

SECTION 32 01 90.33 – TREE AND SHRUB PRESERVATION

PART 1 – GENERAL

1.01 WORK INCLUDED

- A. Protect living trees and shrubs not marked for removal and outside the construction area.
- B. Provide root protection trenching to avoid damaging trees and shrubs during grading operations within the root zone.
- C. Treat damaged trees and shrubs to prevent additional harm.
- D. Trim trees and shrubs to provide clearance for access and construction activities.

1.02 RELATED WORK

- A. Section 02 41 13 Selective Site Demolition
- B. Section 31 22 00 Grading
- C. Section 31 22 19.13 Spreading and Grading Topsoil

1.03 QUALITY ASSURANCE

- A. Comply with Metro requirements for tree protection.
- B. Refer to tree protection notes on Demolition and Construction Plans.

PART 2 – PRODUCTS

2.01 Fencing shall be 6' tall chain link fencing wired to 8' steel poles.

PART 3 – EXECUTION

3.01 **TRIMMING OPERATION** The pre-construction trimming operation shall be completed by others and shall include only trees affected by construction:

- A. Trees to be trimmed will be designated as specified in the Site Plan and flagged in the field.
- B. A list of the trees to be trimmed and the prescribed tree care needed will be provided by the Owner.
- C. Trimming shall consist of pruning to provide clearance for vehicular traffic, structures, equipment, tree protection fencing, line of sight, and trenching machines.

3.02 **ROOT PROTECTION TRENCHING** The root protection trenching operation shall be completed by the Contractor and shall consist of the following:

- A. Where excavation, grade cutting, or tree removal is to occur within a tree root zone, make a clean cut, 3 feet deep minimum, between the designated disturbed and undisturbed root zone area with a rock saw or chain trencher to minimize damage to undisturbed root zone.
- B. Trenching area shall be designated on the Site Demolition Plan and exact trench location shall be painted on the ground by the University Landscape Architect.
- C. Protective root cuts shall be backfilled with topsoil immediately after trenching.
- D. Where cuts are over 3' in depth and in a root zone area, a chain trencher shall first be used to cut a vertical edge prior to further excavation.

- E. Protective root cutting shall also be used to cut roots of trees to be removed out of root zones of trees to remain.

3.03 TREE PROTECTION FENCING Tree protection fencing shall be completed by the Contractor as follows:

- A. Tree protection fencing is designated on the Site Demolition or Grading Plan. Exact location will be marked in the field by the University Landscape Architect. Wherever possible, the area enclosed by the tree protection fencing shall be equal to the drip line – the edges of the outermost branches.
- B. Contractor shall provide maintenance and repair of fence during construction.
- C. Fence shall be removed after completion of construction.
- D. No access to fenced areas shall be permitted without prior approval by the University Landscape Architect.

3.04 TREE PROTECTION CONSTRUCTION ROAD Where vehicular access or materials lay down space is required to occur over tree root zones (within the tree drip line) or in lawn areas where soil compaction is to be avoided, the University Landscape Architect may approve temporary Tree Protection Construction Roads to be installed by the Contractor consisting of the following:

- A. One layer of ½" plywood, edges overlapping, laid on ground surface.
- B. One layer of filter fabric, laid on plywood, edges turned up 8" against adjacent fencing to contain crushed stone.
- C. 8" crusher-run stone laid on filter fabric.
- D. Exact location of road(s) will be marked on site by University Landscape Architect.
- E. Contractor shall provide maintenance and repair of road(s) during construction.
- F. Road(s) shall be removed after completion of construction.
- G. In some cases, where an area is to be used only for materials lay down, or for light vehicular traffic of very short duration, the University Landscape Architect may approve the installation of only a double layer of ½" plywood to protect the tree root zone or lawn area.

END OF SECTION