UNIVERSITY OF NORTHERN COLORADO

- Tables w/ benches (Fixed) Victor Stanley (or approved equal) Powder Coat color RAL 5003 Sapphire Blue
  - Tables IPR-
  - Seats FTRS-36

- Café Table Victor Stanley PRSCT-36R Powder Coat RAL 5003 Sapphire Blue

- Café Chairs Victor Stanley PRSCA-8 Powder Coat RAL 5003 Sapphire Blue

- Exterior Trash containers Victor Stanley (or approved equal) VS SD-35 24 gallon Powder Coat color RAL 5003 Sapphire Blue

- Exterior Trash Victory Stanley SD-242 Powder Coat RAL 5003 Sapphire Blue, side-door recycling

- Exterior Trash and Recycling containers MaxR Verde Collection, Triple stream (double stream can be used but must be approved by Project Manager), Navy Color, Resin Rings PMS 368 C (Custom Green) Cam locks and custom graphics
  - Exterior to be front load with curved top
  - Prior approval for use of this container required

- Bicycle racks Ground Control Systems DB-215 Varsity Bike Dock. Surface mount, no logo, Powder Coat RAL 5003 Sapphire Blue

- Bollards Surface moune VTQq0000912 0 1/00000000912 0 1/00000000912 0 1/0000000091

Assuring the overall quality of the system requires attention to system design, installation, and management. In particular, this includes the following:

- Pipelines jointed with rubber gaskets or threaded connections may be subjected to a pressure test at any time after partial completion of backfill. Pipelines jointed with solvent-welded PVC joints shall be allowed to cure at least 24 hours before testing.

- Subsections of mainline pipe may be tested independently, subject to the review of

I. Hydrostatic Pressure Test (Solvent Weld Mainline Pipe):
   A. Subject mainline pipe to a hydrostatic pressure equal to 140 PSI for two hours **with a limit of 5.0 psi loss allowable.** Test with mainline components installed.
   B. Backfill to prevent pipe from moving under pressure. Expose couplings and fittings.
   C. Expose all remote control valves their riser pipe and service tee fittings.
   D. Observe pressure loss on pressure gauge. If pressure loss is greater than 5 PSI, identify reason for pressure loss. Replace defective pipe, fitting, joint, valve, or appurtenance. Repeat test until pressure loss is equal to or less than 5 PSI.
   E. Cement or caulking to seal leaks is prohibited.

II. Operational Test:
   A. Activate each remote control valve in sequence from controller. The

      patterns, and leakage.
   B. Replace, adjust, or move water emission devices to correct operational or coverage deficiencies.

III. Control System Grounding:
   A. Test for proper grounding of control s
      recom
      recommendations guidelines for acceptance.
   B. Replace defective wire, grounding rod, or appurtenances. Repeat the test

IV. Testing must be completed and passed to reach Substantial Completion in which time the warranty/guarantee period starts.

IRRIGATION COMPONENTS

PIPE AND FITTINGS:

I. Ma[illegible] and Fitti

F. Joint sealant: Use non-hardening, nontoxic pipe thread sealant formulated for use on threaded connections and approved by the pipe fitting and valve manufacturers. Where directed by valve manufacturers, use thread tape for threaded connections at valves instead of thread paste.

i. Note - Use of two-wire method will require Baseline BiCoder for each valve
ii. When possible, provide hardline data connection for controller to talk to main controller
    1. Wireless card communication is acceptable when hardline connections cannot be made.
iii. Please include moisture sensors in design of irrigation system.

C.

OTHER COMPONENTS:

I. Some projects may require a Hydrometer to be installed on the mainline and tied into the Baseline Controller

- Plantings shall not interfere with site or security lighting.

- All trees in lawn areas shall have a 3 foot diameter circle of shredded wood mulch. No steel edging required.

- Tree stake should include protective cap and painted RAL5003 Sapphire Blue. Specify nylon tree strap with galvanized steel wire.

- Layout of trees shall consider the location of existing utilities, walks, signs and lighting.

    - Maintain the following minimum clearances:
        - 10 feet from sewer lines
        - 5 feet from water, gas and electrical lines
        - 5 feet from walks and curbs. Minimum of 80 inch vertical clearance above pedestrian walks
        - 15 feet from building walls for most shade trees
        - Recommended Street Tree spacing is 30-35 feet, depending on

- Tree Genus: Salix all species and cultivars of Willows are strongly discouraged. They are typically a wet soil species that require abundant water to survive. Willows again are typically weak-wooded, short-lived and produce abundant litter in form of broken twigs and branches.
  ils.
- Silver Maple (Acer Saccharinum) The species is fast growing, is also soft-wooded and prone to storm damage. It also has a shallow root system which causes lawn maintenance problems.

- Autumn Flame Maple (Acer X freeman) and Autumn Blaze Maples develop chlorotic symptoms as trees age due to alkaline soils.

- Siberian Elm (Ulmus pumila). Although highly resistant to Dutch elm disease, it is fast growing and soft-wooded and also very prone to storm damage. The species is also prone to insects including scale and various leaf beetle infestations. It produces mass amount of seed that result in many weed seedlings that invade the landscape.

- Salt Cedar (Tamarisk). This species is prohibited in the State of Colorado. It is considered an invasive species that will eventually displace Colorado native vegetation.

- Russian Olive (Eleagnus angustifolia). This species is also considered invasive and is no longer planted in the State of Colorado. As existing trees on campus fail or die, they will not be replaced.

- Ginkgo biloba (Female). Female trees produce fruit that constitute a serious litter problem and that also give off an unpleasant odor as they decay. Male cultivars are currently available that make excellent use in the landscape.

- Tree Genus: Fraxinus All species and cultivars are prohibited due to the recent introduction of Emerald Ash Borer in Colorado

- PROHIBITIVE ORNAMENTAL SHRUBS, VINES
- Cornus sericea Kelseyi or other dwarf cultivars.
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- Refer to the Landscape Master Plan guidelines for specific information regarding tree selection