ATTACHMENT A

A Photographic Guide to the Evaluation of Hazard Trees in Urban Areas

TREE HAZARD EVALUATION FORM 2nd Edition

Site/Address: OPP. 66 FRESHWATER ROAD

Map/Location: JINGILI

Owner: public DCC private _____ unknown _____ other _____

Date: 14 OCT 09 Inspector: E. FISHER

Date of last inspection: 6 OCT 09

HAZARD RATING:

3 (Failure Potential) + 4 (Size of part) + 3 (Target Rating) = 10 (Hazard Rating)

✓ Immediate action needed

_____ Needs further inspection

_____ Dead tree

TREE CHARACTERISTICS

Tree #: _____ **Species:** KHAYA SENEGALENSIS

DBH: 100cm **# of trunks:** 1 **Height:** 26 mtrs **Spread:** 26 mtrs

Form: ☑ generally symmetric ☐ minor asymmetry ☐ major asymmetry ☐ stump sprout ☐ stag-headed

Crown class: ☐ dominant ☑ co-dominant ☐ intermediate ☐ suppressed

Live crown ratio: 70 % **Age class:** ☐ young ☐ semi-mature ☑ mature ☐ over-mature/senescent

Pruning history: ☑ crown cleaned ☐ excessively thinned ☐ topped ☑ crown raised ☐ pollarded ☐ crown reduced ☐ flush cuts ☐ cabled/braced ☐ none ☑ multiple pruning events Approx. dates: LAST 15 YEARS

Special Value: ☐ specimen ☐ heritage/historic ☐ wildlife ☐ unusual ☑ street tree ☐ screen ☑ shade ☐ indigenous ☐ protected by gov. agency

TREE HEALTH

Foliage color: ☑ normal ☐ chlorotic ☐ necrotic **Epicormics?** (Y) N

Foliage density: ☐ normal ☑ sparse **Leaf size:** ☐ normal ☑ small

Annual shoot growth: ☐ excellent ☐ average ☑ poor **Twig Dieback?** (Y) N

Woundwood development: ☐ excellent ☑ average ☐ poor ☐ none

Vigor class: ☐ excellent ☐ average ☐ fair ☑ poor

Major pests/diseases: MASTOTERMES - INFESTATION HAS BEEN TREATED BUT ASSOCIATED DAMAGE IS TERMINAL.

Growth obstructions:

☐ stakes ☐ wire/ties ☐ signs ☐ cables

☑ curb/pavement ☐ guards

☐ other _____

SITE CONDITIONS

Site Character: ☐ residence ☐ commercial ☐ industrial ☑ park ☐ open space ☐ natural ☐ woodland\forest

Landscape type: ☑ parkway ☐ raised bed ☐ container ☐ mound ☐ lawn ☐ shrub border ☐ wind break

Irrigation: ☑ none ☐ adequate ☐ inadequate ☐ excessive ☐ trunk wettled

Recent site disturbance? Y (N) ☐ construction ☐ soil disturbance ☐ grade change ☐ line clearing ☐ site clearing

% dripline paved:	0%	10-25%	(25-50%)	50-75%	75-100%	**Pavement lifted?** (Y) N
% dripline w/ fill soil:	0%	10-25%	(25-50%)	50-75%	75-100%	
% dripline grade lowered:	0%	10-25%	25-50%	50-75%	75-100%	

Soil problems: ☐ drainage ☑ shallow ☑ compacted ☐ droughty ☐ saline ☐ alkaline ☐ acidic ☐ small volume ☐ disease center ☐ history of fail ☑ clay ☐ expansive ☐ slope ____° aspect: _____

Obstructions: ☐ lights ☐ signage ☐ line-of-sight ☐ view ☑ overhead lines ☐ underground utilities ☑ traffic ☑ adjacent veg. ☐ _____

Exposure to wind: ☐ single tree ☐ below canopy ☐ above canopy ☐ recently exposed ☐ windward, canopy edge ☑ area prone to windthrow

Prevailing wind direction: _____ Occurrence of snow/ice storms ☑ never ☐ seldom ☐ regularly

TARGET

Use Under Tree: ☐ building ☑ parking ☑ traffic ☑ pedestrian ☐ recreation ☐ landscape ☐ hardscape ☐ small features ☑ utility lines

Can target be moved? Y (N) **Can use be restricted?** Y (N)

Occupancy: ☐ occasional use ☐ intermittent use ☑ frequent use ☐ constant use

TREE DEFECTS

ROOT DEFECTS:

Suspect root rot: (Y) N **Mushroom/conk/bracket present:** Y (N) **ID:** _____

Exposed roots: ☐ severe ☑ moderate ☐ low **Undermined:** ☐ severe ☐ moderate ☐ low

Root pruned: _____ distance from trunk **Root area affected:** _____% **Buttress wounded:** (Y) N **When:** LAST 12 MONTHS BY TERMITES

Restricted root area: ☐ severe ☑ moderate ☐ low **Potential for root failure:** ☑ severe ☐ moderate ☐ low

LEAN: _____ deg. from vertical ☑ natural ☐ unnatural ☐ self-corrected **Soil heaving:** Y N

Decay in plane of lean: Y (N) **Roots broken** (Y) N **Soil cracking:** Y (N)

Compounding factors: VASCULAR SYSTEM COMPROMISED, STRUCTURAL INTEGRITY COMPRIMISED **Lean severity:** ☐ severe ☐ moderate ☐ low

CROWN DEFECTS: Indicate presence of individual defects and rate their severity (s = severe, m = moderate, l = low)

DEFECT	ROOT CROWN	TRUNK	SCAFFOLDS	BRANCHES
Poor taper			✓	
Bow, sweep			✓	✓
Codominants/forks				
Multiple attachments			✓	
Included bark			✓	
Excessive end weight				
Cracks/splits				
Hangers				✓
Girdling	✓			
Wounds/seam	✓	✓	✓	
Decay	✓	✓	✓	
Cavity				
Conks/mushrooms/bracket				
Bleeding/sap flow				
Loose/cracked bark	✓			
Nesting hole/bee hive				
Deadwood/stubs				
Borers/termites/ants	✓	✓		
Cankers/galls/burls				
Previous failure				✓

HAZARD RATING

Tree part most likely to fail: ROOT CROWN - TRUNK

Inspection period: 3 month annual _____ biannual _____ other _____

Failure Potential + Size of Part + Target Rating = Hazard Rating

3 + 4 + 3 = 10

Failure potential: 1 - low; 2 - medium; 3 - high; 4 - severe
Size of part: 1 - <6" (15 cm); 2 - 6-18" (15-45 cm); 3 - 18-30" (45-75 cm); 4 - >30" (75 cm)
Target rating: 1 - occasional use; 2 intermittent use; 3 - frequent use; 4 - constant use

HAZARD ABATEMENT

Prune: ☐ remove defective part ☐ reduce end weight ☐ crown clean ☐ thin ☐ raise canopy ☐ crown reduce ☐ restructure ☐ shape

Cable/Brace: _____ **Inspect further:** ☐ root crown ☐ decay ☐ aerial ☐ monitor

Remove tree: (Y) N **Replace?** (Y) N **Move target:** Y N **Other:** REPLACE WITH TAMARINDUS INDICUS

Effect on adjacent trees: ☐ none ☐ evaluate

Notification: ☐ owner ☑ manager ☐ governing agency **Date:** _____

COMMENTS

SEVERE DAMAGE TO ROOT CROWN / BUTRESS. MASTOTERMES HAVE CAUSED DEATH OF MAJOR VASCULAR TISSUE IMPEDING NUTRIENT CYCLING THROUGHOUT TREE.
STRUCTURAL INSTABILITY IS NOW A HAZARD AS THE TREE IS SUPPORTING ITSELF ON HEARTWOOD ONLY, AND IS UNABLE TO CARRY OUT ESSENTIAL BIOLOGICAL FUNCTIONS FOR LONG TERM SURVIVAL. REMOVE TREE

ATTACHMENT B

ATTACHMENT C


ATTACHMENT D