Members' Debate

on the Motion on "Perfecting Tree Management System" at the meeting of the Legislative Council held on 15 June 2011

Progress Report

PURPOSE

At the meeting of the Legislative Council held on 15 June 2011, the motion on "Perfecting Tree Management System" moved by the Hon Tanya CHAN as amended by the Hon CHAN Han-kan, the Hon IP Wai-ming, the Hon KAM Nai-wai and the Hon Patrick LAU Sau-shing was carried (the wording of the motion is at **Annex A**).

2. Many of the suggestions in the motion are in fact already being taken forward by the Greening, Landscape and Tree Management (GLTM) Section under the Works Branch (WB) of the Development Bureau (DEVB) pursuant to the recommendations in the Report of the Task Force on Tree Management. The Secretary for Development elaborated on the progress made to date as well as the measures under planning in her opening and concluding speeches at the motion debate. We also provided a comprehensive "Progress Report on the Work of the Tree Management Office (TMO)" (CB(1)2225/10-11(02)) to the Legislative Council Panel on Development for discussion at the Panel meeting held on 16 July 2011 (a copy of the Panel paper is at Annex B). This report highlights the action taken by the Administration on the suggestions raised in

the motion.

Item (a): Integrated Approach to Tree Management

3. Government adopts an "integrated approach" for the management of trees on Government land. In essence, the department responsible for the maintenance of an area or a facility is also responsible for the maintenance of trees therein. The Task Force on Tree Management, led by the Chief Secretary for Administration, reaffirmed that this approach was generally efficient and cost-effective. Our experience since the establishment of the GLTM Section demonstrates that the GLTM Section has very effectively played a lead role in formulating policy on tree management matters, promoting a professional approach to tree management and overseeing the proper implementation of good practices at the operational level in government departments. We consider that the current organisational set-up is appropriate, facilitating the discharge of tree management responsibilities within the Administration in an effective and systematic manner, and we do not see a need for any changes to the present arrangement.

Item (b): Advisory Bodies on Greening, Landscape and Tree

Management

- 4. As recommended in the Report of the Task Force on Tree Management, DEVB set up an Expert Panel on Tree Management (the Expert Panel) in March 2011 to provide the needed expertise in both policy and operational aspects concerning tree management, with the objective of promoting the well-being of trees in Hong Kong, especially those with special value or interest. The Expert Panel comprises local experts and experts from outside Hong Kong.
- 5. In addition, a new Community Involvement Committee on Greening under the chairmanship of Permanent Secretary for Works was established in March 2011 to advise DEVB on measures to encourage greening, quality landscape design and quality tree management, particularly in the built-up areas and in private sector developments. It also advises on the formulation of public education and community involvement programmes to foster an attitude of care for trees and the greened environment in the community. In addition, the Committee advises on the manpower development strategy to nurture a professional landscape and tree management workforce and enlists community support for greening. The Committee comprises both official and non-official members.

(c) Resource Allocation

6. To strengthen their tree management capacity, we have allocated

additional resources to departments having regard to their operational needs. In addition to the establishment of the GLTM Section in Development Bureau, 35 new posts were created in seven tree management departments, including the formation of a Tree Unit in Lands Department (LandsD) in 2010-11. Departments have also reinforced their manpower resource on tree management through internal re-deployment. The expansion of the Tree Teams in LCSD from a complement of 122 staff members to 210 through internal redeployment is a case in point. In addition, departments have been allocated additional resources for purchase of equipment, training provision, conducting research, etc.

7. In terms of spending in greening works, the Administration has been proactively planting trees, shrubs and annuals throughout the territory to beautify the environment in the past decade. In 2010-11, the Administration planted 1.1 million trees, 8.3 million shrubs and 0.97 million annuals at a cost of \$250 million. Looking ahead, while we will continue to invest in greening our environment, we will in parallel attach importance to promoting quality planting.

Item (d) and (p): Legislation on Tree Preservation

8. Following a comprehensive review in 2009, the Task Force on Tree

Management considered that there was no need to introduce any legislative change at the current stage and efforts should instead be channelled to the implementation of administrative measures to improve coordination among parties, enhance tree risk assessment, upgrade professional expertise in tree management and promote more extensive community involvement.

- 9. For trees on private land, Government has included "tree preservation clauses" and "landscape clauses" in land lease since the 1970's and the mid-1980's respectively. Under the existing tree preservation clauses, land-owners shall not remove trees within their premises under non-emergency situations, unless with a prior written approval from Lands Department. Upon receipt of complaints, Lands Department will investigate any unapproved removal of trees on leased land, and may impose a fine on the land-owners.
- 10. While the Administration will continue to accord priority attention to the implementation of various administrative tree management initiatives, in response to Members' suggestion raised at the motion debate, DEVB is seriously considering embarking on a study on the issue of enacting tree legislation.

Item (e) and (t): Greening in Large-scale Projects and New Development Areas and in Urban Environments

- 11. The Greening and Landscape Office (GLO) of the GLTM Section is working with relevant departments to reserve adequate quality planting space in new development areas and re-development projects at the early stages of planning and design as far as practicable. In addition, the GLO provides professional landscape advice to various planning studies, area improvement plans as well as strategic projects (e.g. the projects under Kai Tak Development and the greening works for the Central and Wan Chai waterfront, the cycle track network in the New Territories, heritage revitalisation projects etc.) with a view to raising the standard of landscape works in Government projects through innovative design and quality planting. GLO also advises on landscape treatment of urban structures such as green noise barriers, slopes and retaining structures as well as green roofs with a view to improving the general quality in landscape design.
- 12. For private developments, GLO works closely with Planning Department and Building Department to encourage greening by introducing new greenery coverage requirements and promote the wider adoption of new greening techniques, such as rooftop greening and vertical greening. GLO organises professional seminars to promote these new greening techniques to the landscape industry, professionals and government staff.

- 13. The GLTM Section advocates a professional and holistic approach to landscape management and tree management that embraces adequate space allocation for new planting, proper selection of planting species as well as quality landscape design and planting practices in the upstream through proper works implementation to professional vegetation maintenance in the downstream. Due emphasis is placed on the protection of public safety as a priority consideration. To this end, the GLTM Section has issued guidelines on a variety of tree management topics, including tree risk management, proper planting practices, proper pruning practices, identification of common tree problems, identification of brown root rot and tree protection measures in construction sites.
- 14. The TMO introduced a new tree risk assessment arrangement in 2010 with the promulgation of detailed guidelines for compliance by tree management departments to better protect public safety. Under this arrangement, tree risk assessment is conducted in two stages in accordance with a systematic methodology. Focusing on areas with high pedestrian or vehicular flow, tree management departments first carry out a tree group inspection for locations under their purview, during which trees that require particular care (such as Old and Valuable Trees (OVTs) and stonewall trees) as well as dead trees and trees with health or structural problems that might pose hazards to the public are identified. Detailed inspections are then conducted

for these trees individually to assess their health and structural conditions more comprehensively.

15. The TMO, in collaboration with tree management departments, is formulating a training and manpower development plan to ensure an adequate supply of professional staff at the managerial, supervisory and frontline levels for the competent discharge of the full spectrum of tree management responsibilities. Meanwhile, the TMO has continued to organise tree-related training, e.g. on tree risk management, identification of tree species, common tree problems, pest and disease control, proper tree maintenance, tree protection during construction, etc., for Government staff engaged in tree management. Some of these training sessions are also open to consultant/contractor staff engaged by Government departments.

Item (f) and (u): Formulation of Greening and Landscape Design Framework

16. Government is committed to the sustainable development of a greener environment in Hong Kong. To achieve this, GLO works closely with Planning Department to seek new greening opportunities in the town planning process by reserving space for greening and setting greenery coverage requirement where practicable. For example, GLO has imposed a more stringent greenery

coverage requirement for the Kai Tak Development (KTD) projects in order to deliver the planning objective of turning KTD into a green hub. After the issuance of the Sustainable Building Design Guidelines by Building Department, on the minimum site coverage of greenery for new private building developments of site area at 1,000 m² or more as a prerequisite for approval of Gross Floor Area concessions, GLO is now reviewing the site coverage for greenery for government building projects. In addition, requirements on site coverage of greenery are included as part of the planning briefs and/or land lease conditions for public and private developments, where practicable.

- 17. In order to uplift landscape design standards, GLO is now developing a territory-wide integrated landscape design framework. This framework aims to achieve coherence and integration across projects undertaken by different departments and an overall coordinated greening effect with due regard to urban design. It will provide practical guidelines on the landscape treatment for key types of public works such as public parks and gardens, road structures, roadside planting, slopes, etc.
- 18. In the built-up urban environment, Government has embarked on the development and implementation of Greening Master Plans (GMP) to bring about visible improvements to our cityscape, taking account of factors such as the local landscape and cultural characteristics. The GMP guides planting in

the same district so as to achieve greater coherence in the overall greening effect. The GMPs in the urban areas were substantially completed in mid-2011. In the light of the positive results achieved in the urban areas, Civil Engineering and Development Department (CEDD) has commenced with the development of GMPs for the 9 New Territories districts in phases, with a focus on the enhanced provision of greenery at the more densely populated areas and tourist attractions as well as along major transportation routes. More details of the GMP initiatives are set out in paragraphs 30 below.

Item (q): Review and Increase the Green Belts in the Statutory Town Plans

19. The planning authority considers land use zonings on statutory town plans with regard to local topography, landscape features and relevant planning factors. In 2010-11, a total of about 1,400 hectares of land has been zoned "Green Belt" on newly prepared statutory town plans in the New Territories. As for Metro Areas, the total area of "Green Belt" zones as of 30 September 2011 was 3,487.53 hectares.

Item (g): Review of Contractor Management

20. Government departments rely on consultants and contractors to provide

a wide spectrum of landscape planning and design, arboricultural and horticultural services. In general, the performance of the majority of the landscape consultants and contractors is satisfactory.

- 21. As a major client of landscape and tree management services, Government plays a critical role in driving continuous improvements in the industry by setting a high standard in the contract requirements for its outsourced services. The GLTM Section is taking forward a review on the management of landscape consultants and contractors engaged by the Government in consultation with relevant departments with the objective of maintaining and improving service quality. The review will cover the entire cycle of contractor/consultant engagement, from qualifications and service specifications to performance monitoring.
- 22. On the suggestion of introducing a licensing system for tree management contractors and personnel, we consider that immediate efforts should be channelled to the implementation of administrative measures to upgrade the professional standards of the landscape and arboricultural industry. These administrative measures include the promulgation of standards, guidelines and best practices for a wide adoption by the industry, as well as enhanced training. The review of consultant/contractor management will also drive continuous improvement of the professional standard of the landscape and

arboricultural industry in Hong Kong.

Item (h): Training Provision on Arboriculture

23. One of the focal areas of work of TMO is the enhancement of training provision to raise the professional standard of local tree management personnel. TMO, in collaboration with tree management departments, is formulating a training and manpower development plan to ensure an adequate supply of professional staff at the managerial, supervisory and frontline levels for the competent discharge of the full spectrum of tree management responsibilities. Since 2010, the GLTM Section has been organising talks and seminars on greening and professional trees management to reach out to professional bodies and tertiary institutions.

24. In parallel, TMO continues to centrally organise arboricultural training for tree management departments, in addition to the training arranged by the departments themselves to equip staff engaged in tree management with the necessary professional knowledge and practical skills. Some of these training courses are open to contractor staff engaged by departments as well.

Item (i): Tree Management Information System, Tree Register and Preservation of Old and Valuable Trees

- 25. At present, tree management departments do not have a standardised information system for maintaining records on trees under their purview. To improve on this, the TMO is working with the Efficiency Unit on the development of a new electronic Tree Management Information System (TMIS) so that relevant information on the tree stock (e.g. species, size, location and health / structural conditions as well as detailed tree records) under the purview of individual tree management departments can be captured systematically and comprehensively for analysis and management purposes. The TMIS will be available to departments for data entry in the first half of 2012.
- 26. To further protect public safety and to facilitate community-wide surveillance, DEVB has uploaded a tree register to its tree website (www.trees.gov.hk) information on trees (including location, species, tree conditions and mitigation measures (if applicable), the inspection department, photos and, in some cases, location maps) which have undergone detailed inspection by tree management departments in recent months but the improvement measures for which have not yet been completed as well as trees requiring special attention (e.g. Old and Valuable Trees and stonewall trees).
- 27. Old and Valuable Trees are natural assets of our community, TMO, in consultation with the Expert Panel on Tree Management and the tree

management departments, is drawing up arrangements to invite members of the public to nominate trees in accordance with specified criteria for inclusion into the Old and Valuable Tree Register. We aim to launch the nomination exercise in 2012.

Item (j): Complaint Handling Mechanism

28. Operating round-the-clock and with the capability to receive public complaints / enquiries via telephone, email, fax or letter, the "1823" Call Centre serves as an effective, centralised, one-stop platform for the public to lodge tree complaints and enquiries. Apart from referring the cases received to the responsible department, the "1823" Call Centre also monitors the progress of follow-up action on individual cases and keeps complainants posted on Drawing on the latest technology of developments in the process. geo-referencing functions, a "Tell me@1823" app was launched for smart-phones in April 2011, whereby members of the public may submit photographs along with voice descriptions and digitally registered geo-data when reporting problematic trees. The electronic Tree Report form available at www.trees.gov.hk has recently been enhanced with similar geo-referencing functions, thus facilitating frontline staff in locating the tree under complaint. In addition, TMO proactively liaises with departments and provides professional advice to help resolve complex tree complaint cases. Experience to date indicates that the above arrangements are effective and we do not see a need to set up another complaint hotline to be operated by a dedicated department for handling tree complaints and enquiries.

Item (k) and (o): Funds for Tree Conservation and Greening

29. There are already a number of government funding schemes for application by schools, non-government organisations, etc for the implementation of greening and tree conservation initiatives. For instance, the Environment Protection Department (EPD) and Leisure and Cultural Services Department (LCSD) are respectively administering the Environmental Conservation Fund (ECF) and the Greening School Subsidy Scheme. District Councils also provide funding for district-based greening initiatives having regard to the circumstances at the district level. We encourage interested parties to submit applications to these funding schemes.

Item (1): Urban Greening Master Plans in Urban District

30. Commencing with Tsim Sha Tsui and Central districts in 2005, the Administration progressively implemented the GMPs to bring about visible greening improvements to our built-up areas. A GMP provides a coherent, overarching greening framework, defined by a greening theme and a palette of

plant species, to guide the planning, design and implementation of greening works in an area/district. All greening works under the 27 GMPs for the 9 urban districts that can be implemented without any alteration to the prevailing land use and traffic arrangements were substantially completed in mid-2011.

Item (m): Greening Master Plans in New Territories

31. With the completion of the greening works under the urban GMPs in mid-2011, CEDD embarked on preparation for the development of GMPs for the New Territories in 2009. In taking forward this initiative, CEDD will draw on the experience of developing and implementing the urban GMPs as well as the local characteristics of the New Territories districts. In addition, CEDD will adopt the "Enhanced District Participation Mechanism" to engage local stakeholders in the process. To prepare for the development of the New Territories GMPs, the Administration has consulted all 9 District Councils (DCs) in the New Territories, as well as Heung Yee Kuk. The consultancies for New Territories North West and New Territories South East commenced in May 2011 The remaining two consultancies, for New for completion in end 2013. Territories North East and New Territories South West respectively, will commence by end 2011 for completion in mid-2014.

Item (r) and (s): Public Education and Community Involvement

Activities

32. The GLTM Section, in collaboration with relevant departments, seeks to foster a culture of care in Hong Kong for greenery across the territory through a variety of community involvement and public education activities. In 2010-11, community involvement and public education activities organised by the GLTM Section were attended by over 2 500 people and we will continue with these activities. As regards the tree adoption proposal, we will give it further consideration, in consultation with the Community Involvement Committee on Greening (CICG).

Item (n): Protection and Preservation of Valuable Local Species

33. Several local tree species of economic value that are frequently found in the countryside of Hong Kong, including Buddhist Pine trees and incense trees, have become the targets of theft in recent years. To address this problem, Agriculture, Fisheries and Conservation Department and the Hong Kong Police Force have since 2001 stepped up action to combat illegal felling of trees in country parks, e.g. increasing the frequency of patrols, better collection of intelligence and conducting joint operations. To enhance the deterrent effect, consideration is given to laying charges for illegal felling of trees under the Theft Ordinance (Cap 210), which imposes higher level of fines and penalties,

instead of the Forests and Countryside Ordinance (Cap 96).

34. In addition, the GLTM Section, in collaboration with relevant departments and in consultation with the CICG, will continue to organise public education and community involvement activities to educate the public on green living and environmental conservation, and to foster a culture of care for the trees in our community.

Item (v): Studies on Sustainable Development

- 35. "The right plant for the right place", is the key guiding principle for species selection in greening and landscape design. Currently, Government uses a wide variety of plants to green our cityscape, including some species of bamboo. While some species of bamboo are suitable for landscaping purposes in the urban environment, other bamboo species such as Mao Bamboo and Sunburst Bamboo which are suitable for use as scaffolding are not suitable for landscape due to their invasive growing nature.
- 36. The GLTM Section will continue to carry out research studies to enhance our knowledge base in an endeavour to raise the professional standard of tree management work in Hong Kong. The findings of research studies will be shared with the tree management departments as well as the industry.

Greening, Landscape and Tree Management Section

Development Bureau

October 2011

(Translation)

Motion on "Perfecting tree management system" moved by Hon Tanya CHAN at the Legislative Council meeting of Wednesday, 15 June 2011

Motion as amended by Hon CHAN Hak-kan, Hon IP Wai-ming, Hon KAM Nai-wai and Prof Hon Patrick LAU Sau-shing

That with the presence of high-rise buildings everywhere, air pollution and the heat island effect are very serious in Hong Kong, and planting trees may achieve the effects of improving air quality, alleviating the greenhouse effect and lowering the temperature in urban areas, and improve the urban environment; greening may also improve community landscape as well as people's living environment, thereby upgrading quality of life; a comprehensive system of tree preservation and management is an indispensible segment of the greening process; while proper tree management may strike a balance between conserving trees and protecting people's lives and properties, it can also reduce the chances of the Administration having to handle tree risk management and hazardous trees in the future and reduce expenditures; in this connection, in order to further perfect Hong Kong's tree preservation and management system, this Council urges the Government to:

Establishment of a framework and perfecting resource allocation -

- (a) set up an independent and dedicated department to co-ordinate the work of green planning, tree preservation and tree risk management, which is at present scattered among various government departments;
- (b) set up an advisory framework comprising tree and greening experts as well as community members for advising the relevant policy bureaux and government departments on policies and specific measures relating to green planning as well as tree preservation and management;
- (c) increase resources for green planning, tree preservation and tree risk management;
- (d) study enacting specific legislation on tree management, establish a comprehensive legal framework, and formulate various policies and measures on tree preservation and management, so as to ensure that trees can receive comprehensive and appropriate protection;

Perfection of green planning —

- (e) add green elements to various large-scale public and private works projects as well as new development areas, and formulate a tree preservation and management mechanism;
- (f) formulate a comprehensive green planning system, and comprehensively examine the greening arrangements in Hong Kong;

Perfection of the training and regulation of talents—

- (g) formulate a licensing and regulatory system for tree management personnel and tree management contractors, and establish a demerit point system and a penalty mechanism for the Government's outsourcing contractors for tree management work, so as to strengthen the monitoring of outsourcing contractors' quality;
- (h) strengthen the training of tree preservation and management personnel, and encourage various organizations to offer courses on tree preservation and management as well as green planning;

Strengthening of community work –

- (i) establish a comprehensive database of trees in the communities for recording the basic information of trees, their health conditions and locations, etc., to facilitate the Government to carry out tree management and the public to access the relevant information, and conduct tree surveys in the various communities, so as to identify trees of conservation value, and include such trees in a specific register, and conserve them through specific legislation on tree management;
- (j) strengthen public education on tree preservation and management, set up a complaints hotline operated by a dedicated department, make use of various channels such as smart phone or the Internet, etc., to facilitate the reporting of problematic trees by the public, and organize the participation of interested people and groups in tree preservation and management work in the districts; and
- (k) allocate funds for encouraging the community to organize research projects and activities in relation to greening management and tree preservation, so as to enhance public awareness towards tree conservation;

Establishment of a framework and perfecting resource allocation —

- (1) as the urban Greening Master Plans have been in implementation for quite some time, consolidate the relevant experience in a timely manner, take on board the community opinions, and promote public engagement, so as to further develop and upgrade the effectiveness of the urban Greening Master Plans on the basis of collective wisdom and concerted efforts, thus enabling more effective tree management;
- (m) drawing on the experience of implementing the urban Greening Master Plans, incorporate the features and characteristics of New Territories districts and seriously heed and take on board the views of District Councils and the community, so as to formulate a clear timetable on drawing up the Greening Master Plans for the New Territories and an implementation schedule as part of perfecting tree management; and

Strengthening of community work —

(n) adopt proactive and effective measures for strengthening the conservation of local plants of economic value, such as Buddhist pines and incense trees, etc., so as to eradicate these plants from being stolen and felled by people, and educate the public about caring of trees with local characteristics as well as relevant conservation knowledge, so as to protect Hong Kong's green environment;

Establishment of a framework and perfecting resource allocation —

- (o) study establishing a trees and greening conservation fund to offer funding on a 'dedicated-funds-for-dedicated-uses' basis for application by various types of organizations or institutions, including civil society institutions, so as to conserve trees and valuable trees which are beneficial to the community and which are grown on non-government land (for example, the land under the Hong Kong Housing Authority, the Hong Kong Housing Society and public organizations, as well as private land of public welfare purposes) and not managed by the Government; this fund may also be used to increase resources for green planning, tree preservation, tree risk management, public education and the promotion of green tourism;
- (p) set penalties for prohibiting any persons from felling, transplanting, trimming or damaging trees without authorization, so as to ensure that trees can receive comprehensive and appropriate protection;

Perfection of green planning —

(q) review and increase the green belts as provided in the statutory town plans of Hong Kong (especially the urban areas);

Strengthening of community work —

- (r) study establishing a tree protection and observation team in various districts; and
- (s) implement a tree adoption scheme to put community-wide tree observation into action; at the same time, invite relevant professionals to provide the public with tree protection knowledge and training;

Perfection of green planning —

- (t) undertake extensive greening in the vicinity of residential areas and on urban structures, including wall faces, slopes, pavements and rooftops, etc.;
- (u) formulate strategic green planning with special landscape design features for various districts and the planting of theme trees in selected streets and places for showing various shades of colours in different seasons, so as to create beautified streets and scenic spots to attract tourists and stop any haphazard planting from ruining the beauty of trees; and

Strengthening of studies on sustainable development —

(v) through conducting studies on planting bamboo groves or other plants, develop a green economy to dovetail with sustainable urban development; in particular, as bamboo grows quickly and its photosynthetic rate is three times that of other plants, it can convert more carbon dioxide into oxygen, thereby helping to alleviate greenhouse effect; at the same time, bamboo has the property of tightly gripping the surface of the soil and is safer than other trees; bamboo can also provide substantial natural construction materials and can be used for manufacturing bamboo products; planting bamboo can even increase employment opportunities in the fields of research, planting, landscaping, manufacturing, design and certification, etc.; with the economic benefits of sustainable development, put in more resources to perfect tree preservation and management work.

For information

LEGISLATIVE COUNCIL PANEL ON DEVELOPMENT

Progress Report on the Work of the Tree Management Office

Purpose

This paper reports to Members work progress of the Tree Management

Office (TMO) in the Development Bureau (DEVB) in the implementation of the

tree management policy.

Tree management policy

2. Pursuant to the recommendations in the Report of the Task Force on Tree Management published in June 2009, DEVB has taken up the overall policy responsibility for greening, landscape and tree management. The Greening, Landscape and Tree Management (GLTM) Section was established under the Works Branch of DEVB in March 2010 to champion a new, strategic policy on greening, landscaping and tree management with a view to achieving the sustainable development of a greener environment in Hong Kong.

- 3. The GLTM Section is underpinned by the Greening and Landscape Office (GLO) and the TMO, which work in close cooperation to promote a holistic greening approach embracing adequate space allocation for new planting, proper selection of planting species as well as quality landscape design and planting practices in the upstream through proper works implementation to professional vegetation maintenance in the downstream. Due emphasis is placed on the protection of public safety as a priority consideration.
- 4. Under the "integrated approach" for the management of trees on Government land, the department responsible for the maintenance of an area or a facility is also responsible for the maintenance of trees there. To ensure more effective implementation across departments of the "integrated approach" to tree management, the TMO acts as a central authority to give policy steer, a focal point of coordination of departmental efforts and a provider of arboricultural expertise.

Professional team in the TMO

5. In support of its mission to raise the level of professionalism in tree management work in Hong Kong, the TMO is staffed predominantly by officers with considerable professional arboricultural expertise and experience. addition to the two Arborist posts on non-civil service contract¹ (NCSC) terms created in 2010, four additional Arborist / Assistant Arborist NCSC posts were created in TMO in 2011 to form a centralised tree support team within the TMO to assist in a variety of tasks requiring specialist arboricultural input. professional/technical officers in the TMO, 14 are International Society of Arboriculture (ISA) Certified Arborists, and nine of them have attained additional professional qualification in arboriculture such as ISA Certified Tree Risk Assessor, ISA Certified Municipal Specialist or LANTRA Professional They are complemented by 4 officers with Tree Inspection Certificate. professional arboricultural qualification in the GLO.

Work focus of the TMO

6. As recommended in the Task Force Report, the TMO is tasked to focus

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There are currently no Arborist grade in the civil service. As recommended in the Report of the Task Force on Tree Management, we will review the need for a civil service Arborist grade in 2012. The engagement of arborists on NCSC terms meanwhile would provide us with useful feedback for carrying out the review in due course.

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on the following key areas of work –

- (a) enhancement of tree risk management;
- (b) promotion of a quality-oriented approach to tree management;
- (c) enhancement of the tree complaint handling mechanism and the emergency response arrangement;
- (d) enhanced training to raise the professional standard of tree management personnel; and
- (e) enhancement of public education and community involvement.

(A) Enhancement of tree risk management

7. The TMO introduced a new tree risk assessment arrangement in 2010 with the promulgation of detailed guidelines for compliance by tree management departments to better protect public safety. Under this

arrangement, tree risk assessment is conducted in two stages in accordance with a systematic methodology. Focusing on areas with high pedestrian or vehicular flow, tree management departments first carry out a tree group inspection for locations under their purview, during which trees that require particular care (such as Old and Valuable Trees (OVTs) and stonewall trees) as well as dead trees and trees with health or structural problems that might pose hazards to the public are identified. Detailed inspections are then conducted for these trees individually to assess their health and structural conditions more comprehensively. In addition to visual inspection², detailed examination with the assistance of more sophisticated equipment (e.g. resistograph instrument or tomography instrument to check whether there is internal rot or tree cavity) may be conducted if the tree conditions so warrant.

8. Depending on the tree conditions, appropriate risk mitigation measures (such as pruning, removal of wilted branch, treatment of pest and disease, and cabling and propping to support trees) are prescribed. If there are no other feasible remedial measures, departments will remove hazardous trees as a last

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Visual inspection is accompanied by appropriate inspection methods (such as hammering the trunk with a rubber mallet to test the internal hollow, detecting any unusual smell for indication of underground root decay, etc.) and assisted by simple tools (e.g. measuring tape and levels to ascertain the crown dimension, tree height and trunk inclination).

resort so as to eliminate the threat to public safety.

9. To ensure that the tree risk assessment is properly carried out, tree management departments are required to adopt quality assurance measures such as close supervision of frontline duties and conducting internal audit. In addition, the TMO carries out desk-top checking of the tree inspection forms completed by departments on a selective basis and random inspection on site of the condition of trees on Government land to ensure that the tree risk assessments are conducted in a professional manner. For the 2010 tree risk assessment exercise, the TMO audit checked 196 of the returned "Tree Group Inspection Form (Form 1)" and 163 "Tree Risk Assessment Form (Form 2)". The latter comprised 14% of all returned Form 2.

Preparation for the 2011 wet season

10. In preparation for the on-set of the wet season in 2011, the TMO has refined the guidelines on the conduct of tree risk assessment³ in the light of the experience gained from the 2010 tree risk assessment exercise. In addition, the

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The refined guidelines have been uploaded to www.trees.gov.hk.

TMO has organised a series of training sessions, including both training for staff who have newly taken up tree risk assessment duties as well as refresher training for other staff with previous work experience in this areas, in December 2010 to February 2011 to ensure proper mastery of the assessment methodology. About 1 770 government staff and contractor staff under the core tree management departments attended these training sessions. The TMO has also reached out to the other government departments, reminding them to take appropriate precautionary measures for trees within facilities under their care before the wet season.

- 11. Tree management departments will closely monitor the conditions of problematic trees identified during the tree risk assessment and complete the mitigation measures as soon as possible. In addition, they will stay vigilant during the typhoon and rainy season and act promptly should there be any change in the risk level of the trees under their purview.
- 12. As for last year, the TMO will continue to audit check the tree risk assessments carried out by tree management departments so as to ensure full compliance with the promulgated guidelines. We expect that as the tree

management departments and their consultants/contractors build up experience in tree risk assessment, they will acquire more comprehensive knowledge of the tree stock under their care and take more timely action in response to any changes in the tree conditions.

13. Information about those trees which require continuous monitoring by the relevant tree management departments (including OVTs and stonewall trees which require special attention and other trees for which the prescribed improvement measures have not yet been completed⁴) is uploaded to the Tree Register at www.trees.gov.hk. The TMO will continue to work in collaboration with the tree management departments to keep the Tree Register up-to-date. In addition, tree management departments are taking steps to install labels on those trees included in the Tree Register. An extract of the Tree Register uploaded to www.trees.gov.hk is at Annex A and a sample of the label installed on trees included in the Tree Register is at Annex B.

14. Apart from taking action to ensure that trees on Government land are

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These cases may involve tree removal for which road closure needs to be arranged, pest and disease control which takes time to have full effect, tree pruning that is being arranged, etc. Emergency cases where the subject trees pose immediate danger to the public are dealt with without delay.

safe, the TMO has also been reminding private owners of their duty of care for trees within their properties and raising their awareness of tree risk management. In 2010, the TMO distributed leaflets on "Pictorial Guide for Tree Maintenance to Reduce Tree Risks" and "Keep Your Trees Safe" (copies are at Annex C and Annex D) to owners' corporations, mutual aid committees and property management companies in the territory, and reminded private property owners and property management companies to inspect trees within their premises so as to minimise risks. Relevant information has also been uploaded to DEVB's dedicated tree website (www.trees.gov.hk).

15. To prepare for the approaching wet season, the TMO has written to owners' corporations, mutual aid committees, area committees, Rural Committees, Village Representatives, property management companies, education and religious institutions as well as other non-government organisations, appealing to them to take proper care of the trees within their premises for the safety of residents, users and visitors. TMO will continue to disseminate practical advice on tree management in private premises through DEVB's dedicated tree website.

16. In view of the large number of trees in Hong Kong and since the health and structural conditions of trees change in step with their normal lifecycle as well as changes in the external environment, we have enlisted the support of the public in monitoring the conditions of trees in our community. In addition to Register, the launching of the Tree the dedicated website (www.trees.gov.hk) and a "Tree Care Report" standard form⁵ (a copy of the standard form is at Annex E) for reporting suspected problematic trees in July 2010, the TMO has collaborated with Leisure and Cultural Services Department (LCSD) and Housing Department (HD) to enlist the support of Green Ambassadors⁶, District Tree Care Volunteers⁷ and Estate Tree Ambassadors⁸ in monitoring the conditions of trees in the territory. As of 13 May 2011, the TMO has received 228 Tree Care Reports from the public. Additional measures to promote community surveillance of trees are set out below –

⁵ The "Tree Care Report" standard forms are available in e-form format and downloadable format.

LCSD has appointed about 220 Green Ambassadors, including District Councillors and community leaders, to assist in the surveillance of trees in the community and other greening initiatives.

Of the 2 300 Green Volunteers under LCSD's Green Volunteer Scheme, there are 177 District Tree Care Volunteers who assist in the surveillance of trees in the community in addition to other greening initiatives.

There are about 380 Estate Tree Ambassadors under HD's Tree Ambassador Scheme to assist in the surveillance of trees in public housing estates.

- (a) The TMO has produced a series of three educational videos⁹ to raise public awareness of the importance of tree care and to encourage the public to report problematic trees. These videos are now being shown in all public housing estates and major indoor recreational centres managed by LCSD;
- (b) Under the "Tell me@1823" app launched by the Efficiency Unit

 (EU) for smart-phones in April 2011, members of the public may
 submit photographs along with voice descriptions when reporting
 problematic trees. Equipped with a geospatial functionality,

 "Tell me@1823" also captures the physical location of the tree
 under complaint. This facilitates the identification of the
 responsible tree management department and helps expedite
 necessary follow-up action; and
- (c) In collaboration with EU, DEVB is planning to launch a dedicated online community portal for reporting problematic trees through the Internet and mobile devices by mid-2011.

These videos have also been uploaded to www.greening.gov.hk.

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(B) Promotion of a quality-oriented approach to tree management

17. Tree management is a professional task. To promote a holistic and quality-oriented approach to tree care in Government departments, the TMO collaborates with the GLO in disseminating knowledge on various aspects of tree management through training and the formulation of guidelines and best practices. To date, the GLTM Section has issued guidelines on a variety of tree management topics, including tree risk management, proper planting practices¹⁰, proper pruning practices, identification of common tree problems, identification of brown root rot and tree protection measures in construction Other guidelines now under preparation include tree protection measures sites. for hoarding installation in construction sites, care of stonewall trees and care of ageing trees. These tree management guidelines and best practices will also be disseminated to the industry and the community at large through DEVB's dedicated greening website (www.greening.gov.hk), seminars, workshops, etc.

-

The guidelines on proper planting practices issued by the GLTM Section to date cover topics such as "Design for Tree Protection Zone", "Keep Sufficient Space Clear of Vegetation at the Base of Trees", "Do Not Plant Too Deep", "Provide Adequate Growing Space for Future Growth of Canopy", "Provide Sufficient Growing Space between Trees and Adjacent Building/Structures" and "Select and Plant Good Specimens".

- 18. To share knowledge among tree management departments, the TMO is now developing a tree failure database. Case details of tree failures as well as tree removals due to poor health and structural problems are being collected for further analysis with a view to identifying the cause of the tree problem so that appropriate improvement measures can be identified and implemented. Learning points are disseminated among tree management departments so that they can learn from the experience of others.
- 19. In an endeavour to raise the standard of tree management work in Hong Kong, the GLO and the TMO will spearhead research studies to build up our professional knowledge base. Identified research topics include wood strength of common tree species in Hong Kong, common biological tree decaying agents in Hong Kong, choice of planting medium, selection of suitable tree species for greening and the development of tree support designs. The research findings will be shared among the tree management departments as well as the industry.
- 20. As recommended in the Report of the Task Force on Tree Management,
 DEVB set up an Expert Panel on Tree Management in March 2011 to provide
 the needed expertise in both policy and operational aspects concerning tree

management, with the objective of promoting the well-being of trees in Hong Kong, especially those with special value or interest. The Expert Panel comprises local experts and experts from outside Hong Kong. The membership list is at Annex F.

- 21. At present, tree management departments do not have a standardised information system for maintaining records on trees under their purview. To improve on this, the TMO is now working with EU on the development of a new electronic Tree Management Information System (TMIS) so that relevant information on individual trees (e.g. species, size, location and health / structural conditions as well as tree care records) could be captured systematically and comprehensively for future reference. The system will also facilitate management analysis of our tree stock, thereby providing a solid basis to support our efforts in promoting a professional approach to tree management.
- 22. The development of the TMIS will take account of the functional needs of individual tree management departments. The system is expected to be completed by mid-2012, whereupon the tree management departments will be able to input the data of their tree stock into the system to facilitate the

discharge of their day-to-day tree care responsibilities.

- (C) Enhancement of the tree complaint handling mechanism and the emergency response arrangement
- 23. Operating round-the-clock and with the capability to receive public complaints/enquiries via telephone, email, fax or letter, the "1823" Call Centre serves as an effective, centralised platform for the public to lodge tree complaints and enquiries. Apart from referring the cases received to the responsible department, the "1823" Call Centre also monitors the progress of follow-up action on individual cases and keeps complainants posted in the process.
- 24. In step with the introduction of additional channels for reporting problematic trees such as "Tell me @1823", the TMO has been working with tree management departments to ensure that these cases are dealt with promptly upon receipt. In particular, the TMO takes the lead in resolving complex tree cases which tree management departments may not be able to deal with on their own, e.g. cases requiring specialised arboricultural expertise, trees of special

interest to the community, cases involving cross-departmental implications, etc. When such cases are brought to the TMO's attention or when the TMO comes across such cases in the course of its day-to-day work, the TMO will proactively liaise with the tree management department concerned in ascertaining the facts of the case, exploring possible solutions and providing advice on the implementation of the identified solutions. A tree case which was resolved under the TMO's lead is at Annex G.

- 25. The TMO and tree management departments have enhanced the procedures for handling emergency tree cases. The TMO has set up an internal alert system, whereby Fire Services Department (FSD), the Hong Kong Police Force, the "1823" Call Centre and Highways Department (HyD) will immediately notify the TMO when a major tree failure involving the following occurs
 - (a) major injuries (i.e. the injured was admitted to hospital) or loss of human life;
 - (b) substantial damage to properties; or

- (c) serious / complete blockage to main pedestrian/vehicular access.
- Each tree management department is required to designate a 26. departmental contact officer to liaise with the TMO in handling emergency tree-related cases, and to put in place an effective mechanism for their internal communication and decision-making when a tree-related emergency situation occurs. The tree management department concerned is required to attend to the scene promptly. In addition, for tree-related cases involving major injuries or loss of human life, TMO staff with certified arborist qualification will arrive at the scene as soon as possible after notification from FSD / the Police / the "1823" Call Centre / HyD to obtain first-hand information on the incident and to offer guidance to the tree management department concerned regarding the handling of the incident. Since the commencement of this arrangement on 28 June 2010, TMO staff have to date been deployed to attend to 3 such tree failure incidents in support of the tree management departments concerned.
- (D) Enhancement of training to raise the professional standard of tree management personnel

- 27. Enhanced training is essential for nurturing a professional workforce capable of providing quality tree care service. The TMO, in collaboration with tree management departments, is formulating a training and manpower development plan to ensure an adequate supply of professional staff at the managerial, supervisory and frontline levels for the competent discharge of the full spectrum of tree management responsibilities. Meanwhile, the TMO has continued to organise tree-related training, e.g. on tree risk management, identification of tree species, common tree problems, pest and disease control, proper tree maintenance, tree protection during construction, etc., for Government staff engaged in tree management. Some of these training sessions are also open to consultant/contractor staff engaged by Government departments. To date, these training sessions have registered a total attendance of about 7 440. Apart from enhancing training provision for Government staff and consultant/contractor staff, the TMO also liaises with local training providers to upgrade available training opportunities for the industry.
- 28. As at 12 May 2011, there are 203 International Society of Arborists (ISA) Certified Arborists within Government. Some of these officers have

more than one professional qualification in arboriculture¹¹. The TMO will continue to encourage staff of various levels to obtain professional qualifications in arboriculture with a view to generally raising the professional standard of our tree management staff.

29. The TMO is also committed to upgrading the professional level of the industry on tree management. Together with the GLO in the GLTM Section, which focuses on the upstream processes of landscape planning and design and planting, the TMO will conduct a comprehensive review on the management of consultants/contractors engaged by Government departments for landscape works and tree management service. In addition to the ongoing review on the qualification requirements for contractors interested in admission to Government's approved list of contractors, the GLO and the TMO will examine feasible ways to promote continuous improvement in consultant/contractor performance, for instance, through more clearly-defined service requirements. As part of the review, we will also examine opportunities to further enhance the performance management arrangement for Government consultants/contractors

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These qualifications include ISA Municipal Arborist, ISA Tree Risk Assessor and LANTRA Professional Tree Inspection Certificate.

providing landscape-related and tree-related service.

(E) Enhancement of public education and community involvement

- 30. The GLTM Section seeks to foster a culture of care in Hong Kong for greenery, including trees, across the territory through a variety of community involvement and public education activities. In addition to various activities related to tree risk management and community surveillance of trees as mentioned in paragraphs 13-16 above, other public education and community involvement activities organised by the GLTM Section during the past year with a tree management dimension are highlighted below
 - (a) seminars on proper tree management for professional groups and other non-government organisations with a total attendance of about 800 participants;
 - (b) talks on tree care for secondary students and uniformed groups with a total attendance of about 2 450, and roving exhibitions in schools;

- (c) district-based seminars on tree care with a total attendance of almost 700 participants;
- (d) organisation of a photo competition for all secondary schools in Hong Kong in December 2010 to February 2011 to foster an attitude of care toward greening and trees among students;
- (e) launching of the revamped dedicated Greening website (www.greening.gov.hk) in April 2011, with enhanced content to raise public awareness of, and to disseminate knowledge on, greening, planting practices and tree management;
- (f) participation in the Hong Kong Flower Show 2011;
- (g) publication of a quarterly Greening Newsletter (a copy of the first issue released in April 2011 is at Annex H); and
- (h) regular displays on greening, landscaping and tree management issues at LCSD's Green Education and Resource Centre in Kowloon Park and the Environmental Resource Centres of the

Environmental Protection Department in Wan Chai and Kennedy Town.

- 31. In March 2011, a new Community Involvement Committee on Greening (CICG) under the chairmanship of Permanent Secretary for Works was established to advise DEVB on measures to encourage quality greening and to nurture a culture of care for trees through public education and community involvement activities. The membership of the CICG is at Annex I.
- 32. Additional public education and community involvement activities that the GLTM Section is working on with a focus on trees are highlighted below
 - (a) development of a teaching kit on issues related to greening, landscape and tree management;
 - (b) publication of tree and landscape maps to introduce interesting trees, open spaces and landscape assets in Hong Kong; and
 - (c) launching of new apps for smart-phones on tree appreciation.

- 23 -

33. Apart from DEVB, other bureaux/departments are also engaged in

organising public education and community involvement activities in support of

the cause for green living and environmental conservation. DEVB will

continue to play an overseeing role and identify opportunities for enhanced

efforts in this regard. In particular, DEVB will spearhead initiatives where the

GLTM Section will be best placed to take a lead role in view of the professional

expertise in arboriculture in its team or due to the involvement of

cross-departmental efforts. Examples of these initiatives include promotion of

good tree care practices to the general public and the private sector, community

surveillance of trees, etc.

Development Bureau

May 2011

Extract from the Tree Register at www.trees.gov.hk

位置 Location	樹木品種 Tree Species	樹木狀況 Tree Condition	改善措施 Mitigation Measures	其他 Others	視察部門 Inspection Department 上次檢查日期 Last Inspection Date 樹木登記冊號碼 Tree Register No. [部門編號 Department Reference no.]	相片 Photo	地圖 Location Map
長沙灣道425號 ,長沙灣遊樂場 No.425, Cheung Sha Wan Road, Cheung Sha Wan Playground	盾柱木,雙翼豆 Peltophorum pterocarpum	整體狀況良好 Good overall condition 曾受颱風吹襲破損 Previously damaged by typhoon	安裝纜索或支撐物 Cabling / other support 已完成改善措施 Mitigation measures completed		康樂及文化事務署 Leisure and Cultural Services Department 12/05/2011 LCSD/SSP/023 [LCSD_SSP_DT-CSWPG-6]		
荔枝角道, 深水埗公園對面 Lai Chi Kok Road, opposite Sham Shui Po Park	榕樹,細葉榕 Ficus microcarpa	整體狀況良好 Good overall condition		古樹名木登記編號: LCSD SSP/7 Old and Valuable Tree registration no. LCSD SSP/7	康樂及文化事務署 Leisure and Cultural Services Department 6/5/2011 LCSD/SSP/002 [LCSD SSP007]	10 Map	
薄扶林道,與域多利道交界的一所 小學工地 Pok Fu Lam Road, construction site of Pokfulam Primary School at junction with Victoria Road	黃葛樹,大葉榕 Ficus virens var. sublanceolata	呈現樹洞(情況中等) Cavity - moderate	適當修剪樹木枝條 Appropriate pruning 已完成改善措施 Mitigation measures completed		建築署 Architectural Services Department 19/4/2011 ASD/CW/006 [ASD_SSW307_T100]		
羅便臣道,斜坡編號:11SW-A/R614 Robinson Road, slope no. 11SW-A/R614	榕樹,細葉榕 Ficus microcarpa	呈現樹洞 Cavity 呈現腐爛 Decay 未有察覺明顯缺陷 No significant defect observed		石牆樹 Stone wall tree	路政署 Highways Department 3/2/2011 HYD/CW/096 [hyd_hk_11sw_a_r614_01_t3]		COMMAND TO THE PROPERTY OF THE
沙頭角 ,荔枝窩 Sha Tau Kok, Lai Chi Wo	秋楓 Bischofia javanica	整體狀況良好 Good overall condition 呈現樹洞 Cavity 呈現腐爛 Decay	適當修剪樹木枝條 Appropriate pruning 已完成改善措施 Mitigation measures completed 密切監察樹木狀況 Tree condition under close observation	古樹名木登記編號: AFCD/LK/004 Old and Valuable Tree registration no. AFCD/LK/004	漁農自然護理署 Agriculture, Fisheries and Conservation Department 22/2/2011 AFCD/N/001 [AFCD_LK_004]		

Examples of tree labels installed by tree management departments for trees included in the Tree Register

(a) Housing Department





(b) Drainage Services Department



Pictorial Guide for Tree Maintenance to Reduce Tree Risks 減低樹木風險的樹木護養簡易圖解

Please take immediate action when any of the following situations is identified. 如樹木有以下狀況,請從速慮理

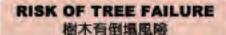
General Condition

Leaning Tree 傾斜樹木

Leaning tree with horizontal cracks in the upper (tension) side and/or buckling wood or bark on the lower (compression) side.

傾斜樹木背後的拉緊位置出現橫向 裂縫・而在擠壓位置出現樹皮皺起 的情況。

Leaning tree (30° to 40°) with soil cracks in the soil surface. 傾斜樹木 (角度達30至40度) 及背後的土壤出現裂績





Recommendation

Recommend to add support system or may need to remove the tree

建騰加股支撐系統或 需考慮移除樹木

Crown Condition

Dieback Twigs 樹枝枯死

Dieback twigs on tree crown 樹冠頂上的樹枝枯死



Recommendation

Pruning 適當修枝

May need to investigate if roots have been damaged or diseased

無檢查樹根是否受損

Branch Condition

Dead Branch 樹枝枯死



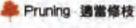
Crack/Split 關係遊離條



Hanger 懸吊斷枝



Recommendation





recommended position of final pruning cut 建議修枝位置

Recommendation

Recommend to add

runk Condition

V-shaped Crotch with Cracks/Split V型樹松有裂縫或裂關

The stem is split by one or more cracks 枝幹沿著裂縫斷開

Codominant stems 等勢草

A weak union with crack(s) and / decay 接合點出現裂



support system or may need to remove the tree

建牆加設支撑系統 或需考慮移除樹木

Development Bureau

RISK OF TREE FAILURE 樹木有倒場風險

Wood Decay and Cavity 高爆/樹洞

Wood decay/cavity at basal area /root

> 樹腳/或根部上有 明顯眞爛或樹詞



Open cavity decay more than 30% of cross-section or open more than 120° 國際機的模切而多過30%或 樹潤製開角度多於120"

Recommendation

Recommend to add support system or may need to consider tree removal

建議加設支撐架或可 能需要考慮移除樹木

RISK OF TREE FAILURE 樹木有倒場風險

Root Condition

Severely cut/damaged roots 根郎被嚴重切割或損害



and health condition of the tree RISK OF TREE FAILURE

建購加設支撐架及監 察樹木的種固狀況和 健康狀況

Recommend to add

support system and

monitor the stability

Recommendation

Fungal fruiting bodies

呈現菌類子實體



Recommendation

More detailed investigation of extent of decay is required

> 需要對窩爛狀況作 更詳集檢查

ATTENTION :

樹木有倒塌風險



Topping creates more dangerous trees because: 削頂會令樹木變得危險,因為:

"Sprouts" after topping are weakly attached and are lkely to break 樹木削頂後所長出的水楊枝接含脆弱,容易折斷

Topping wounds are prone to insect and disease attack 削頂的傷口容易受病蟲害侵襲

Topping cuts invite decay in trees 削頂的切口使樹木腐爛



Note

For guidelines on pruning, please refer to (http://www.devb-

wb.gov.hk/greening/en/preservation/guidelines.pdf). 請瀏覽以下網址的「修剪樹木的一般指引」: (http://www.devbwb.gov.hk/greening/tc/preservation/guidelines.pdf) •

The information in this leaflet is for general reference only. For assessment of specific conditions of trees, specialist advice from reputable contractors/specialist is recommended.

本單張/小冊子資料僅供一般參考,如需詳細檢查個別樹 木‧應向可靠承觸商或相關專業人士尋求意見,

Reference



[2] Hayes E., "Evaluating Tree Defects", 2nd Edition, Safetrees, 2005.

[3] Lilly S.J., "Arborists' Certification Study Guide" International Society of Arboriculture, USA, 2001. [4] Matheny N.P. and Clark J.R., "A Photographic Guide to the Evaluation of Hazard Trees in Urban Areas" . international Society of Arboriculture, USA, 1993. [5] Mattheck C. & Breioer H., "The Body Language of Trees: A Handbook for Failure Analysis (Research for Amenity Trees)", Stationery Office Books, 1995.

級化、國境及樹木管理組

Pictorial Guide for Tree Maintenance to Reduce Tree Risks 減低樹木風險的樹木護養簡易圖解

Please take immediate action when any of the following situations is identified. 如樹木有以下狀況、請從速處理。

General Condition

本狀況

Leaning Tree 傾斜樹木







Crown Condition

冠狀況

Dieback Twigs 樹枝枯死





Pest problem 病蟲害





Trunk Condition

V-shaped Crotch with Cracks/Split V型樹椏有裂縫或裂睛



Cavity at basal area 根部上有樹洞





Wood Decay and Cavity

腐爛/樹洞

Root Condition

Severely cut/damaged roots 根部被嚴重切割或損害





Fungal fruiting bodies 呈現菌類子實體



Keep Your Trees Safe

Why is tree maintenance important?

Proper tree maintenance contributes to the healthy growth and good form of trees. Healthy and structurally stable trees are valuable assets to our environment.

Many tree failures are triggered by poor tree maintenance such as improper pruning, topping, damage to the root system and other malpractices in tree care. Tree failures could cause injury and loss of human lives and damage to properties.

Preliminary maintenance inspections

The primary purpose of Preliminary Maintenance Inspections is to identify the need for tree maintenance works. Property owners as well as property management or maintenance staff could carry out such preliminary maintenance inspections before seeking professional advice as necessary.

In carrying out preliminary maintenance inspections, you should check a tree for any of the following signs and take appropriate action (see 'Pictorial Guide for Tree Maintenance to Reduce Tree Risks').

- 1. Leaning
- 2. Dieback twigs/dead branches/hangers
- 3. Cracks/splits/wood decay/cavities
- 4. Severely cut/damaged roots
- 5. Fungal fruiting bodies
- 6. Topping/improper pruning

Trees are living organisms and their condition may change with time. Owners should inspect trees within their premises at least once a year and take appropriate precautionary measures before the onset of the wet season. Routine tree maintenance works should be carried out by a competent landscape service provider or an arborist/tree specialist.

Who is responsible?

Property owners are responsible for trees within their lots. Property owners may also be liable under specific lease conditions for the maintenance of trees within or adjoining their lot.

If your building is held in multiple ownership, it is preferable for the Owners' Corporation to coordinate the maintenance of the trees for which you are collectively responsible. If you need further advice on how to set up an Owners' Corporation, please consult your nearest District Office.

How to reduce Tree Risks?

Depending on the identified tree risks, abatement measures may include:

- · Restricting access;
- Removal or relocating the objects that may be hit by a fallen tree/branch;
- · Monitoring tree and/or site conditions;
- · Appropriate pruning;
- · Cabling, bracing and propping; and
- Tree removal (In case of any defective tree or dead tree requiring the removal, the tree owner should follow the requirements stipulated in the lease conditions where applicable).

What would happen if I did not maintain my trees?

If a tree is not well maintained, it will deteriorate and a tree failure may occur. This could result in injury to persons or damage to properties. If this happens, you may have to incur great expense to repair property and to compensate the victims.

Enquiry

For further information about tree management and maintenance, please contact Tree Management Office, Development Bureau by calling telephone no. 2848 2334, or by e-mail to gltms@devb.gov.hk.

發現懷疑有問題樹木的日期及時間 Date and time of identifying suspected tree problem(s):						
樹木品種 (如知道): Tree species (if known):						
樹木所在地 Location of the t 路/區域 Road/Area: 地區 District: 附近地標 Near:	木所在地 pocation of the tree(s): /區域 pad/Area: 區 strict: 近地標					
	(可選多於一項) pserved (may tick more than one box):					
□ 出現嚴重傾係 severe leanin □ 在樹根附近的		□ 懸用斷枝broken branch(es) hanging from tree□ 根部因挖掘工程受損				
	r cracks in structures behind the tree	root damage caused by trenching				
□ 白蟻 termite		□ 過度修剪 excessive pruning				
	上有大型的破損或外露的樹洞 ′ open cavity on trunk/ branch(es)	□ 樹皮剝落 loosened bark				
	上有裂開情况 on trunk/ branch(es)	□ 有真菌子實體 fungal fruiting bodies observed				
	不尋常落葉(例如:在生長季節大量落葉) (es)/ abnormal defoliation	□ 其他補充資料 (<i>請說明</i>) Other supplementary information (please specify) ————————————————————————————————————				
Is there a departmental sign near the site or the tree? 現場/樹木附近有部門標記嗎?						
□有,請說明 Yes, please specify □無/看不見 No / Don't see any.						
樹木周圍有下列設施嗎?(例如:籬笆圍欄/花槽/水掣/樹槽/路磚/樹架/樹穴)						
Are there any facilities around the tree, e.g. fence, trellis, planter, water point, tree pit, paver or tree grill, tree cave? ☐ Yes 有 ☐ No 沒有						
有關樹木是否整齊排列 ?						
Is the concerned tree(s) arranged in order?						
□Yes 是 □ No 不是						



樹木相片(如有的話)

Photos of tree (if available)

多謝你積極參與,令香港的樹木更安全。

Thank you for your participation in enhancing tree safety in Hong Kong.

個人資料 (非必要)

政府部門會將以下個人資料作聯絡用途及查詢報告內所載樹木的資料。

Notes about Personal Data (not mandatory)

The personal data provided by you below will be used by relevant Government departments for the purpose of communication with you on matters relating to your report.

姓名: 聯絡電話號碼

Name: Contact telephone no.:

電郵地址:

E-mail address:

我同意可/不同意*將本人的聯絡資料轉交有關政府部門,以便跟進及直接聯絡本人。

I agree/ disagree* that my personal contact details may be released to the concerned Government departments to facilitate follow-up actions and communication with me.

* 請刪去不適用者 delete as appropriate

使用者須知 (非電子表格専用):

報告懷疑有問題的樹木簡單方便。你可以透過下列途徑提交此表格:

- 1. 傳真至 1823 電話中心(傳真號碼: 2760 1823) 或電郵至 tellme@1823.gov.hk; 或
- 2. 傳真至發展局的樹木管理辦事處(傳真號碼: 2186 6932) gltms@devb.gov.hk 或 trees@devb.gov.hk。

Notes to Users (For non-e form only):

Reporting suspected tree problems is easy. You may send in this form through the following channels:

- 1. Submit the report to the 1823 Call Centre by fax (fax number: 2760 1823) or by e-mail to tellme@1823.gov.hk; or
- 2. Report to Tree Management Office, DEVB by fax (fax number: 2186 6932) or by e-mail to gltms@devb.gov.hk or trees@devb.gov.hk.

Membership of the Expert Panel on Tree Management

Chairman

Principal Assistant Secretary (Greening, Landscape and Tree Management), Development Bureau

Non-official members

Professor JIM Chi-yung
Dr WONG Fook Yee
Dr Peter Yau
Mr Simon Yu Lap-on
Professor ZHUANG Xueying

Official members

Head of Tree Management Office, Development Bureau Chief Leisure Manager (Passive Amenities), Leisure and Cultural Services Department

Senior Conservation Officer (Technical Services), Agriculture, Fisheries and Conservation Department

A tree case which was resolved under the TMO's lead

In late November 2010, the Tree Management Office (TMO) received a complaint via the LegCo Secretariat regarding a Cotton Tree (*Bombax ceiba*, 木棉) outside the Cooked Food Centre near Yuen Long Plaza, Yuen Long (Photo 1). The tree is about 16m tall and its trunk measures 0.6m dbh (diameter at 1.3m above ground level).

- 2. Previously, the complainant had complained to Lands Department (LandsD) that the subject tree suffered from decay as a result of fungal and termite infection. After inspecting the tree, LandsD recommended, among others, to expand the tree pit by removing the concrete paving around the roots (Photo 2). The complainant requested, via the LegCo Secretariant, the TMO to inspect the tree and confirm its structural stability.
- 3. Upon receiving the referral, the TMO conducted a detailed inspection of the tree. The tree was assessed to be structurally sound, but was subject to severely constrained growing condition. While the TMO agreed in principle to the proposed removal of the concrete paving around the roots, it considered that such works would need to be carried out with care to avoid any adverse effect on the structural stability of the tree.
- 4. To ensure that the identified mitigation measure was properly carried out, the TMO tendered professional advice to Highways Department (HyD), which carried out the removal of the concrete paving and the tree pit construction works, on necessary precautionary measures, including the installation of temporary tree support during the works period. HyD completed the mitigation measures in late December 2010 (Photo 3). The tree was subsequently handed over to the Leisure and Cultural Services Department (LCSD) for management.

Photo 1



A Cotton Tree near Yuen Long Plaza, Yuen Long that was the subject of a complaint to the LegCo Secretariat.

Photo 2



The tree was subject to severely constrained growing conditions, including a concrete planter nearby and concrete paving around the roots.

Photo 3



The concrete planter and the concrete paving around the roots were removed, and the tree pit was expanded to provide a better growing environment for the tree.

締造綠色香港 A Greener Vision for Hong Kong 我非常高興見到《綠化》期 政府在綠化的工作已取得一定的成果,而私人

里程》後,發展局及工務部 門近年來出版的第三份期刊。 這些期刊不但讓我們接觸到市民大 眾,同時有助推廣和宣傳政府在各方 面努力推展的工作。

繼2009年成立由政務司司長領導的樹木 管理專責小組後,我主動提出負責有關綠 化、園境和樹木管理的政策,並在發展局 轄下成立綠化、園境及樹木管理組。 綠化不僅是種植花草樹木,要取得 良好的綠化效果,需要在擬訂土地用 途和城市規劃階段作出週詳的考慮。 這正好配合發展局所負責的城市規劃和發 展以及地政工作,並且切合我們締造優質 城市環境的願景。

這解釋了為何我們這樣重視啟德發展計 區內各處可容納大量綠化公眾休憩 空間,在香港這實在難能可貴。

與此同時,我們在香港的已發展地區積極 爭取更多綠化機會,為各區制訂綠化總綱 圖。綠化總綱圖有系統地令已發展地區的環 境煥然一新。

刊面世。《綠化》是繼《活 界別的參與同樣重要。現時,我們透過三個主 化@Heritage》和《啟德新 要渠道鼓勵私人界別參與綠化:

> 1. 可持續發展委員會建議大型發展項目須提供 綠化空間,包括優先在地面進行綠化,以及在

2. 我們與市區重建局合作,透過該局在 灣仔、九龍城和觀塘等地區的重建項目,率先 實踐綠化理念,在擠迫的市區營造更多綠化

3. 政府在2010年推出活化工業大廈的政策 透過重建或改裝整幢位於黃竹坑、柴灣、觀塘 和荃灣等地區的工廈,騰出更多地方進行綠化

在香港推行綠化困難重重:懸垂的招牌、錯綜 複雜的地下公用設施、建築物遮擋陽光照射樹 劃。該計劃佔地超過300公頃,在 木、土壤狀況欠佳等。由於市區環境狹窄,我 們要利用新穎及富創意的綠化方法。

> 位於灣仔莊士敦道和盧押道交界鄰近公衆垃圾 收集站的綠化工程,是我最喜愛的其中一項綠 化項目。縱然該地點面積有限,但各式各樣的 花卉和灌木為這角落增添亮麗色彩,今灰暗的 都市環境變得繽紛怡人。

政府在樹木管理工作方面投放了大量資源。現 時,我們正發展一個電子系統,方便市民監察 社區內的樹木狀況,盡早識別有問題的樹木。 該電子系統具備全球定位功能,市民可在數碼 地圖上準確指出問題樹木的所在地點,以便負 責的政府部門盡快跟進。

公眾教育非常重要,尤其要從小培育綠化意識。 我們持續鼓勵學校將綠化概念融入日常生活, 例如設立有機園圃和綠化屋頂,以培育學生愛 護植物的文化。我們希望市民大眾都以綠化為 己任,同心協力締造綠色香港。❖

發展局局長 林鄭月娥



I am pleased to note the launch of the Greening newsletter, the third in recent years to be published by the Development Bureau and its departments following the Heritage and Kai Tak Development newsletters. Not only do these newsletters provide a means of engaging the public, but also they help promote and publicise the good work being done.

Following the Task Force on Tree Management led by the Chief Secretary for Administration in 2009, I offered to take up the policies on greening, landscaping and tree management and thus created the Greening, Landscape and Tree Management (GLTM) Section under the Development Bureau. Greening goes beyond planting; it needs to be considered at the early stages of land use and town planning to be successful. It is a natural fit with our work of land use and town planning and development, which ties in

excited about the Kai Tak Development because it has some 300 hectares of new land providing the greatest opportunity to plan open green spaces throughout the development. This is a luxury in Hong Kong.

well with our vision to create a quality

city environment.

Concurrently we are also exploring opportunities greening in such a constrained physical for further greening in the existing built-up areas. This is where the Greening Master Plans (GMPs) come in. We have created GMPs that have successfully transformed these areas from the ground up in a very systematic manner.

While the greening efforts at the Government level have borne fruit, we recognise the need to get private sector participation and involvement in our greening mission. There are three key ways we are doing this:

- 1. The Council for Sustainable Development recommended, and the Government has agreed, that there should be a mandatory requirement to provide greenery for large sites, including greenery at the ground level as a priority as well as on the podium and roof levels. This should make a significant change to our city environment.
- 2. We are working with the Urban Renewal Authority, a pioneer in terms of greening and creating more open space in very congested city environments such as Wan Chai, Kowloon City and Kwun Tong through their redevelopment projects.
- 3. Launched in 2010, the revitalisation of industrial buildings by encouraging redevelopment or wholesale conversion in areas such as Wong Chuk Hang, Chai Wan, Kwun Tong and Tsuen Wan will provide opportunities for more greening.

Hong Kong is certainly not without its challenges to greening: congested spaces both above with overhanging signboards and below with underground utilities, as well as the shading effect of buildings and substandard soil conditions in the urban environment. So we need more innovative and creative ways of

One of my favourite greening projects is a very tiny space in Wan Chai at Johnston Road and Luard Road near a refuse collection point. It is delightful to see how flowers and shrubs survive in this little corner adding a lot of colour to an otherwise grey city environment.



On tree management alone the amount of resources we are spending is quite unprecedented. Currently, we are developing a community surveillance tool to get the public to help us identify problematic trees. The electronic GPS-based system will use digital maps so the public can indicate exactly where problematic trees are located, and we shall promptly follow up on these trees.

Public education is very important and it is most effective when started at a very young age. We continue to encourage schools to integrate greening concepts into every day life, including organic gardens and green roof projects to foster a culture of care for greenery. It is our hope that everyone can make it our collective mission to green Hong Kong. *

Mrs Carrie Lam Secretary for Development



中文名: 宮粉羊蹄甲 學**名**: Bauhinia variegata

原產地:東南亞、華南以西至 巴基斯坦及印度

香港觀賞勝地:遍佈全港 特別是公園和郊野公園

宮粉羊蹄甲是一種中小型落葉喬 木,可高達10至12米,在春天 綻放粉紅花朵。宮粉羊蹄甲與香 港市花洋紫荊是同科及同屬的植 物,兩者特徵相近,花朵皆酷似 蘭花而且香味怡人,擁有心型雙 瓣樹葉,與別不同。又因樹葉形 狀似駱駝的足印, 故英文亦稱 Camel's Foot Tree •

Common name: Orchid tree/Camel's Foot tree Scientific name: Bauhinia variegata

Origin: Southeast Asia, from Southern China west to Pakistan and India

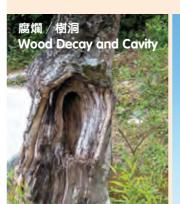
Viewing in HK: Throughout the territory, particularly in parks and country parks

Flowering in spring, Bauhinia variegata is an attractive small- to medium-sized deciduous tree that can grow to 10-12 m tall. It is in the same family and genus as Bauhinia blakeana, the floral emblem of Hong Kong. Both have the same characteristics with orchid-like flowers with a pleasant fragrance and large round twin-lobed leaves which are distinctive from other species. Because the leaf shape resembles the footprint of a camel, Bauhinia variegata is also called "Camel's Foot Tree".

舉報有問題樹木莫遲疑 How You Can Help to Report Problematic Trees

香港綠蔭處處,古樹名木蒼勁多姿。但年 化、園境及樹木管理組呼籲大家舉報懷疑有 定必跟進及回覆。※

問題的樹木,好讓我們防患於未然。請致電 老、病蟲害、土壤欠佳等問題都可能導致樹 1823、使用Tellme@1823應用程式或於 木健康出現問題,或會對公眾構成危機。綠 www.trees.gov.hk下載並填寫護樹報告。我們







Hong Kong is blessed with many beautiful trees. But sometimes old age, disease, poor soil and other conditions can weaken trees. making them a potential risk to the community. The GLTM Section asks everyone to help identify problem trees and report them to us. Simply call 1823 or use the tree care report at www.trees.gov.hk or via the Tellme @1823 mobile app, which was launched on the 12th of April 2011. Of course, we will make the best effort to save all trees! *

1823 www.trees.gov.hk

歡迎與我們聯絡 We hope you enjoy our quarterly newsletter. You are welcome to contact us with any comments or suggestions:

綠化,園境及樹木管理組 The Greening, Landscape and Tree Management Section Development Bureau

我們希望您喜歡這份《綠化》

季刊,如有任何意見或建議

中環花園道美利大廈10樓 10/F Murray Building, Garden Road, Hong Kong

電話 Tel: 2828 2111 傳真 Fax: 2523 5327 電郵 Email: greening@devb.gov.hk www.greening.gov.hk



綠化、園境及樹木管理組管理層 **Introducing GLTM Section Management** 2010年3月,發展局工務科轄下 The Greening, Landscape and Tree Management

成立綠化、園境及樹木管理組, 倡導新的策略性綠化、園境及樹 木管理政策,使香港持續發展更 綠化的環境。該組的管理層成員 包括(照片從左至右):樹木管理 辦事處總監周錦超、首席助理秘 書長(綠化、園境及樹木管理) 區令堯、綠化及園境辦事處總監 伍芷筠。❖

(GLTM) Section was established under the Works Branch of the Development Bureau in March 2010 to champion a new and strategic policy on greening, landscape and tree management, with a view to achieving the sustainable development of a greener environment for Hong Kong. It is led by (from left to right): Lawrence Chau, Head of Tree Management Office, Kieran O'Neill, Principal Assistant Secretary (Greening, Landscape and Tree Management), and Kathy Ng, Head of Greening and Landscape Office. *



2011年香港花卉展覽於3月11至20日舉行,綠化、園境 及樹木管理組在會場設立教育攤位,推廣「可持續綠化及 樹木管理」。透過採用可持續的建築材料和別出心裁的「綠 色屋頂」,將主題的理念展現眼前,攤位設計更獲頒「最具 特色獎」。是次展覽共吸引約五十萬人次入場參觀,當中 不少人士蒞臨參觀我們的攤位。

The GLTM Section set up an educational booth at the Hong Kong Flower Show 2011 from 11–20 March to promote the theme of "Sustainable Greening and Tree Management". The design and construction of our booth brought the theme to life through the use of sustainable building materials and a special "green roof". We received the "Award for Unique Feature" for our booth, which was viewed by many of the 500,000 visitors to the event.









根據2009年6月發表的《樹木管理專責小

組報告 — 人樹共融 綠滿家園》的建議

www.greening.gov.hk

綠化、園境及樹木管理組網站展新貌 **GLTM Section Website Revamped**

歡迎瀏覽經革新的政府綠化網站,查閱政府的綠化措施、樹木 護理及管理方法、一般的樹木及植物資料和最新活動資訊。

Please visit our newly revamped website for information on greening initiatives, tree care and management, common trees and plants, current events and much more!



攝影比賽宣揚人樹共融 **Photo Contest Results Spread Harmony**

「人樹共融 樂滿家園 | 攝影比賽已完滿結束,綠化、園境及樹木管理組 恭賀所有得獎的中學生。得獎作品帶出香港的人、樹和都市環境息息相 關,和諧共存的信息。比賽分三個組別,主題分別為:1「蒼翠茂盛的 市區樹木」、2「美麗獨特的古樹名木」和3「賞心悦目的本地植物」。 共吸引270多名學生參加。請登入我們的網站觀賞得獎作品。

GLTM Section congratulates all winners of our "People, Trees, Harmony" Photography Contest for secondary school students. The results highlight the harmony between trees, plants, people and the urban environment in Hong Kong. Over 270 contestants vied for prizes in three categories: 1 "Trees in urban environment"; 2 "Beautiful old trees"; and 3 "Attractive native plants". Please see our website for images of winning entries.

組別冠軍 Champions of Category



鄭朗澄 Cheng Long Ching, Jason

Julien Hanck Colourful moss and lichen

Cheng Ho-ching, Justin

合歡之光



緑化, 園境及樹木管理組期刊 Newsletter of the Greening, Landscape and Tree **Management Section**





都市快拍 SNAPSHOTS





overnment of the Hong Kong Special Administrative Region

五月 May - 七月 July

綠化推廣活動 **Greening Promotional Activities**

康樂及文化事務署 逢星期二至五 (上午9時30分至下午4時45分, 分4節進行)

Leisure and Cultural Services Department Every Tuesday to Friday (4 sessions from 9:30am to 4:45pm) Lecture Room, Green Education 九龍公園綠化教育資源中心研習室 and Resource Centre, Kowloon Park Enquiries: 2723 6042 www.lcsd.gov.hk/green/gerc/en/promotional.php

海下灣海岸公園生態導遊

Hoi Ha Wan Marine Park Ecotour

海下灣海岸公園 逢星期日及公衆假期 (上午10時30分至中午12時/ 下午2時15分至3時45分) 最多可接待25位遊客,先到先得 Call 1823 for details 查詢電話:1823

Hoi Ha Wan Marine Park Every Sunday and public holidays (10:30am - 12:00noon; 2:15pm - 3:45pm Max 25 visitors, first-come-first-served

www.gohk.gov.hk/eng/calender/nature.html

嘉道理農場暨植物園生態導遊團 **Eco-Tour for Group Visit**

2011年7月1日至12月31日 星期一、三、四及五 (上午9時30分至中午12時及 下午2時至4時30分) 由5月25日起接受申請 查詢電話: 2483 7200 www.kfbg.org/kfb/homepage.xml

1 July to 31 December 2011 Monday, Wednesday, Thursday & Friday (morning session 9:30am - 12:00noon; afternoon session 2:00pm - 4:30pm) Application will be accepted from 25 May 2011 Enquiries: 2483 7200



1. 「以地點為本」的評估 — 政府部門會 先確定一旦發生樹木枝折或倒塌事件將會 令公眾面對相當大風險的地點,並調動資 源作優先處理,從而更有效實施樹木風險

at Kadoorie Farm & Botanic Garden



2. 「以樹木為本」的評估 — 經確定地點 後,有關部門的人員會識別有問題或須要 重點護養的樹木,並按劃一方法有系統地

管理。

着外在環境不斷改變而出現變化。業主對 management



木,應最少每年檢查 一次,並妥善護理樹 木,及採取適當的防 範措施,我們呼籲私 人業主在風雨季來臨 之前檢查其物業內的

進行樹木風險評估並 非一次過的工作,而 是專業樹木護理工作

在政府加強防範下,加上業主和市民的支持, 我們能同時兼顧保育樹木和保障公衆安全。 🛠

Following the recommendation of the "Report of the Task Force on Tree Management - People, 檢查樹木的狀況,尤其會注意個別樹木的 Trees, Harmony" in June 2009, the GLTM Section was established to coordinate tree management departments for, among other 樹木是有生命的,其健康和結構狀況會隨 tasks, the implementation of tree risk

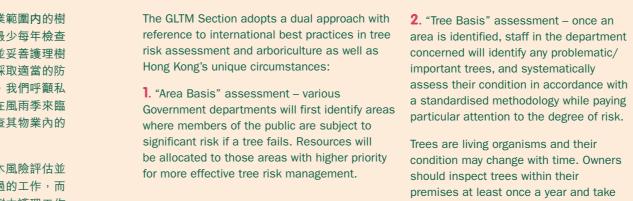


particular attention to the degree of risk. condition may change with time. Owners premises at least once a year and take

appropriate precautionary measures to maintain them. Also, we appeal to private owners to check their trees in advance of the coming wet season. Tree risk assessment is not a one-off exercise. It contributes to a professional

approach to tree management and helps ensure the long-term sustainability of our trees. By remaining vigilant at the Government level and with the help of all property owners and citizens, we can strike a good balance between tree preservation and public safety. 🛠





Membership of the Community Involvement Committee on Greening

Chairman

Permanent Secretary for Development (Works)

Non-official members

The Hon Chan Hak-kan
Mr Alan Chan Ming-on
Professor Leslie Chen Hung-chi
Mr John Ho Kin-chuen
Mr Stephen Lam Wai-nang
Mr Patrick Lau Hing-tat
Mr Leung Man-kit
Dr NG Cho-nam
Mr Kenneth Ng Kar-wai

Miss Maria Tom Wai ahr

Miss Maria Tam Wai-chu

Professor WONG Chi-kui

Official members

Secretary for Education or representative

Director of Agriculture, Fisheries and Conservation or representative

Director of Civil Engineering and Development or representative

Director of Environmental Protection or representative

Director of Home Affairs or representative

Director of Housing or representative

Director of Leisure and Cultural Services or representative

Deputy Secretary (Works)1, Development Bureau