

DIVISION 32 00 00—EXTERIOR IMPROVEMENTS

FORMAT

1. Technical specifications content and numbering system shall be based on the most current CSI Master Format.

BASIS OF DESIGN

1. APSU design standards shall not replace fully developed, project and market specific technical specifications, with 3 manufacturers unless indicated otherwise, e.g., Stanley CorMax. Designer shall utilize the standards as a minimum standard to guide the design.
2. Design guidelines supplement building, fire, and other health, safety and welfare codes, and represent practices APSU has adopted regarding the built environment. Where conflicts arise between codes and guidelines, codes shall take precedent.
3. Coordinate deviation from guidelines with the University Design and Construction (UDC).

RELATED SECTION

03—Concrete

GENERAL PROVISIONS

Reserved

32 13 13—CONCRETE PAVEMENT

1. Designer shall place the following note conspicuously on the drawing showing concrete work:

“Contractor has sole responsibility to protect newly poured concrete from graffiti. Contractor shall coordinate pour times with FPP or designer in order to optimize cure time before the new concrete is unattended, and state how they intend to eliminate the risk for graffiti or damage. Should graffiti or damage appear in the concrete within 24 hours after the pour, contractor shall replace the area affected at no cost to the University.”
2. Pedestrian Walks
 - a. Minimum Width: 6'-0"
 - b. Minimum Concrete Thickness: 4"
 - c. Minimum Base Thickness: 4"
 - d. Control Joints at 5'-0" min., expansion joints every 20'-0"
 - e. Compressive Strength: 4,000 psi after 28 days
 - f. Reinforcing: Synthetic fiber admixture
 - g. Service Drives, Aprons, and other areas subject to vehicular traffic.
 - h. Minimum Concrete Thickness: 8"
 - i. Minimum Base Thickness: 6"

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- j. Control Joints at 8'-0" min., expansion joints every 32'-0".
 - k. Compressive Strength: 4,000 psi after 28 days
 - l. Reinforcing: Synthetic fiber admixture and engineered wire mesh
3. Finish
- a. All walks and service drives shall have a light broom finish with 2" wide "framed" hand-tooled finish on edges, control and expansion joints.
 - b. Do not install concrete joints by saw cutting.
4. Curing and Sealing: apply non-staining, non-yellowing curing and sealing compound to all concrete walks. Use a two-step process where a film-forming curing compound is applied and then followed-up with a sealing compound after curing compound is removed; or a single-step curing and sealing application.

32 17 23—PAVEMENT MARKINGS

- 1. Vehicle space width shall be nominally 9'-0 x 20'-0".
- 2. Parking space between stalls and rows striping shall be white.
- 3. No parking areas, fire lanes, and end of row lines shall be yellow.
- 4. Handicap space lines and the international symbol for accessibility shall be blue.

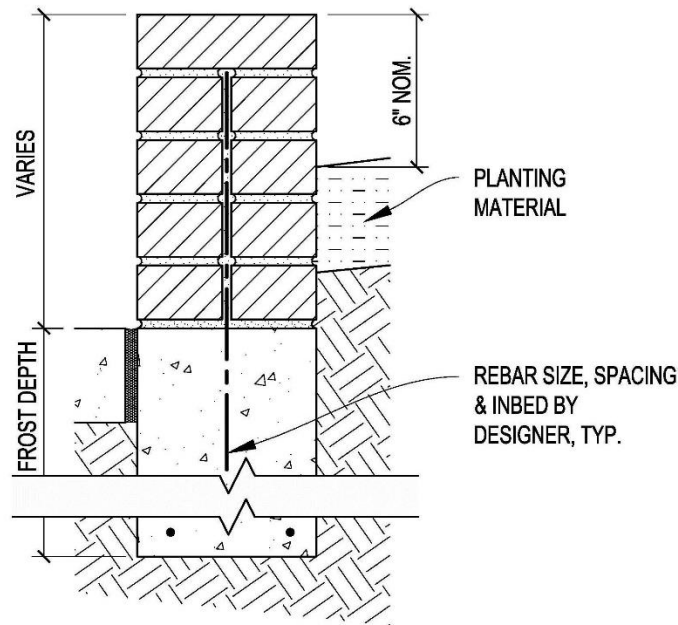
32 31 00—FENCES AND GATES

- 1. Fencing shall be black powder coated extruded aluminum bars, shapes and tubes.
- 2. Pickets shall be spear point type 4" apart.
- 3. Intermediate support posts shall be square with no finials.
- 4. Spear points and top of posts shall be at the same level.
- 5. Consult with the University on height of fence.
- 6. Fencing shall be similar to Specrail, Style 1 Bennington, and commercial grade.

32 32 00—RETAINING WALLS

- 1. Architectural cast-in-place concrete retaining walls shall have weeps, footer drain, and vertical expansion and/or control joints approximately every 25' receive an ACI 301 Smooth-Rubbed Finish.
- 2. Landscape islands shall have perimeter walls constructed of unit masonry conforming to below drawing:

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32 84 00—PLANTING IRRIGATION

1. General

- a. Designer shall work with APSU Grounds Department, at 931-221-7429, in order to identify potential conflicts of existing irrigation system during construction. When the irrigation system needs to be redesigned in order to accommodate construction, designer shall identify the scope of services and inform FPP in writing if there will be an impact on the budget or scope.
- b. Designer shall place the following note conspicuously on drawings where there will be work affecting existing irrigation systems:

“Prior to working, contractor shall contact APSU Landscape and Grounds Department, at 931-221-7429, to have irrigation system controls, sprinkler heads and lines located. Contractor shall coordinate work with the Landscape and Grounds Department to ensure irrigation system will not be damaged during construction.”

2. Irrigation Installation

- a. Reserved

32 91 00—PLANTING PREPARATION

1. Install minimum of 6” of topsoil having a minimum of 6 percent organic material content; free of stones 1 inch or larger in any dimension and other extraneous materials harmful to

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plant and turf growth.

2. Newly installed landscape beds shall be mulched with black, aged, hardwood mulch, containing no waste wood (i.e. pallets, telephone poles, rail road ties, reclaimed lumber etc.). The black coloring will be no-toxic and environmentally friendly. Mulch will be installed at a thickness of 2-4”.
3. Netting Planting Soil Stabilization—use 100% biodegradable erosion mats in areas prone to erosion due to steep grading.

32 92 00—TURF AND GRASSES

1. Designer shall work with APSU Landscaping and Grounds Department, 931-221-7429, in order to develop full technical specification including establishing a seed mix and type of application, using the mix thresholds based on soil analysis and use characteristics, e.g., athletic fields, etc.
2. Seeding shall occur from September 1 to October 15, and March 1 to April 30.
3. Grass seed mix ratio by weight:
 - a. ±75% Turf-type tall fescue, with equal parts drought, heat, and shade tolerant turf
 - b. ±25% Perennial ryegrass
 - c. ≤0.05% Weed seed
 - d. ≤2% Inert matter
4. Use only hydraulic seeding (hydroseed) with the above seed mix. Do not use loose straw. Contractors shall supply their own water.
5. In areas where there is no functioning irrigation, contractor shall provide watering services utilizing water sources provided from University facilities.
 - a. Contractor shall supply hoses and sprinklers to ensure adequate water coverage of newly seeded areas for 30 days after planting and be responsible to daily turn water on and off.
 - b. Should turf not be established after 30 days due to poor watering management, contractor shall reseed at their expense per the specification, and continue watering with their equipment until turf is established.
 - c. Contractor shall remove equipment after turf is established.

32 93 00—PLANTS

1. New trees shall have a minimum of 1½” trunk caliper.
2. In all projects, no more than 25% of all plants shall be of one species.

End of Section