



ACT
Government



Canberra
Memorial
Parks

REGULATIONS AND SPECIFICATIONS FOR THE CONSTRUCTION OF MONUMENTS

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REGULATIONS AND SPECIFICATIONS FOR THE CONSTRUCTION OF MONUMENTS

1 Introduction

This document has been produced to describe the minimum requirements and standards for monuments constructed in cemeteries managed by the ACT Public Cemeteries Authority (Authority). Its purpose is also to safeguard the rights of Exclusive Right Holders (ERH) and to maintain the safety of the public, cemetery staff and contractors alike. Consideration will be given to variations only if there is conflict between this document and ERH rights.

The Authority reserves the right to vary these specifications for any given location if in the opinion of the Authority the impact of any structure would not be in keeping with the intent of this document.

This document shall be read in conjunction with Canberra Cemeteries *Policy 24 Contractors and Providers (Policy 24)*. Where there is contradiction between these documents *Policy 24* shall take precedence.

It is the responsibility of Monumental Masons and Contractors (contractors) working in Canberra Cemeteries precincts to be familiar with this document. By commencing work on a Canberra Cemeteries precinct Masons and Contractors agree to abide by the rules and specifications set down in this document.

2 Working In Cemeteries

2.1 General Conditions

- 2.1.1 The ability to conduct business inside precincts controlled by Canberra Cemeteries is a privilege not a right. Failure to comply with any of the requirements set down in this document may jeopardise that privilege.
- 2.1.2 Prior to working in any cemetery controlled by the Authority, contractors shall provide Cemetery management with a certificate of currency of insurance. In any case this shall be provided not later than 1 July each year.
- 2.1.3 All Monumental Masons shall notify a member of Canberra Cemeteries' staff of their presence and fill out the attendance log providing details of the location of their work prior to commencing work on any given day. Log books are held at:
 - Gungahlin: Office
 - Woden: Depot
 - Hall: Gungahlin office
- 2.1.4 Cemetery staff may inform Contractors of burials and/or other activities being conducted in their vicinity. Contractors may be required to cease work and remove equipment and vehicles from particular areas of the cemetery if their presence is likely to interfere with a funeral or other cemetery operations.
- 2.1.5 Holes in beams may not be drilled without permission

2.2 Drugs and Alcohol

- 2.2.1 All Contractors must not arrive for work on cemetery property under the influence of alcohol or drugs. Alcohol and drug consumption (including possession and distribution) is also prohibited during work hours. Any contractor found contravening these requirements shall be asked to leave the property.

2.3 Personal Conduct

- 2.3.1 Contractors and their staff shall at all times conduct themselves in a professional manner.
- 2.3.2 Contractors and their employees are expected to be attired similar to that required of cemetery employees. Uniforms are preferable where available.

2.4 First Aid

- 2.4.1 Contractors shall supply for their employees a Workplace First Aid Kit on site.

2.5 Hazardous Materials

- 2.5.1 Some materials required to carry out work may be hazardous and have immediate or delayed effects to those who handle them. All contractors or their employees involved with these materials must be trained in their safe handling and use requirements as specified in the Material Safety Data Sheets/label. All labels must be readable and MSDS must be present onsite.

2.6 Permits

- 2.6.1 As required by the Code of Practice (Cemeteries and Crematoria Act 2003) an APPLICATION FOR A PERMIT TO ERECT A MEMORIAL, CARRY OUT REPAIRS, ALTERATIONS OR ADDITIONS (Permit Application) must be tendered for approval prior to commencing work on the construction of a monument. Removal of monuments may be required for those constructed without issue of a permit.
- 2.6.2 Permit Application form must be submitted for alterations. No fee will be charged for alterations providing changes are of a minor nature.
- 2.6.3 Permit Application form must be signed by the ***Exclusive Right Holder***.
- 2.6.4 Permit Applications must contain diagrams disclosing all particulars of the design and construction of the monument including but not necessarily limited to detail of :
- i. Foundations including piers where required;
 - ii. Dimensions of components and completed monument;
 - iii. Joins and doweling;
 - iv. Jointing compounds;
 - v. Permanently affixed ornaments; and
 - vi. Weight of completed monument.
- 2.6.5 Prior to *1 July 1996* permit fees were not collected at the time of burial. In these cases permit fees shall be paid at the time of the lodgement of the

Application. If Contractors are unsure of the situation for a monument, contact should be made with the Cemetery office.

2.6.6 Permit Applications are valid for a period of six (6) months only. Failure to complete the work within the period without prior approval with Canberra Cemeteries will require application for a new permit and payment of an application fee.

2.6.7 Once started, work must be completed within four (4) weeks. Failure to complete work within four weeks without prior approval from Canberra Cemeteries will require the payment of an additional Permit Fee.

2.7 On Site Construction

2.7.1 During construction the site must be kept clean and safe at all times.

2.7.2 Should there be a requirement to move any part of any structure (whether structure is temporary or not) in an adjoining allotment then the Cemetery office must be notified prior to it being moved.

2.7.3 Safety signs consistent with AUSTRALIAN STANDARD AS 1319-1994 : *Safety signs for the occupational environment* shall be used during construction.

2.8 Advertising

2.8.1 Business cards may be left in the office.

2.8.2 Soliciting work in the cemetery is not permitted. Soliciting includes but is not limited to approaching potential clients in the Cemetery to offer services and leaving business cards on graves.

2.9 Damage

2.9.1 Contractors are responsible for any damage they cause. Before commencing work adjoining monuments should be inspected. Cemetery staff should be advised if there is any existing damage.

2.10 Inspections

2.10.1 As detailed on APPLICATION FORM, inspections are required:

- i. Prior to commencement to identify the site
- ii. After preparing foundations when steel is in place
- iii. When the kerb is in place but before installation of the top slab or ledger and
- iv. At completion.

2.10.2 It is the responsibility of Contractors to notify the Cemetery office at each stage so that it may be inspected. Appointments may be made in advance if required. Failure to have each stage inspected may require removal of that stage.

2.10.3 Cemetery staff will require that work on a monument be stopped if it is not being constructed in accordance with the approved drawing or does not meet other standards specified.

2.11 Location of Monument

- 2.11.1 Monumental headstone areas are provided at Gungahlin, Woden and Hall Cemeteries. Monuments are to cover the full allotment in headstone areas. Specifications vary for each of these areas.
- 2.11.2 Small monuments are permitted in lawn areas on beams in family estate, children's areas and monumental lawn areas in Gungahlin and children's areas at Woden.
- 2.11.3 No monuments are permitted in traditional lawn areas. Standard plaques and headstones are provided by the Authority for these areas.
- 2.11.4 While every effort is made to ensure that maps used to locate graves are as accurate as possible, it is important to note that maps may not always be to scale or otherwise represent the ground conditions. It is therefore essential that the location of each site is signed off by and authorised cemetery staff member **prior to construction**.

2.12 Rubbish and Clean up

- 2.12.1 All rubbish shall be removed at the completion of work each visit.
- 2.12.2 The site is to be completely cleaned and reinstated at the completion of construction.
- 2.12.3 All rubbish shall be removed each visit.
- 2.12.4 The Cemetery will require payment from the Monumental Mason for any work that is required to bring the site up to the expected standard.
- 2.12.5 Dumping rubbish in adjacent bushland is expressly prohibited. Any business found to be conducting this activity will immediately lose its work privileges.
- 2.12.6 Canberra Cemeteries reserves the right to charge the contractor for the cost of removal of rubbish left behind.

2.13 Removing and replacing ledgers/monuments for a burial

- 2.13.1 Removal and replacement of ledgers/monuments for burials will be arranged by cemetery staff from 1 July 2007.

2.14 Cemeteries and Crematoria Act 2003

- 2.14.1 Contractors should be familiar of the relevant sections of the Act and Regulations. Call the Cemetery office if further explanation is required.

2.15 Allotment Sizes

- 2.15.1 Contractors should consult detailed drawings for full specifications.
- 2.15.2 Standard metric monumental allotments are 2500 mm x 1250 mm.
- 2.15.3 Imperial monumental allotments are 2438 mm x 1219mm (site requirements must be taken into consideration when calculating width)
- 2.15.4 Children's Area allotments are 2000mm x 1000mm.
- 2.15.5 Allotments may vary. Contractors should measure the site carefully before commencing work.

3 Hall Cemetery

3.1 Access requirements

- 3.1.1 Hall Cemetery contains a *rare and endangered* Orchid and remnant Woodland and Grassland plant communities. Hall Cemetery is managed under an environmental management plan overseen by Environment ACT. This requires that there is no unnecessary traffic across grassed areas and there are other special restrictions during spring and summer. Access to Hall cemetery is conditional upon strict compliance with these requirements. Failure to comply will mean suspension of access privileges.
- 3.1.2 Stone Masons must complete an induction process before they will be allowed access to the Cemetery. This includes meeting Cemetery staff on-site.
- 3.1.3 A key is held at the Cemetery office at Gungahlin Cemetery which must be signed in and out each visit.

4 Specifications for the Erection of Monuments

4.1 General

- 4.1.1 A standard monument comprises a foundation, a full kerb and a solid ledger that be made of stone or high density concrete. As a general rule loose coverings such as pebbles or scoria are discouraged as these inevitably become contaminated, are scattered around the monument and may be a safety hazard.
- 4.1.2 Imperial Measurements are to be used for all headstones in older areas at Woden and Gungahlin. Please contact cemetery office if in doubt.

4.2 Design and Construction

- 4.2.1 All monumental work must be in accordance with cemetery requirements (in this document and otherwise specified by the approving officer) and to AUSTRALIAN STANDARD AS 4204-1994 *Headstones and Cemetery Monuments*. Together with this document these are to be regarded as the minimum requirements.
- 4.2.2 Canberra Cemeteries will require removal or modification of monuments that do not meet these specifications.
- 4.2.3 Due to the increasing size of coffins and caskets and the common requirement for additional burials in a grave, Stonemasons should carefully evaluate the design and construction of monuments to ensure that the opening in both the foundation and the inside kerb when the ledger is removed are as large as practicable. Otherwise provision should be made to easily dismantle the monument at time of burial.
- 4.2.4 All materials used should have a minimum predicted life of fifty years.
- 4.2.5 Full canopy type monuments are not permitted in any cemeteries managed by the Authority.
- 4.2.6 Headstones on the side of monuments specifically are not permitted.

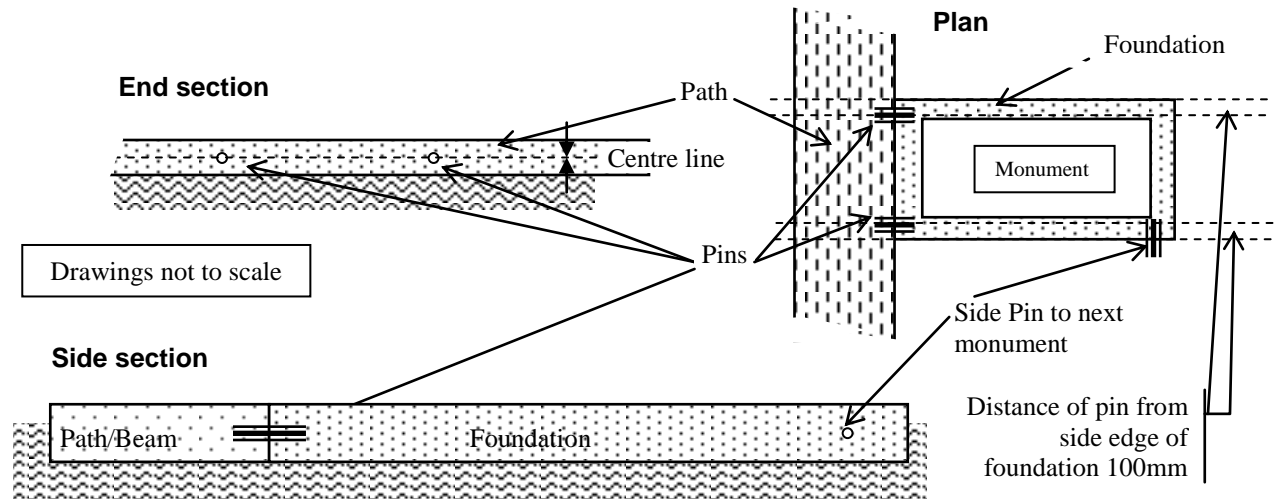
4.3 Foundations

- 4.3.1 Foundations shall not extend above ground level or the concrete path (where provided) by more than 50mm at the highest point of the allotment.
- 4.3.2 Foundations are required to abut adjoining foundations, being separated by expansion joints.
- 4.3.3 Foundation to be 2650 mm (Imperial 2588 mm) long with 75-mm overhang at front and rear and 1250 mm (Imperial - 1219 mm) or multiples thereof wide. Note: as previously stated each allotment at Woden Cemetery should be considered in the context of adjacent monuments. *Variations to width are sometimes possible but must be detailed on permit application.*
- 4.3.4 The only exception to the above is Oak Boulevard foundations which are 1500mm wide.
- 4.3.5 Foundations are to be a minimum of 125 mm deep and onto solid ground, using at least 2 bar F-trench mesh steel reinforcing in 20 mpa concrete.
- 4.3.6 If the foundation cannot be formed on solid ground, piers or extensions to solid ground are required. Contractors shall contact Cemetery Groundsman to inspect and advise where there is no solid ground for foundations. Contractor shall refer to AUSTRALIAN STANDARD AS 4204-1994 for pier specifications.
- 4.3.7 A minimum width of 800 mm inside the monument foundation is required to allow excavation of the grave.
- 4.3.8 Internal formwork shall be used to prevent concrete from encroaching on the grave space..
- 4.3.9 Where a concrete foot path or *guide-beam*¹ has been installed, (such as in Portion 17 Gungahlin) that end of the foundation is to be tied into the *guide beam* with pins provided. Pins that are pre-installed in the beam during construction and need to be “unfolded” so that can be tied into the foundation of the monument. Where pins are not available, suitable pins shall be drilled into the vertical centre of the beam or path. At least 2 dowels shall be provided for each monument foundation. A pin to side of the foundation shall be installed where there is a monument already installed in the next allotment. (see diagram 4.2.11 below)
- 4.3.10 It is imperative for the contractor to have the foundation sighted and signed off by cemetery staff after steel is installed and prior to pouring the foundation.

Failure to do so will result in the foundation being rejected with mandatory removal and replacement.

¹ Guide-beam: a beam installed at the headstone end of a monument that forms a point of reference for location of foundations – monument locations are marked and numbered.

4.3.11 Path/guide-beam PIN arrangement.



4.4 Monument

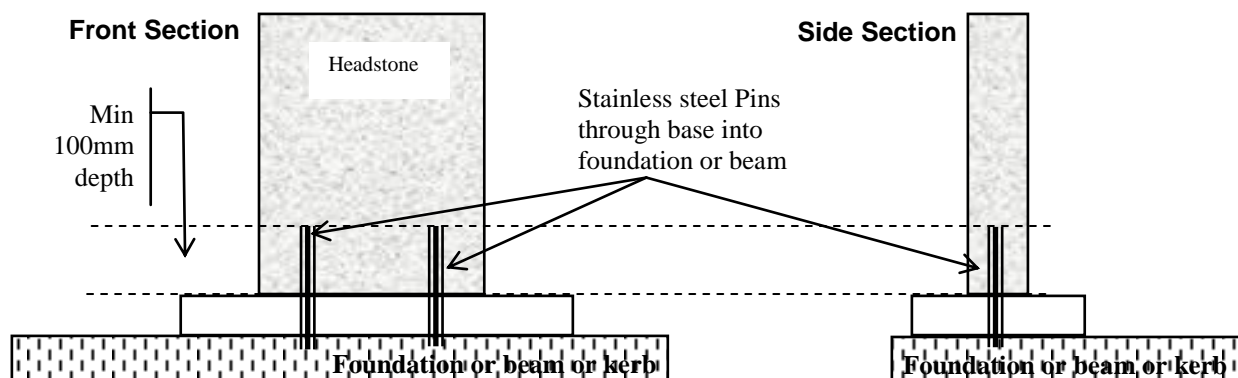
- 4.4.1 The front of the monument shall finish flush with the stringline fixed between the two marker pegs fixed at either end of the row. If these pegs cannot be located the Monumental Mason should contact Cemetery staff.
- 4.4.2 Single monument to be a minimum of 950 mm and a maximum of 1050 mm (Imperial 1025) wide and 2500 mm long.
- 4.4.3 Kerbs to be between 100 mm and 150 mm wide with a maximum height 225 mm.
- 4.4.4 Monuments topped with cement, or similar and filled with “chips” or other loose material:
- shall have at least 50mm deep high strength concrete over the grave;
 - shall be constructed with provision for openings to allow free drainage; and
 - shall be designed to minimise the amount of loose “chips”. For example, have only a thin layer over a layer embedded in the top of the concrete grave cover.
- 4.4.5 Monument height measured from the top of the foundation shall not exceed 1400 mm, *including decorations*. Exception – in order to maintain relative proportions for their extra width OAK BOULEVARD Headstones shall exceed not 1500mm.
- 4.4.6 Where possible all joins of non-removable components of a monument shall be fitted with appropriate dowels. Reference should be made the Australian Standard AS 4204-1994 for specific treatment of dowels.

4.5 Two piece headstone PIN arrangement

- 4.5.1 . This information applies to all headstones that are made from one or two pieces of stone or other material including: family estates and monumental beams.

4.5.2 All such headstones shall be pinned through the base plate into the foundation using a 13mm stainless steel pin. The pins shall extend a minimum of 100mm into the headstone. There shall be at least two (2) pins per single width headstone and Three (3) per double width headstone. The pins shall be glued in place with an appropriate jointing compound.

4.5.3 Diagrams for pin arrangements.



4.6 Stone capping and additional surface treatments

4.6.1 For safety and durability stone capping or other surface treatments on foundations are not generally recommended.

Where capping is installed Canberra Cemeteries accepts no liability whatsoever for any damage incurred to the capping regardless of the cause. It is the responsibility of the contractor to bring this to the attention of the exclusive Right holder of the monument.

4.7 Garden beds in monuments

4.7.1 A 600mm deep garden bed inside the front kerb is permitted. Monumental Masons should inform clients that Cemetery staff should be consulted over the selection of plant material. In general plants that have the potential to outgrow the planter are not permitted. The Cemetery reserves the right to remove any plants not considered suitable. Canberra Cemeteries will not maintain planter beds.

4.8 Vault Monuments

4.8.1 When a foundation is not provided as part of the vault, the new foundation is to be provided as part of the monument and be securely anchored to the outside of the vault.

4.8.2 No part of the monument is to encroach into the internal space of the vault, except the headstone sub-base.

4.9 Monumental Masons Identification Plate

4.9.1 A 100 mm by 40 mm plate with the Monumental Mason's details shall be fixed to the side or rear of the monument *prior to the final approval of monuments.*

4.9.2 The identification plate shall include the grave allotment number details.

4.10 Dimensions and Arrangements

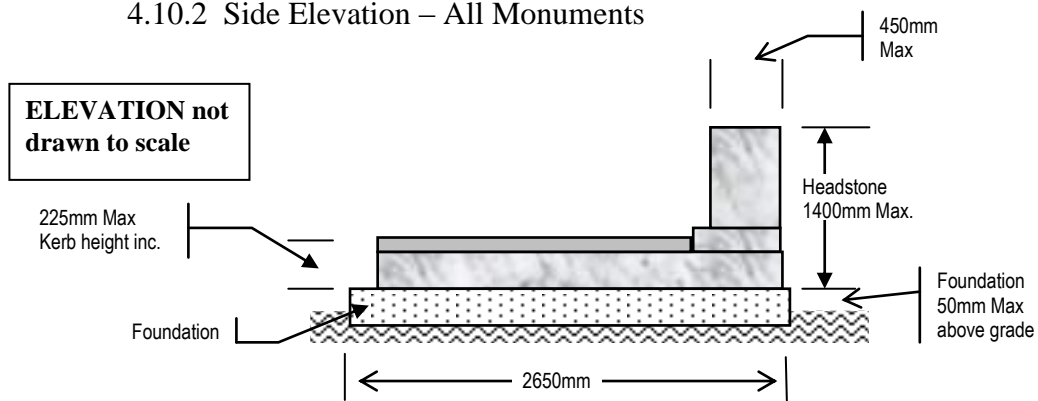
4.10.1 General

Please note that each location has site specific issues that must be taken into account. Contractors should check that dimensions provided take into account the requirements of the individual allotment. The Authority may require modification of monuments that do not meet the site requirements.

Some examples where issues have arisen include:

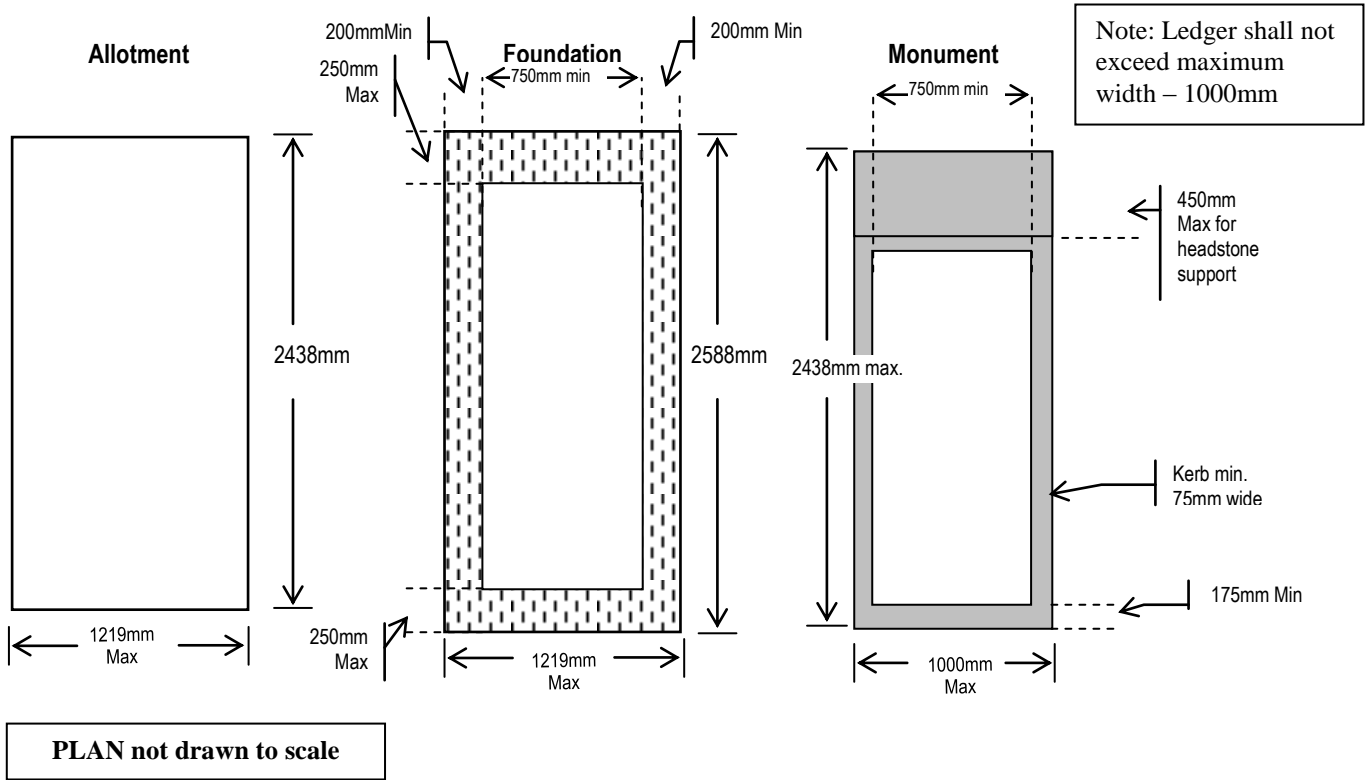
- Measurements for Standard (new) monuments being used in Imperial (old) allotments;
- Monuments/foundations encroaching into neighbouring allotments;
- Monuments encroaching into pathways;
- Piers not installed in unstable ground.

4.10.2 Side Elevation – All Monuments



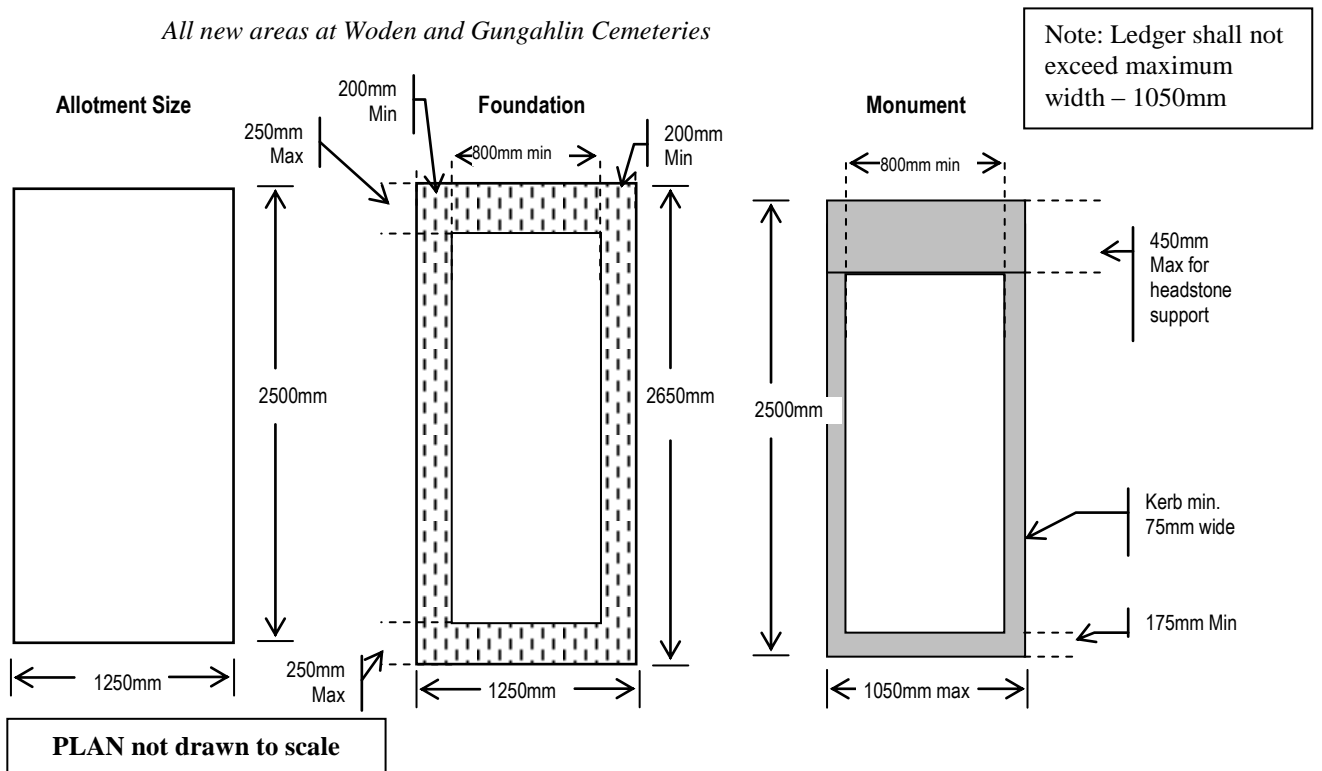
4.10.3 Imperial Monument (older areas)

Includes the majority of Woden Cemetery (new areas excepted) and older areas of Gungahlin Cemetery



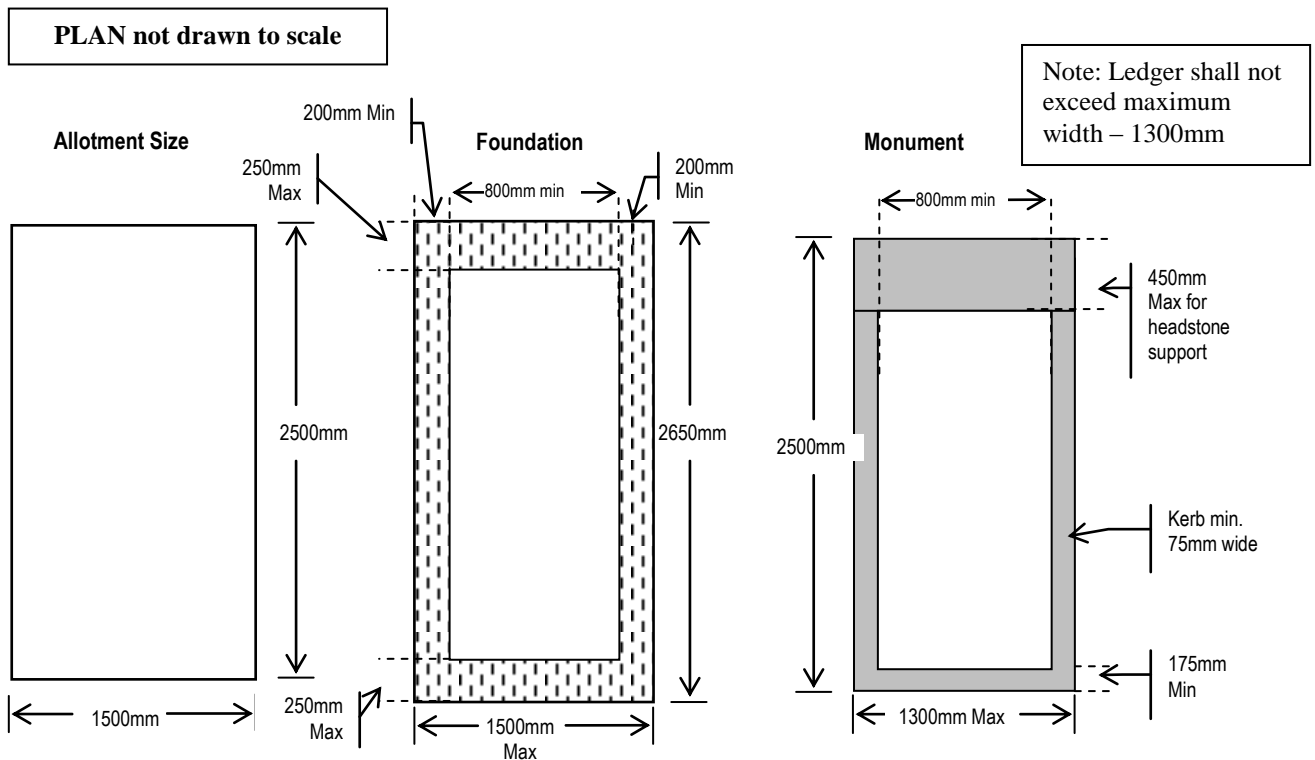
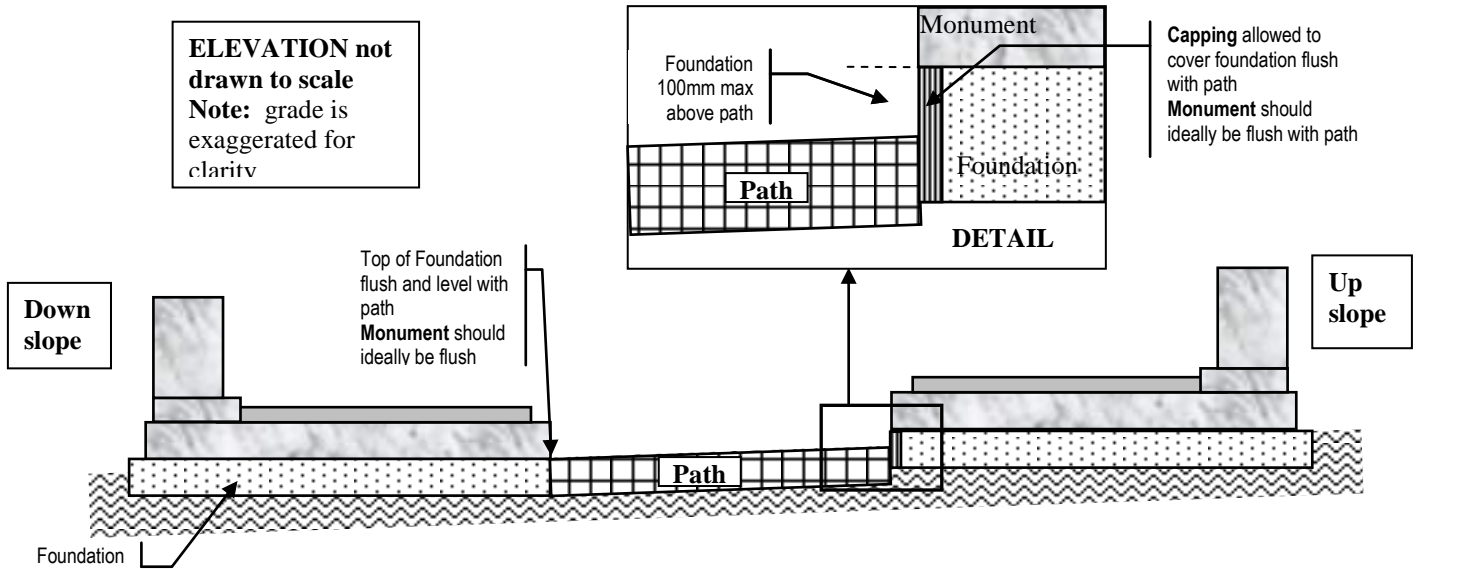
4.10.4 Standard Monument

All new areas at Woden and Gungahlin Cemeteries



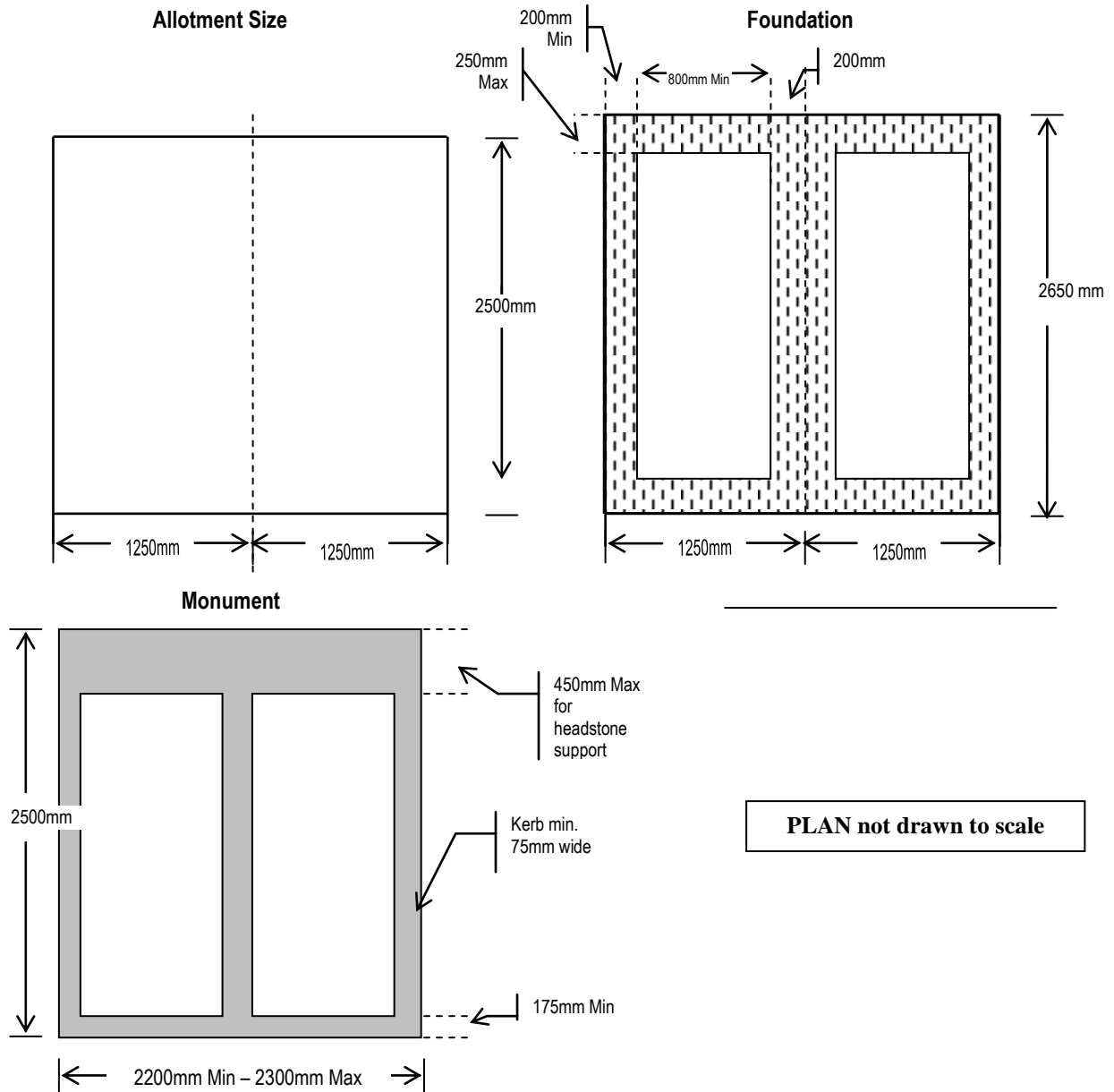
4.10.5 Oak Boulevard Monument

The following diagram sets out the detail for the interface of monuments and the pathway at Oak Boulevard.



4.10.6 Double Monument

The same principles for standard monuments may be applied to double and other multiples – each application to erect a monument will be assessed on its merits and the individual requirements of the site..



4.10.7 Monumental Beam

4.10.7.A The width of the beam may vary and Contractors are advised to measure the width of the beam prior to design.

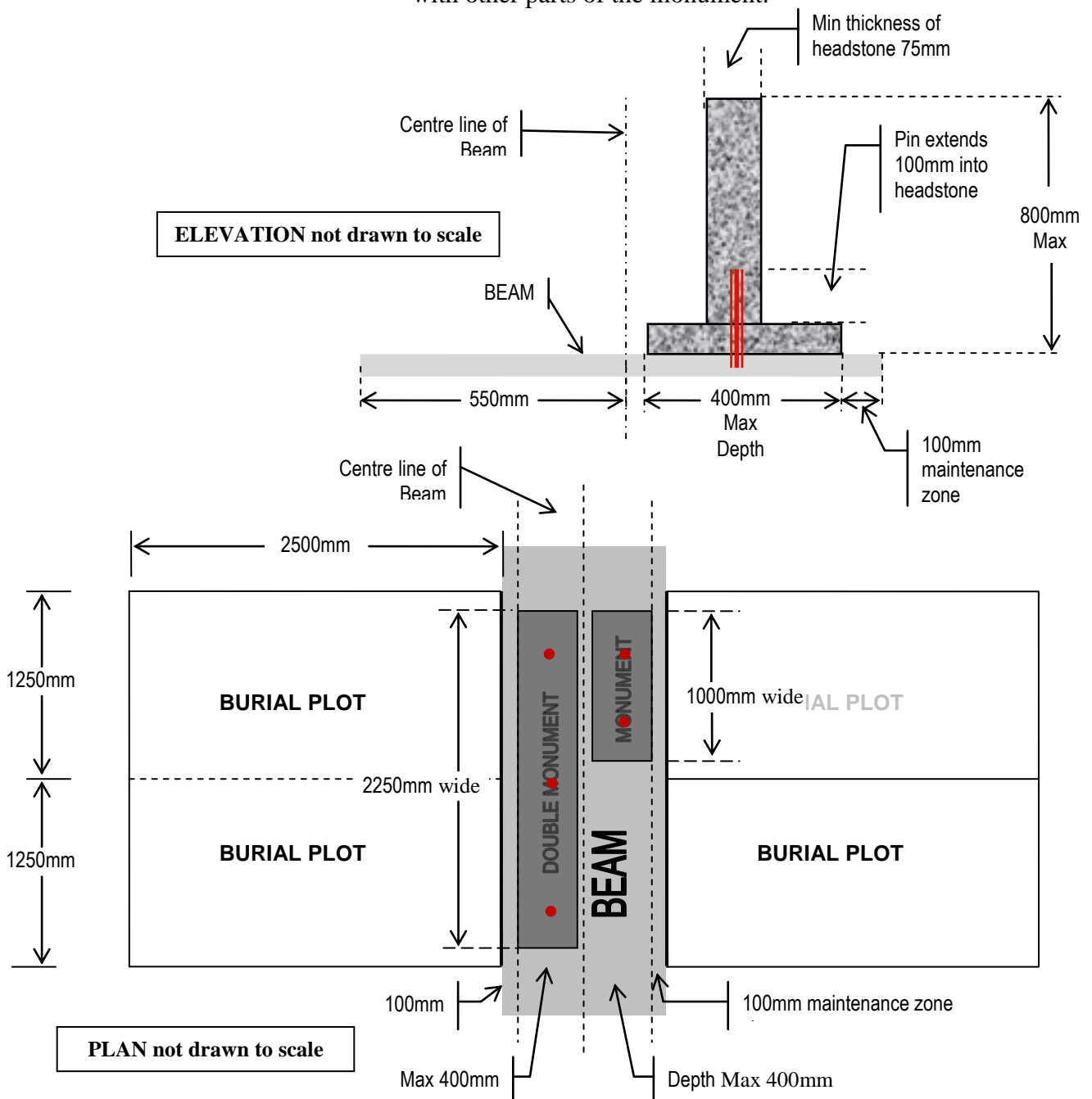
4.10.7.B Monument height not to exceed 800mm.

4.10.7.C Monument depth is not to exceed 400mm.

4.10.7.D Monument width not to exceed 1000mm and monument is to be centred on the allotment.

4.10.7.E To ensure long term stability and to account for changing levels on the beam, the base of the monument shall be either:

- Placed on a full bed of high strength shrink-resistant grout; and/or
- Placed on a wedge of stone or other material in keeping with other parts of the monument.



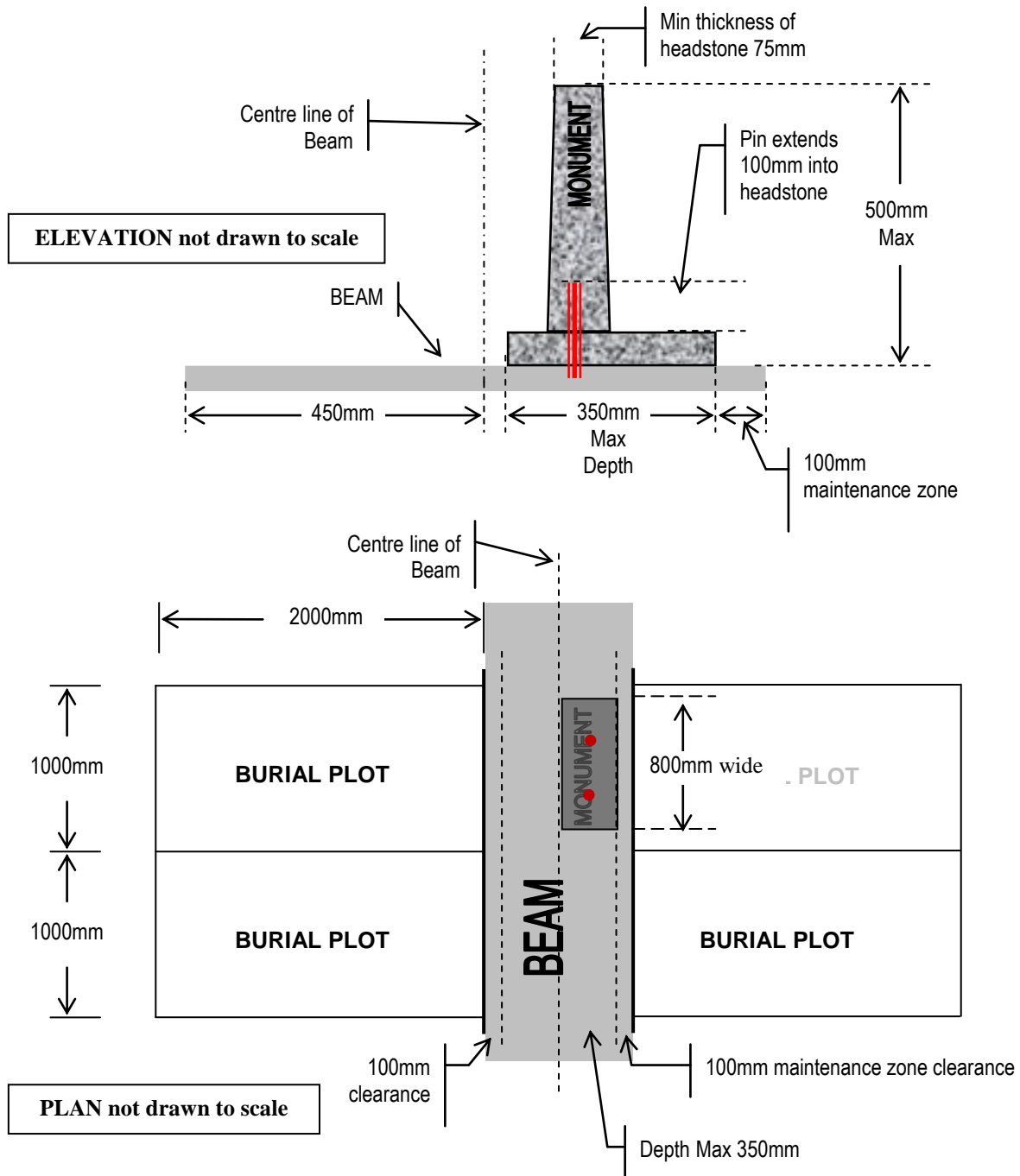
4.10.8 Children's Areas (Beam)

4.10.8.A The width of the beam may vary and Contractors are advised to measure the width of the beam prior to design.

4.10.8.B Monument height not to exceed 500 mm.

4.10.8.C Monument width is not to exceed 350 mm.

4.10.8.D Monument length not to exceed 800 mm and monument is to be centred on the allotment.



4.10.9 Family Estate

4.10.9.A Family Estates constructed since 1994 have beams 500 mm wide. Prior to this date measurements vary. Contact Cemetery staff for specific measurements required.

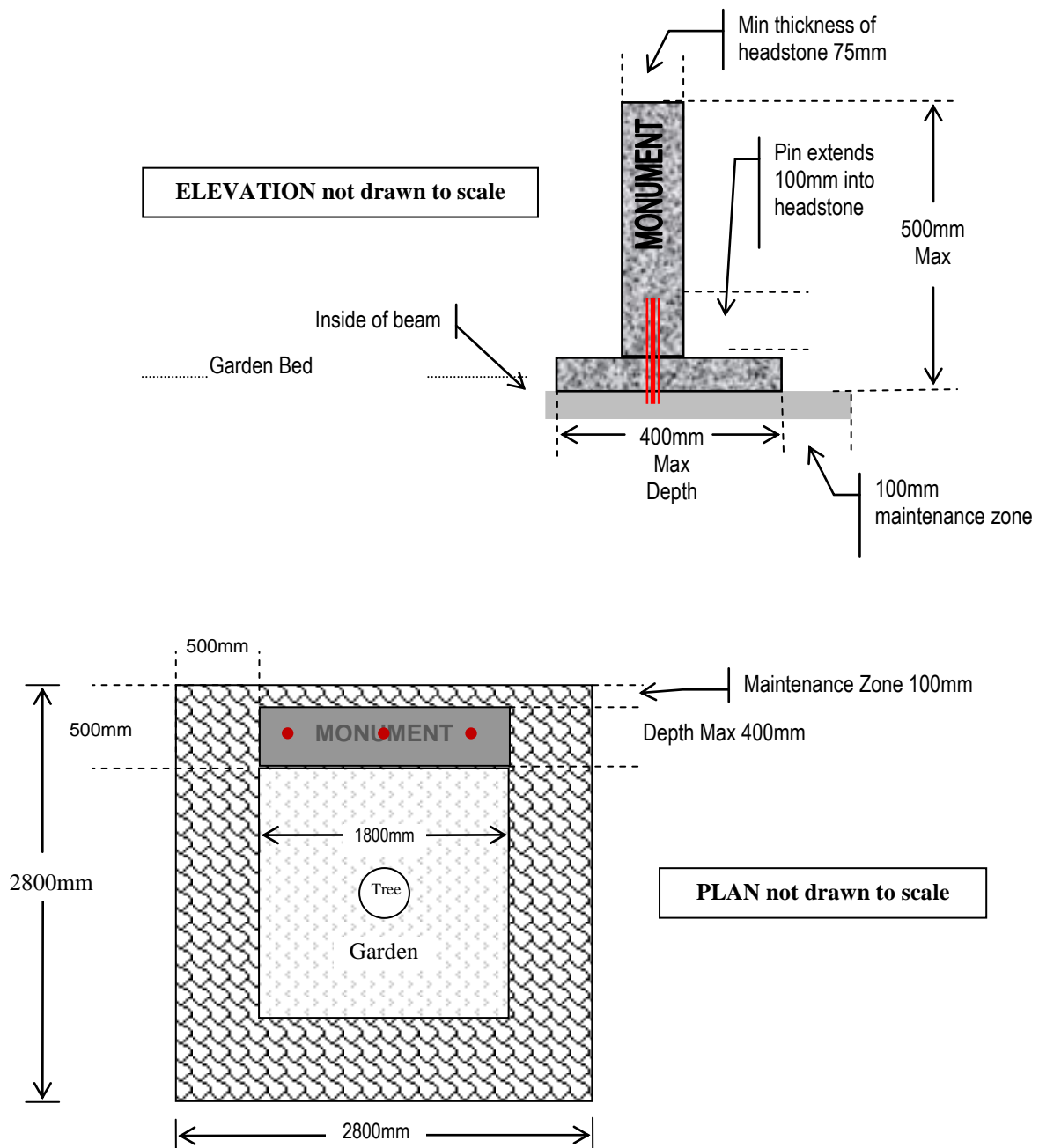
4.10.9.B Monument height is not to exceed 500 mm.

4.10.9.C Monument depth is not to exceed 400 mm.

4.10.9.D Single monument width not to exceed 750 mm and double monuments not to exceed 1800 mm.

4.10.9.E Monument to be placed 100 mm behind the front of the beam.

4.10.9.F Nothing to be placed within 500 mm of the outside corner.



5 References

Cemeteries and Crematoria ACT A2003 [R7]

<http://www.legislation.act.gov.au/a/2003-11/default.asp>

Cemeteries and Crematoria Code of Practice

<http://www.legislation.act.gov.au/a/2003-11/di.asp>

AUSTRALIAN STANDARD AS 4204-1994 *Headstones and Cemetery Monuments*

<http://www.standards.com.au/catalogue/script/Details.asp?DocN=stds000011590>

AUSTRALIAN STANDARD AS 1319-1994: *Safety signs for the occupational environment*

Canberra Cemeteries *Policy 24 Contractors and Providers.*