

SECTION 32 90 00 – LANDSCAPE ESTABLISHMENT

120-day Landscape Establishment

PART 1 GENERAL

1.01 SCOPE OF WORK

- A. A. This work shall include all labor, materials, equipment, supplies, and services to sustain and maintain in healthy, attractive and safe condition for all trees, shrubs, groundcovers, annuals, perennials, and turf. It shall also include the proper clean-up and off site disposal of all clippings, pruning's, etc., generated in the process.
- B. All work shall be in full compliance with procedures and techniques as described and outlined in this contract.
- C. B. The 120-day landscape establishment schedule, itemized in Section 4.01, shall start at date of construction acceptance of the project.

1.02 WORK UNDER THIS PROJECT

- A. The following items are a general description of the project for guidance only and shall not be construed as a complete detailed list of all operations to be performed.
- B. Maintain all landscape plant materials.
- C. Regularly check landscape irrigation system.
- D. Control and eliminate weeds in mulched areas, turf areas, planting beds, and inert materials.
- E. Control and eliminate pests.
- F. Mow and edge turf.

1.03 QUALIFICATIONS OF CONTRACTOR PERSONNEL

- A. All persons utilized by the Contractor in the performance of this contract shall be fully qualified, professional gardeners with experience in the grounds maintenance field. This experience must have provided, as a minimum, broad knowledge of all phases of landscape pest and disease control; shrub and tree pruning; fertilization; and irrigation system operation, maintenance and repair.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.01 PERFORMANCE

- A. All work shall be performed in a professional manner within the standards of the industry, using quality equipment, methods and materials.
- B. Work Schedule: Contractor will supply the University representative with a proposed scheduling of the expected day and time tasks listed below will be performed. This schedule shall be approved prior to project maintenance commencement.
- C. The frequencies of the tasks stated are suggested minimums only. During extremely wet or dry periods, the Contractor must adjust schedules to ensure correct and proper conditions are maintained.

3.02 SHRUBS AND TREES

- A. All shrubs and trees shall receive no less than the following:
- B. Eliminate all bracing and supports as rapidly as plants can become self-supporting.
- C. Supports that must remain should be kept in good repair and functioning at all times, and trees or shrubs fully protected. Supports or braces shall be repositioned as often as necessary to prevent damage to the tree or shrub trunk.
- D. All debris resulting from care of shrubs, trees and other plant areas shall be removed from site on day work is performed and area cleaned.
- E. Side shoots or branches may be "headed back" but are to be left on and encouraged on all thin or spindly tree trunks and on all trees still needing bracing or staking.
- F. Sucker growth from the base of trees at soil level or below shall be removed, unless otherwise directed.
- G. Pruning shall be provided to encourage a healthy natural growth pattern for each variety of tree or shrub.
- H. All pruning shall be towards developing the natural branching structure. All pruning shall be accomplished in accordance with accepted practices and standards.
- I. All plants will be fertilized with a balanced fertilizer according to schedule, Section 4.01.
- J. Fertilizer used will be a balanced type supplying all nutrients required of the plant. Application rate will be as follows: a minimum of 1 pound actual nitrogen shall be applied to each plant over 5 gallon container size or its equivalent. Plants smaller than 5 gallon shall receive 1/4 to 1/2 pound actual nitrogen.. Application will be at the base, on drip line.
- K. The Contractor is responsible for ensuring the correct soil conditions are maintained for each tree, shrub, flower, grass or plant covered under this contract in order to promote optimum growth, environment and health for the species of plant. This may require addition of soil, soil amendments, humus, mulch, gypsum, sulphur, all of which will be provided by the Contractor at no additional cost to the University.

3.03 ESTABLISHMENT

- A. Begin establishment immediately after planting.
- B. Maintain plants in temporary location as well as final location. See Section 02950, SPECIAL PROJECT WARRANTY
- C. Turf watering shall be at intervals to obtain a moist soil condition to a minimum depth of 2 inches. Frequency of watering and quantity of water shall be adjusted in accordance with the growth of the turf. Run-off, puddling, and wilting shall be prevented
- D. A balanced fertilizer shall be applied at the rate of 5 pounds actual nitrogen per 1000 square feet according to the schedule in Section 4.01.
- E. Groundcovers shall be kept free of bermudagrass and nutgrass at all times.
- F. Weeds, trimmings, etc., will be removed from site on day work is performed and area cleaned.

3.04 IRRIGATION SYSTEM AND WATERING

- A. Make adjustments and settings of automatic controllers, if any, to establish frequency and length of watering periods. During the contract period, the Contractor will repair or replace any equipment damaged as a result of contract operations at the Contractor's expense.
- B. Sprinkler system shall not be operated when extremely windy or freezing conditions prevail.
- C. Watering cycles shall be timed to cause the least inconvenience to the building occupants and visitors. Entrances shall not be wet during the arrival and departure of occupant employees/residents.
- D. Sprinkler heads on a continuing basis will be cleaned, adjusted, repaired, and maintained at a proper height.
- E. When irrigating turfed areas, Contractor must make sure that sprinkler heads are adjusted to cover turf areas and shrubs and that sprinkler heads are clean so the water comes out evenly. The Contractor is responsible for ensuring that all turf, groundcovers, shrubs and trees are adequately watered at all times, whether or not sprinklers are provided.

3.05 CULTIVATION

- D. A. Groundcover and annual flower beds will be cultivated to maintain a loose, friable top soil for the purposes of gas exchange, water penetration and soil aeration.

3.06 LANDSCAPE INSECT, RODENT AND DISEASE CONTROL

- A. The Contractor is to implement an integrated pest management program for the control and eradication of pests and and plant diseases.
- B. Chemicals used, methods of application and reporting procedures will fully comply with all provisions of Sections 3.08, 3.09 and 3.10.
- C. The Contractor shall furnish services necessary to exterminate rodents and insects using only those pesticides which comply with the provisions of the Federal Insecticide, Fungicide and Rodenticide Pesticide Control Act of 1972, Public Law 92516 (86 Stat. 973), and the regulations issued thereunder.
- D. These services shall be performed by a licensed pest control contractor or state-certified chemical applicator.

3.07 INITIAL SERVICE:

- A. A thorough inspection of the premises shall be conducted to locate any infestation and intensive treatment made to eliminate any existing problems during the first month of the establishment portion of the contract.

3.08 FOLLOW UP SERVICE

- A. Additional inspections and treatment will be made as scheduled and/or required.

3.09 SAFETY PRECAUTIONS

- A. In order to safeguard both life and property, the Contractor will adhere to the following:
- B. Appropriate protective clothing and gear consistent with the type of pesticide being used shall be provided and worn during application. All containers holding pesticides shall be properly labeled with the name and strength of the chemical agent therein. Pesticides, herbicides and other toxic materials will not be stored on University property.

- C. A large number of pesticides or groups of pesticides are designated as restricted materials; their use and possession are subject to special restrictions under regulations of the State Department of Agriculture. Included in this list are insecticides, fumigants, mercury-treated seeds, rodenticides and avicides. In addition, certain herbicides are also classified as restricted materials. A permit from the appropriate local authorities must be obtained for use of any of these restricted materials. Before using any material listed in this group, contact the Agricultural Commissioner to determine the status of the chemical and for information regarding regulations concerning pesticide storage, transportation and disposal. **NO RESTRICTED USE PESTICIDES ARE TO BE USED ON CAMPUS.**

3.10 SCHEDULES AND REPORTS

A. Chemicals and methods and rates of application will be submitted to the University representative for approval prior to use. Until the end of the establishment period, the Contractor shall provide the University representative a detailed monthly report of all fertilizers and pesticides applied during the preceding month. The report shall include the chemical names, trade names, date and rate of application, specific areas of application and the purpose for the application.

3.11 GENERAL INSTRUCTIONS

A. Any eroded areas shall be repaired by the replacement of the proper material to bring them back to original grade as required.

3.12 CLEANUP AND PROTECTION

- A. During landscape work, keep pavements clean and work areas in an orderly condition.
- B. Protect landscape work and materials from damage due to landscape operations, operations by other contractors and trades and trespassers. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged landscape work as directed.
- C. All clippings, trimmings, cuttings, trash and debris resulting from work of this contract shall be promptly removed from the site.

PART 4 SCHEDULES

4.01 120-Day Landscape Establishment Schedule

Item	Work Item Description	Frequency	Time Frame
1	Prune Trees	Once	When Installed
2	Prune Shrubs	Once	4th Month After Installation
3	Trim & Edge Groundcovers	Monthly	
4	Mow & Edge Turf	Weekly	
5	Fertilize Trees, Shrubs,	Once	4th Month

	Groundcovers, and Turf		After Installation
6	Irrigate Plants	3x Week	
7	Irrigate Turf	3x Week	
8	Weed All Areas	2x Month	
9	Apply Pre-Emergent Herbicide	Once	4th Month After Installation
10	Ensure Soil Conditions	Once	2nd Month After Installation
11	Cultivate Flower Beds	Once	2nd Month After Installation
12	Insect, Rodent, & Disease Control	Monthly	
13	Rake Inert Material Areas	Monthly	
14	Police Site	Weekly	

END OF SECTION 32 90 00