

ST. LUCIE COUNTY
**STORMWATER AND WATER
QUALITY IMPROVEMENT EFFORTS**



JOSÉ M. VEGA
STORMWATER PROGRAM COORDINATOR
St. Lucie County Water Quality Division

BMAPs

Basin Management Action Plan

The Florida Department of
Environmental Protection adopted
BMAPs

St. Lucie County Projects



Melville Road Phase 1 Stormwater Improvements



175 acre residential neighborhood
in White City



Pond Design



Littoral Zones



Deeper pockets of water



Provides annual reduction in
Phosphorus and Nitrogen



78% of nitrogen –
787 lbs/year removed



91% of phosphorus –
145 lbs/year removed



Melville Road Pond Planting Plan

NOT A SURVEY:



TYPICAL STA 6 MONTHS AFTER PLANTING (CITY OF PORT ST. LUCIE)



TYPICAL STA 1 YEAR AFTER PLANTING (CITY OF PORT ST. LUCIE)



TYPICAL STA 6 MONTHS AFTER PLANTING (CITY OF PORT ST. LUCIE)



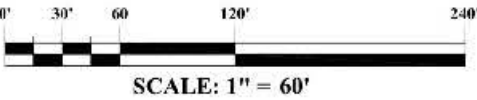
TYPICAL STA 1 YEAR AFTER PLANTING (CITY OF PORT ST. LUCIE)

TYPICAL PLANTS

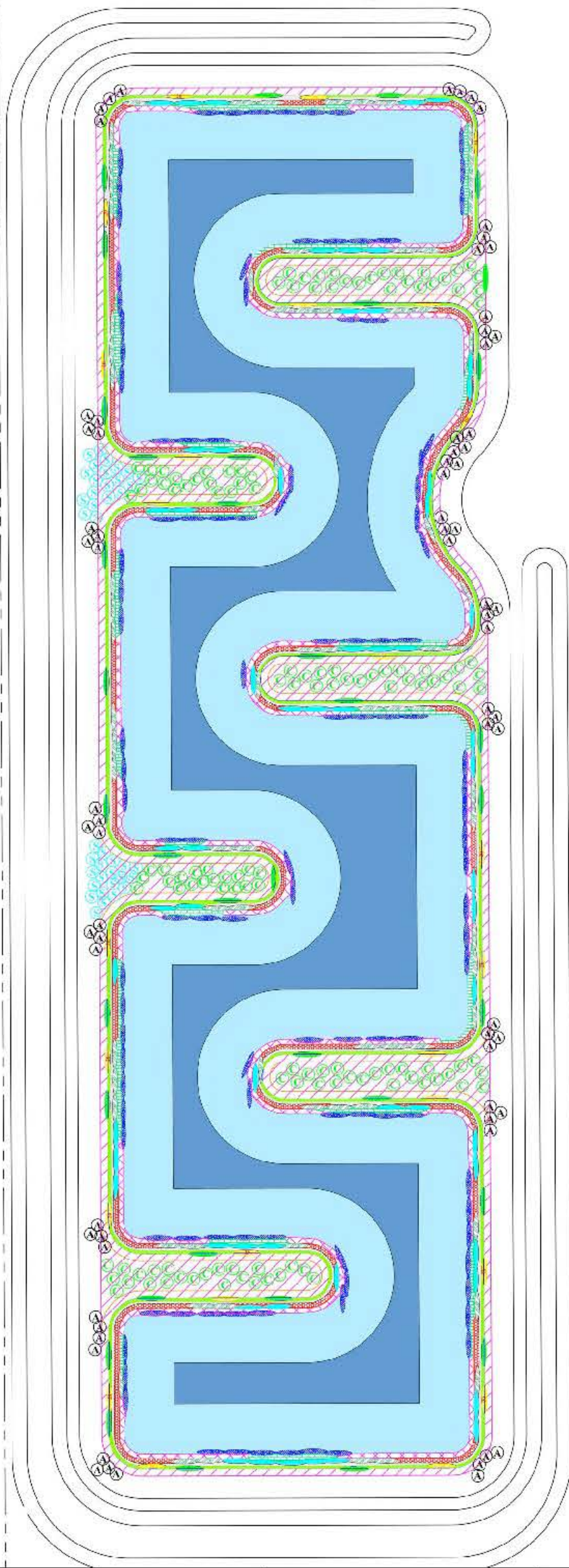
COMMON NAME	SCIENTIFIC NAME	DENSITY	SIZE	UNITS
CRINUM LILY	<i>Crinum americanum</i>	2' O.C.	BR	760
DUCK POTATO	<i>Sagittaria latifolia</i>	2' O.C.	BR	1200
FIRE FLAG	<i>Thalia geniculata</i>	3' O.C.	BR	2300
GIANT BULRUSH	<i>Scirpus californicus</i>	2' O.C.	BR	2800
GOLDEN CANNA	<i>Canna flacida</i>	2' O.C.	BR	500
JOINTED SPIKERUSH	<i>Eleocharis interstincta</i>	2' O.C.	BR	1850
MAIDENCANE	<i>Panicum hemitomon</i>	2' O.C.	BR	2160
MUHLY GRASS	<i>Muhlenbergia capillaris</i>	2' O.C.	BR	500
PICKERELWEED	<i>Pontederia cordata</i>	2' O.C.	BR	1600
SAND CORDGRASS	<i>Spartina bakeri</i>	2' O.C.	BR	13250
THREE-SQUARE RUSH	<i>Scirpus americanus</i>	2' O.C.	BR	1400

TREE LIST

BALD CYPRESS	<i>Taxodium ascendens</i>	10' O.C.	20G	140
CABBAGE PALM	<i>Sabal palmetto</i>	10' O.C.	FG 8 - 10'	40
FLORIDA ASH	<i>Fraxinus caroliniana</i>	10' O.C.	20G	75



SCALE: 1" = 60'



SOURCE: BOWMAN CONSULTING AND HSE

PLAN VIEW	LATITUDE: 27°21'53.820"	DATE: 13 MARCH 2019	SCALE: 1" = 60'	HSE JOB NO.: 17-023.06	SEC.	TWP.	R.	COUNTY: ST. LUCIE	ST. LUCIE COUNTY BOARD OF COUNTY COMMISSIONERS PUBLIC WORKS DEPARTMENT WATER QUALITY DIVISION PARCEL H MELVILLE ROAD FT. PIERCE, FLORIDA STA PLANTING PLAN		Hobe Sound Environmental Consultants Inc. 9512 SE Duncan Street Hobe Sound, FL 33455 (772) 545-2676, E-mail: behhcnv@gmail.com		DRAWING NO. 01 - PLANNING.DWG
	LONGITUDE: -80°19'45.255"	DRAWN BY: BK	CHECKED BY: ERP	APPROVED BY: RLW	10	36S	40E	STATE: FLORIDA					FIGURE: 1 OF 4

Future



A needs assessment study



Harmony Heights Phase 1
is underway and may be
completed by end of 2020

