tanner landscape architecture

BRYAN SQUARE waterSmart DEMONSTRATION GARDEN

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- PROJECT NARRATIVE -

waterSmart PLANT SELECTION

The subject property, Bryan Square, is a greenspace courtyard located on Hutchinson Island approximately .28 acres in size and is bounded by the Westin Savannah Harbor to the east, the Savannah River to the south, and the Savannah International Trade and Convention Center to the west. The property is encompassed by a turn-around and loading/unloading area at the south end of Wayne Shackelford Boulevard and it is currently being used by pedestrians moving from a vehicle to one of the surrounding buildings and vice-versa.

The project herein proposes to develop a cost-effective, sustainable "waterSmart Demonstration Garden" that will help visitors understand how to create landscapes at their homes that are attractive and, once established, can be maintained with little or no supplemental watering. The project will also restore a sense of place and connection to the surrounding amenities.

Plants have been selected to meet the specific needs and context of the site. Considering that Bryan Square is surrounded by a vast expanse of pavement and large buildings, emphasis is placed on utilizing drought-tolerant native plants that can withstand the intense microclimate created by the surrounding hardscape. Over 90% of the proposed plant material is native to the coastal Georgia region, and in effect will reduce the need for irrigation (potable water consumption) after one year. Utilizing native plants provides a number of additional benefits including reduced maintenance inputs (fertilizers, pesticides, etc.), restored native wildlife habitat, improved sense of place, and repaired soil biomass.

waterSmart HABITATS

As previously mentioned, plants have been selected and grouped according to specific needs and context. As shown on the associated Section/Elevation and Plan View drawings, the perimeter plantings reside in full sun conditions, and the groupings reduce the heat island effect of the adjacent hardscape, provide a much needed buffer between the garden and drives, and create a sense of enclosure and intimacy for visitors.

Most notably, four (4) "waterSmart Habitats" have been established and associated plants have been grouped to assist visitors in understanding how to create landscapes for context specific areas around the home:

WATERSMART HABITAT #1 – "Full Sun Garden"
Features plants that flourish in full sun and drought conditions

WATERSMART HABITAT #2 – "Shade Garden"
Showcases plants that prosper in dry, full shade locations

WATERSMART HABITAT #3 – "RainGarden"
Includes plants that thrive in moist to wet soil conditions

WATERSMART HABITAT #4 – "Full Sun Garden"
Highlights native plants that are edible/medicinal

waterSmart FEATURES

As stated in the Sustainable Sites Initiative: Guidelines and Performance Benchmarks, "At a time when demand for water in the United States is up 209 percent since 1950, irrigation of unsustainable landscapes accounts for more than a third of residential water use – more than 7 billion gallons per day nationwide". In efforts to reduce potable water consumption for irrigation, a predominantly native and drought-tolerant plant palette is used throughout the garden. The minimum establishment period for all newly planted landscapes is one year (plants must follow a watering schedule during this time), and the irrigation system will be turned off following the establishment period. In addition, the existing irrigation system will be retrofit with water-efficient components, and existing turf areas have been reduced and replaced with drought-tolerant Paspalum sod. Plant biomass will be preserved, restored and recycled on site for use as mulch to reduce evaporation rates and cool the plants.

waterSmart RAINWATER RE-USE

In many cities and towns across the country, rainfall is treated as waste, to be funneled directly from roof gutters and pavements to sewers, leading to increased costs in stormwater management and lost opportunities using a natural resource. Rather than getting rid of the onsite rainwater (i.e. stormwater) as quickly as possible, the project herein allows for the immediate infiltration of rainwater in all planted areas. Specifically, waterSmart Habitat #3 – "RainGarden" is graded to form a small bowl for the collection, storage, and infiltration of rainwater that falls on surrounding areas.

waterSmart RESIDENTIAL IDEAS

Four (4) "waterSmart Habitats" have been established and associated plants have been grouped to assist visitors in understanding how to create landscapes for context specific areas around the home including the Full Sun Garden, Shade Garden, RainGarden, and Edible Garden. Interpretive signs have been located at each waterSmart Habitat and specific plants and design elements will be clearly identified to empower visitors in translating the ideas to their own gardens and landscape designs at home. In addition, recycling receptacles will be provided onsite to reduce/eliminate waste and instill a sense of environmental stewardship that visitors will take away with them.