

DIVISION 32 – EXTERIOR IMPROVEMENTS

SECTION 32 93 00 – PLANTS

PART 1: GENERAL

1.01 Scope of Standard

- A. This standard provides general guidance concerning the specific preferences of the Texas State University for Plants.
- B. Texas State University recognizes that project conditions and requirements vary, thus precluding the absolute adherence to the items identified herein in all cases. However, unless there is adequate written justification, it is expected that these guidelines will govern the design and specifications for Texas State University projects.

1.02 Maintenance

- A. General
 1. Maintain plant materials, weed removal, in all beds, tree wells and lawn areas until substantial Completion and Final Acceptance of the project. Maintenance period shall be based on Substantial Completion and Final Acceptance schedule for the project
 2. Three (3) Month Maintenance Period AFTER SUBSTANTIAL COMPLETION Requirements: after receipt of Substantial Completion Letter, a 3-month maintenance period shall begin. Contractor shall maintain the project landscape. Maintenance shall include but not be limited to the following irrigation schedule: weeding (manual and chemical within one week of Ground Operations Request and written record of chemical application), cultivating, pruning (as required by Grounds Ops), mowing, re-staking, adjustments of stakes, restoring of plant and tree wells, maintenance of mulch cover, edging of beds and curbs, litter removal in bed areas and lawns, and removal of and replacement of dead plants and dead trees
 3. Grass height should not exceed 4" between mowing. Mow as needed to maintain an approximate 2-1/2" height or approximately every 7 to 10 days or on special occasions or for special requests.
- B. Trees Protection
 1. All trees and natural areas to be preserved shall be protected during construction with chain link fence. Location of fences and installation details shall be included in construction documents. Refer to **Section 01 56 39 Tree Protection**.

PART 2: PRODUCTS

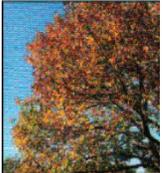
2.01 Landscape Products

- A. Plantings: Specify container-grown unless otherwise approved by Texas State University Project Representative. Plant materials shall follow ANSI Z60 American Standards for Nursery Stock guidelines. Plants shall be first quality, healthy, vigorous and densely foliated. Plants with diseases, pests, girdling roots, absence of root flare, improper branch spacing, or other objectionable characteristics shall be rejected. No trees shall be lifted by the trunk at any time. Plant materials showing mechanical damage may be rejected.
- B. Supplements: Grounds Operations may specify that fertilizer shall be supplied as recommended.
- C. Backfill: Use only approved weed free soil mix backfilled in maximum six-inch lifts. Lightly compact each six-inch lift.
- D. Staking/Guying: Guy wires may be required on large trees at Director of Grounds Operations or delegate's request. Removal of synthetic material and/or wire or burlap, is required if included in the plants root ball.
- E. Plant tags and flagging are to be removed after plant materials have been accepted and planted.

2.02 Plants:

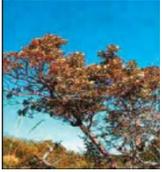
- A. The list of plants below has been approved in the Texas State University Master Plan. Deviation from this list will have to be approved by Texas State University.
- B. Campus Plant Zones: The Texas State University Campus is divided into 3 zones; Plateau, Prairie, and Wetlands.
- C. Approved Plants to be used on Texas State University Campus.

<i>Category</i>	<i>Scientific Name/Common Name</i>	<i>Zone</i>	<i>Deciduous/ Evergreen</i>	<i>Picture</i>
Shade Trees				
1	Acer grandidentatum/Bigtooth Maple	PL/PR	D	
2	Acer negundo/Box Elder	W	D	
3	Acer rubrum/Red Maple	W/PR	D	
4	Carya illinoensis/Pecan cultivars	PR/W	D	
5	Cupressus arizonica/Arizona Cypress	PL	E	
6	Ehretia anacua/Anacua	PL/A	D/E	

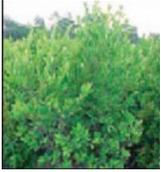
Category	Scientific Name/Common Name	Zone	Deciduous/ Evergreen	Picture
7	Ehretia anacua/Anaqua	PL-A	D/E	
8	Fraxinus texensis/Texas Ash	PL	D	
9	Juniperus virginiana/Eastern Red Cedar	PR	E	
10	Liquidambar styraciflua/Sweetgum	PL	D	
11	Magnolia grandiflora/Southern Magnolia	PR	E	
12	Pistachia chinensis/Chinese Pistache	PR	D	

Category	Scientific Name/Common Name	Zone	Deciduous/ Evergreen	Picture
13	Platanus mexicanus/Mexican Sycamore	PR	D	
14	Platanus occidentalis/American Sycamore	W/PR	D	
15	Populus deltoides/Cottonwood	W/PR	D	
16	Prosopis glandulosa/Mesquite	PR	D	
17	Quercus spp/Oak	PL/PR	D/E	
18	Taxodium distichum/Bald Cypress	PR/W	D	

<i>Category</i>	<i>Scientific Name/Common Name</i>	<i>Zone</i>	<i>Deciduous/ Evergreen</i>	<i>Picture</i>
19	Taxodium mucronatum/Montezuma Cypress	PR	E	
20	Ulmus crassifolia/Cedar Elm	PL/PR	D	
21	Ulmus parvifolia/Lacebark Elm	PR	D	
Ornamental Trees				
1	Acacia farnesiana/Huisache	PL	D	
2	Aesculus pavia/Red Buckeye	PL/PR	D	
3	Bauhinia congesta/Anaconcho Orchid Tree	PL/PR/ A	D	
4	Cercis canadensis var. texana/Texas Redbud	PL/PR	D	

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5	Cercis canadensis var. mexicana/Mexican Redbud	PL/PR	D	
6	Chilopsis linearis/Desert Willow	PL	D	
7	Cotinus obovatus/Smoketree	PR	D	
8	Cupressus arizonica/Arizona Cypress	PR	E	
9	Cupressus sempervirens/Italian Cypress	PL/PR	E	
10	Diospyros texana/Texas Persimmon	PL	D	
11	Eriobotrya japonica/Loquat	PL/PR/ A	D	

<i>Category</i>	<i>Scientific Name/Common Name</i>	<i>Zone</i>	<i>Deciduous/ Evergreen</i>	<i>Picture</i>
12 SPECK/Garden	Hibiscus syriacus/Rose of Sharon cultivars	PL/PR	D	
13	Ilex decidua/Possum Haw	PL/PR/ W	D	
14	Ilex vomitoria/Yaupon Holly cultivars	PL/PR/ W	E	
15	Lagerstroemia indica/Crape Myrtle cultivars	PL/PR	D	
16	Leucaena retusa/Goldenball Leadtree	PL/PR	D	
17	Palm spp.	PL/PR/ A	E	
18	Parkinsonia aculeata/Retama	PL	D	
19	Pistachia texana/Texas Pistachio	PL	E	

Category	Scientific Name/Common Name	Zone	Deciduous/ Evergreen	Picture
20	Prunus caroliniana/Cherry Laurel	PL/PR	E	
21	Prunus mexicana/Mexican Plum	PL/PR/ W	D	
22	Ptelea trifoliata/Wafer Ash	PR	D	
23	Rhus spp. / Sumac	PL/A	D/E	
24	Sophora secundiflora/Texas Mountain Laurel	PL/PR	E	
25	Sophora affinis/Eve's Necklace	PR	D	
26	Ungnadia speciosa/Mexican Buckeye	PL	D	

<i>Category</i>	<i>Scientific Name/Common Name</i>	<i>Zone</i>	<i>Deciduous/ Evergreen</i>	<i>Picture</i>
27	Viburnum rufidulum/Black Haw Viburnum	PL/A	D	
28	Vitex agnus-castus/Chaste Tree	W/PR	D	
Shrubs				
1	Berberis swaseyi/Texas Barberry	PL/A	E	
2	Berberis trifoliolata - Agarita	PR/PL	E	
3	Caesalpinia gilliesii-red & yellow/Bird of Paradise	PL	D	
4	Caesalpinia pulcherrima/Pride of Barbados	PL	D	

<i>Category</i>	<i>Scientific Name/Common Name</i>	<i>Zone</i>	<i>Deciduous/ Evergreen</i>	<i>Picture</i>
5	Callicarpa americana/American Beauty Berry	PL/W	D	
6	Eleagnus pungens/Eleagnus	PL	D	
7 TBG	Dietes iridoides Butterfly Iris	PL/PR	E	
8	Fatsia japonica/Fatsia	PL/PR	E	
9 TBG	Feijoa sellowiana Pineapple Guava	PR	E	
10	Hibiscus militaris/Rose Mallow	W	D	

<i>Category</i>	<i>Scientific Name/Common Name</i>	<i>Zone</i>	<i>Deciduous/ Evergreen</i>	<i>Picture</i>
11	Jasminum mesnyi/Primrose Jasmine	PL/PR	E	
12	Leucophyllum spp./Cenizo cultivars	PL/PR	E	
13 SPECK	Mimosa Borealis/Fragrant Mimosa	PR	D	
14	Myrica cerifera/Southern Wax Myrtle	PL/PR	E	
15 GROUNDS	Maphigia punicefolia Barbados Cherry	PR/PL	E	
16 TBG	Nerium oleander 'Petite' Dwarf oleander	PR	E	

Category	Scientific Name/Common Name	Zone	Deciduous/ Evergreen	Picture
17	Rhus .spp.	PL/PR	D	
18	Rose spp. cultivars	PL/PR/ A	D	
19	Rosmarinus officinalis/Rosemary	PL	E	
20	Sabal Minor/Dwarf Palmetto	PR/W	E	
21	Salvia spp. Salvia	PL/PR	E	
22	Senna corymbosa/Flowering Senna	PL/A	D/E	

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23 SPECK	Senna lindeheimeriana/Lindeheimer Senna	PR	D	
24	Xylosma congestum/Xylosma	PR	E	
Perennials				
1	Achellia millefolium/Yarrow	PR/PL	E	
2	Agave spp./Agave cultivars	PL	E	
3	Anisacanthus wrightii/Flame Acanthus	PL	D	
4	Aquilegia spp./Columbine	PL/PR	D	

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5	Artemesia sp./Artemesia	PL	D	
6	Aster frikartii/Fall Aster	PL	D	
7	Carex spp./Sedge	PR/W	E	
8	Chasmanthium latifolium/Inland Sea Oats	PR	D	
9	Coreopsis lanceolata/Coreopsis	PL	D/E	

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10	Cyrtomium falcatum/Holly Fern	PL/PR	E	
11	Chrysactinia mexicana/Damianita	PL	D/E	
12	Dasyllirion spp. Sotol	PL/PR		
13	Echinacea purpurea/Purple Cone Flower	PL/PR	D	
14	Equisetum hyemale/Horsetail	W	E	

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15	Eupatorium spp./ Mistflower	PL/PR	E	
16	Hesperaloe parviflora/Red Yucca	PL	E	
17 TBG	Hemerocallis spp.		E	
18	Hymenocallis liriosme/Spider Lily	W	D	
19	Iris spp.	PL/PR	E	
20	Lantana spp. cultivars	PL/PR	D	

Category	Scientific Name/Common Name	Zone	Deciduous/ Evergreen	Picture
21 TBG	Liriope muscari/Big Blue Liriope	PL/PR	E	
22	Liriope gigantia/Giant Liriope	PL/PR	E	
23	Malaviscus arboreus/ Turk's Cap	PR	D	
24	Miscanthus sinensis/Madengrass	PR	E	
25	Muhlenbergia cappilaris/Gulf Coast Muhly	PL/PR	D	
26	Muhlenbergia dumosa/Bamboo Muhly	PL/PR	D	

Category	Scientific Name/Common Name	Zone	Deciduous/ Evergreen	Picture
27	Muhlenbergia lindheimeri/Lindheimer's Muhly	PL/PR	D	
28	Muhlenbergia reverchoni/Seep Muhly	PL/PR	D	
29	Muhlenbergia rigens/Deer Muhly	PL/PR	D	
30	Nolina lindheimeriana/Devil's Shoestring	PL/PR	E	
31	Nolina texana/Basketgrass	PL/PR	E	
32	Ophiopon japonicus/Monkey Grass		E	

Category	Scientific Name/Common Name	Zone	Deciduous/ Evergreen	Picture
33	Panicum virgatum/Switchgrass	PR/W	E	
34	Plumbago auriculata/Plumbago	PR	D	
35	Poliomintha longiflora/Mexican Oregano		D	
36	Rudbeckia spp. /Black-eyed Susan	PR	D	
37	Ruellia spp. /Mexican Petunia	PL/PR	D	
38	Salvia spp.	PL/PR	D/E	

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39	Scutellaria suffrutescens/Skullcap	PL/PR	D	
40 SPECK	Stipa tenuissima/Mexican Feathergrass	PR	D	
41	Tagetes lemmonii/Copper Canyon Daisy	PL	D/E	
42	Yucca spp. Yucca cultivars	PL	E	
43	Verbena x hybrida/Verbena	PR	E	
44	Wedelia texana/Zexminia	PL/PR	D	

Vines

Category	Scientific Name/Common Name	Zone	Deciduous/ Evergreen	Picture
1	Bignonia/Crossvine	PL/PR	D/E	
2	Campsis radicans/Trumpet creeper	PI/PR	D	
3	Ficus pumila/Fig Ivy	PL/PR	D/E	
4	Gelsemium sempervirens/Carolina Jessamine	PL/PR	E	
5	Lonicera sempervirens/Coral Honeysuckle	PL/PR	D/E	
6	Mascagnia macroptera/Butterfly Vine	PL/PR	E	

<i>Category</i>	<i>Scientific Name/Common Name</i>	<i>Zone</i>	<i>Deciduous/ Evergreen</i>	<i>Picture</i>
7	Parthenocissus quinquefolia/Virginia Creeper	PL/PR	D	
8	Podranea ricasoliana/Pink Crossvine	PL/PR	D/E	
9	Trachelospermum jasminoides/Confederate Star Jasmine	PL/PR	E	
10	Wisteria frutescens/Texas Wisteria	PL/PR	D	
Groundcover				
1 SPECK/Garden	Ajuga reptans/Ajuga			
2 TBG	Trachelospermum asiaticum/Asian Jasmine	PL/PR	E	

<i>Category</i>	<i>Scientific Name/Common Name</i>	<i>Zone</i>	<i>Deciduous/ Evergreen</i>	<i>Picture</i>
3 SPECK	Vinca major/Big leaf periwinkle	PL/PR	E	
Lawn				
1	Bermuda grass	PL/PR		
2	St. Augustine grass	PL/PR		
3	Buffalo Grass Var. 609	PL	D	
4	Zoysia	PL/PR	D	

PART 3: EXECUTION**3.01**

- A. All landscaping activities shall be performed in a manner that reduces the discharge of pollutants to the storm sewer system. Applicators of fertilizer, pesticides, and herbicides must be trained and appropriately certified. Application of all fertilizer, pesticides, and herbicides shall be in a manner that minimizes their application to impervious cover and unvegetated areas. Storage shall be in rainfall protected location within secondary containment. Unused fertilizer, pesticides, and herbicides and their residues and containers shall be properly disposed of according to applicable state and federal regulations. Spills shall be cleaned up immediately and disposed of properly. Clean up rocks, pots, and other debris. Clean mulch off of grass and hard surfaces. Remove all tags and labels from installed plants. Also, remove tree stakes that were brought in pots from nursery.

END OF SECTION 32 93 00