

**DC Submission For  
Conventional Housing Development With  
Open Space Provision**

**NParks**

**Contents**

## PART I 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) Address, lot and/or plot number of the development site and neighbouring lots
- (d) Survey plan (survey done less than 2 years at the point of application and endorsed by a qualified surveyor)

### 2. Site Information (if applicable)

		Layout Plan	Cross Sectional Drawing
(a)	Development boundary line and boundary of proposed open space verged in red	Indicate	
(b)	Proposed development layout	Indicate	
(c)	Existing and proposed road reserve line verged in red	Indicate	
(d)	Widths of proposed road reserve	Indicate	
(e)	Length of roadside planting verges	Indicate	
(f)	The walking distance	Indicate	
(g)	Existing and proposed levels of the site including the open space	Indicate	Indicate
(h)	Area of open space as per URA's computation	Indicate	
(i)	Existing and proposed boundary/retaining wall adjacent to the proposed open space is to be highlighted in orange	Indicate	
(j)	Schematic engineering drawing with dimensions of the height and base of retaining wall within open space (if applicable)		Indicate

### 3. Conservation of Trees / Single-Stem Palms Within Development Site

(only applicable if the development is within the gazetted Tree Conservation Area or on vacant land)

The QP is to submit survey plan of the development. In addition to the existing structure eg. building, boundary/retaining wall & drain and the terrain/level of the site, the survey plan should incorporate the following requirements:

		Layout Plan	Cross Sectional Drawing
(a)	Existing trees / single-stem palms within the site boundary and on the neighbouring lot up to 5m from the boundary; with the following information indicated: -species -girth size (measured 0.5m from the ground) -height (if available) -all trees/palms should be uniquely numbered and consistent throughout the project	Indicate	

Notes:

1. The QP is to obtain permission from the neighbouring owner to gather the information required. The QP has to submit letter of consent to NParks if he foresees existing trees/palms along the common boundary or on the neighbouring land(s) will be affected
2. Refer to Annexes 4-1 to 4-4 on method of measuring girth of a tree/single-stem palm

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

**Table 3b – Colour Code for existing trees/palms/shrubs**

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

		Layout Plan	Cross Sectional Drawing
(c)	All existing trees / single stem palms indicated on the survey plan should be reflected on site plan and indicated in Annexes 1 and 2.	Indicate	

#### 4. Retention of Roadside Trees/Palms/Shrubs

		Layout Plan	Cross Sectional Drawing
(a)	Roadside trees/palms/shrubs abutting the development boundary and up to 10m on both sides of the boundary; with the following information indicated: - species - girth size (for tree/ single-stem palm; measured 1.0m from the ground) - height (if available) and number of cluster palms / shrubs :	Indicate	
(b)	All trees / single-stem palms and cluster palms (roadside only) should be uniquely numbered. The numbering should be consistent throughout the project.	indicate	

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
(c)	The colour code for existing trees / palms / shrubs is as follows :	Indicate	

**Table 4c – Colour Code for existing trees/palms/shrubs**

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

		Layout Plan	Cross Sectional Drawing
(d)	All existing trees / palms / shrubs indicated on the survey plan should be reflected on the site plan as well as indicated in Annex 3.	Indicate	

## 5. Photographs

Photographs of trees and single stem palms proposed for retention within development site in Tree Conservation Area or on vacant land are to be submitted.

The trees in the photographs are numbered according to numbering shown on plan.

## 6. Proposed Open Space

		Layout Plan	Cross Sectional Drawing
(a)	All slopes are to be shown on plan using standard symbols.	Indicate	
(b)	The walking distance between the furthest unit and the proposed open space, measured along the road centre should not be more than 250m. To indicate using arrow line(s) representing the walking path and the distance shown in metres.	Indicate	

## 7. Proposed SWA Section 18 Road (if applicable)

		Layout Plan	Cross Sectional Drawing
(a)	Width of proposed road.	Indicate	

## PART II Division 2A Regulatory Requirements

### 1. Conservation Of Trees / Single-Stem Palms Within Development Site

(only applicable if the development is within the gazetted Tree Conservation Area or on vacant land)

Under the Parks & Trees Act (S14), a person must obtain written approval from the Commissioner of Parks & Recreation to remove or cut any tree with a girth exceeding 1m growing on any vacant land or on the gazetted Tree Conservation Areas (TCA), unless it is:

- (i) for the prevention of imminent danger; or
- (ii) in compliance with any obligation imposed by any written law; or
- (iii) an expendable species listed in Annex 5

NParks' decision on whether a tree can be removed is final.

### 2. Tree Protection Zone (TPZ) for Retained Tree/Single-Stem Palm

		Layout Plan	Cross Sectional Drawing
2.1	The minimum protection zone from centre of tree / single-stem palm to be provided in accordance to the table below:	Indicate	

**Table 2.1 –Minimum Protection Zone**

	Girth(m)	Minimum Protection Zone
(a)	≤1.0m	2.0m
(b)	>1.0m but ≤1.5m	3.0m
(c)	>1.5m but ≤ 2.0m	4.0m
(d)	>2.0m	5.0m

\* Depends on the root spread, especially for tree with girth more than 2.0m, larger tree protection zone will be determined at site on case by case basis

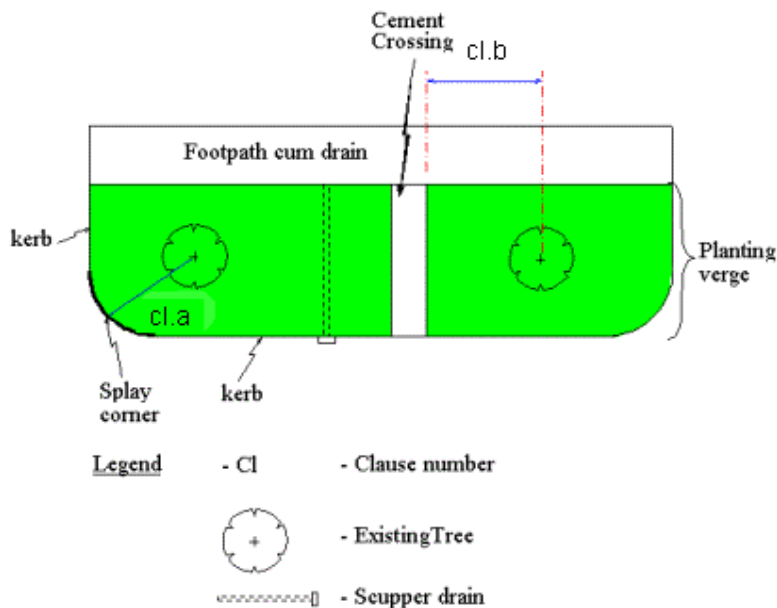
		Layout Plan	Cross Sectional Drawing
2.2	Hoarding is to be provided along the limits of the protection zone around the tree. There must be no excavation, raise/lower of soil level, compaction and any form of construction including temporary works within the hoarded area	Indicate and Endorse	Indicate

### 3. Retention Of Roadside Trees / Palms

		Layout Plan	Cross Sectional Drawing
3.1	Proposed roadside elements should be constructed at minimum clearance away from an existing roadside tree / palm, as shown in the following table and illustration. If there are constraints on design that require roadside trees / palms to be felled, approval should be obtained from NParks.	Indicate	

**Table 3 – Minimum clearance requirements from proposed roadside elements to an existing roadside tree or palm**

Clause	Proposed roadside Elements	Required minimum clearance of element from the centre of an existing :		
		Palm	Small to medium size tree	Large tree
(a)	Splay corner of: entrance culvert, bin centre driveway, substation driveway, MDF room driveway	1.0m	1.5m	2.5m
(b)	Cement crossing (e.g. pushcart ramp for bin centre)	2.0m		



**Figure 3 – Minimum clearance requirements from proposed roadside elements to an existing roadside tree or palm**



## 4. Proposed Open Space

### 4.1 Area of Open Space

		Layout Plan	Cross Sectional Drawing
	The formula for computing a proposed open space is: $\text{Area of open space} = (\text{G.F.A} / 56\text{m}^2) \times 4.05\text{m}^2$ where G.F.A refers to the Gross Floor Area (Minimum size of an open space should be at least 1000m <sup>2</sup> and the maximum size should not be more than 3000m <sup>2</sup> )	Indicate	

### 4.2 Location Of Open Space

(Qualified Persons are advised to pre-consult NParks on the location of the proposed open space)

		Layout Plan	Cross Sectional Drawing
(a)	If the proposed development does not abut existing or proposed park connector:	Indicate	
	i) The walking distance from the furthest unit to the proposed open space, measured along the road centre, should not be more than 250m.		
	ii) The proposed open space must not abut a major road		

		Layout Plan	Cross Sectional Drawing
(b)	If the proposed development is adjacent to a proposed or existing Park Connector,	Indicate	
	i.) the open space is to abut the Park Connector provided the Park Connector is not abutting a major road and it complies with clause 4(a)i.		
	ii.) for open space that cannot abut the Park Connector, a linkage must be provided from the open space to the Park Connector.		
	iii.) the proposed open space must not abut a Park Connector that in turn abuts a major road.		

### 4.3 Accessibility Of Open Space

		Layout Plan	Cross Sectional Drawing
(a)	At least one of the boundaries of the open space abuts an existing minor road or a new local access road.	Indicate	
(b)	Proposed opening or access to the open space should be at least 4.0m wide.	Indicate	

#### 4.4 Configuration of Open Space

	Layout Plan	Cross Sectional Drawing
An open space is preferably to be a rectangular or of regular configuration. The width should be at least 30m.	Indicate	

#### 4.5 Terrain Of Open Space

	Layout Plan	Cross Sectional Drawing
(a) The open space should generally be flat (gradient 1:40). Where tree planting on slope is required within the open space, the gradient of the slope should not be steeper than 1:2.5.	Indicate	
(b) The level of open space should be the same as the proposed footpath adjacent to it.	Indicate	
(c) Proper drainage system should be provided where waterlogging is expected. Details of the system will be commented at BP stage.	Indicate	
(d) The open space should be free from encumbrances above and below the ground level.	Indicate	

#### 4.6 Others

	Layout Plan	Cross Sectional Drawing
(a) An open space should not be divided by any structures, for example, an existing canal.	Indicate	
(b) Existing/Proposed retaining walls should not be located within or adjacent to an open space.	Indicate	

#### 5. Proposed SWA Section 18 Roads

	Layout Plan	Cross Sectional Drawing
(a) The length of a planting island should be at least 6.0m long. If it is less than 6.0m long, it should be indicated.	Indicate	
(b) The width of roadside planting verges should be provided in accordance with LTA standard road code.	Indicate	
(c) No underground services are allowed to be laid within the roadside planting verges. Services that are required to transverse through a planting verge into a building plot are to be laid at least 2.0m away from the centre of a tree / palm.	Indicate	





Annex 3 Existing Roadside Trees / Palms / 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									

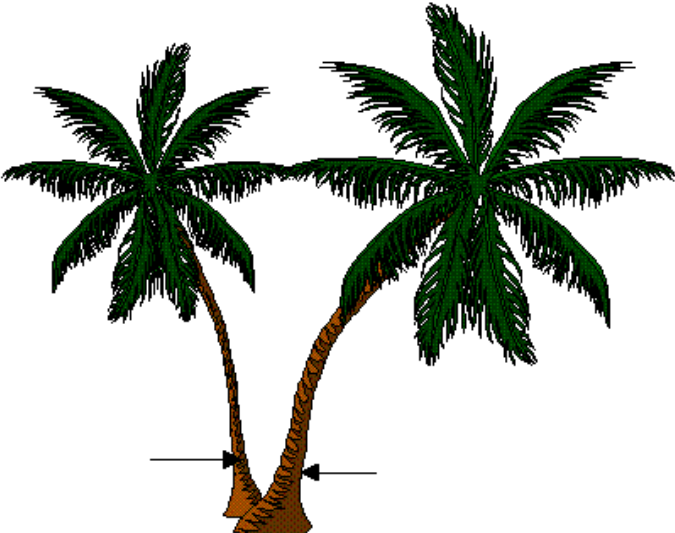
\* Please refer to [Annex 3-1](#) for list of reasons

Annex 3-1 Reasons for Removal / Retention

Reasons for Removal		Reasons for Retention
<b>main covered structure (ms)</b>		good/rare species (gs) within the buffer zone (bz) uncovered structures (us) within road widening plot (wp)
<b>Ancillary buildings</b>		
e.g substation guard house bin centre	ss	
<b>Outdoor recreational facilities</b>		
e.g swimming pool tennis courts playground car park	ou	
<b>Vehicular access</b>		
driveway, fire engine access access to bin centre, substation footpath fire hardstanding area (fa)	va	
<b>Other construction activities</b>		
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)		
<b>Health of tree</b>		
strike by lightning, wind throw (sl) unhealthy (decay, rot) (uh) poor form (pf) hazard (hz)		

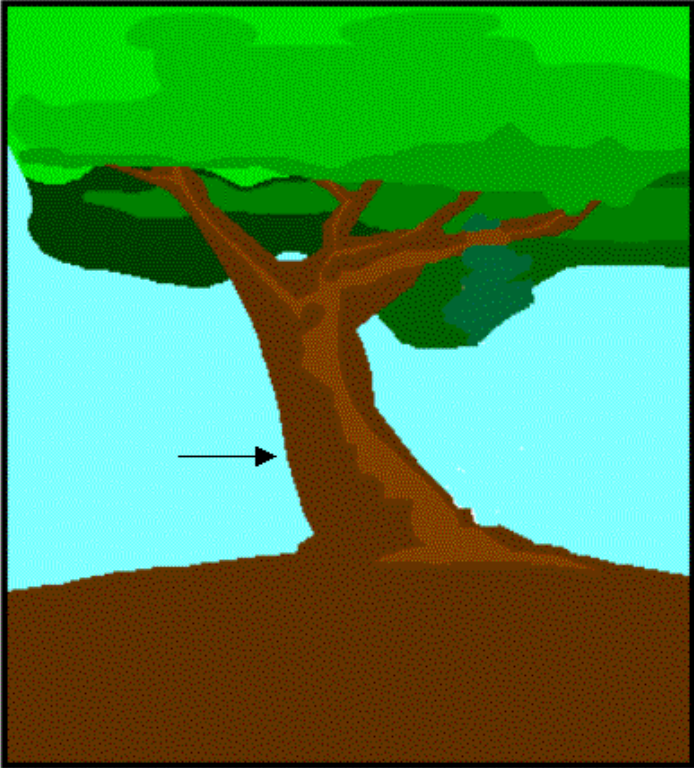
Annex 4-1 Girth Measurement For Multi-leader Tree (leaders sprout from collar)

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

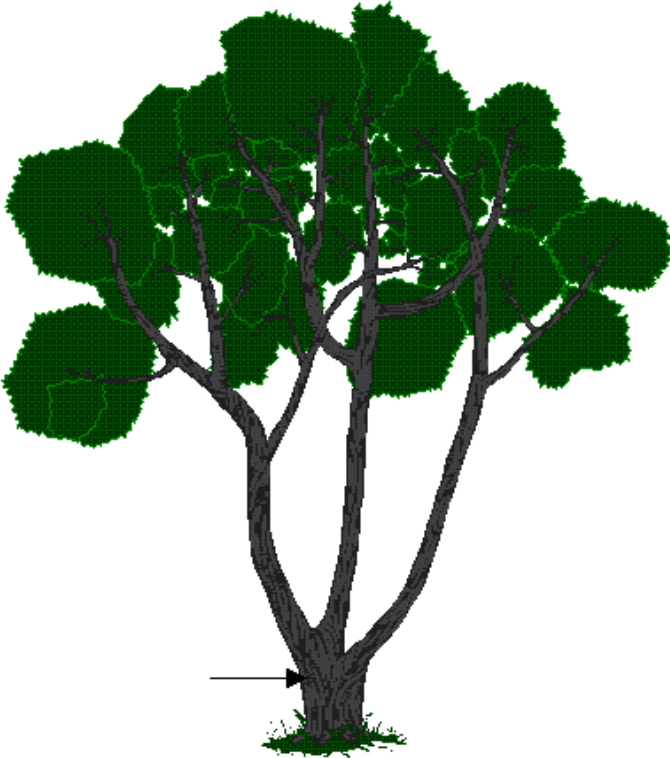
For this type of buttressed tree, measure the girth at 0.5 metres height above the ground. (arrowed)





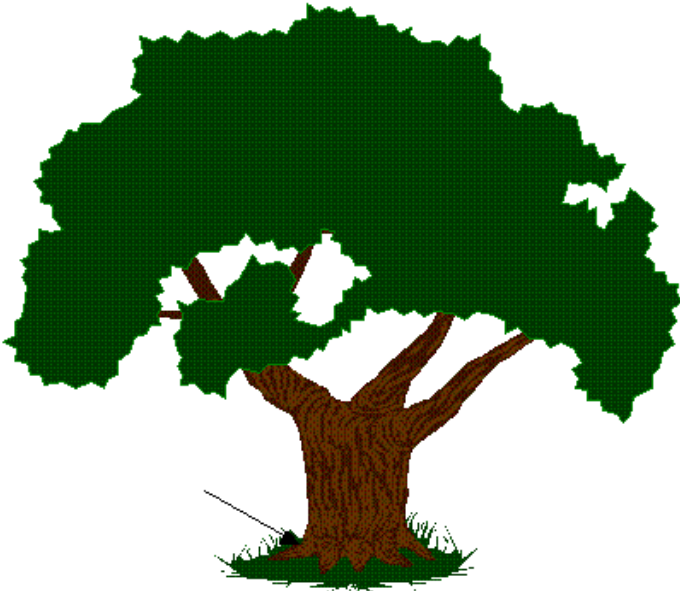
Annex 4-3 Girth Measurement For Multi-leader Tree (at a point between collar)

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.



Annex 5 Expendable Species

Trees	Palms
Albizzia ( <i>Albizzia species</i> )	Coconut palms ( <i>Cocos nucifera</i> )
African tulips ( <i>Spathodea campanulata</i> )	
Brown Heart ( <i>Andira inermis</i> )	
Cempedak ( <i>Artocarpus integer</i> )	
Jackfruit ( <i>Artocarpus heterophyllus</i> )	
Madras thorn ( <i>Pithecellobium dulce</i> )	
Pong Pong tree ( <i>Cerbera odollam</i> )	
Wattle ( <i>Acacia auriculiformis</i> )	