# **Division 31 – Earthwork**

#### 31 10 00 Site Clearing

1. Topsoil shall be stripped to the depth determined by the Soils Engineer, usually not less than 4 inches. Topsoil shall be stockpiled in accordance with the requirements of the approved E&S Plan in locations as coordinated with the University. Under no circumstances shall topsoil be removed from University property without written University Approval. Topsoil shall not be mixed with subsoil or other site debris.

#### 31 20 00 Earth Moving

1. The Contractor shall obtain from the University the Land Disturbance Permit prior to any onsite activities. All work shall be in accordance with the Permit requirements. A Preconstruction meeting shall be held with the University prior to land disturbance.

### 31 23 00 Excavation and Fill

- 1. All excavation for Mason projects shall be unclassified excavation, meaning that whatever material is encountered during excavation must be removed. If the soils reports indicate large quantities of rock at the elevations of the building footings, this procedure may be modified, with the permission of the University. The Contractor shall be instructed to stop excavation if anything of archaeological value is encountered. Contact Miss Utility prior to excavation and follow the requirements of the Mason Land Disturbance Permit.
- 2. Contractor is required to coordinate with Mason's Geotechnical Engineer to perform inspection and testing of all earthwork. Mason's Geotechnical Engineer shall provide all field and laboratory services required to:
  - Test and evaluate all samples of proposed fill materials to determine optimum moisture density relationship in accordance with VTM-1.
  - Test all samples to assure compliance with gradation requirements of this Specification. Grain size analysis shall be performed in accordance with ASTM D 422.
  - Determine depth of topsoil stripping. Existing site topsoil shall be reviewed to determine the need for importing offsite topsoil for use in final landscaping. Existing university topsoil at the Fairfax, Prince William and Arlington Campuses have not produced desired finished lawns around new facilities. Augmenting or supplementing onsite topsoil may be required.
  - Inspect all proof rolling and determine the presence of any local soft pockets.
  - Inspect excavation in natural soil to determine if bearing stratum meets design criteria.
  - Inspect and test compacted fill to determine compliance with these Specifications. Field densities shall be determined by VTM-1.
  - Keep written records of all tests and field instructions, and summaries of these reports shall be mailed weekly to A/E, the Contractor, and the University. Final written summaries shall be provided to The University upon completion of work.

#### **31 25 00** Erosion and Sedimentation Controls

1. All erosion and sediment control measures will meet the requirements of the state of Virginia's Department of Conservation and Recreation's "Erosion and Sediment Control Manual", (www.dcr.virginia.gov/stormwater\_management/e\_and\_s-ftp.shtml)

## Chap. 4, Construction Products and Activities

2. the latest edition of the Mason Annual Standards and Specification for Erosion and Sediment Control and Stormwater Management (http://facilities.gmu.edu/LandDevelopment/erosion1.htm), and the Mason Design Guidelines.