat each stem as a separate tree. (arrowed)



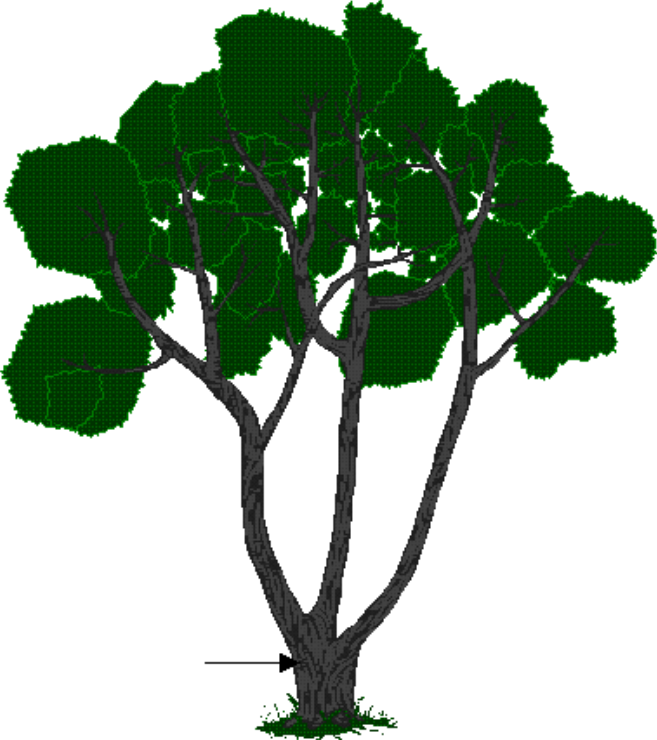
Annex 4-2 Girth Measurement for Buttressed Tree

For this type of buttressed tree, measure the girth at 0.5 metres height above the ground. (arrowed)



Annex 4-3 Girth Measurement for Multi-leader Tree (at a point between collar)

For this type of multi-leader tree, measure the girth at a point between the collar and 0.5 metres height above the ground. (arrowed)



Annex 4-4 Girth Measurement for Tree Growing On A Mound

For this type of tree growing on a mound, measure the 0.5 metres height above the ground next to the collar (arrowed), and not at the base of the mound.

