

Facilities Management Design Standards

Contents

General Section	3
Electrical	5
Plumbing	6
HVAC	8
Elevator	9
Roof	10
Fire Alarm	11
Interior Design and Finishes	11
Irrigation Systems	12
Landscaping	12
Damage Assessment	13
Prohibited Practices	13
Signage	14

General Section

- 1. Building structures and exterior envelope systems shall be selected with low maintenance longevity as the primary consideration.
- 2. Structure cannot be higher than 2/3 of tree height.
- 3. Ingress and egress openings shall utilize automatic opening system (Record ADA Door Operator) at main entrance unless otherwise approved by University.
- 4. Drainage structures and surface runoff should be designed to remove water efficiently from the site. Create positive drainage around the building footprint.
- 5. Select pavement type for specific geographical location and anticipated loading. Use Georgia Department of Transportation standard pavement specifications. Contact Facilities for formula on color.
- 6. Soil conditions should be tested by a licensed professional geotechnical engineer. Foundations shall be designed in accordance with engineer's recommendations. Copy of soil report shall be delivered to University for project file. For sidewalks soil testing not required, however visual inspection shall dictate proper action.
- 7. General overall layout of rooms, corridors and facilities shall be functional and logical. (Reference University "Design Guidelines" notebook for standard room sizes)
- 8. Handicapped accessibility: all work should comply with published criteria of current ADA requirement.
- 9. Prevent moisture problems (underground). Provide sheet membrane waterproofing and positive slope foundation perimeter drains to grade. Use protection board over all membranes. (Use waterproof mastic for vinyl tile applied to below grade floor slabs.)
- 10. Prevent moisture problems (above ground). Provide non-corrosive metal window and door head flashing, through-wall flashing, and counter flashing. Slope all ledges and horizontal surfaces 1; 4"/ft. minimum.
- 11. Finishes Maintainability, durability in high traffic use areas is essential.
- 12. VCT flooring installation VCT phased out. Commercial grade laminates or other hard surface finishes accepted upon approval by the University.
- 13. Finished flooring surface should be free of glue, abrasions, marks, etc. if NOT installed with a protective coating.
- 14. Chairs, desks, etc placed on finished flooring should have appropriate floor protectors installed.
- 15. Finished flooring should be installed with a protective finish (preferable), ready for in house coating.
- 16. Finished flooring shall be minimum 1/8 thickness.

Clayton State University Design Standards Rev. February, 2018

- 17. All hard surface area edgings, transitions and thresholds should be designed, constructed and installed in such a way that they cannot separate from hard surface areas, walls or other surfaces and create trip hazards, and comply with 2010 ADA Standards.
- 18. Avoid inaccessible ceiling systems (to accommodate maintenance).
- 19. Provide access to building for maintenance vehicles. Provide shielded exterior areas with washdown capability for refuse containers.
- 20. Provide adequate storage areas for the occupants as well as maintenance equipment. (The Physical Plant Maintenance Department typically needs a 10' x 20' Storage Room).
- 21. Provide (where possible) an outside door to mechanical rooms, particularly boiler rooms (which require mechanics to carry chemicals for equipment services).
- 22. Mechanical rooms should not be located next to sound-sensitive spaces, nor high voltage transformers under office/classroom space.
- 23. Acoustics should be considered in appropriate areas for comfort, presentations, and privacy.
- 24. Fixed seating should be 20" wide minimum. Proper spacing should be allowed for the disabled and very large people.
- 25. Sound insulation requirements where needed.
- 26. Black/Grey Concrete (where applicable) for new or repairs to sidewalks.
- 27. Bricks need weep holes and they need to be free of any blockages.
- 28. Any location where something over 10 pounds is to be hung on a wall blocking for support must be installed.
- 29. When selection of restroom tile and grout color, Facilities must be involved.
- 30. Restroom partitions should be stainless steel and be approved by Facilities.
- 31. Restroom vanity top shall be marble/Corian top finish and accepted by the University.
- 32. Wet areas require floor drains.
- 33. Restroom custodian fixtures/receptacles/dispensers shall be approved by the Facilities.
- 34. Perform Manufacture Training on all mechanical equipment, EMS controls, Fire Alarm systems and training on High Voltage Transformers.
- 35. Custodian Closet: Each floor shall have a minimum 75 S.F. of custodian closet. Each closet shall have a floor mop sink with 6" lip/flashing around and the sink area needs to be water proof above and around the sink.
- 36. Require floor sinks and water availability.
- 37. Custodial storage require appropriate accessible custodial storage
- 38. Provide 360 degree fire truck access around new building.
- 39. Door Lock hardware should be Sargent and needs to be coordinated thru Facilities to match the CSU master keying system. Campus is to provide the keying schedule.
- 40. Doors require on board door stops (to prevent jamming door frame to hold open which

causes damage to door and hinges).

41. Require inside locking capability in the event of emergency lock down.

Electrical

1. Provide sufficient capacity for substantial future growth. All sub panels shall have at least 25% free space in each panel.

- 2. All circuits to include ground wire.
- 3. Provide sufficient quantity of receptacles. Corridor minimum spacing 25' for custodial)
- 4. Provide proper disconnects for all equipment.
- 5. Standardize switch gear, panel boards, LED exit lights and any other equipment when possible.
- 6. Building lighting should be timer controlled and/or occupational sensors (with accessible override) to reduce foot-candles to code approved minimum at night and weekends.
- 7. Concrete encase all underground Primary Power to the buildings.
- 8. Energy savings fixtures and lamps should be utilized at all locations. (LED's, Electronic ballast & T-8lamps, compact fluorescent down light fixtures, parabolic fixture covers).
- 9. Exclude incandescent lamp usage.
- 10. Use LED or metal halide lamps for HID fixtures and wall packs.
- 11. Emergency lighting required in all occupied buildings (not including buildings used primarily for storage). Generator to be used in new construction when capable. Existing building
- 12. When generators are installed, Life Safety must be the first consideration and will involve Facilities, Public Safety, Disability Services and OITS.
- 13. High voltage transformers must match the existing transformers on campus. Note: CSU owns all of the transformers on campus and Building Operations needs to approve transformer specifications thru Georgia Power.
- 14. Switches and receptacle plates to be ivory, almond, white or SS to match existing.
- 15. Provide spare conditions to accommodate future additions and/or changes as requested by University.
- 16. Provide adequate telephone system installation capacity (checked/approved by IT department).
- 17. Provide security system as may be requested by University.
- 18. Exterior Emergency phones will be Digital Cell Phone, Solar Powered, User Programmable, Flashing Blue light, Free Standing and shall be compatible with other cell services. Plant Operations and Public Safety Departments must be involved in the location and installation.
- 19. Panel and equipment identification: Type written index and location in each electrical panel.
- 20. Computer receptacle circuits to have separate neutral and ground.
- 21. Electrical Installation: Comply with the NEMA Standards, requirements of National

Electrical Codes, NFPA and NECA's standard of installation.

22. Walkway Lighting- Pole New Style 12'0" (all new poles will be Kenya black)

- a. Pole Old Style 12'0" Kenya Black.
- b. All walkway lighting has been upgraded to 150 watt Metal Halide. Sterner Gothic Head with clear hammered glass lens. (Design Sterner, Job# M200651, fixture type WN, #7PD03995500)
- 23. Electrical circuits shall be run in EMT and shall provide a junction box before entering a wall or closed space.
- 24. Card swipe accessibility needs to be approved by IT.
- 25. All electrical services to new structures must have an independent meter that can be attached to current DDC system.

Plumbing

- 1. Use Sloan Royal Flush Valves or Sloan Crown. Zurn Sloan Clone would be third choice.
- 2. Use American Standard Plumbing Fixtures and trim. Second choice: Kohler.
- 3. Use Grundfos 1/25 and 1/6 hp circulating pumps. These are water cooled and water lubricated.
- 4. Use Teledyne or 96% thermal efficiency hot water generation equipment, or equivalent A.O. Smith Legend. Lochinvar New Generation also acceptable.
- 5. Design all new restrooms and emergency showers to have a floor drain to protect the building from valve failure and improve housekeeping maintenance. Make trap primers accessible for repair.
- 6. Restroom water proofing: The restroom floor shall be water proofed to keep the water from penetrating to the adjacent area to prevent and avoid future mold growth.
- 7. Restroom flooring: Floor material shall be min. 12" X 12" ceramic tiles but the bordering can be any size for aesthetic reason. The tile grout shall be only epoxy.
- 8. Restroom fixtures Toilet tissue dispensers should be double Jumbo roll type (SS preferred)
- 9. Sanitary napkin dispenser receptacles should be surface mounted in each stall. No thru partition type. (SS preferred)
- 10. Use Orion chemical resistant pipe. Second choice: Enfield (no glass or duriron).
- 11. Use no galvanized water pipe in or outside buildings.
- 12. Use Elkay Model # LZSTL8WSSP Refrigerated wall water cooler w/bottle filling station, 2 level, electronic sensor (bottle filler).
- 13. Use Watts #9 reduced pressure backflow preventers for high hazard use.
- 14. Provide specific maintenance data, including O & M manuals, for all equipment.
- 15. Provide shutoff valves on utilities outside building and isolation valves inside buildings at each floor and bathroom fixtures.
- 16. Provide backflow preventer on domestic water system.
- 17. Rainwater drainage system should include insulation or horizontal runs in floor drain (interior)

leaders.

- 18. Provide air chambers or shock absorbers at plumbing fixtures.
- 19. Provide proper fixture support.
- 20. Service sink faucets Moen model #8230
- 21. Lavatory sink Moen model #8413 finishes to match counter tops with grid drains.
- 22. Handicap shower valve Moen model #8346
- 23. Regular shower heads and valves Moen model #8375
- 24. Break room kitchen type faucet Moen model #8710
- 25. All toilets and urinals must be wall mounted type with Sloan flush valves.
- 26. Toilet tissue dispensers should be double Jumbo roll type (SS preferred)
- 27. Sanitary napkin dispenser receptacles should be surface mounted in each stall. No thru partition type. (SS preferred)
- 28. Frost proof wall hydrants shall be installed on all 4 elevations of the Building.
- 29. Valves shall be single domestic manufacturer. Valves 2-inches and smaller shall have screws or solder ends. Valves larger than 2-inches shall have flanged ends.
 - a. Gate valves 2 inches and smaller shall be Class 200 SWP, 400 WOG, ASTM B-62 stem, solid bronze wedge with cooper-nickel seat ring in body, meeting MSS SP80, with malleable iron handwheel. Aluminum or die cast handwheel may not be substituted. Gate valves 2-2 Yz inches and larger shall be Class 125 SWP, flanged end, ASTM A126 Class B cast iron body, bronze trim SO & Y valves, meeting MSS SP70. Stem/wedge Connections shall beT-head connection. Pinned connections are not acceptable.
 - b. Check valves 2 inches and smaller shall be rated Class 125 SWP<5 degree T- pattern swing check type, meeting MSS SP80. ASTM B-62 bronze body. Brass, Bronze or TFE disc with stainless steel disc pins. Brass disc pins are not acceptable. Check valves 2-2 Yz inches and larger shall be Class 125 SWP, flanged end, ASTM A126 Class B cast iron body, bronze trim, swing check meeting MSS SP71.
 - c. Globe valves 2 inches and smaller shall be Class 150 SWP, valves meeting MSS SP80 ASTM B-62 bronze body. B-62 bronze stem with union bonnet. TFE seating on disc. Handwheel shall be malleable iron. Aluminum or die cast handwheel are not acceptable. ASTMA126 Globe valves 2-2 1/z inches and larger shall be Class 125 SWP, flanged end, Class B cast iron body, bronze trim meeting MSS SP85.
 - d. Butterfly valves shall be tapped lug body style, meeting MSS SP67. Body to be ASTM
 - e. A126 Class B cast iron, stems must be two piece, Type 416 or Type 316 stainless steel and positively retained with lock plate or gear removed. Disc to be ASTM B-148 aluminum bronze, with integral disc/stem connection. Waterway shall be free of all pins or bolts. Seats and seals shall be field replaceable EPDM cartridge type suitable for temporary deadened service to the rate pressure of the valve with the downstream flange removed. Valves shall be bi-directional. Valves12 inches and smaller shall be rated 200 WOG, 14 inches and larger 150 WOG. Butterfly valves 6 inches and smaller shall have lock lever handles with minimum of 10 locking positions. Valves 8 inches and larger shall have a weatherproof worm gear ASTM A126. Class B cast iron actuator with iron handwheel. Aluminum gear boxes will not be accepted.
 - f. Ball valves 3 inches and smaller shall be rated 150 SWP, 600 WOG meeting WWV 35C Type II, Class A, Style 3. Valves shall be two pieces treaded ASTM B0584 bronze body,

smooth bore, solid or tunnel drilled, large port, stainless steel ball providing laminar flow. Seats and seals shall be reinforced Teflon. Stem shall be of blowout-proof

- g. design with threaded adjustable packing follower. Packing shall be retained under full working pressure with handle or handle nut removed. Brass valves shall not be accepted.
- 30. All wall hung handicap toilets need to have a 750 pound mounting bracket installed.
- 31. Saddle taps are not allowed.
- 32. All water and gas services to new structures must have an independent meter that can be attached to current DDC system.

HVAC

- 1. Standardize equipment and materials with existing when possible/applicable.
- 2. Provide ample access to equipment for maintenance.
- 3. Provide isolation valves and pumps, chillers, coils, pipe risers, etc.
- 4. Use only sil-phos solder on copper chilled and hot water lines (No 95-5).
- 5. Provide access panels for maintenance of fire dampers.
- 6. Specify bound Operation and Maintenance Manuals (3 copies) and framed control Diagrams/Sequences on appropriate equipment. Specify Contractor training for University Maintenance personnel on all systems.
- 7. Provide vibration isolation for equipment where needed.
- 8. Size ducts to allow for internal liner. (Specify liner material.) Do not use internal liner with high pressure systems.
- 9. Provide access to sheet metal accessories, air dampers, splitter dampers, etc. All access panels shall be 24" square. (18" panels not acceptable).
- 10. Pipe identification required for all systems.
- 11. Provide automatic air vents with cut off valves at high places in water lines and route to drain.
- 12. Provide proper refrigerant specialties (expansion valves, strainers, dryers, etc.).
- 13. Specify energy efficient equipment.
- 14. Provide equipment bases and housekeeping pads.
- 15. Use only HFC refrigerants.
- 16. Cooling towers: specify motorized valves for make-up water and electric water controller.
- 17. All new direct digital controls (DDC) must be compatible with existing campus DDC Siemens/ALC system. (Applicable to main campus only). Also needs to have a UPS system.
- 18. Remove all obsolete/non-functional controls while retrofitting with DDC.
- 19. Centralize control cabinets as close as possible to the mechanical equipment with proper clearance for maintenance.
- 20. Provide University with reproducible CAD diagrams, control drawings and as-built drawings.

- 21. Require north arrows on all floor plans.
- 22. Specify roof mounted equipment curbs similar to Pate or Thycurb and don't allow equipment to be mounted to pressure treated wood.
- 23. Provide Bakelite nameplates on all equipment, motor starters, remote push button stations, insertions type thermostats, remote bulb thermometers, filter gauges, pump pressure gauges, fans, pumps, panel mounted controls and manual damper operators, multi-zone damper sections by room number, room designation, zone number, etc.
- 24. All thread nipples 1 % inch and smaller in diameter are prohibited. Nipples attached to larger pipes shall be scheduled 80 attached with the use of threadolets or weldholes.
- 25. All elbows shall be long radius unless otherwise noted.
- 26. Miter fittings and tapped pipes are not allowed.
- 27. Provide unions in piping to all equipment and specialties to permit removal for service; union shall be metal seat type. Provide di-electric unions where needed.
- 28. Reducers in piping shall be e-centric type where grading is specified (reducers shall be used to change pipe sizes).
- 29. Dissimilar materials, i.e. cooper and steel, shall not be installed to allow direct contact between the metals. Provide dielectric connections as necessary.
- 30. Relief valves or devices discharge piping shall be piped to a drain.
- 31. Duct smoke detectors and fire stats shall have button to test operation.
- 32. Laboratory fume hood design shall conform to the USG Board of Regents latest design criteria.
- 33. Additionally, all fume ducts shall be type 316 stainless steel.
- 34. Provide all water treatment equipment required to deliver chemicals to systems at completion of construction, i.e. shot feeders, blow down controls, chemical pumps, and meters. Also, provide test equipment for operating personnel.
- 35. Basket strainers with removable tops shall be installed on all Chiller Condenser piping.
- 36. Must follow Manufacturer Specifications on installation.
- 37. All mechanical rooms need to have floor drains and be accessible for cleaning.

Elevator

- 1. Provide three complete sets of final wiring diagrams, operating and maintenance manuals, parts manuals and troubleshooting guides.
- 2. Provide any special diagnosis equipment, meters or monitors with instructions and operating manuals needed to troubleshoot or repair elevators.
- 3. Provide a written guarantee that the Contractor will sell to the Owner any parts or troubleshooting equipment needed to repair or maintain elevator equipment.
- 4. Provide maintenance and call-back service on each elevator after it is completed and placed in operating order for a period of I (one) year.
- 5. All elevators require jack holes. For hydraulic elevators provide safety sleeve for jack.

Clayton State University Design Standards Rev. February, 2018

- 6. Approved manufacturers:
 - i. Otis Elevator
 - Company
 - ii. Dover Elevator Company
 - iii. Westinghouse Elevator Company
- 7. Elevator cab lighting Provide LED fixtures only.
- 8. Provide key locks for independent service, fire service inspection, emergency stop, lights and
 b. Fan. (4 (four) keys for each lock).
- 9. Provide ADA hand free communication with direct dial telephone line to police; one button fan. (4 (four) keys for each lock).
- 10. Provide brushed stainless steel wall panels with hangers for safety pads.
- 11. Provide safety pads (for moving).
- 12. Provide hand smooth surfaced flooring (no carpet).
- 13. Provide fire service to meet current code.
- 14. Provide voice announcer.
- 15. Provide braille and tactile numbers and labels.
- 16. Provide instructions for fire service etched into panel.
- 17. Provide 2 copies of "design certificates" to Design & Construction Services (DCS).
- 18. Provide all user and service codes for all diagnostic equipment.
- 19. When writing specifications for construction which will involve use of elevator, require Contractor to clean elevator thresholds and sills daily and to dust off/vacuum off contacts weekly. This part requires an elevator mechanic. This will reduce the incidents of elevator calls due to construction debris jamming the functions of the elevator.
- 20. Add to project Special Condition specification wherever applicable "Any requirements/requests for independent operation of the elevators for specialized handling must be in written request to University Physical Plant service desk. The University will coordinate with other building users before permission for exclusive use is granted. All costs involved shall be paid by the Contractor making the requests."
- 21. To keep University elevator equipment in peak running environment but without having to air condition a large mechanical room; provide that all new and renovated elevators shall have air conditioning and humidity controls in the control cabinets.

Roof

- 1. Roofing types: (unless otherwise approved by University).
 - i. Low slopes (flat to 1/4" per foot slope) 4 ply coal tar pitch.
 - ii. Med. Slopes (1/4" to 3" per foot slope) 4 ply granular surface modified bitumen.

iii. High Slopes (3" per foot and steeper) – standing seam metal panels or heavy weight asphalt shingles.

Modified bitumen roofs to meet standards provided by Facilities.

- 2. Provide platforms and ladders or stairs for safe rooftop access from mechanical or utility spaces.
- 3. Roofs Install lightning protection system.
- 4. Drains need to be connected to storm drains.
- 5. Perform roof drain test for water flow prior to beginning of roof replacement and upon completion.

Fire Alarm

1. Fire alarm system to be Simplex or Notifier to match existing. (Comply with current NFPA code). Also any system shall have a dialer to our Public Safety Department.

2. Any lab space needs gas and CO2 monitor wired into the building fire alarm system.

Interior Design and Finishes

- 1. All proposed finish and furniture selections will be submitted to and approved by Physical Plant operations department. Submittal shall be in form of a "color board", 8 lfz" x 11" min. sizes, with actual paint colors, material samples, fabric swatches, and furniture pictures.
- 2. Below is a product list of acceptable finish products. There may be deviations made to these products, however, they must be approved by CSU Facilities Management:
 - a. Carpet -woven, 34 ounce with moisture resistant
 - b. 2x2 squares, to be glued directly to slab.
 - c. NO Vinyl Composition Tile (VCT) acceptable for renovations or new construction, LVT preferred.
 - d. Base wood base in individual buildings unless otherwise approved by CSU's Facilities.
 - e. Paint Wall paint 2 coats and must be flat latex or eggshell finish, low-to-zero VOC.
 - f. Door frame paint must be oil-base enamel. Acceptable manufacturers: Duron, Sherwin Williams, Glidden
 - g. Ceiling New construction or where applicable in renovation, install Armstrong's stratus revealed regular/drop off type, color to be selected, 24" x 24" #531BCR ceiling tile 7/8" thickness.
 - h. Plastic Laminate Acceptable manufacturers: Wilsonart, Nevermar, Formica.
- 3. At the completion of each project, a schedule of actual finish materials and colors used will be provided to the Project Manager.
- 4. Furnishing material coverings should be non porous or absorption resistant and have high wear tolerance for routine standard cleaning techniques.

5. Appropriate DR standard specific to area of use. Minimum Type II.

Irrigation Systems_(Required for all landscaped areas and should coordinate with CSU Landscape Director.)

- 1. All main turn off valves shall be full port brass gate valves located inside a valve box with locking lid
- 2. All irrigation piping shall be schedule 40
- 3. Tracer wire shall be located in all main and lateral trenching with irrigation pipe
- 4. All valves, heads and rotors shall be compatible with "dirty water" (pond water) filtering
- 5. Controllers must be inside stainless steel pedestals and be compatible with existing systems.
- 6. All valves boxes should have a locking lid
- 7. All irrigation piping that runs under concrete, asphalt, walkways and roads shall be in a minimum of 4" sleeves
- 8. Turf fixed spray heads must raise 6" minimum above grade.
- 9. Planted bed fixed sprays must raise 12" minimum above grade.
- 10. Rotor heads must have interchangeable nozzles.
- 11. Wire connection for electric valves must be connected with locking nut enclosed inside a water proof gel.
- 12. Irrigation water will be supplied from the lake that is closest to the project.

Landscaping

- 1. Landscape on campus of Clayton State University to preserve uniqueness of the natural setting of the campus and provide drainage into retention ponds instead of discharging into sewers.
- 2. New landscape project to reduce storm water runoff.
- 3. Landscape to keep existing tree canopy by replacing aging and damaged trees.
- 4. Landscape/Hardscape items to include benches, bike racks, trash/recycling containers.
- 5. In order to protect and preserve trees during construction, policies must be followed to protect their trunks and root systems from construction site injury.
 - a. The root zone of all trees must be protected on all construction projects. A tree's root zone is defined as 5 times the trunk diameter distance from the base of the trunk, or from the trunk to the tree drip line, whichever is greater. Ten feet beyond the drip line is preferable.
 - b. All trees to remain on a project shall have protective fencing. A tree protection drawing detailing the protective fencing shall be submitted with the project plans for review. The drawing should include an accurate representation of the existing trees to remain, to be removed, and to be relocated, including species, trunk diameter and canopy diameter. Protective fencing should be placed at 10' beyond the tree drip line

wherever possible.

- c. Construction materials, equipment and personal vehicles should not be stored or parked in the root zone of any trees in order to avoid soil compaction.
- d. Protect overhanging tree canopies from construction damage.
- e. All trenching shall conform to the following guidelines: Roots larger than 2 inches in diameter should not be severed without approval for cutting or review. Boring under roots rather than cutting is preferred. Digging within a tree's root zone should be avoided. If it is necessary, hand digging should be used for any trenching within the tree's root zone. All roots that must be cut should be cut cleanly.
- f. All planning, construction, and renovation projects on campus should at minimum preserve the existing tree canopy cover and species represented.

Damage Assessment

Any damage to trees, shrubs, perennials, annuals and turfgrass created by a contractor or outside sources will be evaluated and the costs of the damage, replacement or maintenance will be evaluated by the university. The party responsible for the damage will then be billed by the University for the damages incurred.

Prohibited Practices

- 1. Planting, removing or pruning any trees and shrubs without the approval from the Assistant Director of Landscape Management is prohibited. This is to prevent unnecessary damages to the existing tree population on campus.
- 2. Each plant shall be selected for the proposed site and optimum growing environment. Soils shall be checked for compaction. If soils are compacted, mechanical implements and amendments shall be used to improve soil structure.
- 3. Trees and shrubs shall be planted in the fall and winter months (or in dormancy stage). When planting an individual tree or shrub in native soil that has not been disturbed or amended, dig the planting hole at least two times wider than the root ball of the plant. The depth of the hole shall be no deeper than the size of the root ball. It is best to plant 1 to 2 inches above grade to allow for soil settling and mulching. Always backfill with native soil that was removed from the hole.
- 4. All newly planted trees shall receive 3 to 5 inches of mulch after initial planting. The recommended mulch should be organic and aged mulch, and should be non-matting. Examples would include hardwood, cypress, and pine bark mini-nuggets. Avoid using pine straw as base mulch, because pine straw does not absorb as much moisture as hardwood mulch.
- 5. Trees, shrubs and turfgrass shall receive 1" of water per week during the first growing season or until a healthy root system is established
- 6. Prohibited trees, shrubs and perennials:
- a. Sweetgum (Liquidambar styraciflua)
- b. Pines (Pinus spp.)
- c. Empress Tree (Paulwonia tomentosa)
- d. Chinaberry (Melia azedarach)
- e. Bradford Pear (Pyrus calleryana 'Bradford')
- f. Black Locust (Robinia pseudocacia)

- g. Tree of Heaven (Ailanthus altissima)
- h. Mimosa (Albizia julibrissin)
- i. Cherry Laurel (Prunus caroliniana)
- j. Japanese Blood Grass (Imperata cylindrical 'Rubra')
- k. Chinese Wisteria (Wisteria chinensis)
- I. Autumn Olive (Elaeagnus umbellata)

Signage

- 1. Requirements to interior signage need to be acquired from Facilities Management.
- 2. Interior signage to be classified by classroom, office, utility, exit signs, and signs for rooms of common use (restrooms, stairs, elevators, etc.).
- 3. Room signage shall be ADA compliant.
- 4. Interior directional signage needs to be included.
- 5. Interior signage shall be mechanically fastened to a wall.
- 6. Exterior monumental building signage shall be on a stone base and matching the existing campus signs.