SECTION 101 – CLEARING AND GRUBBING

101.01 DESCRIPTION

This work shall consist of clearing and grubbing within the limits specified in the Contract Documents. Site clearing work includes protection of existing natural resources outside the disturbance limits, and trees within the disturbance limits that are identified on the site plan to be saved.

101.02 REFERENCE STANDARDS

M-NCPPC Section 721 - Tree Preservation
M-NCPPC Section 308 – Sediment Control

101.03 DEFINITIONS

Clearing. Clearing within the construction area includes removing and disposing of trees, brush, shrubs, vegetation, rotten wood, rubbish, fences and structures not specified in the Contract Documents for removal and disposal. Clearing outside the construction area is prohibited.

Tree Removal. Trees to be removed outside of the limits of disturbance, after being authorized by M-NCPPC Construction Manager, are to be removed by hand. Trees must be brought down with ropes in sections unless approved by M-NCPPC Construction Manager. All stumps shall be saw cut flush with the ground.

Grubbing. Grubbing is removing from the ground and disposing of all stumps, roots and stubs, brush, foundations, and debris.

Limits. Limits of clearing and grubbing include the construction area and all ditch areas and stream or channel change areas and is identified as the limit of disturbance (LOD) shown on the sediment control plans.

Disturbed Area. Any area impacted by construction activities.

Stabilization. Providing vegetation or structural measures (seed, temporary or permanent mulch, soil stabilization matting, riprap, stone aggregate, and paving by asphalt or concrete) that will prevent erosion. The placement of one or more of these temporary or permanent stabilization measures as directed by the M-NCPPC Construction Manager shall satisfy the requirements to proceed with the next grading unit or operation.

Stabilized. An area covered with erosion resistant material such as grass cover, vegetation, seed and mulch, soil stabilization matting, riprap, stone aggregate, or paving by asphalt or concrete.

Site clearing work includes protection of existing trees outside the disturbance limits, and trees
within the disturbance limits that are identified on the site plan to be saved. Please refer to section 721 Tree Preservation.

101.04 MATERIALS

Provide barricades, coverings, and protective fence as necessary to prevent damage to existing trees or improvements indicated to remain in place including all protective measures shown on the plans.

101.03 SUBMITTALS

Not applicable.

101.03 QUALITY ASSURANCE

Not applicable.

101.04 CONSTRUCTION

1. It shall be the responsibility of the Contractor to walk the limits of disturbance/clearing with the M-NCPPC Construction Manager before clearing operations begin.

2. Protection of existing trees:
   a. Protect existing trees and other vegetation indicated to remain in place, against unnecessary cutting, breaking or skinning of roots, skinning and bruising of bark, smothering (by stockpiling construction materials or excavated materials within the drip line), excess foot and/or vehicular traffic, and parking of vehicles within the drip line. Provide temporary fences, barricades, guards, or mulch mats as required to protect the trees and vegetation to be preserved.
   b. Water trees which are to remain within the limits of the contract work as required to maintain their health during the course of construction operations.

3. Root Pruning shall be performed wherever grades will be lowered within the critical root zone of a tree to be preserved as indicated on the plans or as directed by the M-NCPPC Construction Manager. See Section 721 Tree Preservation.

4. Site clearing:
   a. Clearing shall consist of removal and disposal at ground level of trees, brush, shrubs, grass, weeds, other vegetation, down timber, rotten wood, rubbish, fences, incidental structures, bituminous and concrete paving, and general debris within the limits of disturbance as shown on the plans.
b. Grubbing shall consist of removal of stumps, roots, stubs, brush, foundations, and other buried items and debris which interfere with this work. Such removal shall be carried out to a depth of not less than two (2) feet below sub-grade or sub-base levels unless specified on the plans.

c. Trees, stumps, and roots that are to be removed as a result of site clearing shall be removed completely.

5. Tree limbs over the LOD shall be pruned and removed as needed for construction activity as approved by the M-NCPPC Construction Manager and is considered a part of clearing. Any pruning of limbs of trees located outside of the LOD shall require the permission of the M-NCPPC Construction Manager. Disposal of waste material:

a. Burning of combustible cleared and grubbed materials is not permitted.

b. Unless otherwise directed by the M-NCPPC Construction Manager, all waste material must be removed from the site and legally disposed at an approved facility.

6. A concerted effort shall be made by the Contractor to protect the vegetation (including trees, shrubs, and ground cover) adjacent to the limits of clearance. If vegetation outside the limits of clearance are damaged, the following procedures shall be followed to repair the damage:

7. The Contractor shall provide corrective recommendations by a licensed arborist to the M-NCPPC Construction Manager. For qualifications, see Section 721 Tree Preservation. Repair vegetation damaged by construction operations is to be approved by the M-NCPPC Construction Manager. The repair of tree damage shall be made by licensed arborist.

8. If the M-NCPPC Construction Manager determines that the vegetation is damaged and not repairable, the contractor will be responsible to M-NCPPC for the following:

9. Removal and clean-up.

10. Cost of Assessed value of vegetation as established through procedures of the Council of Tree and Landscape Appraisers or another agreeable method by the M-NCPPC Construction Manager.

11. Protection and restoration of existing improvements shall require restoring any existing improvements damaged by this work to their original condition, as acceptable to M-NCPPC or other parties or authorities having jurisdiction.
101.04  MEASUREMENT AND PAYMENT

Payment shall be full compensation for clearing and grubbing as specified in this document when not covered as a specific pay item in the contract document, all material, labor, equipment, tools and incidental items necessary to complete this work. Payment shall be made on a unit rate or lump sum basis as indicated in the bid proposal.