

Policy 11: Land Development Guidelines

SS3

Specification for Clearing and Grubbing for Infrastructure, Roadways and Designated Areas

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1.0 General

- 1.1 The work covered by this specification includes all plant, labour, tools, materials and other accessories of whatsoever nature necessary for the clearing, grubbing and disposal of material in areas for roadworks, cut and fill areas, allotments, service trenches and areas designated on the drawings.
- 1.2 The limits of clearing and grubbing shall be in accordance with this specification, as shown on the drawings and as directed by the Superintendent.

2.0 Acts, Regulations, Local Laws

- 2.1 The Contractor shall comply with all Acts, Local Laws and Regulations having jurisdiction over work under the Contract and shall be fully responsible for any breaches thereof.

3.0 Trees to be Left and Preserved

- 3.1 The Superintendent may require the Contractor to construct the Works so that certain trees and flora be preserved without damage.
- 3.2 Individual trees as the Superintendent may designate and mark shall be left standing and uninjured. In order to minimise damage to trees to be left standing, trees shall be felled towards the centre of the area being cleared when and as directed by the Superintendent. To prevent injury to structures or other trees or property or to minimise danger to traffic, trees shall be cut in sections from the top downward.
- 3.3 If during the Contract period any trees, which are to be retained are damaged, the Principal reserves the right to replace such trees. The cost of so doing together with the cost of removing and disposing of the damaged trees shall be borne by the Contractor.

4.0 Care and Protection

- 4.1 The Contractor shall be responsible for all damage to grass, cultivation, fences, existing services, buildings or stock, by fire, falling timber or other causes arising from its operations.
- 4.2 Any fences damaged during the execution of work under the Contract shall be immediately repaired by the Contractor at its expense and in a manner approved by the Superintendent.
- 4.3 During the clearing of lines and designated areas the greatest care shall be taken not to disturb any Bench Marks, survey or level pegs. During burning-off, all Bench Marks and survey pegs shall be covered with earth to prevent their damage.
- 4.4 The Contractor shall take care in its operation not to interfere with nor damage or interrupt any existing services.
- 4.5 If the Contractor damages any existing services it shall immediately arrange for the relevant service Authority to make good such damage and all costs for this work shall be borne by the Contractor.

5.0 Roadways, Designated Areas and Allotments

- 5.1 In roadways the Contractor shall initially clear and grub the area between property boundaries. When this has been completed, a Site conference will be held (to be attended by the Superintendent and the Contractor) at which time the Contractor will be further advised of the extent of selective clearing to be carried out on the Site. Clearing and grubbing shall include the clearing of dead timber, stumps, undergrowth and the slashing of long grass as directed, and the clearing of those trees designated by the Superintendent.
- 5.2 In roadway excavations, between property boundaries, all stumps and roots larger than 70mm in diameter shall be removed to a depth of not less than 500mm below subgrade level and to a depth not less than 1m below the finished footpath level. In areas under roadway embankments and all fill areas all stumps and roots shall be cleared, grubbed and removed.
- 5.3 Grubbing shall be carried out for the full width of the ground to be occupied by completed earthworks. However, stumps may be cut flush with the existing ground in areas immediately inside the toes of embankments that are more than 3m below the top of fill and more than 500mm below the batter surface.
- 5.4 Holes left by clearing and grubbing operations shall be filled with material approved by the Superintendent and compacted to the standard specified in the Earthworks specification.

- 5.5 After the clearing and grubbing work has been completed, the Contractor shall not drive machinery or equipment on or otherwise disturb areas in which no cutting or filling or other construction work is detailed except as approved by the Superintendent. Notwithstanding such approval the Contractor shall be responsible for the cost of any trimming, topsoiling and regrassing as is necessary to fully reinstate any areas damaged by construction equipment.

6.0 Service and Pipeline Trenches

- 6.1 Individual trees near trenches, which, in the opinion of the Superintendent, are likely to damage or obstruct the Works in any way shall be cleared and grubbed in accordance with **Clause 5.0** herein.

7.0 Disposal of Timber and Refuse

- 7.1 Trees felled and grubbed, together with stumps, roots, scrub, bush, lying and fallen timber, rubbish and other perishable material, shall be stacked and burnt to ashes (in an approved manner), or removed from Site to the satisfaction of the Superintendent.

- 7.2 Where specified or if directed by the Superintendent that any area of timber is to be used for milling, wood chipping or construction purposes this timber shall be set aside and shall be trimmed of limbs and tops, and sawn into suitable log lengths and neatly stacked separately from the material to be burnt or disposed of and shall remain the property of the Principal.

- 7.3 No tree, log or other destructible rubbish shall be placed in any embankment, scour, hole or other hollow place, whether under roadways, allotments, or designated areas.

- 7.4 The Contractor shall comply with all relevant Acts, Regulations and Local Laws having jurisdiction for the burning of timber or rubbish. The Contractor shall be solely responsible for any breach of such Acts or Local Laws or Regulations. The Contractor shall give to neighbours, and to the Fire Warden or Chief Officer of the Fire Brigade (as the case may be), notice of its intention to burn, and shall secure any necessary permits required. The Contractor shall take all necessary precautions against the spread of fire and minimise effects of smoke on adjacent properties and the public.

In addition to the above the Contractor shall give the owners or tenants of the properties through which the Works are being constructed, and also the owners or tenants of adjoining properties and/or affected properties, forty-eight (48) hours notice of its intention to burn off the timber and rubbish.

- 7.5 When specified, or if required by the Local Authority or any other Authority having jurisdiction over work under the Contract (hereinafter in this **Clause 7.5** referred to as 'the Authority') pit furnace method shall be applied for burning of felled trees and timber from clearing and grubbing. The following conditions shall apply:

- i) The Contractor shall submit to the Superintendent for approval (and to the Authority if required) the proposed pit location, pit dimensions, and details of the air blowing system including plant descriptions and methodology of work.
- ii) Upon approval but prior to commencement of the burning activities the Contractor shall construct a demonstration pit furnace for a trial burn for witnessing and approval by the Superintendent and the Authority.
- iii) The Contractor shall provide, erect and maintain at each pit furnace such fences, barriers, warning signs and lights as may be necessary to prevent injury to the general public. The operation and maintenance of protective and preventative measures shall be to the satisfaction of the Superintendent and the Authority alike.
- iv) Any residue and ashes shall be removed from the pit prior to backfilling and shall be disposed of off-Site.
- v) As the pits become obsolete the Contractor shall backfill with approved fill material and compact to the standard specified in the Earthworks specification. The survey location of all obsolete pits shall be submitted to the Superintendent.

8.0 Measurement and Payment

- 8.1 The cost of all clearing, grubbing, refilling, removal and restoration as specified herein and shown on the drawings shall be deemed to be included in the relevant Bill Item for clearing and grubbing; and if not specifically shown as a separate item it shall be deemed to be included in the earthworks items and the Lump Sum of the Contract generally.