Pre-Construction Notice

Utilities may be damaged if you do not call the toll-free number (1-888-721-7877) between the hours of 8:00 AM and 5:00 PM, Monday through Friday, exclusive of holidays. If you have a conflict with this timeframe, please call the Contractor. The Contractor shall coordinate installation of the landscaping and irrigation with Owner’s Contractor.

The South Carolina STATE LAW requires that excavators give a 72-Hour notice, (3 working days excluding Saturdays, Sundays, and legal holidays), for the location of underground utilities. If a contractor fails to do so, the contractor shall be liable for any damages to underground utilities.

The Utility Companies ask that you leave a 2 1/2 feet margin on each side of a marked utility line. Also note that your request is good for 10 working days after it has been processed by our system.

Please call PUPS if you are aware of any underground utilities.

General Notes:

- Contractor Responsible for the Structural Integrity of all Elements.
- Contractor Shall Use Pressure-Treated Lumber for all Exterior Construction. Contractor/Owner Should be Aware of Hazards Related to Pressure-Treated Lumber.
- Contractor Responsible for Verifying Compliance with all Setback and Zoning Requirements Prior to Construction.
- Contractor Responsible for Locating all Underground Utilities Prior to Construction. Contractor to Secure a Responsible Utility Company to Locating all Underground Utilities.
- Owner Shall Consider the Future Maintenance Requirements of This Project to Prevent Injury to the Public.
- Contractor Responsible for Locating All Underground Utilities Prior to Construction. Contractor to Coordinate Location with Responsible Utility Company.
- Irrigation System Shall Provide 100% Coverage of all Planting Beds and Lawn Areas.
- Contractor Responsible for Maintaining Positive Drainage Away From Structures.
- Deer Or Other Fauna - Environmental Concepts, LLC Shall Have No Duty or Responsibility For The Knowledge, Discovery, or Responsibility for the Discovery, Location, Presence, Handling, Removal, Disposal or Exposure of Disease or Any Harmful Materials in the Project Site. Owner/Responsible Agent’s Obligation To Inform Environmental Concepts, LLC Will Specify Deer Resistant Plants For The Project.
- Owner Shall Consider the Future Maintenance Requirements of This Project to Prevent Injury to the Public.
- Changes, Substitutions, or Deletions May Require Review and Approval by the Responsible Reviewing Authority.

Note: Landscaping and irrigation systems are provided for demonstration. Demolition of existing trees and shrubs shall be included in the scope of the project. All tree protection of trees remains the responsibility of this Contractor. All landscaping and irrigation will be installed by the Owner. All rough and final grading shall be included within the project bid. The General Contractor shall coordinate installation of the landscaping and irrigation with Owner’s Contractor.
### Planting Schedule - Add Alternate Additional Plants

<table>
<thead>
<tr>
<th>Qt.</th>
<th>Number</th>
<th>Common Name</th>
<th>Botanical Name</th>
<th>Unit</th>
<th>Qty</th>
<th>Spacing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>Dwarf Burford Holly</td>
<td>Ilex cornuta 'Dwarf Burford'</td>
<td>18&quot; O.C.</td>
<td>1</td>
<td>3'</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Carolina Wiregrass</td>
<td>Muhlenbergia capillaris</td>
<td>4' O.C.</td>
<td>1</td>
<td>3'</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Wax Myrtle</td>
<td>Myrica cerifera</td>
<td>3' O.C.</td>
<td>1</td>
<td>3'</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Dwarf Yaupon Holly</td>
<td>Ilex cassine 'Dwarf'</td>
<td>3' O.C.</td>
<td>1</td>
<td>3'</td>
</tr>
</tbody>
</table>

### Planting Schedule - Remove Plants from Planting Schedule on L-2.0 When Add Alternate is Used

<table>
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<tr>
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</tr>
</tbody>
</table>

### Notes:
- Landscaping and Irrigation sheets are provided for information. Demolition of existing trees and shrubs shall be included in the scope of the project. All tree protection remains the responsibility of the Contractor. All landscaping and irrigation will be installed by the Owner. All rough and fine grading shall be included within the project bid. The General Contractor shall coordinate installation of the landscaping and irrigation with Owner's Contractor.

### Pre-Construction Notice

**Palmetto Utility Protection Service (PUPS)**

Ensure all underground utility lines are marked before any work is done. This will prevent damage to those lines that may be located beneath the ground. The PUPS phone number is [803] 771-2858. The South Carolina State Law requires that excavators give a 72-Hour Notice (3 working days, excluding weekends and holidays) to the Utility Company before any work is done. After a ticket has been processed, you will receive a ticket number to be used on all work done within 10 working days after the ticket has been processed. Do not proceed if you have not received a ticket number. PUPS tickets are valid for 10 working days after ticket has been processed. The Utility Company will ask that you leave a 2 1/2 feet margin on each side of a marked utility line. Also note that your request is good for 10 working days after it has been processed by our system.

### Scale

![Scale Diagram](image)

### Title

**PLANTING PLAN - ANNEX NO. 1**

**Scale:** 1" = 20'

**Coastal Carolina University**

**STUDENT CENTER ANNEX CONSTRUCTION**

**CONWAY, SC**

**ANNEX CONSTRUCTION**

**618 Chestnut Road**

**Planting Details:**

1. All Plant Materials Shall Comply with the American Standard for Nursery Stock (ANSI Z60.1-1996).
2. Landscaping Contractor/Owner shall inform landscape architect of any concerns with plant material specified prior to installation. At such time, alternate plant material may be specified by landscape architect. Otherwise, landscape contractor/owner assumes all risk in installing plant material indicated on planting schedule.
3. Landscape contractor shall be responsible for installing a root growth barrier in all locations where plant roots may come into contact with architectural elements (foundations, walls, sidewalks, pools, etc.).
4. Deer resistant plants - some of the plants indicated on this plan may have a resistance to deer. However, if the deer are present in large enough numbers or are hungry enough they will eat whatever may be available. Owner shall consider the maintenance requirements of all plant materials for this project. Changes, substitutions or deletions may require review and approval by the responsible reviewing authority.
5. All native and hybrid species of plant materials shall be from South Carolina nurseries, unless approved by the architect.
6. All materials shall be purchased in accordance with the South Carolina State Law regarding nursery stock and local ordinances.
7. All materials shall be delivered to the site in accordance with the South Carolina State Law regarding nursery stock and local ordinances.
8. All materials shall be delivered to the site in accordance with the South Carolina State Law regarding nursery stock and local ordinances.
9. All materials shall be delivered to the site in accordance with the South Carolina State Law regarding nursery stock and local ordinances.
Note: Landscaping and Irrigation sheets are provided for information. Selection of existing trees and shrubs shall be included in the scope of the project. Tree protection of trees remains the responsibility of this Contractor. All landscaping and Irrigation will be installed by the Owner. All rough and fine grading shall be included within the project bid. The General Contractor shall coordinate installation of the landscaping and irrigation with Owner’s Contractor.
**DESIGN NOTES**

1. DESIGN IS BASED ON INFORMATION GIVEN TO ATLANTIC IRRIGATION SOUTH. ATLANTIC IRRIGATION SOUTH IS NOT LIABLE FOR ANY MISTAKES OR ERRORS IN THE DESIGN BASED ON THESE INFORMATION.

- **Schedule 40 4"**
- **Hunter MP Right Strip**
- **Hunter MP Left Strip**
- **drip**
- **Drip Stub Up**
- **Hunter MP Side Strip**
- **CC1G**
- **Hunter MP2000 90°**
- **Mainline - Schedule 40 4"**
- **Hunter MP1000 210°**
- **Rain Bird XCZ-100**
- **2 inch meter**
- **24" Spacing for less dense plantings**
- **Schedule 40 2"**
- **Lateral - Schedule 40 1"**
- **Hunter MP3000 180°**
- **Landscaping and Irrigation sheets are provided for S 18"RCP PRESSURE. WATER SOURCE WILL BE FROM AN EXISTING PUMP WITH A 4" MAINLINE.**
- **INSTALLER IS TO CONFIRM THE MINIMUM DISCHARGE REQUIREMENTS OF THE WATER SOURCES AS INDICATED ON CONSTRUCTION DRAWING.**
- **CONSULT WITH THE DESIGNER FOR POSSIBLE CHANGE TO THE DESIGN.**
- **Contractor shall coordinate installation of the landscaping and irrigation with Owner's Contractor.**
Note: Landscaping and irrigation sheets are provided for information. Demolition of existing trees and shrubs shall be included in the scope of the project. All tree protection of trees remains the responsibility of this Contractor. All landscaping and irrigation will be installed by the Owner. All rough and fine grading shall be included within the project bid. The General Contractor shall coordinate installation of the landscaping and irrigation with Owner's Contractor.

DESIGN NOTES:
1. DESIGN IS BASED OFF AN IRRIGATION SERVICE, WITH A CAPACITY OF 50 GPM WITH A MINIMUM OF 60 PSI WATER PRESSURE. WATER SOURCE WILL BE FROM AN EXISTING PLUMB WITH A 4" MAINLINE.
2. INSTALLER IS TO CONFIRM THE MINIMUM DISCHARGE REQUIREMENTS OF THE WATER SOURCES AS INDICATED ON THE LEGEND PRIOR TO INSTALLATION. WATER SOURCE LOCATIONS ARE APPROXIMATE AND MAINLINE LAYOUT WILL NEED TO BE ADJUSTED AS NEEDED.
3. THE PRESSURE REQUIREMENT OF THE WATER SOURCES IS BASED ON NO MORE THAN 6 FEET OF ELEVATION CHANGE, CONSULT WITH THE DESIGNER FOR POSSIBLE CHANGE TO THE DESIGN.
4. LOCATION OF HEADS SHOWN ON THE DRAWING IS APPROXIMATE, ACTUAL PLACEMENT MAY VARY TO ACHIEVE FULL AND EVEN COVERAGE. LOCATION OF PIPES ON THIS DESIGN IS FOR CLARITY SAKES ONLY. CONTRACTOR IS TO INSTALL PIPES AS REQUIRED TO MEET ALL LOCAL LAWS AND REGULATIONS.
5. ALL SHUTOFF VALVES SHALL BE INSTALLED PERPENDICULAR TO FINISH GRADE.
6. EXCEPT AS INDICATED, ALL IRRIGATION LINES WILL BE A MINIMUM OF 1/2" COVER BASED ON FINISHED GRADE. DRAINAGE LINES INSTALLATION WITHIN A MINIMUM OF 24" COVERS BASED ON FINISHED GRAVE.
7. CONTRACTOR SHALL DETERMINE THE MAXIMUM TOTAL FEET OF TUBING PER CONTROL ZONE @ 40 GPM.
8. ELECTRICAL CONTROLLER AND GROUND WIRE SHALL BE TYPE UF 600 VOLTS AWG CONTROL CABLE 14 OR LARGER.
9. WATER PROOF ConnectORS SHALL BE A 30 MINUTE MAXIMUM TIME FOR WATER SOURCE OR трубП
10. ALL PRODUCTS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND ACCORDING TO THE LOCAL ELECTRICAL PLUMBING AND BUILDING CODES.
11. SPRINKLER LOCATED ON A STEEP SLOPE REQUIRE CHECK VALVES TO BE INSTALLED IN ALL HEADS ON THE IRRIGATION ZONE.
12. CONTRACTOR WAS AWARE OF SOME EXISTING SLEEVES AND CONDUIT, BUT NOT SURE OF EXACT LOCATIONS. WHEN INSTALLING DRAINAGE LINES INSTALLATION WITHIN A MINIMUM OF 1/2" COVER BASED ON FINISHED GRAVE. DRAINAGE LINES INSTALLATION WITHIN A MINIMUM OF 24" COVERS BASED ON FINISHED GRAVE.
13. THE CONTROLLER IS A SIGNATURE MODEL, CONFIGURATION, INSTALLATION, AND REPLACEMENT COSTS ARE THE RESPONSIBILITY OF THE CONTRACTOR.

IRRIGATION PLAN - ALTERNATE NO. 1

Field Locate Controller, Existing Mainline and Lateral Lines

Maximun Total Feet of Tubing per Control Zone @ 40 GPM

<table>
<thead>
<tr>
<th>Flow Rate (GPM)</th>
<th>Flow (GPM) per 100' of Tubing</th>
<th>Emitter Spacing Inches</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5 GPM</td>
<td>0.6 GPM per 100'</td>
<td>12&quot;</td>
</tr>
<tr>
<td>1.0 GPM</td>
<td>0.9 GPM per 100'</td>
<td>18&quot;</td>
</tr>
</tbody>
</table>

Design is based on information given to Atlantic Irrigation South. Atlantic Irrigation South is not liable for any mistakes or errors in the design based on this information.

Conditions of Use: This drawing and the design thereon are the property of Quackenbush Architects + Planners. The reproduction, copying, or use of this drawing without the written consent of Quackenbush Architects + Planners is prohibited and will be investigated.

North

Scale: 1" = 20'

Site Related Data & Boundary Information Taken from a Compilation of Sources.
Note: Landscaping and irrigation sheets are provided for information. Demolition of existing trees and shrubs shall be included in the scope of the project. All tree protection of trees remains the responsibility of this Contractor. All landscaping and irrigation will be installed by the Owner. All materials and grading shall be included within the project bid. The General Contractor shall coordinate installation of the landscaping and irrigation with Owner's Contractor.

### LMC Series Controller

- **Controller:** LMCX430
- **Valve Box:** L-3.1
- **Valve:** 3" Lateral Valve
- **Wire:** 120V AC 3" Conduit

### Weathermatic 12000s Series Remote Control Valve

- **Valve:** Weathermatic Valve
- **Pipe:** PVC Pipe 1/2" Flex
- **Connection:** Quick Coupling Valve

### Calculating Thrust Block Area

The size and type of thrust block depends on pipe size and operating pressure. The thrust block is required at the top of the line. In most cases, the size and type of thrust block will be determined by the engineer. This thrust block size must be calculated as shown by the following example:

**Example:**

- **Diameter of thrust block 4" Class 100 pipe with a 90-degree elbow, and an operating pressure of 10 psi.**
- **Step 1:**
  - Determine the bearing strength of the soil using the table below.
  - **Flow Through a Valve:**
    - **Pipe:** 4" Schedule 40 PVC
    - **Valve:** 4" Gate Valve
    - **Soil:** Soft Clay

**Step 2:**

- **Determine the bearing strength of the soil using the table below.**
- **Flow Through a Valve:**
  - **Pipe:** 4" Schedule 40 PVC
  - **Valve:** 4" Gate Valve
  - **Soil:** Soft Clay

**Step 3:**

- **Determine the thrust block area using the formula below.**
  - **Flow Through a Valve:**
    - **Pipe:** 4" Schedule 40 PVC
    - **Valve:** 4" Gate Valve
    - **Soil:** Soft Clay

### Concrete Thrust Block

- **Main Line Access Valve #1:**
- **Gates:**
  - **Gate Valve (Typ):**
  - **Gate Valve (Typ):**
- **Connection:**
  - **Connection:**

### Notes:

- **Under All Other Areas:**
  - **Concrete Supports & Anchors:** 1/2" Concrete Pipe
  - **Concrete Supports & Anchors:** 1/2" Concrete Pipe
  - **Concrete Supports & Anchors:** 1/2" Concrete Pipe

- **Construction Details:**
  - **Double Check Backflow Preventer:**
  - **Double Check Backflow Preventer:**
  - **Double Check Backflow Preventer:**

### Notation:

- **L-3.2**
- **L-3.3**
- **L-3.4**

Contractor Shall Coordinate with Owner for Scheduling, and Provide Subcontractors as Required for All Piping as Indicated.
1.2 COORDINATION OF CONDITIONS:

b. No Valves shall be installed in sod. All Valves should be installed in planting beds. Adjustments if Field Conditions Vary.

c. Provide Minimum (1) 4" SDR-21 PVC Sleeve with Min. 12" & Max. 18" of cover.

c. No wire or pipe shall be placed under pavement unless necessary.

2.4 The Contractor shall coordinate with the General Contractor for the installation of controller, locations, remote control valves, quick-coupling valves, and all sprinkler system. 

5.8 Automatic Control Wiring:

b. The contractor shall select the appropriate nozzles for onsite conditions to provide the coverage needed. 

D. MEASUREMENT: Plants are not to be stretched in order to obtain a measurement. 

E. AVERAGE SIZE: If a bed or group of plants is specified to be 18"-24", then the entire group of plants shall average 21" in spread or height (whichever is applicable). A group of plants just under 18" in spread, but meeting the height criteria, is acceptable. 

F. MATERIALS:

- Aluminum Sulfate: Unadulterated, in manufacturer's original, unopened container labeled "Aluminum Sulfate".
- Limestone: Raw, ground agricultural limestone, containing at least 90 percent calcium carbonate, in manufacturer's original, unopened container labeled "Limestone".
- Epsom Salt: Food grade, in manufacturer's original, unopened container labeled "Epsom Salt".
- Fertilizer: All fertilizers shall be in a readily available form, in manufacturer's original, unopened container labeled "Fertilizer".

G. NOMENCLATURE: Names of plants required for use as trees, shrubs, vines, ground covers, perennials, and other landscape materials are listed in this section. 

H. The Owner / Responsible agent shall notify the Landscape Architect of any changes in the above planting etc...