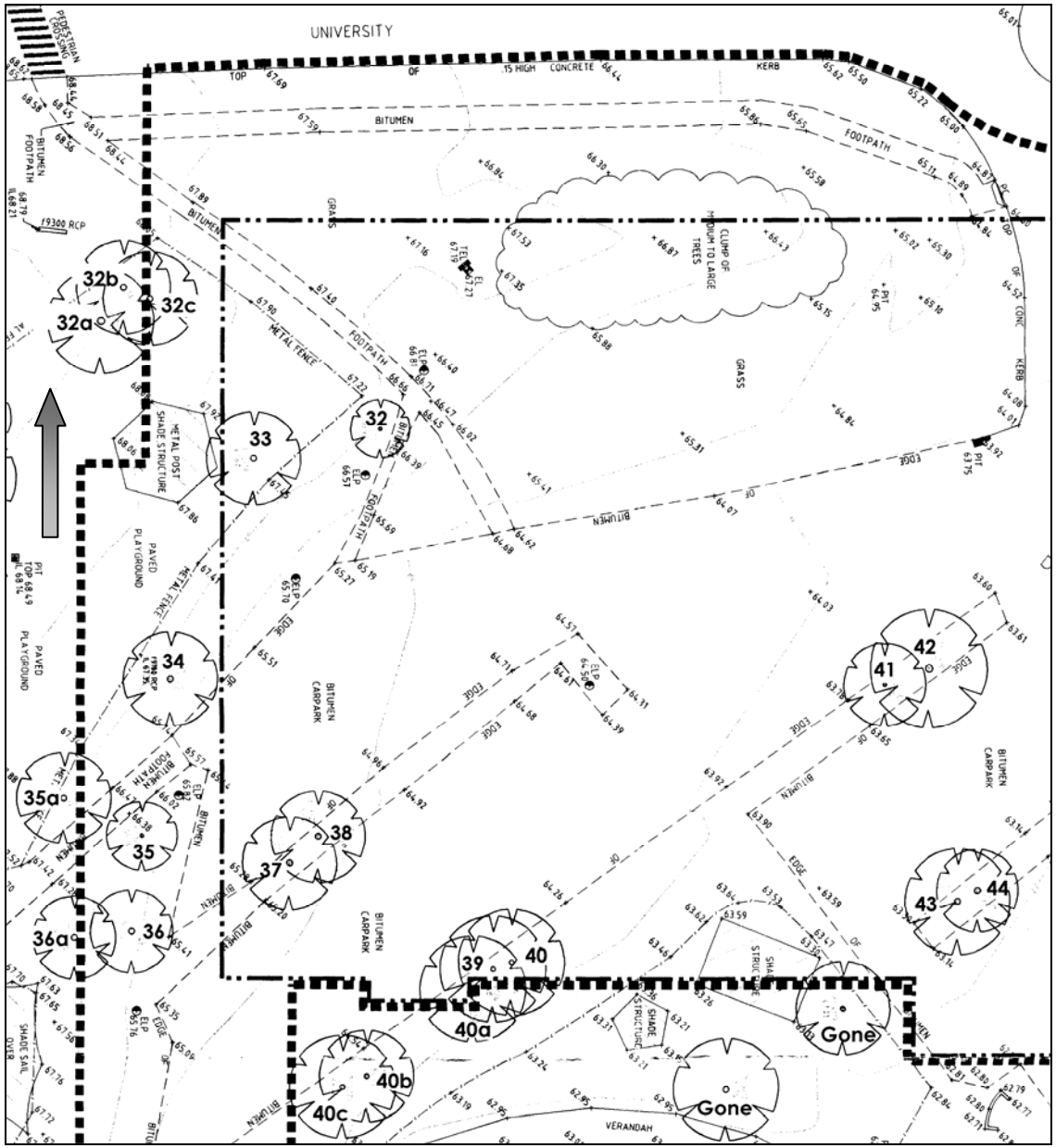
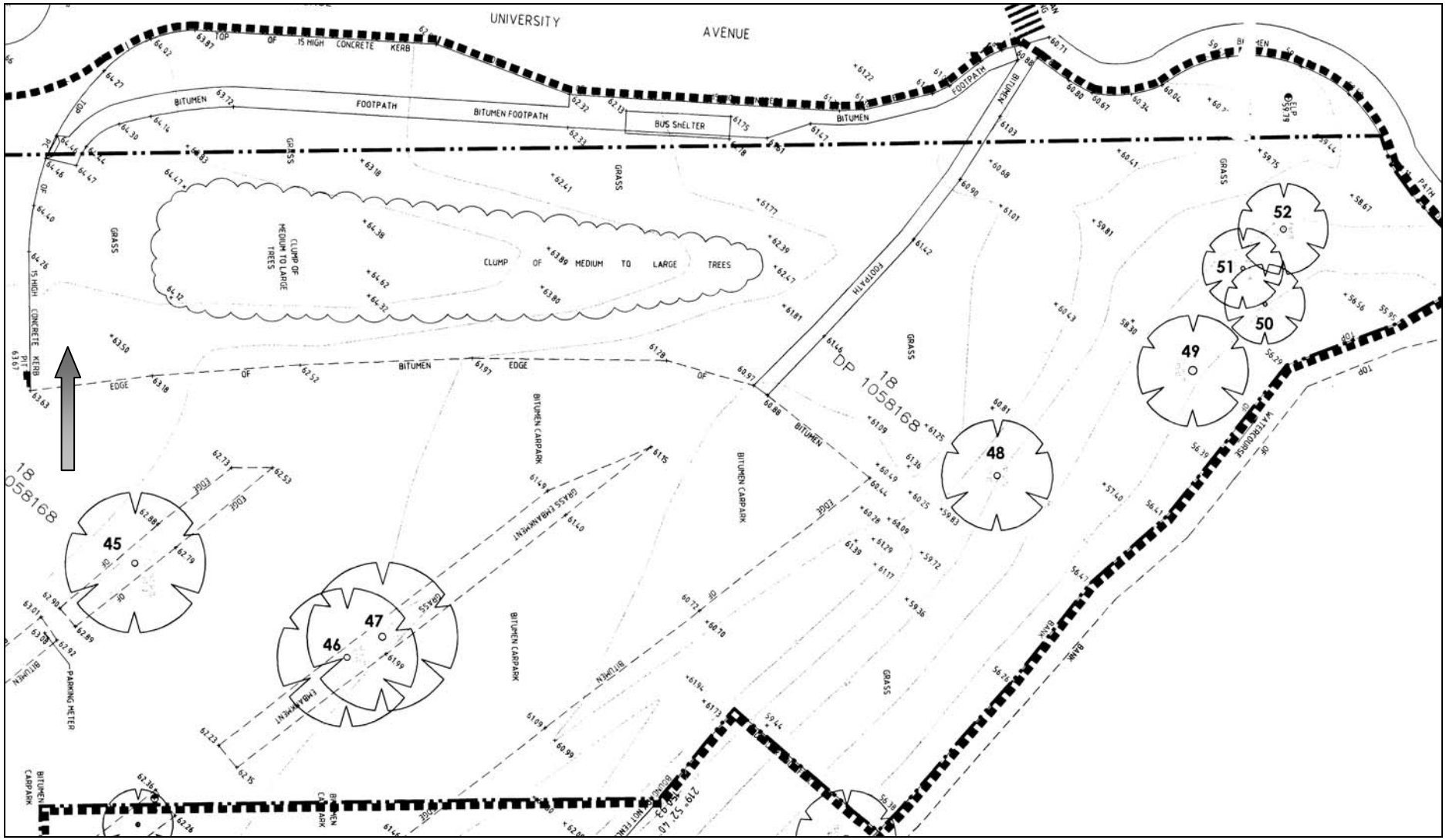
Western area



Eastern area



Plates

Plate 1: western mound viewed from the south showing Trees 1 to 8

Plate 2: Trees 3 and 4 *Eucalyptus grandis* (Flooded Gum)

Plate 3: eastern mound viewed from the west

Plate 4: eastern mound viewed from the east showing Trees 10, 11 and 12 *Eucalyptus elata* (River Peppermint), Tree 13 *Eucalyptus saligna* (Sydney Blue Gum) (obscured), Tree 15 *Eucalyptus elata* (River Peppermint) (right) and Tree 16 *Eucalyptus scoparia* (Wallangarra White Gum)

Plate 5: eastern mound viewed from the east showing Trees 31a, b and c *Eucalyptus botryoides* (Bangalay), Tree 27 *Eucalyptus botryoides* (Bangalay) and Tree 29 *Corymbia eximia* (Yellow Bloodwood) (right)

Plate 6 trunk detail of Tree 24 *Eucalyptus botryoides* (Bangalay) showing fungal fruit body in wound

Plate 7: trunk detail of Tree 25 *Eucalyptus botryoides* (Bangalay) showing fungal fruit bodies in wound (arrow)

Plate 8: eastern group showing Trees 49 and 52 *Syncarpia glomulifera* (Turpentine) left and right, Tree 50 *Angophora costata* (Sydney Red Gum) and Tree 51 *Eucalyptus resinifera* (Red Mahogany)

Plate 9: western group showing Tree 32 *Liquidambar styraciflua* (Liquidambar) right and Trees 33 to 38 *Eucalyptus grandis* (Flooded Gum)

Plate 10: Tree 45 *Eucalyptus grandis* (Flooded Gum)

Plate 11: trunk detail of Tree 45 *Eucalyptus grandis* (Flooded Gum) showing stubs of branch breakage

Plate 12: Trees 46 and 47 *Eucalyptus grandis* (Flooded Gum)

Plate 13: trunk detail of Tree 47 *Eucalyptus grandis* (Flooded Gum) showing multiple fungal fruit bodies in wound

Terminology used in the report

Age classes (I) *Immature* refers to a well-established but juvenile tree. (S) *Semimature* refers to a tree at growth stages between immaturity and full size. (M) *Mature* refers to a full sized tree with some capacity for further growth. (O) *Overmature* refers to a tree about to enter decline or already declining.

Health refers to the tree's vigour as exhibited by the crown density, leaf colour, presence of epicormic shoots, ability to withstand disease invasion and the degree of dieback.

Condition refers to the tree's form and growth habit, as modified by its environment (aspect, suppression by other trees, soils), and the state of the scaffold (ie trunk and major branches), including structural defects such as cavities, crooked trunks or weak trunk/branch junctions. These are not directly connected with health and it is possible for a tree to be healthy but in poor condition.

Health	
Good	In good vigour with full leaf coverage of the crown; deadwood if present is internal and a normal feature of the species
Fair	Generally vigorous but shows symptoms of stress or decline, leaf coverage thinner than normal for the species; deadwood of smaller diameter may be present
Poor	Shows symptoms of advanced stress or decline including sparse crown with twig and branch dieback, lack of response to pests or disease
Structural condition	
Good	Has well-spaced branches and strong branch collars; form and habit typical of the species; good example of the species with low probability of significant failure
Fair	Has structural defects of moderate severity with low propensity for failure which could be remediated by pruning or modification of its environment
Poor	Has structural defects which have already failed and/or have a high propensity for failing in the future

Safe Useful Life Expectancy (SULE). In a planning context, the time a tree can expect to be usefully retained is the most important long-term consideration. SULE is a system designed to classify trees into a number of defined categories so that information regarding tree retention can be concisely communicated in a non-technical manner. SULE categories are easily verifiable by experienced personnel without great disparity. A tree's SULE category is the life expectancy of the tree modified first by its age, health, condition, safety and location (to give safe life expectancy), then by economics (ie cost of maintenance; retaining trees at an excessive management cost is not normally acceptable), effects on better trees, and sustained amenity (ie establishing a range of age classes in a local population). SULE assessments are not static but may be modified as dictated by changes in tree health and environment. Trees with short SULE may at present be making a contribution to the landscape but their value to the local amenity will decrease rapidly towards the end of this period, prior to their being removed for safety or aesthetic reasons. For details of SULE categories see Table 2, adapted from Barrell (1993 and 1995).

Decay is the result of invasion by fungal diseases through a wound.

Decline is the response of the tree to a reduction of energy levels resulting from **stress**. Recovery from a decline is difficult and slow; is usually irreversible.

Epicormic shoots are sprouts produced from dormant buds in the bark. Production can be triggered by fire, pruning or root damage but may also be as a result of stress or decline.

Hazard is the potential for tree failure due to structural defect in the presence of targets.

Risk is the likelihood and consequence of failure.

Sparse crown refers to reduced leaf density, often a precursor to dieback and may imply stress or decline. Also possibly a response to drought or root damage.

Stress refers to the response of the tree to a reduction of energy levels resulting from adverse influences such as altered soil conditions (compaction, poor nutrition, reduced oxygen or moisture levels), root damage, toxicity, drought, waterlogging; may be reversible given good arboricultural practices but may lead to **decline**.

Weak junctions are points of possible failure in the scaffold. They are usually caused by the trunk or branch bark being squeezed within the junction so that the necessary interlocking of the wood fibres does not occur and the junction is forced open by the annual increments in growth. This is often a genetic problem.

Wounds are areas where the bark has been damaged by branch breakage, impact or insect attack. Some wounds decay and cause structural defects or weakness. Healthy trees are able to resist and contain infection by walling off areas within the

wood. Tree wounds are often eventually covered over by new bark but the walled off or infected areas still remain internally and may lead to weakness of the heartwood.

Disclaimer

All care has been taken to assess potential hazard but trees are always inherently dangerous. This assessment was carried out from the ground, and covers what was reasonably able to be assessed and available to the assessor at the time of inspection. No aerial or subterranean inspections were carried out and structural weakness may exist within roots, trunk or branches.

Any protection or preservation methods recommended are not a guarantee of tree survival or safety but are designed to improve vigour and reduce risk. Timely inspections and reports are necessary to monitor the trees' condition. No responsibility is accepted for damage or injury caused by the trees and no responsibility is accepted if the recommendations in this report are not followed.

Limitations on the use of this report

This report is to be utilised in its entirety only. Any written or verbal submission, report or presentation that includes statements taken from the findings, discussions, conclusions or recommendations made in this report, may only be used where the whole of the original report (or a copy) is referenced in, and directly attached to that submission, report or presentation.

Assumptions

Care has been taken to obtain information from reliable resources. All data have been verified insofar as possible; however, Treescan Urban Forest Management can neither guarantee nor be responsible for the accuracy of information provided by others.

Unless stated otherwise:

Information contained in this report covers only the trees that were examined and reflects the condition of the trees at the time of inspection: and

The inspection was limited to visual examination of the subject trees without dissection, excavation, probing or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the subject trees may not arise in the future.