Osprey Preserve PUD

Tree Mitigation Summary

Tree Mitigation Requirements

According to the tree mitigation requirements outlined in Section 5.05.02 Tree replacement and protection requirements the applicant is required to provide the following mitigation for the proposed removal of slash pines and hardwoods.

Tree Type	Caliper Inches Removed	Tree Removal Factor	Total Inches to be replaced	Total Inches provided
Slash Pine	2,477 inches	1.5	4,016 inches	4,016 inches
Hardwoods	128.5 inches	2.5	321 inches	324 inches

Site Related Constraints and Tree Mitigation within the Preserve Area

Although the site is 15.23 ac, approximately 5 acres of the property will be comprised of wetlands and upland preserve areas. So, in discussion with the City of Stuart the applicant will be allowed to meet a portion of the mitigation requirements by providing landscaping in the preserve. For the plantings in the preserve areas, there will be two categories of plantings. The first category will resolve the previous impacts to the preserve as described in the Preserve Area Management Plan. The second category will continue to address the previous impacts to the site, but the plantings will also count towards a portion of the tree mitigation requirements. In order to credit the plantings in the preserve, the applicant will provide the City of Stuart a payment into the tree mitigation fund of $18,000 based on the installed cost of a restoration shrub that has been now counted towards mitigation tree credits. The plant schedule on the landscape plan identifies the type and quantity of each category.

Requested Exceptions from the City of Stuart Land Development Code as Part of the RPUD

I. Section 5.05.02 A.1.e states that when it's not feasible to replant with like species of slash pine, replacement trees may be substituted with the following palm trees on a 1:1 ratio:

- Alexander Palm
- Coconut Palm
- Chinese Fan Palm
- Date Palm
- Majesty Palm
- Royal Palm
- Christmas Palm
- Washington Palm

The code does not provide for the ability to use sabal palms as replacement trees. We are requesting an exception to use sabals as a replacement tree. The palm is a Florida native and an appropriate palm for the site.

II. Section 5.05.02 A.1.e states that Specimen trees, excluding Slash Pine trees, for which relocation is not possible or is not expected to be successful, shall be replaced with like species within the development site. Replacement trees shall have a combined DBH of 2.5 times the DBH of the trees replaced. The minimum size for replacement trees is 4.5 inches DBH. Determination of the number of replacement trees or contribution to City Tree Fund shall be calculated in accordance with Table 1 below. Replacement trees shall be native to Florida or not documented as an invasive species.

Due to the amount of preserve on site, the configuration of the site and the fee simple sale of the lots meeting all of the mitigation requirements outside of the preserve area is not possible. The applicant is meeting a portion of the mitigation requirements within the preserves. The mitigation plan was developed in consultation with the project environmental professional, the plan restores and enhances impacted preserve areas by planting both native trees and shrubs. The shrubs that are utilized for enhancement purposes will planted larger than a typical landscape shrub and will be counted towards the mitigation requirements on an inch for inch basis.

Shrub Mitigation Credit Table				
Shrub Type	Proposed Size	Quantity	Caliper	Total Inch Credit
Wax Myrtle	15G, 4' oa	300	1 inch	300 inches
Green Buttonwood	15G, 4' oa	300	1 inch	300 inches
Cocoplum	15G, 4' oa	300	1 inch	300 inches
			Total	**900 inches**

The Preserve Area Management Plan requires a total of 1,605 shrubs to restore the impacted on-site preserves. Since the applicant is proposing to use 900 shrubs to the count towards the mitigation requirements, the applicant will credit the City for the cost that would have been associated with the purchase of the a 3- gallon sized plan that would have been used for restoration. This monetary contribution is to prevent taking credit for both a mitigation and preserve restoration requirement with the same shrub.

Shrub Mitigation Tree Mitigation Contribution to Tree Fund				
Shrub Type	Proposed Size	Quantity	Cost	Total Inch Credit
Wax Myrtle	3G	300	$20	$6,000
Green Buttonwood	3G	300	$20	$6,000
Cocoplum	3G	300	$20	$6,000
			Total	**$18,000**

At site permit plan approval, the applicant will provide a check in the amount of $18,000 to be deposited in the City of Stuart Tree Fund.

III. Section 5.05.02 A.1.g states that credit towards tree replacement requirements shall be provided for landscaping required by Section 6.04.00 only if all required trees are planted at a minimum DBH of 4.5 inches and all required palms are planted at a minimum of 14 feet clear trunk. If required trees or palms, as proposed for a development site in accordance with the landscape code, are planted at minimum landscape code requirements, then no credit is obtainable.

The applicant is requesting an exception to allow for the planting of 3" oak trees to count towards the tree mitigation and landscaping requirement due to the scarcity of the larger oak trees at a reasonable cost. This exemption would in fact result in thirty-six additional trees being planted within the community, and the trees should reach 4.5"caliper within two to three years with proper maintenance.

Summary

In summary, we are requesting three exceptions from the land development regulations and they are: to allow credit for sabal palms towards mitigation, to count a portion of the shrubs planted in the preserve to count towards the mitigation credit with a contribution to the City of Stuart Tree Fund, and to count 3" oak trees rather than 4.5" oak trees to count towards the tree mitigation requirements.

The mitigation table is as follows for the slash pine mitigation:

Slash Pine Mitigation				
Tree and Shrubs	Proposed Size	Quantity	Caliper	Total Inch Credit
Sabal Palms (1:1 ratio)	14' (planted at 18'oa)	167	12.02 inches (Average Pine Caliper)	2,008 inches
Sabal Palms Extra Height	4'	167	1" per foot	668 inches
Wax Myrtle	4'	300	1"	300 inches
Green Buttonwood	15G, 4' oa	300	1 inch	300 inches
Cocoplum	15G, 4' oa	300	1 inch	300 inches
Slash Pine	2.5" caliper	176	2.5 inches	440 inches
			Total	**4,016 inches**
			Total Required	**4,016 inches**
			Total Provided	**4,016 inches**

The mitigation table is as follows for the hardwood mitigation:

Hardwood Mitigation				
Tree and Shrubs	Proposed Size	Quantity	Caliper	Total Inch Credit
Live Oak Trees	3"	108	3"	324 inches
			Total	**324 inches**
			Total Required	**321 inches**
			Total Provided	**324 inches**