

Appendix 5 - Explanatory Notes for Form 1: Tree Group Inspection

This Form 1 is provided with the *Guidelines for Tree Risk Assessment and Management Arrangement (TRAM Guidelines)* (10th Edition) for tree group inspection. It intends to act as a template for Inspection Officers to collect and record tree information and facilitate a meaningful tree group inspection as well as identification of individual tree(s) under the Triage System for individual tree risk assessment (Form 2) or immediate remedial actions. For individual tree risk assessment, the Inspection Officers should refer to the guidelines for individual tree risk assessment (Form 2) in the TRAM Guidelines.

Box(es) and Space(s) are provided on the Form 1 for Inspection Officers to record/write descriptions and estimated measurements, or check box(es) for selected options, in field investigation. The Inspection Officers are also required to provide their observations, suggestions and/or recommendations on tree remedial actions in space under “Overall Remarks” when necessary. It is not necessary to check every box or to fill in every space provided on this Form. Only information relevant to the tree group inspection should be collected.

Section 1 – General Information

This Section intends to identify the responsible department, the Inspection Officer and a brief history of the tree group inspection.

Form 1 Ref. No.: Reference number of the Form 1 in the format: [XXX]-[20XX]-[000]-[9999]-[0], where

XXX	20XX	000	999	0
<i>First 3 character of department's abbreviated name, i.e. AFC for AFCD, LAN for LandsD, etc.</i>	<i>Year of TRAM Exercise, i.e. 2019/2020 TRAM Exercise, use 2019.</i>	<i>Project code or contract code assigned by departments . If no subdivided project or contract, please input "000"</i>	<i>Serial number of Form 1 report in one TRAM Exercise. For each project or contract in the dept., new set of serial number from 0001 to 9999 can be used.</i>	<i>Part number of the Form 1 report. If only one Inspection Officer conducted the Form 1 inspection in a tree group, use "0"; If more than one Inspection Officers and more Form 1 reports for one tree group, use "1" for the 1st report and "2" for the second report, and so on.</i>

Department/Agency: name of the responsible Department or Agency of the tree group inspection.

Inspection Officer: name of the Inspection Officer (to be automatic filled in TMCP system) who met the qualification requirements on academic / professional / training, and work experience as specified in 'Requirements for Inspection Officers' in Appendix 3 of the TRAM Guidelines. The qualifications of Inspection Officer should be vetted by relevant tree maintenance department and a name list of vetted Inspection Officers should be provided to GLTMS/TMCP for verification.

Post: post title of the Inspection Officer in the Department/Agency.

Project/Contract No.: project/contract reference number of the tree inspection works, where applicable.

File Ref.: File reference no. in the Department/Agency that keeps the tree inspection reports, where applicable.

Date of Inspection: date of inspection in the format of dd/mm/yyyy. If the inspection lasts for more than one day, it is the commencement date of the inspection.

Last Inspection Date: date of last inspection of the subject tree group in the format of dd/mm/yyyy. If the inspection lasts for more than one day, it is the commencement date of the inspection. If it is the first time inspection of the subject tree group, please set it to the "Date of Inspection".

Inspection Frequency: The frequency of inspection, i.e. once per 6 months marked as '6 months', once per year marked as '12 months', etc. Mark '*ad hoc*' if the inspection is on need basis.

Section 2 – Location Information

This Section provides background information of the location of tree group to be inspected.

Masterzone Ref. & Subzone Ref.: provides Masterzone reference and Subzone reference, if applicable, of the tree group inspected. Fill in “NIL” in space provided after “Subzone” if no Subzone. Details of the zoning for Masterzone and Subzone are specified in the Tree Management Common Platform (TMCP) manual in the Cyber Manual for Greening (<http://devb.host.ccgo.hksarg>). The zoning is assigned by the responsible tree maintenance department.

Chinese Location and English Location: Chinese and English name of the tree group location, please refer the location/street name to the latest version of “*Hong Kong Guide*” published by the Lands Department.

District: use district categorisation in 18 District Councils.

Tree Risk Management Zone: the category of Tree Risk Management Zone (TRMZ) as specified in the TRAM Guidelines. Select ‘Category I’, ‘Category II’ or ‘Category III’ if the tree group falls into relevant Category zone. The Inspection Officer shall confine the tree group to one TRMZ category. For example, a roadside landscaped area has about 20 metres width with one side along a public road of high pedestrians and/or high traffic flow, but with another side inaccessible by the public or vehicles. According to TRMZ definition, the landscaped area beside the public road of high pedestrians and/or high traffic shall be classified as Cat. I but the rest areas shall be classified as Cat. II/III subject to the fall zone of trees. In this case, the Master Zone would be divided into two Master Zones, or if a single Master Zone should be maintained, the landscaped areas with different TRMZ classification could be divided into two Subzones.

Location Type: check the box for “Location Type” as appropriate; mark SIMAR Slope reference number in the space provided if SIMAR Slope is identified. For trees within a tree ring on a shotcrete slope, check "Tree Pit/ Tree Ring". Provide location information in space in ‘Others’ if the subject tree group does not fall into the boxes provided. **Check more than one box if the subject tree falls into more than one location type.**

Nearby Utility Post No.: The nearby public utility post number, such as Lamp pole number. Mark the utility on the location map with clear denoted reference number.

Section 3 – Tree Information

Inspection Officer shall define the size of a tree group by location types, such as public park, SIMAR slopes, landscaped area, etc. with due consideration given to the limitations of visual tree assessment. **For easy recognition of tree conditions in a tree group under inspection, the tree group inspected shall not contain more than 50 trees.**

Table (A): Triage Trees and Trees Require Remedial Actions or Form 2 Assessment:

Triage Trees and Trees Require Remedial Actions or Form 2 Assessment: Table (A) is designed for trees in the tree group inspected including:

1. Triage Trees, the specific tree categories require Triage Classification including:
 - Dead trees
 - Trees confirmed with Brown Root Rot (BRR) disease infection
 - Old and Valuable Trees (OVTs)
 - Stonewall trees (SWTs)
 - Large trees with an individual trunk(s) DBH ≥ 500mm or overall tree height at 9 metres or above
2. Trees in the tree group that require remedial actions; and
3. Trees in the tree group that require Form 2 assessment.

Individual tree information is required in Table (A).

TMCP ID: A system generated ID to give a unique reference number to trees in the TMCP tree database. Inspection Officers are not required to fill in this TMCP ID.

Departmental Tree ID: the departmental identification number of each tree inspected. If the tree inspected has more than one tree ID, use the latest departmental tree ID.

Tree Species: use the scientific names and the preferred Chinese and English common name (i.e. the first name if more than one name) listed in the *Check List of Hong Kong Plants* (latest version) published by the AFCD.

DBH: Diameter at breast height (DBH). The measurement of DBH shall follow the Practice Notes on measurement of diameter at breast height promulgated by the AFCD. Departments may use Mobile Mapping System (MMS) / Lidar scanning to survey the tree locations and DBH if the site is too large or inaccessible. For use of MMS, please refer to “Tree Management” section in Cyber Manual for Greening.

Estimated Tree Height: estimate the total height of the tree inspected above ground level to top of tree crown, measured in meter (m). For better estimation, making use of clinometer / range pole.

Estimated Crown Spread: estimate the diameter of crown spread in meter (m). For asymmetric tree crown, the longest axis should be measured.

Tree Status: status of the tree inspected, namely

- OVTs
- SWTs
- Large Tree with an individual trunk(s) DBH \geq 500 mm or overall tree height at 9 metres or above
- Other Trees: trees does not fall within the above four status

BRR Disease infected: Check the box “**BRRD confirmed**” if the tree is confirmed infected by BRRD; Check the box “**BRRD in vicinity**” if BRRD confirmed case occurred within driplines of the tree crown.

Overall Conditions: estimate the overall health and structural conditions of the tree inspected and select an appropriate condition in the following categories:

- **Normal:** tree health and structural conditions are similar to other healthy tree of the same species in the area, for example, leaf size and

color, crown density, tree height and crown spread. The growth of the tree inspected is in general vigor in comparison to a healthy tree of the same species in the area and no significant defects were identified.

- **Fair:** Health and structural conditions of the tree inspected is considered not as vigor as a normal tree by comparison to a healthy tree of the same species in the area; plus, either one of the follows:
 - (1) one or two health or structural defects were observed in crown, branches, trunk or root zone (i.e. old wounds, cavity with entire defensive wood, etc.),
 - (2) minor dieback twigs (less than 5%), or
 - (3) signs of pest and/or disease etc., but no actual pest or disease could be identified.

and such health and structural problem(s) can be mitigated by pruning or other tree treatments, tree failure is not foreseeable.

- **Poor:** Health and structural conditions of the tree inspected are significantly poor than a normal tree of the same species in the area, plus either one of the follows:
 - (1) more than 3 significant health or structural defects were observed on crown, branch, trunk or root zone, including large old wounds with signs of decay, large cavities with signs of decay, dead branches, hanging branches, etc.,
 - (2) dieback twigs over 25% of total canopy,
 - (3) minor pest and/or disease infestations are observed, but not detrimental to overall health and structural conditions of the tree inspected, or
 - (4) Tree growth was considered adversely restricted by health or structural defects or other environmental conditions.

Mitigation measures is considered cannot completely remedies the health and structural defects. Tree failure is expected in the long-run. Removal of the tree is recommended.

- **Very poor:** The tree is considered under a very poor condition if either one of the following is observed:
 - (1) many (5 or more) significant health and structural defects are observed, including old wounds with significant decay, large cavity with significant decay, etc., where mitigation measures cannot stop

deterioration of tree health from curing the defects,

(2) fallen leaves or die back twigs over 50% of total canopy (except deciduous trees and semi-deciduous trees), broken of main branches,

(3) large portion of tear off tree barks in main trunk (over 50%), or

(4) severe pest infestation and/or disease infection that existing pest and disease control measures are considered ineffective to the infestation, tree health conditions is continuously deteriorating. These health and structural defects are detrimental to the tree inspected and tree removal is recommended to be conducted as soon as practicable.

- **Dead:** Dead tree. The dead tree shall be removed within 4 weeks after inspection or as soon as practicable. Appropriate warning signs shall be installed and/or condor-off the site shall be arranged when necessary.

Triage Colour: assess the tree under the Triage system in accordance to the TRAM Guidelines, i.e. Black, Red, Orange or Yellow. Fill in the Triage colour category in the space provided. Please note that Triage classification may change in each assessment due to change of tree conditions and mitigations works done. If the tree is “Other Trees” in Zone I or trees in other zoning, no classification under the Triage system is necessary, please mark ‘NIL’.

Remedial Actions/Form 2 Inspection: Fill in the remedial actions or individual tree risk assessment (Form 2) is considered necessary, leave the space empty if no further action is required. If this column is checked, please provide anticipated completion date, tree reference coordinates and reference number of tree photos showing the defects identified or spot of mitigation required in the following columns. Examples of remedial actions include:

- Remove the whole tree;
- Crown reduction to reduce crown load;
- Crown cleaning to remove dead/diseased branches/twigs;
- Crown lifting to remove lower branches;
- Structural pruning to modify tree form;
- Form 2 individual tree risk assessment; or
- Others: please specify in space provided or use separate information sheet.

Anticipated Completion Date: the date that Inspection Officer anticipates the remedial actions or Form 2 assessment should be completed, in the format of dd/mm/yyyy. Consult tree works agent when necessary.

Tree Reference Coordinates: provides reference coordinates of the tree inspected at the tree center by x-axis and y-axis reading (HK1980 Grid Coordinates) up to 3 decimal places for reference in TMCP. The reference coordinates could be a reference location of the tree inspected measured by common GPS instruments or plotted on location plan with estimated reference co-ordinates.

Add Rows: check this box if more row is required.

Delete Rows: check this box to delete row.

Table (B): Other Trees (Non-Triage Trees - trees do not need further actions)

Other Trees (Non-Triage Trees - trees do not need further actions): Table (B) is designed for “Other Trees” in the tree group that do not fall into Table (A): the categories of Triage trees, trees do not need further actions or Form 2 assessment. **Only tree group information is required in Table (B).**

App. Quantity of Trees: Approximated quantity of trees, as far as practicable, in the same species in the tree group falls into the definition of “Other trees”. For tree species cannot be identified during the tree group inspection, mark “unidentified” on the **Tree Species** column. Same tree species may appear in Table (A) and Table (B), please avoid duplicated counting.

Range of Height: the range of tree height in the same species of tree in Table (B). Please mark the tree height from the lowest to the highest in meter.

Overall Remarks: Inspection Officer may provide his/her observations, suggestions and recommendations on tree remedial actions in the space provided under the “Overall Remarks” when necessary. The overall remarks shall also include limitations and restrictions in the site, the need of further assessment on particular tree (individual tree risk assessment by Form 2) in the

tree group assessed, as well as other information did not cover in the above-mentioned items.

Sub-total No. of Trees in Table (A): Total number of trees in Table (A).

Sub-total No. of Trees in Table (B): Total number of trees in Table (B).

Total No. of Trees: the total number of trees in the tree group inspected, i.e. total number of trees in Table (A) + Total number of trees in Table (B).

Summary of Triage Trees: give total number of trees of each Triage colour in the tree group inspected.

Attached Information: use this section to attach photos, map, and other information.

Add Tree Photos: provide tree group photos taken on the inspection day. The picture of tree group inspected shall be taken from at least two different directions; individual tree photos should be provided for tree health or structural conditions classified as “Very Poor” and recommended for tree removal; and tree(s) recommended for remedial actions or further assessment (individual tree risk assessment (Form 2)). All photos provided shall follow the photographs requirements set out in Appendix 6 – Photo-taking Guidelines for Tree Risk Assessment specified in TRAM Guidelines. All photographs should be stamped with date and time of phototaken.

Add Map: add tree location map of the tree group assessed. The map shall show the location of the tree group, the relevant land status, major check points (i.e. Lamp pole number, SIMAR slope number, etc.). **All trees listed on Table (A) in the Form 1 report should be marked on the tree location map with the Departmental Tree ID.**

Add Other Information: add other information related to the inspection, i.e. future development project, land sales information, etc., that the Inspection Officer considers necessary further describe the site conditions and the tree group inspected.