**SECTION 329119**

**LANDSCAPE GRADING**

1. **GENERAL**
	* + 1. **SUMMARY**
				1. This Section includes prevention of excessive weed growth in lawns.
				2. Related Sections:

Section 328400 – Planting Irrigation.

Section 329113 – Soil Preparation.

Section 329200 – Turf and Grasses.

* + - 1. **DEFINITIONS**
				1. Finished Grading: Placing and grading of additional soil that may be required to bring the grade to the required grades for lawns, shrubbery, and groundcover beds.
				2. Additional Fill Materials: Topsoil as specified herein unless otherwise specified.
			2. **PROJECT CONDITIONS**
				1. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-preparation operations.

Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.

Provide alternate routes around closed or obstructed traffic ways if required by authorities having jurisdiction.

Minimize use of heavy machinery where practicable.

* + - 1. **QUALITY ASSURANCE**
				1. Qualifications: Work shall be performed by personnel trained and experienced in the work and shall be done under the direct supervision of a superintendent on Contractor’s staff.
				2. Workmanship: Perform work in conformance with recognized acceptable practices. Where job requirements require deviation from those practices, obtain approval from Landscape Architect before processing.
			2. **EXISTING CONDITIONS**
				1. Protection of Existing Utilities:

Existence and location of underground items are not guaranteed. Investigate and field verify before starting work. Excavation and backfill in the vicinity of existing items of work shall be carried out with extreme caution.

Contractor shall be held responsible for any damage and for maintenance and protection of existing utilities.

Indicate on record drawings where there is conflict between field conditions and drawings.

1. **PRODUCTS**
	* + 1. **MATERIALS**
				1. Topsoil: Topsoil shall be free from herbicides and insecticides which might adversely affect subsequent growth of turf or plantings, or which might otherwise contain materials toxic to humans and pets.
				2. Sand: Required product shall be “Bank Sand”. Submit sample for approval. Sand is not permitted for fine grading purposes if depth exceeds 3/4 inches to achieve finished grade.
			2. **EQUIPMENT**
				1. Machinery: Machinery shall be approved by Owner. Contractor shall provide equipment and machinery sufficient for proper execution of Work.
2. **EXECUTION**
	* + 1. **PREPARATION**
				1. Protect and maintain benchmarks and survey control points from disturbance during construction.
				2. Protect existing site improvements to remain from damage during construction.

Restore damaged improvements to their original condition, as acceptable to Owner.

* + - 1. **TREE PROTECTION**
				1. Erect and maintain temporary fencing around tree protection zones before starting site clearing. Remove fence when construction is complete.
				2. Do not excavate within tree protection zones, unless otherwise indicated.
				3. Repair or replace trees and vegetation indicated to remain that are damaged by construction operations, in a manner approved by Architect.
			2. **UTILITIES**
				1. Locate, identify, disconnect, and seal or cap off utilities indicated to be removed.

Arrange with utility companies to shut off indicated utilities.

* + - * 1. Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:

Notify Landscape Architect not less than two weeks in advance of proposed utility interruptions to allow conformance with Utility Department Outage Notification protocol.

* + - 1. **FINISH GRADING**
				1. In areas to receive lawns, till, disc, or otherwise scarify soil removing all clods, stones, and related material one inch or larger. Place and spread any additional material that may be required.
				2. Landscape areas shall have 2% minimum slope for good drainage. Contractor shall be responsible for minor adjustments to finished subgrade if deemed required by Landscape Architect.
				3. Hand rake surface, removing all clods and undesirable material greater than one-half inch from ground surface. Fill all low spots and cut irregularities to the acceptance of the Landscape Architect.
				4. Finish all swales and additional swales that may be required to drain areas where there are existing plant materials during finished grading operations.
				5. Prepare to immediately begin grassing operations of the completed and accepted finish grade to prevent excessive weed growth in lawn areas.
			2. **DISPOSAL**
				1. Disposal: Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property.

Separate recyclable materials produced during site clearing from other nonrecyclable materials. Store or stockpile without intermixing with other materials and transport them to recycling facilities.

**END OF SECTION 329119**