1. **Purpose:** To provide standard operating procedures to ensure quality, attractive, easy to maintain, and cost effective landscape installations at UNC Charlotte.

2. **Scope:** This Standard Operating Procedure (SOP) covers all landscape installations at UNC Charlotte.

3. **Responsibilities:**

   A. **Campus Landscape Architect:**

      Provides guidance for the overall continuity and consistency of landscape design for the University in accordance with the Campus Master Plan and Design Manual standards.

      Oversees development of landscape concepts for the entire campus.

      Provides conceptual guidance to designers and / or the Grounds Section as appropriate.

      May Prepare conceptual landscape designs for in-house projects.

      Reviews and approves landscape designs and installations as described in the “Specific Procedures” section below.

      May Participate as a voting member in annual pre-qualification of landscaping contractors.

   B. **Capital Projects Section:**

      Designates a Project Manager for landscaping projects associated with capital projects.

      Manages landscaping projects associated with capital projects as described below in the “Specific Procedures” section of this SOP.

      Coordinates with included parties, internal and external to the university.

      Conducts an annual pre-qualification of landscape sub-contractors.

   C. **Design Services Section:**

      Designates a Project Coordinator for landscaping projects associated with capital projects.

      Manages outsourced informal landscaping projects as described below in the “Specific Procedures” section of this SOP.

      Receive approval of plans from Campus Landscape Architect
D. Grounds Section:

Maintains the campus landscape.

Maintains and updates the landscaping specifications section of the Design Manual

Inspects and approves installations as described below in the “Specific Procedures’ section of this SOP.

Provides a “Maintenance Impact Statement” for all New Landscape Installations, as noted under “Maintenance Impact Statement” section.

Functions in the “owner” capacity with final approval on all contracted landscape installations.

Independently installs small infill landscape projects 5000 square feet (in landscape space) that do not require design.

Participates as a voting member in annual pre-qualification of landscaping contractors.

4. Specific Procedures:

A. Capital Projects:

i. Design:

Landscape designs for capital projects will be completed by the Landscape Architect (LA) consultant on the project’s selected design team.

Capital Project Manager will conduct at least one design meeting between the Landscape Architect of Record, Campus Landscape Architect and Grounds Section to discuss design concepts and expectations.

Project Manager will insure that landscaping specifications contained in the Design Manual are incorporated in the design documents.

Campus Landscape Architect and Grounds Section will review the design at the Schematic Design, Design Development, and Construction Documents phases. Capital Project Managers will notify these sections that the plans are available for review and provide a deadline for comments.

The Project Manager will require the Landscape Architect to provide written responses to comments from Campus Landscape Architect and Grounds. Comments that are not resolved to the satisfaction of these sections will be resolved in a face to face meeting with the LA.

Grounds will submit a Maintenance Impact Statement and Staffing Plan to the Director of Facilities Operations for review and resource allocation. If the design cannot be supported by Grounds due to staffing needs / impacts, then a scaling back of the design or alternate design, including “phasing in” will be implemented.

Capital Project Manager will receive a written approval from both the Campus Landscape Architect and Grounds Section before the final design is considered complete and biddable.
ii. **Construction:**

Capital Projects Section will conduct an annual pre-qualification of landscape contractors. Campus Landscape Architect, Grounds Section, and Design Services will provide voting members on the pre-qualification committee.

**Hard Bid:**

General Contractors biding on landscape work will be provided the list of UNC Charlotte’s pre-qualified landscape contractors and will be required to use one of the listed contractors for their sub-contracted landscape work.

Director of Capital Projects, in consultation with the Campus Landscape Architect and Grounds Section, may elect to bid capital landscaping projects separately from the general contract. Criteria to be used in making this determination will include scheduled completion of general construction and the general contractor’s project management abilities.

**CM @ Risk:**

Construction Managers @ Risk will be required to accept only UNC Charlotte’s pre-qualified landscape sub-contractors to bid on landscape work packages that are part of their project.

Project Manager will ensure all landscaping installations occur between mid October and end of April. Projects with proposed finish dates after this period will be delayed for planting installation during the next suitable season.

Funds for capital projects will be managed by the Capital Projects Section.

Project Manager will notify Grounds Section of construction schedules related to landscaping.

Project Manager will coordinate at least one inspection visit by Grounds of plant materials at the selected nursery prior to installation. Grounds will approve or tag all materials prior to delivery to the University. Approvals can include but are not limited to photos. Written approvals will go to the Project Manager before materials are shipped to the University.

Project Manager will coordinate weekly (or more frequent if necessary) inspection visits by Grounds of the project site during plant installation. Written inspection reports/checklists will be provided by the Grounds inspector for follow-up by the Project Manager with the contractor.

Project Manager will coordinate a punch list inspection and a final inspection with a Grounds representative present. Project Manager will receive a final acceptance memorandum in writing from the Grounds Section before making final payment to the contractor.

B. **Informal Projects (under $500,000):**

i. **Delivery Method Determination:**

Informal landscaping projects will be entered in Archibus for Projects.

Once informal landscaping projects are funded, the Director of Facilities Operations will make a determination of a delivery method. The FO Director will decide if the project is
to be executed “in-house” or outsourced based on the capabilities and existing workload of the Grounds Section.

a. **In-house Projects:**

In-house projects will be forwarded to Campus Landscape Architect for a concept design unless Campus Landscape Architect delegates the full design to the Grounds Section. Campus Landscape Architect will coordinate design concept to ensure appropriate plant selection.

Plant selection will be reviewed and approved by the Grounds Section via written memorandum. Disagreements between Campus Landscape Architect and Grounds will be resolved in a face to face meeting.

Grounds Section will designate plant materials.

Final design will be reviewed and approved by Campus Landscape Architect via written memorandum.

Grounds will select plants and perform construction on in-house projects. Funds for in-house projects will be allocated to Grounds for execution.

A punchlist inspection and the final inspection of in-house projects will be conducted jointly by Grounds and Campus Landscape Architect.

b. **Outsourced Projects:**

- **Design:**

  A Design Services Project Coordinator will be assigned for the project. The Campus Landscape Architect will have final approval of the landscape design.

  Design Services and Campus Landscape Architect will select a Landscape Architect off of the Open End Designer list. If a Landscape Architectural company is not on the Open End List the project may be advertised.

  Project Coordinator will conduct at least one design meeting between the Landscape Architect of Record, Campus Landscape Architect and Grounds Section to discuss design concepts and expectations.

  The Landscape Architect (LA) selected will complete the design.

  Project Coordinator will insure that landscaping specifications contained in the Design Manual are incorporated in the design documents.

  The Campus Landscape Architect and Grounds Section will review the design at the design estimate stage (80% design). The Design Services Project Coordinator will notify these sections that the plans are available for review and dictate a due date for comments.

  Project Coordinator will require Landscape Architects to provide written responses to comments from Campus Landscape Architect and Grounds. Comments that are not resolved to the satisfaction of these sections will be resolved in a face to face meeting with the LA.

  Project Coordinator will receive a written approval from both the Grounds Section and Campus Landscape Architect before the final design is considered complete and biddable.

- **Construction:**
Only pre-qualified landscape contractors will be allowed to bid on projects (see paragraph above regarding annual pre-qualification of landscaping contractors).

Project Coordinator will ensure all landscaping installations will occur between mid October and end of April. Projects with proposed finish dates after this period will be delayed for planting installation during the next suitable season.

Funds for out sourced projects will be allocated to Design Services for execution.

Project Coordinator will notify Grounds Section of construction schedule related to landscaping.

Project Coordinator will coordinate at least one inspection visit by Grounds of plant materials at the nursery prior to installation.

Project Coordinator will coordinate weekly (or more frequently if necessary) inspection visits by Grounds of the project site during plant installation. Written inspection reports will be provided by the Grounds inspector for follow-up by the Project Manager with the contractor.

Project Coordinator will coordinate a punch list inspection and a final inspection with a Grounds representative present. Project Coordinator will receive a final acceptance memorandum in writing from the Grounds Section before making final payment to the contractor.

C. Irrigation installations:

Irrigation designs and installations will follow the same processes as for landscaping projects described above.

D. Projects that affect existing landscaping:

Any project that affects existing landscaping, hard-scapes, turf or irrigation must be reviewed and approved in writing by Campus Landscape Architect and Grounds in the design phase.

Projects that remove existing landscaping will be required to include a budget line to replace the landscape based on a new design. Review and approval procedure will be as written above.

All existing landscape and irrigation within the project must be returned to original condition.

Any project that damages existing landscape/hardscape must budget funds for repair.

E. Maintainable Landscapes/Maintenance Impact Statements:

Grounds Section will prepare maintenance impact statements and staffing plans for each new project during the design phase.

The Director of Facilities Operations will review the impact statements and staffing plans and forward requests for resources the AVC FM as required. If the design cannot be supported by Grounds due to staffing impacts, then a scaling back of the design or alternate design(s), including “phasing in” will be implemented.