3280 00 IRRIGATION

- A. Overview
 - 1. Damage to existing irrigation systems must be repaired within 24 hours. repaired in this period, the costs of the repair will be charged to the project.
- B. Materials
 - Automatic Controllers 1.
 - The location of the controller shall be approved by SHSU Landscape Services.
 - All irrigation controllers shall be a Calsense ET2000e LR, RRe, -F, with TP boards b. and radio frequency of 452.6875.
 - 2. Electric Control Valves

a.

- b. Spray nozzles shall have a screw adjustment.
- c. Fabricate all risers as shown in the plans.
- d. Riser nipples for all irrigation heads shall be the same size as the riser opening in the head.
- e. All irrigation heads of the same type shall be the same manufacturer.
- f. Install all irrigation heads on a swinging joint.

7. Flow Sensors

- a. All flow sensors shall be Calsense Flow Meters.
- b. The size of the flow sensor shall be based off the highest and lowest flow zones. The size is not based on the size of the mainline.

8. Drip Irrigation

a. No drip irrigation shall be installed on the SHSU campus.

9. Copper Piping

a. Any irrigation piping inside of a building shall be copper pipe that is labeled "IRRIGATION".

10. Backflow Prevention Units

- a. All irrigation systems shall have a backflow preventer than meets the requirements of AWWA C506 and the City of Huntsville.
- b. The backflow units shall be the types and size indicated on the landscape plans.
- c. Double check backflow units shall not be installed as per the City of Huntsville.
- Install all backflow units above ground and located to minimize visibility.
- e. Each backflow unit will be provided with an insulated cover.

C. Installation

1. Trenching

- a. Pressure supply lines shall be buried to a minimum depth of 18".
- b. Non-pressure lines shall be buried to a minimum depth of 6".
- c. All wiring shall be buried to a minimum depth of 18".

2. Sleeves

- a. Pipe and wiring beneath sidewalks, driveways or concrete areas shall be inside a sleeve.
- b. The sleeve shall extend 24" beyond the surface obstacle.
- c. The sleeve shall be twice the diameter of the pipe running through it.
- d. An extra 2" capped sleeve shall be installed under any sidewalks, driveways or concrete areas.
- e. The sleeve shall be marked with a 3" brass bolt embedded on each end of the concrete surface.
- f. All sleeve pipe shall be PVC Schedule 40 with solvent weld joints.

SAM HOUSTON STATE UNIVERSITY DIVISION 32 EXTERIOR IMPROVEMENTS

2. Root Pruning

- Any root 2" or greater found during excavations shall be pruned flush with the soil. a.
- Rebury exposed roots within 24 hours.
 If they cannot then they shall be covered b. and moistened to prevent dieback.

D. Tree Selection

- 1. Species Selection
 - Select tree species based on their suitability for the site and the objectives for planting the tree.
 - Prioritize trees native to Texas and the East Texas region. b.
 - Apply the 30-20-10 rule to all tree species selections.
- 2. Tree Location
 - a. All tree spacing shall enable the tree to form a full canopy at maturity.
 - b. No trees shall be planted within 5' of any curbs or paved areas.
 - No trees shall be planted within 20' of a building foundation. C.
 - d. All locations must provide adequate moisture and sunlight levels.
 - Soil volume requirements are 900 ft3 for large trees, 600 ft3 for medium trees and e. 300ft³ for small trees. Calculate using a 3' soil depth.

E. Tree Planting

- 1. **Timing**
 - a. Plant all campus trees from October to March.
- F. Tree Pruning
 - 1. Trees shall only be pruned by the SHSU Arborist or under their supervision.
 - 2. All tree pruning shall be paid for by the project.
- G. Tree Removals
 - 1.