

**Territory and Municipal Services  
Reference Document 4**



**LANDSCAPE MANAGEMENT AND  
PROTECTION PLANS (LMPP)**

**Requirements for the Protection of Public  
Landscape Assets Adjacent to Development Works  
Issue 2 Revision 2**

**APPROVED FOR ISSUE**

Approved by:

Fay Steward  
Executive Director  
Land Management and Planning  
Date: **August 2010**

## TERRITORY AND MUNICIPAL SERVICES

### LANDSCAPE MANAGEMENT AND PROTECTION PLANS (LMPP)

#### REQUIREMENTS FOR THE PROTECTION OF PUBLIC LANDSCAPE ASSETS ADJACENT TO DEVELOPMENT WORKS

# AA

**Document No. AA-REF-04**

## 1 PURPOSE

This document establishes the Territory and Municipal Services (TAMS) mandatory requirements (Requirements) for the Protection of Public Landscape Assets and other public infrastructure assets adjacent to any Development Works.

## 2 SCOPE

These Requirements apply to all developments adjacent to publicly owned landscape and other assets in road verges, public open spaces and unleased Territory land.

## 3 OBJECTIVES

These requirements are issued to inform the Applicant of the measures that must be taken to ensure that Public Landscape and other Assets are protected from damage during the progress of any Development Works.

## 4 DEFINITIONS, TERMS AND ABBREVIATIONS

### **Developer**

In the private sector, the organisation nominated in the Deed of Agreement as the 'Developer', including its employees, contractors, successors and agents.

In the public sector, the Land Development Agency (LDA) or any other ACT Government agency responsible for development of public infrastructure works in the ACT including its employees, contractors, successors and agents.

### **Coordinator**

The Developer, the Head Consultant or the agent nominated by the Developer as being responsible for the coordination of all disciplines of design and documentation prepared and certified by the Consultant/s and for the superintendence of the construction of the Works. The Coordinator shall be responsible for the lodgement of the Submission with TAMS and shall be the sole point of contact between Asset Acceptance, through the Project Lead, and the Developer throughout the life of the development. Asset Acceptance is not required to meet or communicate directly with any other entity or individual other than the nominated Coordinator on issues relating to the Submission.

### **Head Consultant**

The organisation responsible on behalf of the Developer for the overall design and/or site superintendence of the whole of the Works and certification that the design and/or construction of the Works comply with these Requirements and the Standards.

### **Consultant**

The organisation responsible for the design and/or site superintendence of part or whole of the Works and certification that the design and/or construction of that part of the Works for which it is responsible complies with these Requirements and the Standards.

### **Asset Acceptance (AA)**

Asset Acceptance is the section of TAMS responsible for co-ordinating the Asset and nominated capital works design and construction acceptance process on behalf of TAMS.

### **Asset Acceptance Project Lead (Lead)**

The Manager who will act as a single point of contact for the life of the project.

### **Development Works (Works)**

Refers to all work on development sites or on areas adjacent to the site, including demolition, site preparation, building and civil engineering works and the installation of utilities and services. Activities include vehicle and equipment access, materials delivery and storage, provision of site services and facilities, site excavation etc.

### **Works Area (Area)**

The area bounded by the approved Works boundaries and all road reserves, street verges, public open spaces and unleased Territory land adjacent to the Works.

### **Landscape Management and Protection Plan (LMPP)**

The LMPP is a drawing with detailed notes that describe the planned method of protection of all hard and soft landscape assets on the Works Area. *(Note that the Works may require the provision of an approved Traffic and Transport Master Plan which will influence the LMPP requirements).*

### **Temporary Traffic Management Plan (TTM)**

A plan approved by the Delegate of the Road Transport Authority authorising the erection or removal of any temporary traffic control devices eg. signs, barricades, traffic cones, etc under the provisions of The Road Transport (Safety and Traffic Management) Act of 1999.

### **Public Landscape Assets (Assets)**

All hard and soft landscape work including paths, driveways, trees, plantings and grass on or adjacent to the Works Area.

### **Standards**

All Australian Standards, applicable ACT Government requirements, codes and guidelines and all statutory and regulatory requirements governing the design of the Works.

### **Parks Conservation and Lands (PCL)**

PCL is the section of TAMS responsible as Asset Owners for the maintenance of all public and unleased Territory land, including parks, nature reserves, ponds and urban landscape in road reserves other than the hard assets such as road surface, paths and lights, lands and parks other than the road reserve areas.

### **Root zone**

Normally considered to be the tree canopy extent plus two metres: large trees may extend further along unpaved verge portions.

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## **6 GENERAL**

The Coordinator is responsible for the planning, installation, management and all ongoing maintenance of the approved protection measures to safeguard the Assets.

The Coordinator must make its own assessment of protection requirements and shall submit to AA for approval a Land Management and Protection Plan (LMPP) describing all required and necessary details of the planned protection measures to enable TAMS to make a full and proper assessment of the proposed measures. The LMPP shall be submitted under a cover sheet, AA-SCS-04 LMPP Submission Cover Sheet (refer Attachment A) and shall include the completed and endorsed checklist AA-DCL-LS-04(ext) Landscape Works Design Checklist (refer Attachment B).

It is the responsibility of the Coordinator to undertake a dilapidation inspection prior to the commencement of construction and to prepare a report identifying all existing defects in the Area. Upon inspection at the completion of the Works, all defects within the Area not previously identified in the report will be assumed to have been caused by the Coordinator and shall be rectified by the Coordinator, at cost to the Coordinator, and to the satisfaction of TAMS.

### **6.1 Approval of Landscape Management and Protection Plans**

The preparation of, and compliance with, an approved LMPP forms part of the Development Conditions for sites with established nature strip trees or where a development borders public open space and unleased Territory land that has established vegetation such as trees, grassing or other plantings.

If the Works are subject to the Development Approval process, the Coordinator shall submit a LMPP to ACTPLA with the Development Application and required detailed design drawings for approval. Where not subject to the Development Approval process, the Coordinator shall submit a LMPP direct to the Manager Asset Acceptance for approval. The LMPP shall provide clear and detailed identification and contact details of the Coordinator responsible for the Works.

### **6.2 Requirements for Landscape Management and Protection Plans**

It is the responsibility of the Coordinator to assess whether there are any Assets adjacent to the Works that may possibly be affected by any work related to the Works. Where the Coordinator is of the opinion that there are such Assets that require protection, the Coordinator shall prepare and submit to TAMS a LMPP in accordance with 6.1 above. This shall include a plan(s) of the site showing all verges and adjacent public open spaces. The plan shall encompass a minimum of ten (10) metres surrounding the development boundaries and shall include any Assets that may be impacted by the development.

Plans shall be scaled and dimensioned and presented on A3 size paper or electronically in PDF format. (Drawings originated at A1 size and reduced to A3 are not acceptable).

The drawing title block shall show the:

- Works title;
- drawing and revision number;
- distribution date;
- Suburb, Section and Block numbers and Street/s names, and
- the address of the title block.

Drawings shall be checked and signed by the Consultant for compliance with the Requirements.

The plan shall:

- locate all existing tree trunks and crown canopy widths and clearly indicate the vertical and horizontal clearance from the outside of the tree trunk to existing or proposed driveways, footpaths, cycleways and street kerbs;
- record an accurate assessment of the existing conditions on the verge and public open spaces;
- include a tree survey showing tree locations, species, sub-species, trunk and canopy dimensions, full condition assessment etc: each tree shall be numbered for identification purposes. Where the Coordinator is of the considered opinion that the existing conditions do not warrant a full tree survey, approval shall be obtained from AA to either submit a modified version or to omit the survey altogether.
- indicate the proposed location of gates and other access points to be used during the construction phase indicating whether existing, temporary or new;
- show the proposed location of fencing (refer section 7.5) to protect all verge plantings, trees and grassing;
- include general notes that describe the planned method of protection for all Assets;
- indicate the location of any proposed service excavation on public land and across any affected verges. Where no service installations are required then a statement to this effect shall be included, and
- identify any storage or parking requirements on the verge or open space adjacent to the Works. Where no storage requirements are needed then a statement to this effect shall be included.

## **7 ON-SITE MANAGEMENT OF VERGES AND OPEN SPACE**

### **7.1 General**

Before commencing works, the Coordinator shall advise AA in writing that the protective measures have been installed in accordance with the approved LMPP. Random audits will be undertaken by AA to ensure compliance: failure to comply may incur the issue of a stop work notice.

All Works shall be contained within the authorised site except for approved service connections in the verge or other approved exceptions.

During the progress of the Works all existing verge grass cover shall be maintained in its pre-existing condition. Protective measures shall include regular watering to maintain grass and trees in good condition.

Where the surface is grass or bare soil without trees, no protection is required where topsoil and grass, or other approved surface, are installed at the completion of the Works in accordance with the “Standard Specification for Urban Infrastructure Works”.

### **7.2 Supervision**

For all Works, other than minor works\*, and unless otherwise approved by AA, a suitably qualified landscape architect or horticulturist shall be employed to ensure that work in the verge meets the Requirements. The architect/horticulturist shall also be present during any cultivation or restoration of the verge which affects plant material and shall provide certification, endorsed by the Coordinator, that all work, cultivation and restoration have been performed to industry standards.

\* (i.e. minor in complexity and / or scope of works and confirmed as a minor works by AA)

### **7.3 Storage of Construction Materials**

The storage of construction materials and the parking of vehicles or equipment on verges or adjacent public open spaces are not permitted without prior approval from TAMS. Where there is no alternative available other than to use these areas for storage and/or parking, the Coordinator may lodge an application with the LMPP requesting approval for the use of these areas for the designated purposes. Approval may be given by TAMS subject to certain terms and conditions of use.

### **7.4 Site Accommodation**

Generally, site sheds, storage sheds, site amenities or billboards shall not be erected on verges or public open spaces without prior approval. Should there be no alternative, the Coordinator may lodge an application with the LMPP requesting approval to erect such a structure on the Area. The erection of site accommodation may be approved subject to the Coordinator's agreement to comply with the terms and conditions specified by AA and obtaining a Permit under the Roads and Public Places Act 1937 from TAMS PCL.

### **7.5 Protective Fencing**

#### **7.5.1 Extent**

All temporary protective fences erected to protect existing Assets shall be in accordance with the approved LMPP drawing. Fencing shall be erected before the commencement of any site works and removed at the completion of all construction activity except during verge restoration. The fence shall remain in place throughout the construction period.

Existing trees, plantings and grass shall be fenced off to enclose the street verge, public open space or unleased Territory land area. Unless otherwise approved by AA, protective fencing shall be located:

- along the drip-line of each tree (as a minimum), and
- 1.2m from the back of the kerb for the full frontage of the lease, along the property boundary and along the approved driveway access to ensure that the verge is completely enclosed.

#### **7.5.2 Materials**

Use of temporary 1800mm tall continuous mesh fence supported by steel posts with concrete bases, or prefabricated fencing panels with concrete bases, is mandatory. Any variation from this requirement shall be accompanied by written approval from AA.

#### **7.5.3 Pedestrian and Traffic considerations**

Existing verge footpaths shall be maintained. All existing verge footpaths and driveways shall remain unobstructed throughout the construction period to provide safe pedestrian movement at all times unless an alternative is approved by TAMS.

Where a constructed footpath or cycleway exists within the verge, protective fencing including the concrete pedestals shall be erected to provide a clear and unobstructed set back of 0.6m from each side of the footpath / cycleway in all cases to ensure safe passage for cyclists and pedestrians.

If there is no constructed public footpath on the verge a fenced clearway of 1.8m in width shall be maintained for the entire frontage of the lease to allow for cyclists and pedestrians.

Any deviations from the distances specified in this clause deemed necessary because of local restraints require prior approval from AA.

Access gates into the site shall swing into the site and not be capable of blocking pedestrian access along the verge or vehicular traffic on the road.

#### **7.5.4 Access for Service Installations**

Fencing shall not be removed for service installation across the verge without prior approval from AA for the service installation.

Where approval has been granted, the fence shall be realigned to provide a lane for service trenching but fences shall be re-erected to enclose trees before trenching commences. Upon completion of trenching, the fence shall be returned to its original alignment.

### **7.6 Existing Trees**

#### **7.6.1 General**

All trees located in the road reserve, verge, public open space and on unleased Territory land, shall be retained and must remain undamaged. The LMPP process requires the Coordinator to identify any trees that may be affected by the Works and to submit a request for approval to proceed with the work clearly identifying the nature of the work affecting the tree and protective measures proposed to minimise damage to the tree. Written authorisation from AA is required prior to any work affecting the tree taking place. Authorisation will be subject to:

- existing canopy clearance not being altered;
- crowns and apex of canopies not being altered or reduced;
- lifting equipment and load capable of operating in a manner that it clears the height and width of the tree canopy without damaging the crown, and
- construction equipment able to pass beneath the trees' lowest limb through the designated driveway access.

#### **7.6.2 Tree Root Protection**

The majority of tree roots grow in the top 300 mm of soil. These are the feeder roots, often very fine roots that provide the tree with water, oxygen and nutrients. These roots typically grow from the trunk of the tree to well beyond its 'drip-line' (the canopy edge).

Excavation within the drip zone of a tree does considerable damage to its root system. It can affect tree stability and tree health to such an extent that it will lead to the decline and possible death of the tree over a period of years.

Excavation that occurs within the drip zone of a tree shall be restricted to one side of the tree only and shall have prior approval from AA.

Where excavation is approved, the following measures shall be adopted for tree protection:

- do not sever large roots (>30 mm diameter) closer than halfway from the drip-line to the trunk;
- locate these roots by hand trenching to a depth of 300mm before any mechanical trenching is undertaken;
- cut all roots cleanly with equipment specifically designed for this purpose or by suitable pruning equipment;
- protect exposed roots from desiccation by lightly watering or covering with hessian which must be kept moist, and
- maintain the good health of the trees that have had disturbance in their root zone by continual watering, at no time shall the disturbed area be allowed to dry out to the detriment of the trees health.

### **7.7 Site Access**

Site access shall be by the existing driveway access points for the Works.



In some cases consideration may be given to allowing new access points across public land, however, alternative or additional access points require prior approval from AA. Where approval has been granted, the site access shall be positioned midway between two existing tree trunks dependent on the distance between trees. Access shall not occur on two sides of a tree within the approved clearance dimension.

Construction technique shall minimise the need for excavation across the verge.

Access across any adjoining public open spaces, parks, recreational reserves, adjoining properties e.g. school playgrounds, community halls etc, is prohibited without prior written authorisation from TAMS, and any other asset owner where applicable.

## **7.8 Services and Utilities**

### **7.8.1 Service Connection to Site**

The Coordinator shall coordinate and collate all approvals for proposed services within the Area.

Approval for trench locations and excavation within the verge shall be obtained through the relevant TAMS agencies at the planning and design stages. Approval is subject to the following requirements:

- if the proposed excavation is within the canopy spread of any tree, boring or tunnelling below the root zone must be undertaken;
- shared trenching for services is mandatory;
- the number of verge crossings shall be minimised;
- excavation for services across the verge (i.e. at right angles to kerb or property line) shall be midway between the tree trunks, and
- any service installation within 5.0m of an existing tree trunk, or within the tree canopy, requires prior approval.

### **7.8.2 Services and Utilities along Road Reserves**

The Coordinator shall coordinate and collate all service approvals: approval by AA for trench locations shall be obtained as part of the LMPP process

To minimise damage and/or disturbance to the roots or root zone and subject to approval by AA, any new or upgraded services parallel to the kerb or property line shall be installed on the following alignments:

- within road paved area;
- below the root zone if the excavation required is within the canopy spread of any tree;
- below the existing footpath on the property line, and
- immediately behind the kerb.

## **7.9 Irrigation**

PCL actively discourages the use of in-ground irrigation systems and generally does not endorse their installation in the verge. However, a system of quick-couplers at the lease edge of the verge may be installed subject to approval of the irrigation plan by PCL. A preferred alternative is the planting of drought tolerant grasses and shrubs that are not reliant on watering to survive.

## 7.10 Verge Infrastructure Condition and Restoration

The Coordinator shall notify AA at the completion of work and obtain approval prior to commencement of any verge restoration. During verge restoration, topsoil shall not be removed and the soil level shall not be changed within the drip zone of trees or as otherwise approved and, upon completion of the Works, verges shall have established appropriate grass cover as approved by PCL, e.g. dryland grass, native grass or couch.

If the standard of grass cover on the verge needs to be improved, the following requirements shall apply:

- within the root zone of trees, lightly cultivate the soil in one direction only to between 25 mm and 50 mm depth (50 mm maximum to minimise damage to tree roots), avoid major roots and keep a minimum of 1m away from tree trunks;
- outside the root zone of trees normal cultivation practice applies;
- add 'B type' topsoil at 25 mm to 50 mm depth, level the topsoil and add NPK fertiliser (equivalent to Multigro) at 40g/m<sup>2</sup>, and
- lay turf or sow seed of suitable drought tolerant species as specified in the *Standard Specification for Urban Infrastructure Works*. Keep moist during establishment.

**All restoration work shall be approved by AA and carried out by approved operators.**

## 8 REFERENCE DOCUMENTS

*Design Standards for Urban Infrastructure*. Department of Urban Services

*Standard Specification for Urban Infrastructure Works*. Department of Urban Services

*Roads and Public Places Act 1937*. ACT Government

## ATTACHMENTS

Attachment **A** : AA-SCS-04 LMPP Submission Cover Sheet

Attachment **B** : AA-DCL-LS-01(ext) Hard and Soft Landscape Works Design Checklist

# ATTACHMENT A : LMPP Submission Cover Sheet

To Senior Manager, Asset Acceptance, Territory and Municipal Services

Macarthur House, 12 Wattle Street, Lyneham ACT 2602

Project Title: .....

Project Description: .....

.....

Submission Status: Original Submission  Resubmission

Applicant: .....

Address: .....

.....

Contact Name: ..... Telephone: .....

Applicant's Reference: ..... email: .....

## SUBMISSION CONTENT

Are Works subject to Development Approval Process? 

Yes
No

 Submit LMPP to ACTPLA  
Submit LMPP to Asset Acceptance

Covering Letter:   
LMPP complies with Reference Document AA-REF-04:   
Landscape Works Design Checklist   
Other documents included with Submission:

Number of sets of documents:  Date of Submission: .....

## SUBMISSION IMPACT

Ref. Clause		Original Submission		Resubmission	
		Circle as applicable		Circle as applicable	
7.3	Storage of Materials	Yes	No	Yes	No
7.3	Parking	Yes	No	Yes	No
7.4	Site Accomodation	Yes	No	Yes	No
7.5	Protective Fencing	Yes	No	Yes	No
7.5.3	• Pedestrian Access	Yes	No	Yes	No
7.6	Existing Trees	Yes	No	Yes	No
7.7	Site Access	Yes	No	Yes	No

1. These Documents are submitted for review, comments and approval.
2. All Documents are in accordance with the design brief and have been prepared in accordance with the Requirements detailed in Reference Document AA-REF-04 Requirements for the Protection of Public Landscape Assets Adjacent to Development Works.

Certified by: .....

Print name: ..... Signature: ..... Date: .....

# ATTACHMENT B : Hard and Soft Landscape Works Design Checklist

Reference No: ..... Project Title: .....  
 Certifier: ..... Consultant: .....

CHECK ELEMENTS	Complies - Yes Complies - No Not applicable	CHECK ELEMENTS	Complies - Yes Complies - No Not applicable
<p><b>Design Factors</b>            Park status            Catchment population            Playground requirement            Road access            Parking</p> <p><b>Paving</b>            Construction details            Material details            Gradients</p> <p><b>Retaining Walls</b>            Construction details            Avoidability            Material details            Safety rails</p> <p><b>Earthworks</b>            Side slopes max. 1:4            Cover material            Clearance from structures</p> <p><b>Planted Areas</b>            Details            Species            Spacing            Surface treatment            Edges            Distance from structures</p> <p><b>Playgrounds</b>            Softfall materials            Softfall containment            Structures to Australian Standards            Paint/coating            Spacing of structures            Clearances</p>		<p><b>Lawns/Grass</b>            Gradients            Species</p> <p><b>Trees</b>            Species            Spacing            Planting Details            Root barriers            Clearances            • utilities            • fencing            • kerbs            • footpaths            • buildings</p> <p><b>Water Features</b>            Sewer connection            Landscape integration            Appropriate species            Planting clearances            Water pump            Water supply            Backflow prevention            Water containment</p> <p><b>Drainage</b>            Contours            Overland flows</p> <p><b>Irrigation</b>            Area            Adequacy of supply            Meter pit detail            Backflow prevention            Pipe sizes            Sprinkler type            Sprinkler orientation            Controller</p>	

**Certified as Checked:** Signature: ..... Date: .....