Littoral Planting Bond Calculations

MC320 Project

SW Greenridge Street & SW Citrus Boulevard Palm City, Martin County, Florida Parcel ID's: 15-39-40-000-000-00010-0 (±126.35 acres) & 15-39-40-000-000-00012-0 (±48.03)

Prepared For:

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Introduction

As part of the MC320 project littoral and upland transitional planting are to be installed and maintained in accordance with the approved Lake Area Management Plan (LAMP). The projects on-site lake consists of ± 32.97 acres, with 6,731.15 linear feet of shoreline as measured at the proposed control elevation. In accordance with Section 4.350 of the Martin County Land Development Regulations (LDR), Guarantee and Performance Bond, a three-year performance bond is required. A cost estimate for installation of the littoral and upland transitional plantings is to be prepared by an Environmental Professional. The bond shall cover 110% of the total cost of plantings and installation. Littoral and upland transitional planting list and associated costs per plant and for installation is as follows:

		Lak	e Plant List				
Zone	Туре	Common Name	Scientific Name	Quantity	Unit- (gal)	Cost per Plant	Total Cost
Littoral	Tree	Bald Cypress	Taxodium distichum	57	15	\$43.00	\$2,451.00
Littoral	Tree	Red Maple	Acer rubrum	35	15	\$43.00	\$1,505.00
Littoral	Tree	Dahoon Holly	Ilex cassine	43	15	\$43.00	\$1,849.00
Littoral	Groundcover	Arrowhead	Sagittaria latifolia	3,105	1	\$2.50	\$7,762.50
Littoral	Groundcover	Pickerelweed	Pontederia cordata	3,105	1	\$2.50	\$7,762.50
Littoral	Groundcover	Maidencane	Panicum hemitomon	3,105	1	\$1.95	\$6,054.75
Littoral	Groundcover	Native rush	Eleocharis spp.	3,240	1	\$1.95	\$6,318.00
Littoral	Ground	Saw Grass	Cladium jamaicense	3,105	1	\$2.50	\$7,762.50
Total Cost Littoral Plantings							\$41,465.25
Upland/Transitional	Tree	Laurel Oak	Quercus laurifolia	54	15	\$45.00	\$2,430.00
Upland/Transitional	Tree	Slash Pine	Pinus elliotttii	81	15	\$45.00	\$3,645.00
Upland/Transitional	Shrub	Saw Palmetto	Serona repens	810	3	\$15.00	\$12,150.00
Upland/Transitional	Shrub	Cocoplum	Chryobalanus icaco	810	3	\$15.00	\$12,150.00
Upland/Transitional	Shrub	Beauty Berry	Callicarpa americana	945	3	\$4.50	\$4,252.50
Upland/Transitional	Groundcover	Sand Cordgrass	Spartina bakeri	5,400	1	\$1.75	\$9,450.00
Upland/Transitional	Groundcover	Muhly Grass	Muhlenbergia capillaris	5,400	1	\$1.75	\$9,450.00
Upland/Transitional	Groundcover	Dwarf Fakahatchee Grass	Tripsacum floridana	4,860	1	\$1.75	\$8,505.00
Total Cost Upland Transitional Plantings							\$62,032.50
Total Cost Planting Both Zones							\$103,497.75

 $Cost\ of\ Plants = \$103,497.75$

Installation = \$258,744.38

Delivery = \$500.00

Total Planting Cost Including Installation and Delivery = \$362,742.13

Required Bond = 110% of \$362,742.13 = \$399,016.34

Summary

As part of the MC320 project littoral and upland transitional plantings are required to be installed along the shoreline of the ± 32.97 acre lake. Plantings and lake maintenance are to be done in accordance with the approved Lake Area Management Plan (LAMP). As required in the Martin County LDR a three-year performance bond totaling 110% of the total cost of plants and installation is required. The qualified biologists from Aquatic Research have prepared the bond calculations. As indicated above the total cost of plants, delivery, and installation is \$362,742.13 and the required bond amount will be \$399,016.34.