PARK ROAD & SAM ALLEN ROAD PD&E

FROM I-4 TO ALEXANDER STREET EXTENSION

DRAFT

ALTERNATIVE STORMWATER MANAGEMENT FACILITY REPORT

HILLSBOROUGH COUNTY

WPI Seg. No.: 257862-1
FAP No.: 0295-005

Submitted to:
Florida Department of Transportation District 7

September, 2004
Revised October, 2004
Revised November, 2004

Alternative Stormwater Management Facility Report

Sam Allen Road and Park Road Project Development & Environment Study

From I-4 to Alexander Street Extension
Road Widening/Reconstruction Project
WPI Seg. No. 257862 1
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Prepared For:

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Prepared By:
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September 2004
October 2004 (Revised)
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EXECUTIVE SUMMARY

The Florida Department of Transportation (FDOT) proposes to widen and reconstruct Park and Sam Allen Roads, a distance of approximately 2.5 miles, from I-4 to the Alexander Street Extension in Hillsborough County. In the existing condition, both roads are two-lane with a rural typical section. In the proposed condition Park Road is to be widened/reconstructed to a four-lane divided rural typical section and Sam Allen Road is to be widened/reconstructed to a four-lane divided suburban typical section.

This Alternative Stormwater Management Facility Report identifies pond site alternatives (two per basin) and floodplain compensation (FPC) sites (one per impacted basin) and includes an alternative analysis for selection of a preferred alternative as part of the entire PD&E Study. This study analyzes pond site alternatives that are hydraulically feasible and environmentally permissible based on the best available information. These alternatives were then compared based on Section 4(f) involvement; cultural resources; environmental impacts including wetlands, upland habitat and protected species involvement; petroleum and hazardous materials contamination; and economic factors including right-of-way costs.

The project area has been sub-divided into four sub-basins (A through D) according to existing topography and existing cross drains located within the project limits. There are a total of 12 existing cross drains and they are tabulated in Table 6.

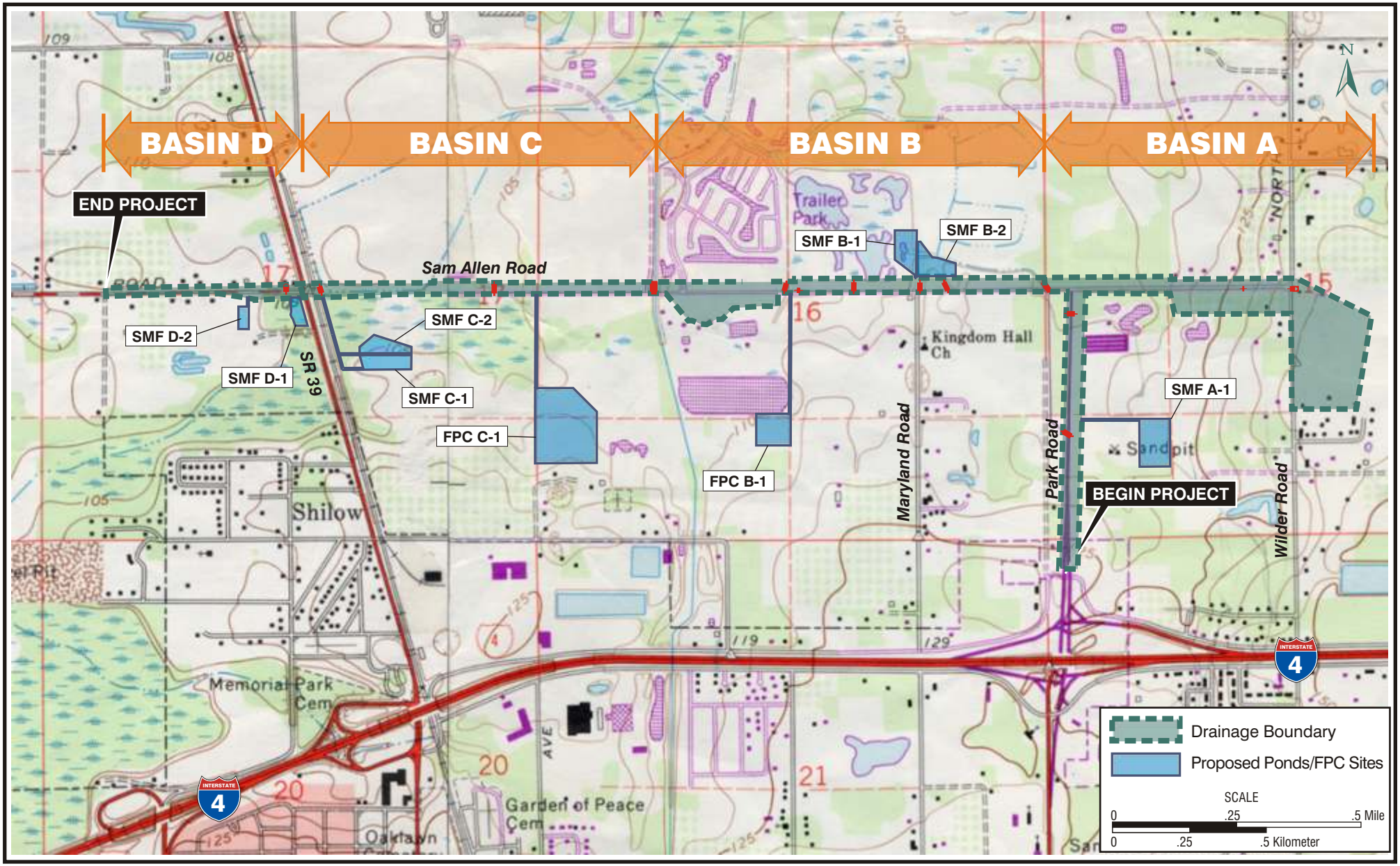
Of major concern in this study was the vast amount of current and near future development along the project corridor. Another challenge was the great extent of the 100 Year flood plain in the area (Refer to Figure 5).

Drainage Basin A totals 65.40 acres in size. Only one stormwater management facility (SMF) was evaluated because it was desired by District 7 to locate the SMF on FDOT property. There were no flood plain impacts to this basin. The total area for Basin B is 18.80 acres. Two SMF sites were evaluated and one flood plain compensation (FPC) site was located upstream of the basin. Basin C is 10.95 acres. Two SMF sites were evaluated and one FPC site was located upstream of the basin. Basin D is 3.02 acres. Two SMF sites were evaluated. There were no flood plain impacts in this basin. The SMF evaluations for each site are shown in Table 7 through Table 10.

The preferred SMF sites are listed in Table 1 below.

Table 1
Recommended Stormwater Management Facility Sites

	Recommended SMFs			
	SMF-A-1	SMF-B-1	SMF-C-1	SMF-D-2
LOCATION (STATION)	190+00	192+00	137+00	122+00
SIDE (LT, RT)	RT	LT	RT	RT
SMF AREA (AC)	4.60	1.50	1.87	0.60
EST. GROUND ELEVATION (FT) @ THE SMF SITE	113.5	105.5	105	106.4
PROPOSED LOW EDGE OF PAVEMENT WITHIN BASIN	110	110	107.88	107
EST. SHW ELEVATION/CONTROL ELEVATION	108	105.5	105	104
TREATMENT SYSTEM	Wet	Wet	Wet	Wet
SOILS NAME	Myakka Fine Sand	Myakka Fine Sand	Myakka Fine Sand	Ona Fine Sand
HYDROLOGICAL SOIL GROUP	B/D	B/D	B/D	B/D
LAND USE	Borrow Pit	Forested	Open Land	Agriculture
RECORDED ARCHAEOLOGOCAL SITES	None	None	None	None
ARCHAEOLOGICAL POTENTIAL	None	None	None	None
RECORDED HISTORICAL STRUCTURES/RESOURCES	None	None	None	None
TENTATIVE HAZARD RANKING				
PROTECTED, ENDANGERED, & ENDANGERED SPECIES	None	None	None	None
WETLAND INVOLVEMENT	None	1 ac	<<< 0.10 ac	None
WETLAND MITIGATION COST	$0	$90,000	$9,000	$0
PROXIMITY TO OUTFALL (FT)	300	60	125	125
OUTFALL PIPE COST ESTIMATE	$22,194	$4,439	$9,248	$9,248
LINER COST ESTIMATE	$585,463	N/A	N/A	$50,326
STORMWATER FACILITY COSTS (APPENDIX #) (OTHER)	N/A	N/A	N/A	N/A
SMF EASEMENT REQUIRED (AC)	0.26	0.01	0.46	0.03
NUMBER OF PARCELS	1	1	1	1
PARTIAL (P) OR WHOLE TAKE (WT)	N/A	P	P	P
ROW COST ESTIMATE (INCLUDES EASEMENTS)	$0	$563,100	$465,100	$108,900
DOCUMENT PAGE NO. FOR BASIN ALTERNATIVES	21	22	23	24
TOTAL ESTIMATED COSTS	$607,657	$657,539	$483,348	$168,474



SOURCE: Plant City East, Florida Quadrangle, 28082-A1-TF-024 photorevised 1987; and Plant City West, Florida Quadrangle, 28082-A2-TF-024 photoinspected 1983

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BASIN LOCATION MAP

Figure 1

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1.0 GENERAL PROJECT INFORMATION

1.1 Introduction

The Florida Department of Transportation (FDOT) is conducting a Project Development and Environment (PD&E) Study to document the preliminary engineering concept of the Sam Allen/Park Roads project corridor from Interstate 4 (I-4) to the Alexander Street Extension in Hillsborough County. The purposes of the PD&E Study are to develop engineering and environmental data and document information which will aid the FDOT and the Federal Highway Administration (FHWA) in determining the type, design, and location of the proposed improvements, and the impacts, if any, associated with the recommended alignment.

The FDOT is proposing improvements to Sam Allen Road/Park Road from I-4 to the Alexander Street Extension in Hillsborough County, Florida, a distance of approximately 2.5 miles. The proposed improvements consist of widening/reconstructing the existing two-lane rural roadway to a four-lane divided rural (Park Road) and suburban (Sam Allen Road) highway to accommodate present and future traffic demands.

As part of the PD&E Study, the Alternative Stormwater Management Facility Report identifies pond site alternatives and floodplain compensation (FPC) sites, and includes analysis for selection of a preferred stormwater management facility (SMF) site. This report analyzes pond site alternatives that are hydraulically feasible and environmentally permittable based on the best available information. These alternatives were then compared based on Section 4(f) involvement; cultural resources; environmental impacts including wetlands, upland habitat and protected species involvement; petroleum and hazardous materials contamination; and economic factors including right-of-way costs. An alternatives evaluation matrix that summarizes the comparative analysis was developed and is shown in Tables 7 through 10 of Section 4.0.

1.2 Site Location and Description

The project study area for this report includes two (2) separate roadways in Hillsborough County. The first leg of the project study area begins on Park Road at its interchange with I-4 and proceeds north to Sam Allen Road. The second leg begins on Sam Allen Road, at its intersection with Park Road (approximately half a mile north of the I-4/Park Road interchange), and continues east to the Alexander Street Extension, for an overall distance of approximately 2.5 miles. The basin location map is shown in Figure 1.

Sam Allen Road is an east-west arterial highway and Park Road is a north-south arterial highway. As existing, both roadways are two-lane rural undivided typical sections through the project area. The existing right-of-way on Park Road is 200 feet. East of SR 39 (Wheeler Road), the existing right-of-way on Sam Allen Road varies in width from 150 to 120 feet. West of SR 39, the existing right-of-way width on Sam Allen Road is 30 feet.

The existing roadway is typically a two-lane rural undivided facility with one 12-foot lane in each direction and 4-foot paved shoulders. The existing roadway typical sections for Sam Allen and Park Roads are shown in Figure 2.

The improvement proposed for Park Road is a four-lane divided rural typical section. This typical section would contain a 46-foot wide depressed median, four 12-foot lanes (two in each direction), five-foot paved/unpaved shoulders, a 43-foot wide ditch section and a 5-foot sidewalk in both directions. The proposed typical will be accommodated within the existing right-of-way. The proposed four-lane typical section is shown in Figure 3.

The improvement proposed for Sam Allen Road is a four-lane divided suburban typical section. This typical section would contain a 26-foot wide raised median (with curb and gutter), four 12-foot lanes (two in each direction), five-foot paved shoulders, 3 foot unpaved shoulders, an eight foot wide ditch section and a 5-foot sidewalk in both directions. A majority of the proposed typical will be accommodated within the existing right-of-way. Additional right-of-way is to be acquired for an approximate length of 1000' on either side of SR 39. The proposed four-lane typical section is shown in Figure 3.

The topography of this part of Hillsborough County consists of broad low-lying plains on the flatwoods, interspersed with many broad sloughs, depressions, and drainageways. Hillsborough County is in the central or mid-peninsular physiographic zone of the Florida Peninsula. The area that contains the proposed improvements lies in the Central highlands.

The East Canal drains the project area. At its downstream end, the East Canal connects to Itchepackesassa Creek, which in turn discharges to Blackwater Creek which ultimately outfalls to the Hillsborough River.

Elevations throughout the project corridor range from approximately 110 feet National Geodetic Vertical Datum (NGVD) of 1929 at the eastern end of the project to approximately 105 feet at Sate Road 39, and 108 feet at the western end of the project.

PARK RD
Existing Typical Section
Sta. 185+00 to Sta. 202+00
Rural 2-Lane Typical Section

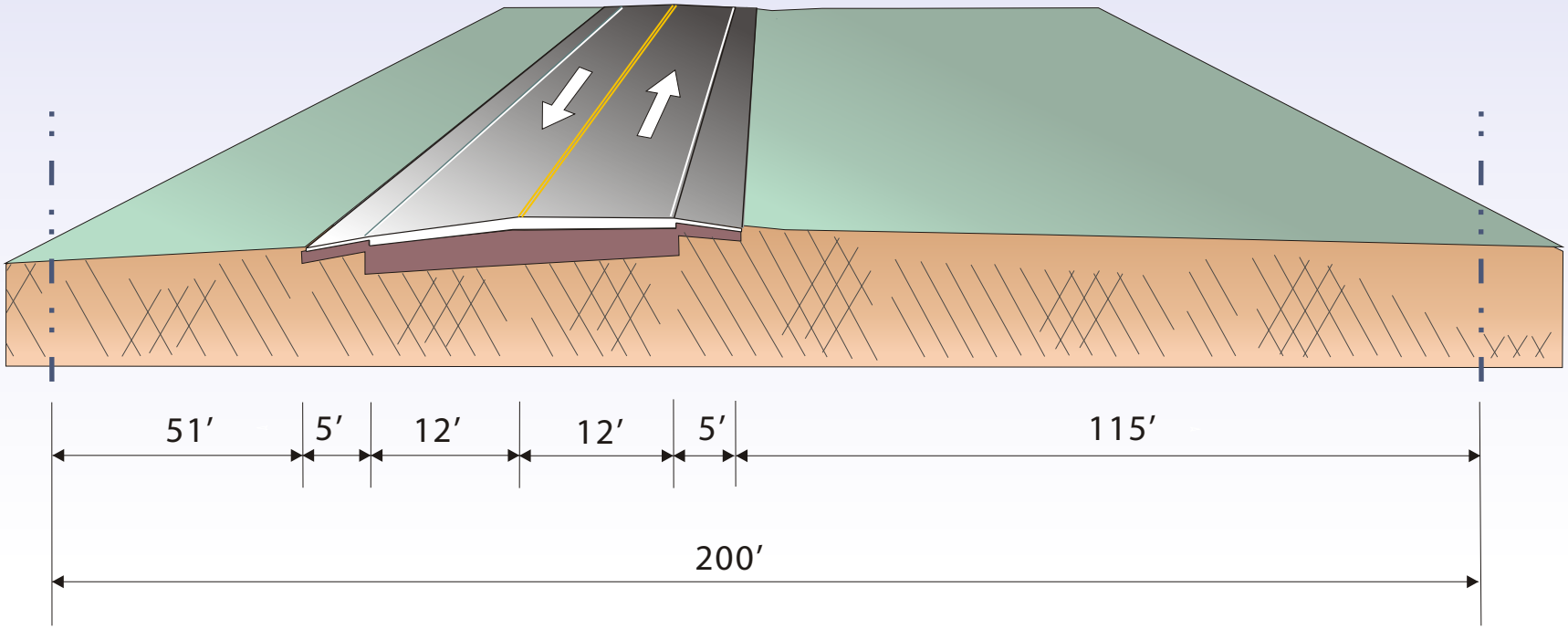

Figure 2

PARK RD / SAM ALLEN RD
From I-4 to Alexander St
Extension

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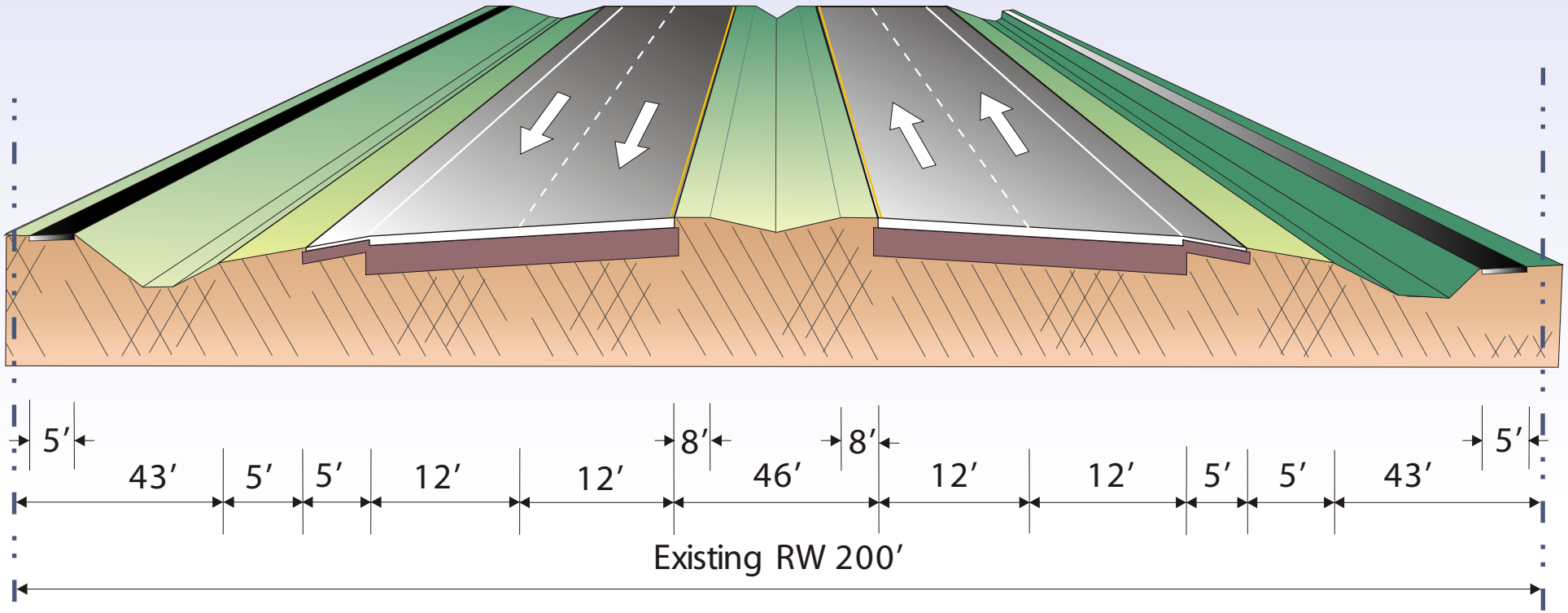
PARK RD
Proposed Typical Section
From I-4 to Sam Allen Rd
Rural 4-Lane Divided Typical Section



Design Speed = 55 mph

Figure 3

PARK RD / SAM ALLEN RD
From I-4 to Alexander St Extension
PD&E STUDY

WPI SEG 257862 1
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SAM ALLEN RD
Proposed Typical Section
West of SR 39 to Park Rd
Suburban 4-Lane Divided Typical Section

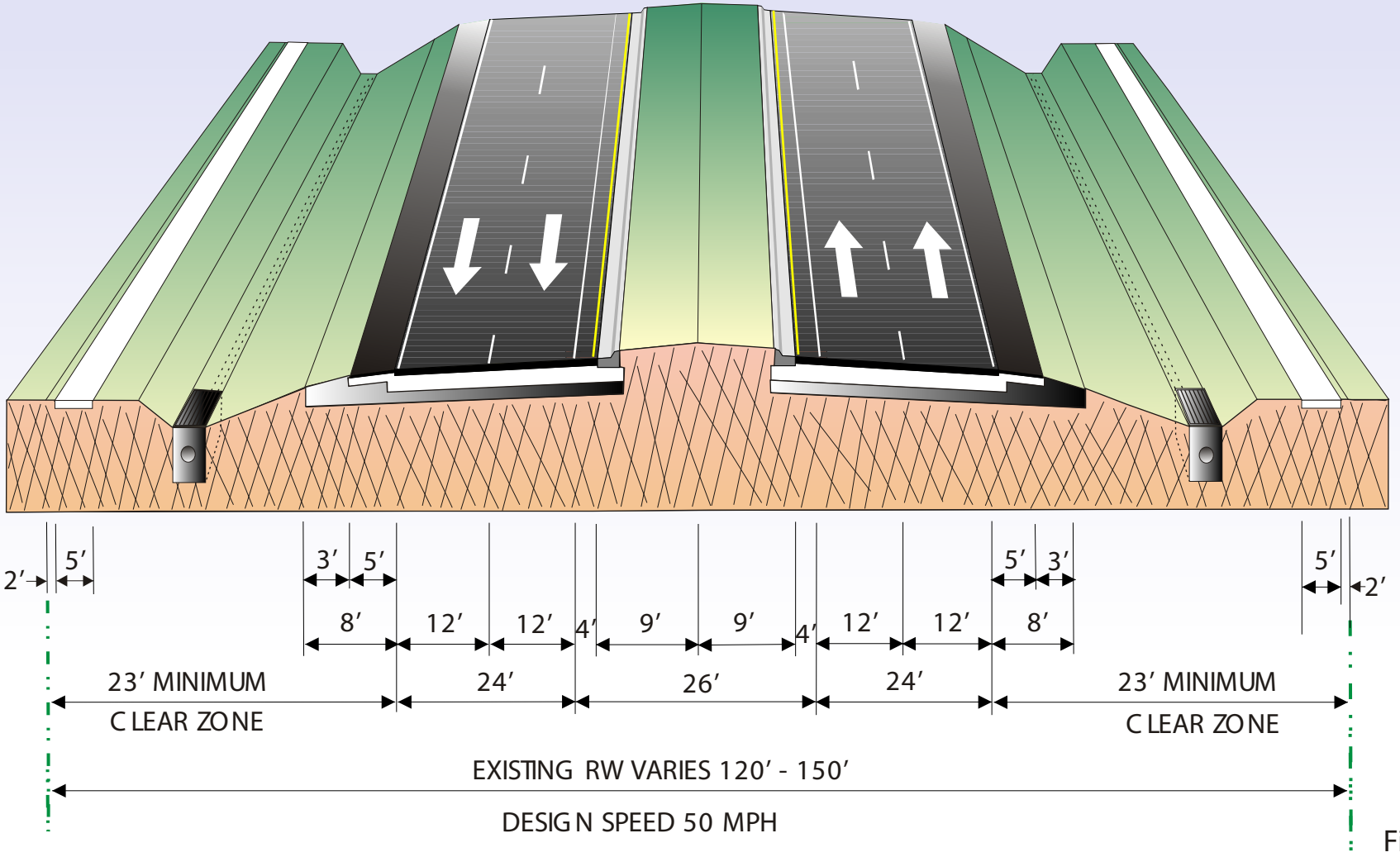


Figure 3

PARK RD / SAM ALLEN RD
From I-4 to Alexander St Extension
PD&E STUDY

WPI SEG 257862 1
FAP NO 0295-005

1.3 Soil Characteristics

According to the Soil Survey of Hillsborough County, the project area lies within an area classified as Soils of the Flatwoods. The general soil map unit is Myakka-Basinger-Holopaw, which consists of nearly level, poorly drained soils that have a sandy subsoil, are sandy throughout, or have a loamy subsoil.

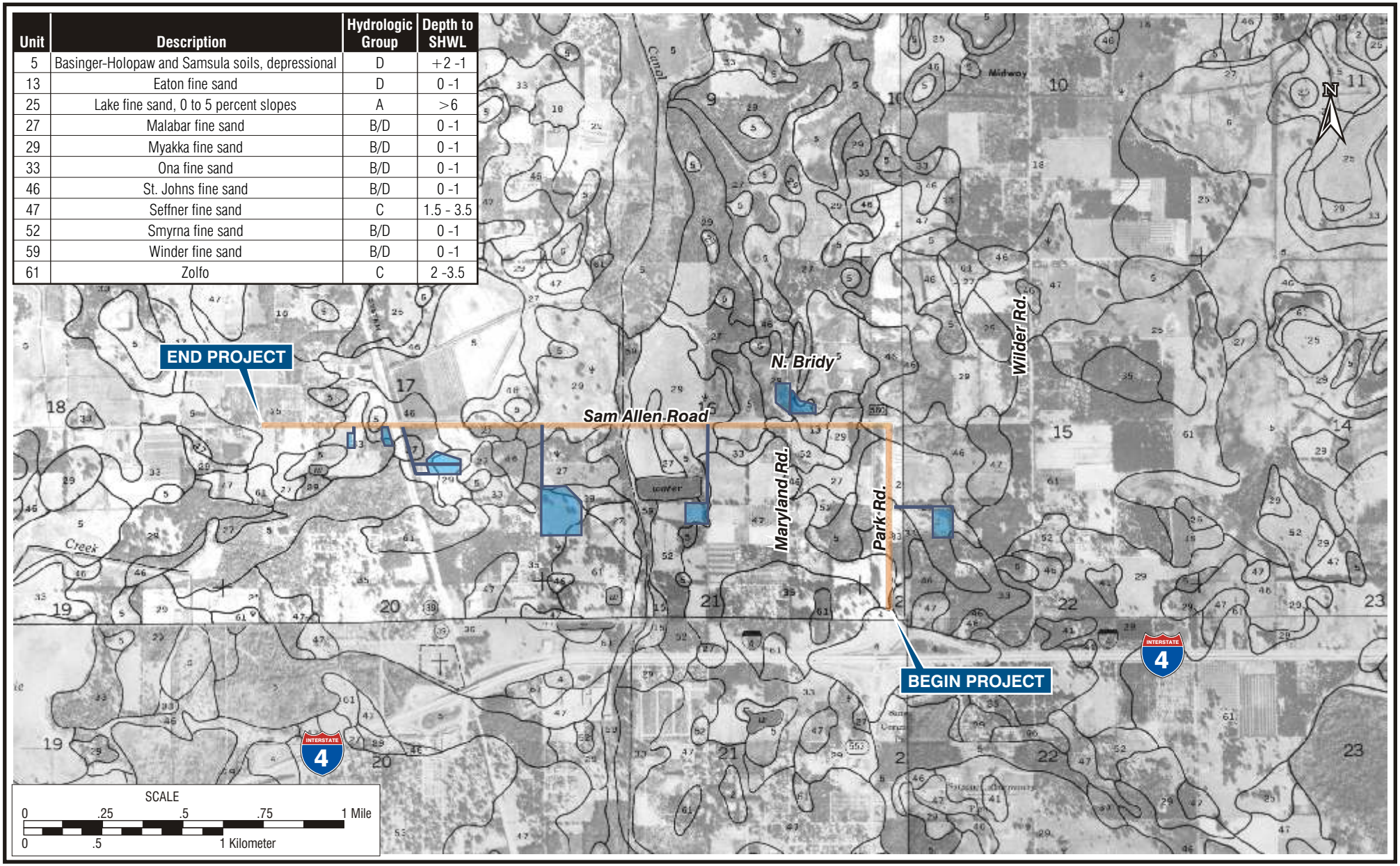
Soils found on the project are pre-dominantly hydrologic soil group B/D. Table 2 below lists the types of soils encountered within the project area.

Table 2
Hillsborough County Soil Survey Information

Unit	Description	Hydrologic Group	Depth to SHWL
5	Basinger-Holopaw and Samsula soils, depressional	D	+2 -1
13	Eaton fine sand	D	0 -1
25	Lake fine sand, 0 to 5 percent slopes	A	>6
27	Malabar fine sand	B/D	0 -1
29	Myakka fine sand	B/D	0 -1
33	Ona fine sand	B/D	0 -1
46	St. Johns fine sand	B/D	0 -1
47	Seffner fine sand	C	1.5 - 3.5
52	Smyrna fine sand	B/D	0 -1
59	Winder fine sand	B/D	0 -1
61	Zolfo	C	2 -3.5

See Figure 4 for the Soils Map, showing project limits and SMF Alternatives and FPC Sites.

Unit	Description	Hydrologic Group	Depth to SHWL
5	Basinger-Holopaw and Samsula soils, depressional	D	+2 -1
13	Eaton fine sand	D	0 -1
25	Lake fine sand, 0 to 5 percent slopes	A	>6
27	Malabar fine sand	B/D	0 -1
29	Myakka fine sand	B/D	0 -1
33	Ona fine sand	B/D	0 -1
46	St. Johns fine sand	B/D	0 -1
47	Seffner fine sand	C	1.5 - 3.5
52	Smyrna fine sand	B/D	0 -1
59	Winder fine sand	B/D	0 -1
61	Zolfo	C	2 -3.5



SOURCE: Soils Survey of Hillsborough County, Florida, issued May 1989

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SOILS MAP

Figure 4

1.4 Flood Plain Information

The proposed improvements to Park Road lie within Zone C – Areas of minimal flooding (no shading), and do not impact the 100-year flood plain. Sam Allen Road, from Maryland Avenue east to Wilder Road also lies within Zone C. However, the 100-year flood plain inundates a majority of the remainder of Sam Allen Road, as described below.

Sam Allen Road, from Maryland Avenue and west 1500' lies within Zone B – Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)

Sam Allen Road, from 1500' west of Maryland Avenue east to SR 39 lies within A3 (Panel 0290 C) and AE (Panel 0270 D). Base flood elevations have been determined, ranging from 108 to 106 (flowing from south to north) within the project area. This flood plain is a part of East Canal, which is a tributary of Itchepackesassa Creek to the north.

Sam Allen Road, from SR 39 west 4000' lies mostly in Zone X, Areas determined to be outside 500-year floodplain. The remainder, approximately 1400', lays within Zone A, Areas of 100-year flood; base flood elevations not determined. See Figure 5 for FEMA map on the project.

In addition, Hillsborough County has developed a SWMM Model of the Hillsborough River watershed. Flood stages have been determined along East Canal, including points up and downstream of Sam Allen Road.

2.0 DRAINAGE REFERENCE AND RESOURCE INFORMATION

2.1 Meetings

2.1.1 Field Review/Discussion with FDOT and Hillsborough County Maintenance

A field review of the project was conducted on June 17, 2004 to ascertain general drainage patterns. A second field review was conducted on September 10th, five days after Hurricane Frances passed through Hillsborough County. There was no evidence of roadway flooding on that date. However, there was standing water in the roadside ditches on the north and south sides of Sam Allen Road in the vicinity of the Countrywood residential development. There was also localized flooding on private property south of Sam Allen Road and east of Maryland Road.

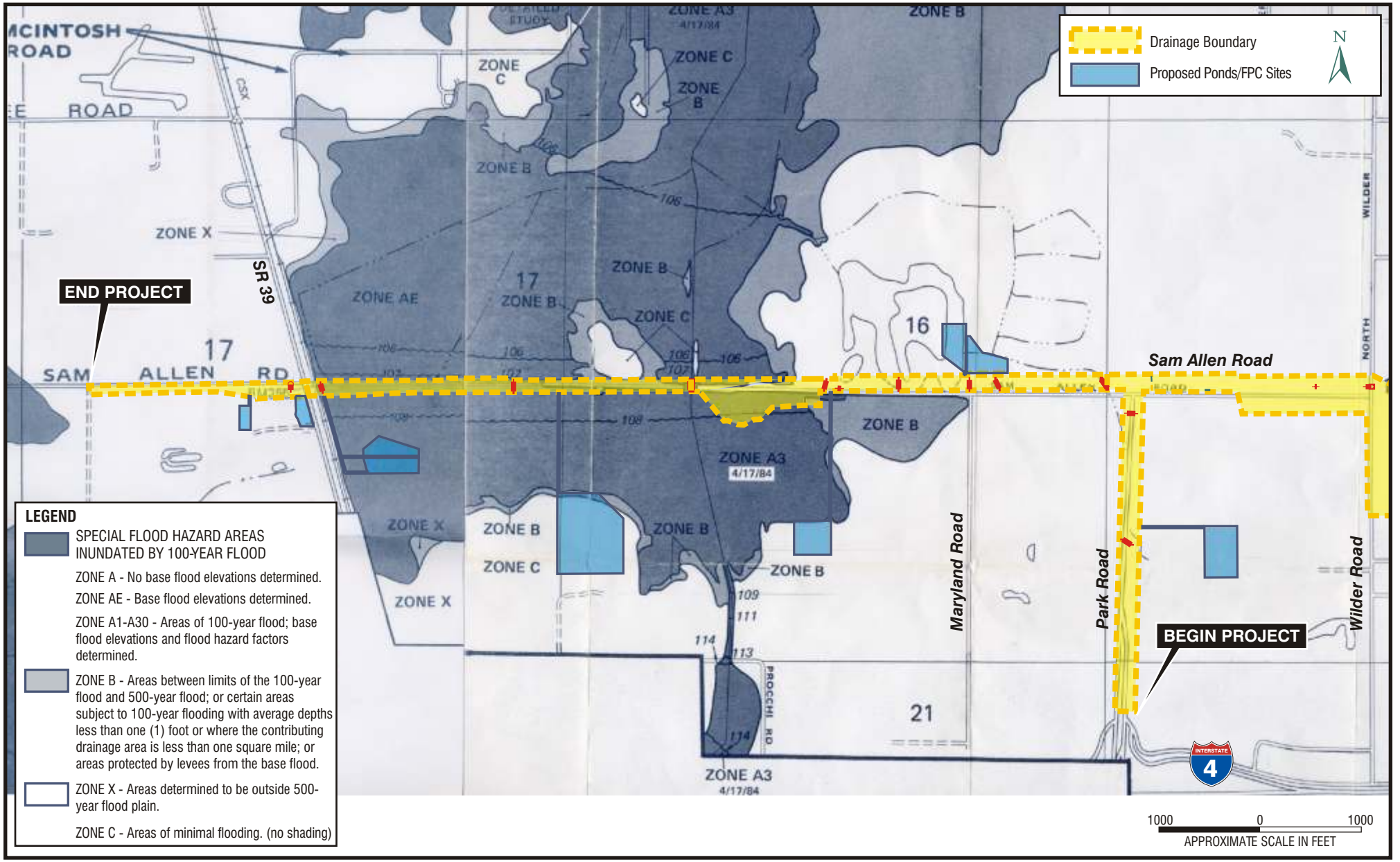
Over his 28-year career, Darrell O'Neal, Supervisor of the East Service Unit, Hillsborough County Maintenance, has no recollection of this part of Sam Allen Road or Park Road ever being inundated by floodwaters. He has, however, witnessed flooding of private property to the north and south of Sam Allen Road along East Canal.

According to Sue Moore of District Maintenance and Tom Gaffney of Tampa Maintenance, there is no record of roadway flooding along the project corridor.

This part of Sam Allen and Park Roads is outside the jurisdiction of the City of Plant City.

2.1.2 SWFWMD Pre-Application Meeting

Two (2) SWFWMD pre-application meetings have been held to date. The first was on May 12 and the second was on July 27 of 2004. Michelle Hopkins (Engineering) and Alberto Martinez (Environmental) representing the Water Management District were in attendance for both meetings. There may be some flooding problems in the area of Sam Allen Road and SR 39, related to the Ferris Waller property. Also, there is a history of flooding in the area of Sunset Oaks. Minutes are included in Appendix B.



SOURCE: FIRM Flood Insurance Rate Map, Hillsborough County, Florida, Panel 290 of 825, No. 120112 0290 C, Revised 4/17/84 and Panel 270 of 750, No. 120112 0270 D, Revised 4/3/92

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FEMA FLOOD INSURANCE RATE MAP

Figure 5

2.2 Curve Numbers

The Curve Numbers on the project that were used to calculate pre- and post-development soil storage are shown below in Table 3.

Table 3
Curve Numbers

Land Use	CN for HSG (A)	CN for HSG (C)	CN for HSG (B/D)
Open Spaces (Good Condition)	39	74	80
Pavement	98	98	98

2.3 Rainfall Intensity Data

The project lies in Zone 6. Table 4 below shows the rainfall depths for typical rainfall events.

Table 4
Rainfall Depths

Rainfall Event	1 Hour (in)	2 Hour (in)	4 Hour (in)	8 Hour (in)	24 Hour (in)	3 Day (in)	7 Day (in)	10 Day (in)
2-Year	2.30	2.80	3.40	4.16	5.76	6.13	8.00	9.00
5 Year	2.70	3.50	4.40	5.28	7.44	8.25	10.00	12.00
10 Year	3.10	4.00	5.00	6.24	8.64	9.25	12.00	14.00
25 Year	3.60	4.60	5.80	7.20	10.56	13.00	15.00	17.00
50 Year	4.00	5.20	6.40	8.00	11.52	13.50	17.00	19.00
100 Year	4.40	6.00	7.20	10.00	12.96	15.00	18.00	20.00

2.4 Resources for Analysis

The process of defining and developing the information base included the following:

- FEMA Flood Insurance Rate Maps (FIRMs) for Hillsborough County
  - Panel Number 120112 0270 D, August 3, 1992 and
  - Panel Number 120112 0290 C, April 17, 1984

- United States Department of Agriculture, Soil Conservation Service (now Natural Resource Conservation Service), Soil Survey of Hillsborough County, Florida, May 1989

- United States Geological Survey (USGS) Quadrangle Maps, Scale 1:24,000:
  - Plant City East (Photo revised 1987)
  - Plant City West (Photo revised 1983) and
  - Nichols (Photo revised 1987)

- Southwest Florida Water Management District (SWFWMD), Aerial Photography With Contours, Scale 1"=200', 1-foot contour interval, January 1978

- FDOT Drainage Manual, January 2003

- Drainage Handbook Stormwater Management Facility, January 2004

3.0 EXISTING DRAINAGE CHARACTERISTICS

3.1 Watershed Descriptions

The project area was sub-divided into four sub-basins as shown below in Table 5.

Table 5
Drainage Basin Boundaries

Regional Drainage Basin	Regional Sub-Basins	Basin Boundaries	Draining to Cross Drain No.
Central Highlands	A	Park Road: From I-4 to Sam Allen Road	S-9
		Sam Allen Road: From Wilder Road to Sta. 206+78	
	B	From Sta. 206+78 to Sta. 165+29	S-4
	C	From Sta. 165+29 to SR 39	S-2
	D	From SR 39 west to Sta. 115+81	S-1

The project area east of SR 39 is drained by the East Canal. At its downstream end, the East Canal connects to Itchepackesassa Creek, which in turn discharges to Blackwater Creek which ultimately outfalls to the Hillsborough River. The project area west of SR 39 is drained by Pemberton Creek. Pemberton Creek then outfalls to Baker Creek, which in turn outfalls to Thonotossassa Lake, ultimately outfalling to the Hillsborough River.

The project area was sub-divided into four sub-basins: A through D. Existing cross-drains and/or roadways bound the limits of the respective sub-basins. See Figure 1 for a map of the basin delineations.

Table 6 provides a list and description of existing cross drains on the project. Hydraulic equivalency for replacement or modification of the existing cross drains will be determined in subsequent design phases of this project. Reference Figure 6 for a map of existing cross drains and their respective drainage basins.

Basin A

This 65.40-acre basin includes Park Road, from I-4 north to Sam Allen Road, and Sam Allen Road, from Wilder west to existing cross drain S-9. Offsite runoff from east of Wilder Road is also included in the drainage basin. From a high point at I-4, runoff on Park Road includes ditch and sheet flow north to a low point on the road at existing cross drain S-12. In addition, there is another high point on Park Road where it intersects with Sam Allen Road. This part of Park Road also drains to existing cross drain S-12. On Sam Allen, there exists ditch flow, from a high point at its intersection with Wilder Road, west to existing cross-drain S-9. Note that S-9 is immediately downstream of S-12. S-9 ultimately discharges to the East Canal.

Basin B

This 18.80-acre basin includes Sam Allen Road, from existing cross drain S-9 west to existing cross drain S-4. Runoff on Sam Allen Road includes ditch and sheet flow west to a low point on the road at existing cross drain S-4. In the existing condition, S-4 accepts flow from a large area upstream that reaches all the way to Plant City. S-4 discharges directly to the East Canal.

Basin C

This 10.95-acre basin includes Sam Allen Road, from existing cross drain S-4 west to SR 39. Runoff on Sam Allen Road includes ditch and sheet flow west to a low point on the road at its intersection with SR 39. An existing cross drain, S-2, is located on Sam Allen Road just east of its intersection with SR 39. S-2 ultimately discharges to the East Canal.

Basin D

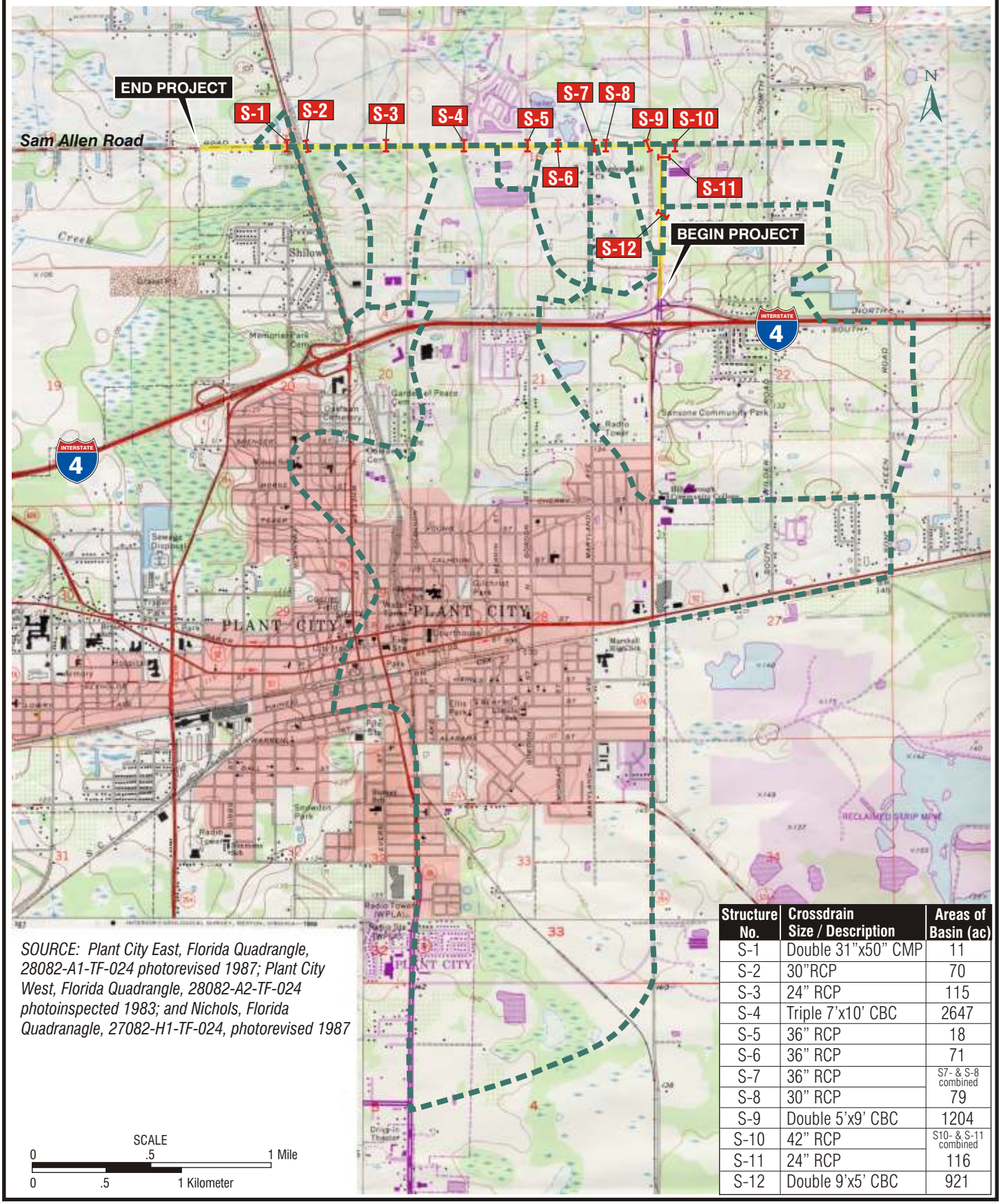
This 3.02-acre basin includes Sam Allen Road, from SR 39 to a high point located approximately 1200' west. Runoff on Sam Allen Road includes ditch flow from this high point east to a low point on the road at its intersection with SR 39. An existing cross drain, S-1, is located on Sam Allen Road just west of SR 39 empties out into a wet area south of Sam Allen Road. This wet area ultimately discharges to Pemberton Creek.

Table 6
Existing Cross Drains

Str No.	Baseline	Approx. Sta. Location	Size / Description	Length (ft)	U/S	D/S	Flow Direction	Area of Basin (ac)
S-1	Sam Allen	126+45	Double 31"x50" CMP	61	102.89	102.85	N-S	11
S-2	Sam Allen	129+04	30" RCP	89	100.45	100.23	S-N	70
S-3	Sam Allen	148+45	24" RCP	90	101.36	100.95	S-N	115
S-4	Sam Allen	165+29	Triple 7'x10' CBC	85	99.91	99.73	S-N	2647
S-5	Sam Allen	179+22	36" RCP	90	103.18	102.98	S-N	18
S-6	Sam Allen	186+50	36" RCP	98	102.41	102.21	S-N	71
S-7	Sam Allen	193+47	36" RCP	90	104.15	104.00	S-N	79
S-8	Sam Allen	196+20	30" RCP	99	104.14	103.49	N-S	
S-9	Sam Allen	206+27	Double 5'x9' CBC	107	102.50	102.30	S-N	1204
S-10	Sam Allen	211+45	42" RCP	90	104.50	102.30	S-N	116
S-11	Park	202+21	24" RCP	86	105.54	105.33	E-W	
S-12	Park	189+60	Double 9'x5' CBC	107	104.33	104.19	E-W	921

Notes:

- Drainage areas for S-7 and S-8 are combined
- Drainage areas for S-10 and S-11 are combined



SOURCE: Plant City East, Florida Quadrangle, 28082-A1-TF-024 photorevised 1987; Plant City West, Florida Quadrangle, 28082-A2-TF-024 photoinspected 1983; and Nichols, Florida Quadranagle, 27082-H1-TF-024, photorevised 1987

Structure No.	Crossdrain Size / Description	Areas of Basin (ac)
S-1	Double 31"x50" CMP	11
S-2	30"RCP	70
S-3	24" RCP	115
S-4	Triple 7'x10' CBC	2647
S-5	36" RCP	18
S-6	36" RCP	71
S-7	36" RCP	S7- & S-8 combined
S-8	30" RCP	79
S-9	Double 5'x9' CBC	1204
S-10	42" RCP	S10- & S-11 combined
S-11	24" RCP	116
S-12	Double 9'x5' CBC	921

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EXISTING CROSS-DRAINS

Figure 6

4.0 PROPOSED DRAINAGE DESIGN

4.1 Stormwater Management Design Approach

The project area was sub-divided into four sub-basins. The required treatment volume per basin was calculated as one inch over the entire area, as the project was conservatively assumed to be a full reconstruction. In addition, the required attenuation volume per basin was calculated using the National Resource Conservation Service (formerly the Soil Conservation Service) equation for runoff, as shown on page 51 of the FDOT Stormwater Management Facility Handbook (January 2004). The summation of these volumes is the total volume required per SMF. The calculations are included in Appendix D.

It should be noted that according to the pre-application meeting held with SWFWMD on July 27, 2004, it might be acceptable to treat only the Directly Connected Impervious Area within an individual basin, thereby reducing the required treatment volume and consequently reducing the overall pond size. In addition, providing compensatory treatment may also be a viable option. However, these approaches were not taken within this report for the purpose of providing a conservative pond design.

In general, two SMF site alternatives were required per basin, with the exception of Basin A. Also, one FPC Site was required for each basin where the proposed design impacted the 100-year flood plain.

Sizing of the FPC sites was calculated using the assumption that an average of one-foot depth of impact was made to the flood plain. That is to say, every acre of impact required an acre of FPC site.

4.2 Design Criteria

A review of the best available information listed in Section 2.4 of this report in addition to field reconnaissance was conducted to assess the potential pond and FPC site locations and sizes. The following parameters of each site were analyzed in the selection process:

- The "Available Area" for each alternative was obtained from the Hillsborough County Property Appraiser's Tax Maps.
- The "Existing Average Ground Elevation" was obtained from the SWFWMD Aerials (1"=200'), as shown in Appendix D.
- The maximum allowable stage in the pond for a 100-year storm event (DHW_{100}) was estimated using the following procedure. DHW_{100} = (elevation of the lowest edge of pavement of the basin draining to the respective pond)-(1 foot of freeboard). The estimated DHW was used in the "Volume Provided in Stormwater Facilities" table in Appendix C to estimate the pond sizes.
- The "Right-of-Way Cost Estimate" information is to be completed by the FDOT Right-of-Way Department.
- Conveyance

- Seasonal High Water Level (SHWL): Per the NRCS Soil Survey for Hillsborough County, the SHWL was conservatively assumed to be at the existing ground elevation.
- Water Quality Treatment Volume
- Attenuation Volume
- Tailwater and Outfall Conditions
- Flood Plain Encroachment Volume

4.3 Evaluations and Recommendations

Based on the methodology and criteria stated in Section 4.2, the following alternative SMF sites were evaluated for each basin. SMF site alternatives are labeled as SMF-A-1, for example, where A is the Basin name and the 1 denotes the numbered alternative.

1) Basin A: SMF-A-1

2) Basin B: SMF-B-1 and SMF-B-2

3) Basin C: SMF-C-1 and SMF-C-2

4) Basin D: SMF-D-1 and SMF-D-2

Each alternative is summarized in the Alternative Matrix Analyses in Table 7 through Table 10. The locations of the alternative ponds are shown on Figure 1.

4.3.1 Basin A Stormwater Management Facility (SMF) Alternatives

SMF-A-1

There is only one SMF site alternative proposed for Basin A to take advantage of an existing property fronting Park Road that is presently owned by the FDOT. The property generally slopes from east to west (facing Park Road), and according to the Florida Land Use Codes, delineated by the FDOT, it consists mostly of open space and upland forests. S-12, an existing double 9'x5' concrete box culvert (CBC) is adjacent to the property. A portion of the runoff from Park Road will more than likely have to be piped underneath the existing CBC to discharge into the proposed SMF. There are no flood plain impacts within this basin. The proposed pond site was placed at the rear of the property at the request of the FDOT. Since the proposed pond is up gradient of the low edge of pavement and the SHWL was assumed to be at existing ground, an impermeable pond liner will be required. As such the SHWL was set at two feet below the existing edge of pavement elevation (Design High Water Elevation in the proposed SMF). There is an existing ditch on the property that will more than likely serve as the outfall for the proposed pond. The proposed pond area is 4.60 acres. The proposed easement area is 0.26 acres, for a total SMF area of 4.86 acres, located on one property. The estimated total right-of-way cost for SMF-A-1 is $0.

Special consideration should be made during the design phase concerning the offsite runoff from west of Wilder Road, as this will ultimately affect the size of the proposed pond. For the purposes of this report, the offsite runoff is being accepted into SMF-A-1. This will ensure a larger, more conservative, pond size. At the same time, the flow path for a majority

of the offsite runoff and the runoff from Sam Allen Road, east of Park Road is being altered. This will require over attenuation with the pond, so that the resulting discharge does not exceed the hydraulic capacity of S-9. Another possible option would be to bypass the offsite runoff and pipe it directly to S-9. This would reduce the required treatment/attenuation volumes and reduce the size of the pond. In fact, all runoff east of Park Road could be bypassed, with compensatory treatment provided within SMF-A-1.

4.3.2 Basin B Stormwater Management Facility (SMF) Alternatives

SMF-B-1

The property generally slopes from south (where it faces Sam Allen Road) to north, and according to the Florida Land Use Codes, delineated by the FDOT, it consists mostly of open space and upland forests. The SMF site is located across from Maryland Avenue and is downstream of S-7, an existing 36" reinforced concrete pipe (RCP). Though the pond site is not located at the lowest point in the basin, due to the prevalence of existing homes in the vicinity, the existing grade is relatively flat which should allow runoff to be piped from the western edge of the basin with little difficulty. The proposed storm sewer will have to pass four minor cross drains, S-5, through S-7, all 36" RCPs, and S-8, a 30" RCP. There is a relatively low amount of flood plain impacts within this basin. There is approximately 1 acre of wetland impacts on this site. This results in approximately $90,000 in wetland mitigation costs, based on the current agreement between the FDOT and the Water Management Districts, otherwise known as the Senate Bill. It also appears to be upstream of an existing ditch on the property, providing easy access to a pond discharge point. The proposed pond area is 1.50 acres. The proposed easement area is 0.01 acres, for a total SMF area of 1.51 acres, located on one property. The estimated total right-of-way cost for SMF-B-1 is $563,100. SMF-B-1 is the preferred pond because it has the lesser overall cost.

SMF-B-2

The property generally slopes from south (where it faces Sam Allen Road) to north, and according to the Florida Land Use Codes, delineated by the FDOT, it consists mostly of upland forests. The SMF site is located across from Maryland Avenue and is downstream of S-7, an existing 36" RCP. Though the pond site is not located at the lowest point in the basin, due to the prevalence of existing homes in the vicinity, the existing grade is relatively flat which should allow runoff to be piped from the western edge of the basin with little difficulty. The proposed storm sewer will have to pass four minor cross drains, S-5, through S-7, all 36" RCPs, and S-8, a 30" RCP. There is a relatively low amount of flood plain impacts within this basin. The proposed pond site is adjacent to an existing ditch on the property, providing easy access to a pond discharge point. There is less than a 0.10 of an acre of wetland impacts on this site. This results in approximately $9,000 in wetland mitigation costs. The proposed pond area is 1.60 acres. The proposed easement area is 0.02 acres, for a total SMF area of 1.62 acres, located on one property. The estimated total right-of-way cost for SMF-B-2 is $1,129,900.

4.3.3 Basin C Stormwater Management Facility (SMF) Alternatives

SMF-C-1

The property generally slopes from south to north, and according to the Florida Land Use Codes, delineated by the FDOT; it consists mostly of open space and upland forests. The SMF site is located approximately 750' south of Sam Allen Road and just east of SR 39. The pond site is located at a relatively low point in the basin. The proposed storm sewer will have to pass two minor cross drains, S-2, a 30" RCP and S-3, a 24" RCP. There is a large amount of flood plain impacts within this basin. The proposed roadway, as well as the proposed pond site lies in the flood plain. There is much less than a 0.10 of an acre of wetland impacts on this site. This results in approximately $9,000 (maximum) in wetland mitigation costs. However, its proximity to the wetland provides easy access for a pond discharge point. The proposed pond area is 1.87 acres. The proposed easement area is 0.46 acres, for a total SMF area of 2.33 acres, located on one property. The estimated total right-of-way cost for SMF-C-1 is $465,100. SMF-C-1 is the preferred pond because it has the lesser overall cost.

SMF-C-2

The property generally slopes from south to north, and according to the Florida Land Use Codes, delineated by the FDOT; it consists mostly of open space and upland forests. The SMF site is located approximately 550' south of Sam Allen Road and just east of SR 39. The pond site is located at a relatively low point in the basin. The proposed storm sewer will have to pass two minor cross drains, S-2, a 30" RCP and S-3, a 24" RCP. There is a large amount of flood plain impacts within this basin. The proposed roadway, as well as the proposed pond site lies in the flood plain. The proposed pond site is adjacent to a wetland, providing easy access to a pond discharge point. There are no wetland impacts on this site. The proposed pond area is 1.86 acres. The proposed easement area is 0.39 acres, for a total SMF area of 2.25 acres, located on one property. The estimated total right-of-way cost for SMF-C-2 is $870,200.

4.3.4 Basin D Stormwater Management Facility (SMF) Alternatives

SMF-D-1

The property generally slopes from north to south, and according to the Florida Land Use Codes, delineated by the FDOT, it consists mostly of open space. The SMF site is located at the southwest corner of the intersection of Sam Allen Road and SR 39. The pond site is located at a relatively low point in the basin. The proposed storm sewer will have to pass one minor cross drain, S-1, a double 31"x50" Elliptical Corrugated Metal Pipe (ECMP). There are no flood plain impacts within this basin. The proposed pond site is adjacent to a wetland, providing easy access to a pond discharge point. There are no wetland impacts on this site. The proposed pond area is 0.86 acres, located on one property. No drainage easement is required. Total SMF area is 0.86 acres. The estimated total right-of-way cost for SMF-D-1 is $610,400.

SMF-D-2

The property generally slopes from north to south, and according to the Florida Land Use Codes, delineated by the FDOT, it consists mostly of farm land. The SMF site is located just south of Sam Allen Road and approximately 600' west of SR 39. The pond site is located at a relatively high point in the basin compared to the existing low edge of pavement elevation on Sam Allen Road within this basin. Therefore, an impermeable pond liner will be required.

Consequently, the SHWL was set two feet below the low edge of pavement elevation (Design High Water elevation). The proposed storm sewer will have to pass one minor cross drain, S-1, a double 31"x50" Elliptical Corrugated Metal Pipe (ECMP). There are no flood plain impacts within this basin. The proposed pond site is near a wetland, providing easy access to a pond discharge point. There are no wetland impacts on this site. The proposed pond area is 0.60 acres. The proposed easement area is 0.05 acres, for a total SMF area of 0.65 acres, located on one property. The estimated total right-of-way cost for SMF-D-2 is $108,900. SMF-D-2 is the preferred pond because of its lower overall cost.

4.3.5 Flood Plain Compensation (FPC) Evaluations and Recommendations

In addition to the criteria and methodology stated in Section 4.2, additional requirements for viable floodplain compensation sites are that they should be located outside of and adjacent to the floodplain. The following alternative floodplain compensation sites were evaluated for each basin.

1) Basin A: None

2) Basin B: FPC-B-1

5) Basin C: FPC-C-1

6) Basin D: None

There is only one FPC site in Basin B, for the following reasons. First of all, available property outside and adjacent to the floodplain is limited. In addition, any location west of the proposed site would place the whole access easement in the floodplain, thereby increasing the amount of impact. A large commercial nursery borders the floodplain to the east. Also, all property north of Sam Allen and adjacent to the floodplain is currently developed for residential use.

There is only one FPC site in Basin C, for the following reasons. First of all, available property outside and adjacent to the floodplain is limited. This site is the only large undeveloped site. In addition, the proposed site, in its present location, results in the least amount of impact by the access easement. Also, any property north of Sam Allen and adjacent to the floodplain is currently developed for residential use.

Since the equal elevation base flood stages for the FEMA floodplain are more or less parallel to the road, it may be permissible to use one site for all impacts. This will be determined during the design phase.

The locations of the alternative FPC sites are shown on Figure 1

4.3.6 FPC-B-1 Alternatives

The FPC site for Basin B is located approximately 1400' south of Sam Allen Road and approximately 1200' east of existing CBC S-4. The FPC site is adjacent to an existing borrow pit and to the approximate limit of the 100 year flood plain. It lies within three properties. The proposed FPC site area is 2.80 acres. The proposed easement area is 0.58 acres, for a total FPC area of 3.38 acres. The flood plain impact is all due to the

proposed roadway improvements and access to be provided to the FPC site. The estimated right-of-way cost for FPC-B-1 is $438,600.

In the vicinity of the East Canal and just south of South Allen Road, the 100 Year Base Flood elevation is 108. Approximately 2000 feet south, the 100 Year Base Flood elevation rises to 109, a gradient of only 0.05%. The proposed site for FPC-B-1, located east of East Canal, adjacent to the floodplain, has an average existing ground elevation of 110.5 and a low elevation of 109. Therefore, although FPC-B-1 is located upstream of the impact, this should not have an adverse affect on the floodplain adjacent to Sam Allen Road given the slight gradient of the existing flood plain and a minor difference of 1 foot between the Base Flood elevation and the existing ground elevation at the FPC site.

4.3.7 FPC-C-1 Alternatives

The FPC site for Basin C is located approximately 1400' south of Sam Allen Road and approximately 1000' west of existing CBC S-4. A portion of the FPC site is adjacent to an existing residential area and to the approximate limit of the 100-year flood plain. It lies within three properties. The proposed FPC site area is 11.19 acres. The proposed easement area is 0.46 acres, for a total FPC area of 11.65 acres. The flood plain impact is due to the proposed roadway improvements, the proposed pond sites in Basin C, access to the ponds and access to be provided to the FPC site itself. The estimated right-of-way cost for FPC-C-1 is $854,600.

In the vicinity of the East Canal and just south of South Allen Road, the 100 Year Base Flood elevation is 108. Approximately 2000 feet south, the 100 Year Base Flood elevation rises to 109, a gradient of only 0.05%. The proposed site for FPC C-1, located west of East Canal, adjacent to the floodplain, has an average existing ground elevation of 111 and a low elevation of 108. Therefore, although FPC C-1 is located upstream of the impact, this should not have an adverse affect on the floodplain adjacent to Sam Allen Road given the slight gradient of the existing flood plain.

Table 7
Basin A SMF Alternatives

Basin Condition: One SMF is required	Basin A SMF Alternatives	
	SMF-A-1	
LOCATION (Station)	190+00	N/A
SIDE (LT, RT)	RT	N/A
SMF AREA (ac)	4.60	N/A
EST. GROUND ELEVATION (ft) @ THE SMF SITE	113.5	N/A
PROPOSED LOW EDGE OF PAVEMENT WITHIN BASIN	110	N/A
EST. SHW ELEVATION/CONTROL ELEVATION	107	N/A
TREATMENT SYSTEM	Wet	N/A
SOILS NAME	Myakka Fine Sand	N/A
HYDROLOGICAL SOIL GROUP	B/D	N/A
LAND USE	Borrow Pit	N/A
RECORDED ARCHAEOLOGOCAL SITES	None	N/A
ARCHAEOLOGICAL POTENTIAL	None	N/A
RECORDED HISTORICAL STRUCTURES/RESOURCES	None	N/A
TENTATIVE HAZARD RANKING		N/A
PROTECTED, ENDANGERED, & ENDANGERED SPECIES	None	N/A
WETLAND INVOLVEMENT	None	N/A
WETLAND MITIGATION COST	$0	N/A
PROXIMITY TO OUTFALL (ft)	300	N/A
OUTFALL PIPE COST ESTIMATE	$22,194	N/A
LINER COST ESTIMATE	$585,463	N/A
STORMWATER FACILITY COSTS (APPENDIX #) (OTHER)	N/A	N/A
SMF EASEMENT REQUIRED (AC)	0.26	N/A
NUMBER OF PARCELS	1	N/A
PARTIAL (P) OR WHOLE TAKE (WT)	N/A	N/A
ROW COST ESTIMATE (INCLUDES EASEMENTS)	$0	N/A
TOTAL ESTIMATED COSTS	**$607,657**	N/A

Table 8
Basin B SMF Alternatives

Basin Condition: One SMF is required	Basin B SMF Alternatives	
	SMF-B-1	SMF-B-2
LOCATION (Station)	192+00	195+00
SIDE (LT, RT)	LT	LT
SMF AREA (ac)	1.50	1.60
EST. GROUND ELEVATION (ft) @ THE SMF SITE	105.5	106
PROPOSED LOW EDGE OF PAVEMENT WITHIN BASIN	110	110
EST. SHW ELEVATION/CONTROL ELEVATION	105.5	106
TREATMENT SYSTEM	Wet	Wet
SOILS NAME	Myakka Fine Sand	Eaton Fine Sand
HYDROLOGICAL SOIL GROUP	B/D	D
LAND USE	Forested	Forested
RECORDED ARCHAEOLOGOCAL SITES	None	None
ARCHAEOLOGICAL POTENTIAL	None	None
RECORDED HISTORICAL STRUCTURES/RESOURCES	None	None
TENTATIVE HAZARD RANKING		
PROTECTED, ENDANGERED, & ENDANGERED SPECIES	None	None
WETLAND INVOLVEMENT	1 ac	< 0.10 ac
WETLAND MITIGATION COST	$90,000	$9,000
PROXIMITY TO OUTFALL (ft)	60	35
OUTFALL PIPE COST ESTIMATE	$4,439	$2,589
LINER COST ESTIMATE	N/A	N/A
STORMWATER FACILITY COSTS (APPENDIX #) (OTHER)	N/A	N/A
SMF EASEMENT REQUIRED (AC)	0.01	0.02
NUMBER OF PARCELS	1	1
PARTIAL (P) OR WHOLE TAKE (WT)	P	P
RECOMMENDED POND LOCATION IN THE PD&E PSR	Y	N
ROW COST ESTIMATE (INCLUDES EASEMENTS)	$563,100	$1,129,900
TOTAL ESTIMATED COSTS	**$657,539**	**$1,141,489**

Table 9
Basin C SMF Alternatives

Basin Condition: One SMF is required	Basin C SMF Alternatives	
	SMF-C-1	SMF-C-2
LOCATION (Station)	137+00	137+00
SIDE (LT, RT)	RT	RT
SMF AREA (ac)	1.87	1.87
EST. GROUND ELEVATION (ft) @ THE SMF SITE	105	105
PROPOSED LOW EDGE OF PAVEMENT WITHIN BASIN	107.88	107.88
EST. SHW ELEVATION/CONTROL ELEVATION	105	105
TREATMENT SYSTEM	Wet	Wet
SOILS NAME	Myakka Fine Sand	Myakka Fine Sand
HYDROLOGICAL SOIL GROUP	B/D	B/D
LAND USE	Open Land	Open Land
RECORDED ARCHAEOLOGOCAL SITES	None	None
ARCHAEOLOGICAL POTENTIAL	None	None
RECORDED HISTORICAL STRUCTURES/RESOURCES	None	None
TENTATIVE HAZARD RANKING		
PROTECTED, ENDANGERED, & ENDANGERED SPECIES	None	None
WETLAND INVOLVEMENT	<<< 0.10 ac	None
WETLAND MITIGATION COST	$9,000	$0
PROXIMITY TO OUTFALL (ft)	125	35
OUTFALL PIPE COST ESTIMATE	$9,248	$2,589
LINER COST ESTIMATE	N/A	N/A
STORMWATER FACILITY COSTS (APPENDIX #) (OTHER)	N/A	N/A
SMF EASEMENT REQUIRED (AC)	0.46	0.39
NUMBER OF PARCELS	1	1
PARTIAL (P) OR WHOLE TAKE (WT)	P	P
RECOMMENDED POND LOCATION IN THE PD&E PSR	Y	N
ROW COST ESTIMATE (INCLUDES EASEMENTS)	$465,100	$870,200
TOTAL ESTIMATED COSTS	**$483,348**	**$872,789**

Table 10
Basin D SMF Alternatives

Basin Condition: One SMF is required	Basin D SMF Alternatives	
	SMF-D-1	SMF-D-2
LOCATION (Station)	127+50	122+00
SIDE (LT, RT)	RT	RT
SMF AREA (ac)	0.86	0.60
EST. GROUND ELEVATION (ft) @ THE SMF SITE	104.5	106.4
PROPOSED LOW EDGE OF PAVEMENT WITHIN BASIN	107	107
EST. SHW ELEVATION/CONTROL ELEVATION	104.5	104
TREATMENT SYSTEM	Wet	Wet
SOILS NAME	St. Johns Fine Sand	Ona Fine Sand
HYDROLOGICAL SOIL GROUP	B/D	B/D
LAND USE	Open Land	Agriculture
RECORDED ARCHAEOLOGOCAL SITES	None	None
ARCHAEOLOGICAL POTENTIAL	None	None
RECORDED HISTORICAL STRUCTURES/RESOURCES	None	None
TENTATIVE HAZARD RANKING		
PROTECTED, ENDANGERED, & ENDANGERED SPECIES	None	None
WETLAND INVOLVEMENT	None	None
WETLAND MITIGATION COST	$0	$0
PROXIMITY TO OUTFALL (ft)	65	125
OUTFALL PIPE COST ESTIMATE	$4,809	$9,248
LINER COST ESTIMATE	N/A	$50,326
STORMWATER FACILITY COSTS (APPENDIX #) (OTHER)	N/A	N/A
SMF EASEMENT REQUIRED (AC)	N/A	0.05
NUMBER OF PARCELS	1	1
PARTIAL (P) OR WHOLE TAKE (WT)	P	P
RECOMMENDED POND LOCATION IN THE PD&E PSR	N	Y
ROW COST ESTIMATE (INCLUDES EASEMENTS)	$610,400	$108,900
TOTAL ESTIMATED COSTS	**$615,209**	**$168,474**

Appendix A
Project Correspondence and Documentation

Blanco, Mitch

From: scott.farash@dot.state.fl.us
Sent: Friday, October 01, 2004 9:39 AM
To: Blanco, Mitch; Romero, John
Cc: todd.mecklenborg@dot.state.fl.us
Subject: Park Rd/Sam Allen Rd Road PD&E Study - WPI Seg. No. 257862-1 Fw: Wetlands & Wildlife Assessment for Ponds

2578621.pondsites.doc

Here is a summary of the Wetlands assessment for the potential pond sites. Todd Mecklenborg can help you if you need more information. He is currently revising the wetlands boundaries based on his recent field review.

Scott

----- Forwarded by Scott Farash/D7/FDOT on 10/01/2004 09:34 AM -----

Todd Mecklenborg/D7/FDOT
10/01/2004 08:54 AM

To: Scott Farash/D7/FDOT@FDOT
cc:
Subject: Re: Wetlands & Wildlife Assessment for Park Rd/Sam Allen Rd Road PD&E Study - WPI Seg. No. 257862-1 (Document link: Scott Farash)

(See attached file: 2578621.pondsites.doc)

Todd Mecklenborg
District Seven Environmental Management Office
todd.mecklenborg@dot.state.fl.us
(813) 975-6457 / 1-800-226-7220 / SC 512-7814

MEMORANDUM

Florida Department of Transportation
District Seven Environmental Management Office - MS 7-500

DATE: September 28, 2004

TO: Scott Farash

FROM: Todd Mecklenborg

COPIES: File

SUBJECT: WPI Seg. No. 257862 1, Sam Allen/Park Road Pond Siting

The proposed Stormwater Management Facilities and Floodplain Compensatory sites were reviewed for listed species and wetland involvement. No listed species were observed or are known to occur in these locations. However, SMF-B-1 and SMF-C-1 have wetlands within the proposed boundaries. The corridor wetland mapping layer has been refined for the area around SMF-B-1 that depicts the wetland impact extent. SMF-C-1 has small inclusions of Myakka Fine Sand that support hydrophytic vegetation (Ludwigia peruviana).

Meeting Minutes

Parsons Brinckerhoff
5405 West Cypress Street, Suite 300
Tampa, FL 33607
813-289-5300
Fax: 813-289-4405

Project: Park and Sam Allen Road

Subject: Pond Siting – Preliminary Pond Locations

Location: FDOT Planning Conference Room

By: John F. Romero

Date of Meeting: July 1, 2004

Attendees:

Scott Farash, FDOT	Jaime Oakely, FDOT	Mitch Blanco, PBQD
Megan Arasteh, FDOT	Bill McTeer, FDOT	
Frank Ghadami, FDOT	John Romero, PBQD	

Summary:

FDOT proposes to reconstruct Park Road from I-4 to Sam Allen Road and Sam Allen Road from Park Road to just west of SR 39. Currently, Park Road is funded for design. However, Sam Allen Road is not. They are County/City roads but the FDOT will do the design. City/County will provide 12.5% of the funds required for pond sites. The potential ponds are to be designed to meet FDOT criteria. Also, FDOT-7 would prefer not to enter into any joint use ponds with developers along the project. Pond liners may be required (as a last resort), to provide hydraulically feasible pond sites. A variance will be required for the proposed roadway border width. The proposed grade line is to closely match existing. There are five basins for the project. Basins A and B primarily cover Park Road from south to north. Basins C, D, E and F cover Sam Allen road from east to west. The improvements on Park Road will occur totally within the existing right-of-way. Additional right-of-way will be acquired south of Sam Allen Road, within Basins E & F.

Basins A and B are separated by a double concrete box culvert (CBC) underneath Park Road. Drainage is from east to west through the cross drain. Both Park and Sam Allen Roads are to be widened in the future. Therefore, it was decided to provide all treatment within ponds. It may be possible to provide the required treatment and attenuation for Basin A within the pond site in Basin B depending on if a connection can be made crossing the existing CBC.

Pond requirements for Basin B can be provided by property owned by FDOT on the east side of Park Road. PB was told to make maximum use of this parcel by locating the pond to the back of the parcel in the available upland area. The intent is to provide the FDOT an economically viable frontage parcel on Park Road on the remainder. Currently, Sam Allen Road east of Park Road, and a portion of Wilder drain to Park Road. The pond sized for Basin B (5.04 acres) would also provide capacity for these roadways. PB was directed to limit pond site alternatives to the FDOT parcel only for Basin B.

Potential pond sites in Basin C are extremely limited. Wetlands exist to the north and a large nursery to the south. The only available parcel is at a higher elevation than the roadway. There may be some opportunity to use the isolated wetlands within the basin area for stormwater treatment. Compensatory treatment will be investigated as an option for this basin. The project will seek to obtain credit for treatment of Sam Allen east of Park Road and Wilder in exchange for not treating the new impervious area being added to Sam Allen as part of the proposed improvements within Basin C. If an agreement cannot be reached, piping stormwater under the cross drain just east of Park Road and ultimately to the pond for Basin B will be investigated. Survey data of the roadway centerline and cross drain invert elevations need to be obtained to determine the feasibility and costs associated with piping stormwater from Basin C to the Basin B pond. A meeting with SWFWMD will be set up to discuss drainage opportunities and issues for the project, including compensatory treatment.

Within Basin D, a pond site located along the north side of an existing borrow pit will be investigated. A secondary pond site that will result in the relocation of a residence will also be considered. Both locations will involve flood plain impacts.

Within Basin E, which is located just east of SR 39, an upland area in the southeast corner of the SR 39/Sam Allen Road will be evaluated for two potential pond sites. Again, both sites will involve flood plain impacts.

For Basin F, which is situated west of SR 39, a parcel in the southeast corner of the SR 39/Sam Allen Road intersection will be evaluated. A secondary site, west of a wetland area on the south side of Sam Allen Road, will also be considered.

The 100-year flood elevation needs to be determined from FEMA maps and or special studies. It was Ms. Arasteh's view that the Southwest Florida Water Management District (SWFWMD) would consider the entire project area on Sam Allen Road, from SR 39 to approximately 1200' west of Maryland Road, a flood plain impact.

Potential floodplain compensation sites should be sited to ensure that the areas have access (20' minimum width) from existing roads.

Action Items:

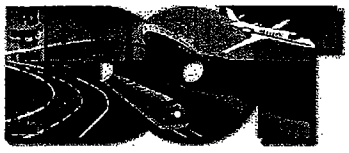
PB is to set up a meeting with SWFWMD.

PB is to research existing permits within the project area.

Scott Farash is to obtain survey data.

The meeting minutes contained herein represent the author's understanding of the discussions that occurred during the referenced meeting. Any attendee who does not entirely agree with the summary or can offer additional information that should be noted within these minutes, please call John Romero at (813) 207-2938.

cc: Attendees
PB File:



Park Road and Sam Allen Road
PD&E Study

From I-4 to Alexander St Extension / Hillsborough County, Florida
WPI Seg. No: 257862 1
FAP No: 0295-005

March 2004

Contact

Scott Farash, P.E., Project Manager at (813) 975-6456 or Marian Pscion, District Public Information Office at (800) 226-7220.

Project Description

The proposed study limits for Park Road and Sam Allen Road are as follows:

Park Road from Sam Allen Road to just north of I-4
Sam Allen Road from just west of SR 39 to Park Road

The total length of the project is approximately 4.8 miles.

Existing Facility

The existing roadways consist of two lane undivided, rural roadway. The segments are located in Plant City and Hillsborough County, connecting traffic from I-4 to SR 39. Land use is mixed with vacant parcels along with agricultural and residential uses.

Proposed Improvements

The project has been identified in the Hillsborough Metropolitan Planning Organizations 2025 Long Range Transportation Plan as a four-lane, divided road. The PD&E Study will consider various alternatives as well as the 'no build' alternative.

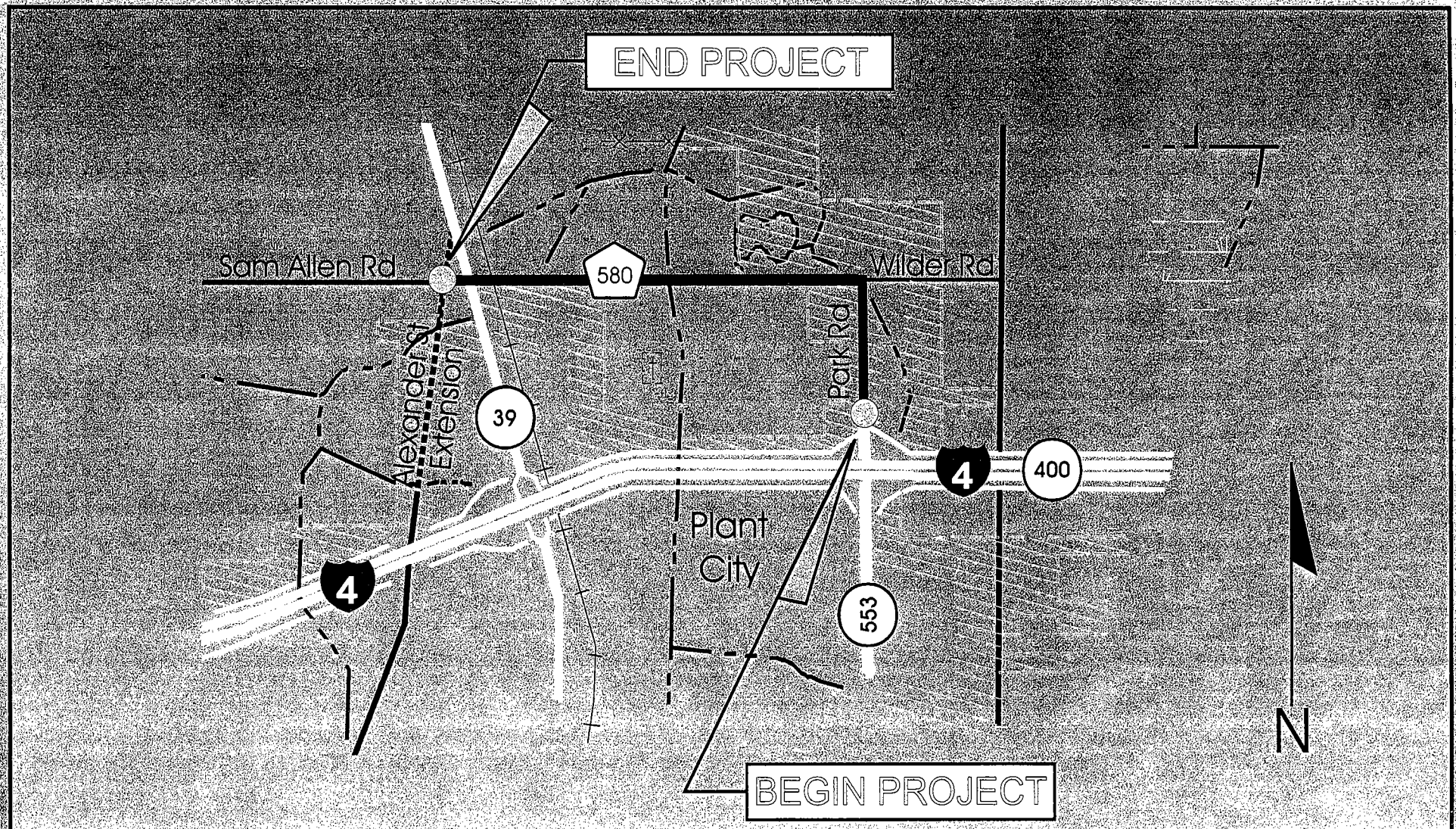
Schedule

The study is anticipated to be completed in the Spring of 2005. Currently, alternatives are being developed.

Five Year Tentative Work Program

Fiscal Year 2004/2005 - 2008/2009
(For Park Road Only)

Design:	2005
Right Of Way Acquisition:	N/A
Construction:	2009



PARK RD & SAM ALLEN RD
[From I-4 To Alexander St Extension]
HILLSBOROUGH COUNTY

PROJECT LOCATION MAP
WPI Seg. No. 257862 1
FAP No. 0295-005

Park / Sam Allen PD&E Study, Pond size estimate

Project Limits:	FPN	Pond 1			Pond 2			Pond 3			Total Basin Length	Total Pond Area (Ac)
		Limits	Basin Length	Area (Ac)	Limits	Basin Length	Area (Ac)	Limits	Basin Length	Area (Ac)		
Sam Allen Road from Alexander Street Extension to Park Road	257862-1	Park Road to North of Maryland Rd.	2292 FT	1.14	North of Maryland Rd. to Triple Concrete Box Culvert	2292 FT	1.14	Triple Concrete Box Culverts to Alexander St. Extenstion	3749 FT	1.58	8333 FT	3.86
Park Road from Sam Allen Road to I-4	257862-2	I-4 to Twin Concrete Box Culvert	1584 FT	0.92	Twin Concrete Box Culvert to Sam Allen Road	1742 FT	0.96				3326 FT	1.88

U1/257862 1/PSR Summary Table...

Appendix B
SWFWMD Coordination

THIS SPACE IS FORMATTED TO FACILITATE AND GUIDE THE DIALOGUE DURING A PRE-APPLICATION MEETING AND PROVIDE NOTE TAKIN
A SUPPLEMENTAL "PROMPT LIST" OF DISCUSSION ITEMS IS ATTACHED, WHICH SHOULD BE EXAMINED BY THE APPLICANT PARTIES PRIOI
MEETING TO IDENTIFY TOPICS FOR DISCUSSION.

Southwest Florida Water Management District
Resource Regulation Division

ERP Pre-Application Meeting NOTES

FILE No.
28-22-15thru18

Date:	May 12, 2004
Time:	11 AM
Project Name:	Park Road and Sam Allen Road
Attendees:	Michelle Hopkins Alberto Martinez Mitch Blanco JohnRomero

County:	Hillsborough	**S/T/R:**	15-18/28/22
Total Land acreage:	R/W	**Project acreage:**	87

Prior Onsite/Offsite Permit activity:
N/A

Project Overview:
Proposed roadway improvement project that involves widening Sam Allen and Park Road, from 39 to I-4 from two lanes to a four lane divided highway.

Site Information Discussion: (Site Topography, SHW Levels, Flood plain Elevations, Conveyance and Storage, Tailwater Conditions, Adjacent Offsite Contributing Sources, Receiving Waterbody, Karst Formations, Existing Wells, Contaminated Sites / Coordination w/ FDEP, etc.)

- They are in the PD&E phase and are investigating pond location options.
- There may be some flooding problems in the area of Sam Allen Road and 39, related to Ferris Waller property

Environmental Discussion: (Wetlands Onsite, Wetlands On Adjacent Properties, Site Visit, Delineation, Permanent/Temporary Impacts, SHWL, Wetland Hydrology, Drawdown Issues, Alternatives Analysis, Elimination/Reduction, Secondary and Cumulative Impacts, T&E species, Conservation Easements, Buffers, Mitigation Options, Mitigation Costs, OFW, Aquatic Preserve, etc.)

- The wetland limits need to be reviewed by the District.
- The wetland impacts have not been determined yet. If wetland and surface water impacts (excluding impacts upland cut ditches and less than 0.5 acre wetlands) exceed 1 acre, an ERP Individual permit will be required.

Sovereign Lands Discussion: (Title Determination, Delegated Authority, Correct Form of Authorization, Content of Application, Assessment of Fees, Coordination with FDEP, etc.)

- N/A

Water Quantity Discussion: (Basin Description, Design Storm Event, Pre/Post Volume, Pre/Post Discharge, Local Requirements, Other)

- Open basin discharges will require attenuation of the peak rate of discharge for a 25 year, 24 hour storm.
- Demonstrate no net fill in a 100 year floodplain.

Water Quality Discussion: (Type of Stormwater Treatment, Technical Characteristics, Non-presumptive Alternatives, Construction Phase Water Management and Erosion Control, Contaminated Sites, Ground Water Protection, etc.)

- Water quality treatment is proposed through wet-detention. Specific design requirements can be addressed at future preap meetings.

Operation And Maintenance, Legal Information: (Ownership or Perpetual Control, Eminent Domain, Work on District Property, Inspections During Const., O&M Entity, System O&M Instructions, Homeowner Association Documents, Coastal Zone Requirements, Public Safety, etc.)

- All work will be in the existing R/W except for the proposed ponds, which will involve some R/W acquisit ot

Application Type And Fee Required: (40D-4.041Permits Required, 40D-1.607 Fee Schedule, etc.)

- Permit Type to be determined after more information is provided. However, if applicable wetland and surface impacts are less than 1 acre, this should be an ERP General, with a required fee of $1600.
- Forms A,C and E
- If an Individual is required the fee is $2500.

Other: (Future Pre-Application Meetings, Fast Track, Submittal Date, Construction Start Date, Required District Permits - WUP, WOD, Well Construction, etc.)

- Schedule additional preaps as the design evolves.

Disclosure: The District ERP pre-application meeting process is a service made available to the public to assist interested parties in preparing for submittal of a complete permit application. Information shared at pre-application meetings is superseded by the actual permit application submittal. District permit decisions are based upon information submitted during the application process and Rules in effect at the time the application is complete.

THIS SPACE IS FORMATTED TO FACILITATE AND GUIDE THE DIALOGUE DURING A PRE-APPLICATION MEETING AND PROVIDE NOTE TAKIN
A SUPPLEMENTAL "PROMPT LIST" OF DISCUSSION ITEMS IS ATTACHED, WHICH SHOULD BE EXAMINED BY THE APPLICANT PARTIES PRIOI
MEETING TO IDENTIFY TOPICS FOR DISCUSSION.

Southwest Florida Water Management District
Resource Regulation Division

ERP Pre-Application Meeting NOTES

FILE No.
28-22-15thru18

Date:	July 27, 2004
Time:	11 AM
Project Name:	Park Road and Sam Allen Road Improvements
Attendees:	Michelle Hopkins Alberto Martinez Megan Arasteh Mitch Blanco John Romero

County:	Hillsborough	**S/T/R:**	15-18/28/22
Total Land acreage:	R/W	**Project acreage:**	

Prior Onsite/Offsite Permit activity:
N/A

Project Overview:
Proposed roadway improvements that involve adding two new lanes to the two existing lanes. Park Road and Sam Allen Road will be widened from I-4 north and west to just past CR 39.

Site Information Discussion: (Site Topography, SHW Levels, Flood plain Elevations, Conveyance and Storage, Tailwater Conditions, Adjacent Offsite Contributing Sources, Receiving Waterbody, Karst Formations, Existing Wells, Contaminated Sites / Coordination w/ FDEP, etc.)

- The ultimate receiving water body is the Itchepackesassa Creek
- There are four major drainage basins
- Delineate the limits of the 100 year floodplain and show no net encroachment.
- Provide soil borings to support the elevation of the SHWT and excavation depth.
- These are County Roads, but will be funded by the DOT.

Environmental Discussion: (Wetlands Onsite, Wetlands On Adjacent Properties, Site Visit, Delineation, Permanent/Temporary Impacts, SHWL, Wetland Hydrology, Drawdown Issues, Alternatives Analysis, Elimination/Reduction, Secondary and Cumulative Impacts, T&E species, Conservation Easements, Buffers, Mitigation Options, Mitigation Costs, OFW, Aquatic Preserve, etc.)

- The wetland limits will need to be reviewed by the District. They will send a written request.
- The proposed wetland impacts will likely exceed 1 acre, which will require an Individual permit.
- Mitigation will be proposed through the FDOT Mitigation Plan...373.4137. They will verify mitigation throu this process will apply even though these are County roads.

Sovereign Lands Discussion: (Title Determination, Delegated Authority, Correct Form of Authorization, Content of Application, Assessment of Fees, Coordination with FDEP, etc.)

- N/A

Water Quantity Discussion: (Basin Description, Design Storm Event, Pre/Post Volume, Pre/Post Discharge, Local Requirements, Other)

- Demonstrate that the post-development peak discharge rate will not exceed the pre-development peak discharge rate for a 25 year, 24 hour storm. They will provide modeling to show no adverse impacts.
- Demonstrate no net fill in a 100 year floodplain. We have had a history of flooding problems in an areas targ as a floodplain mitigation pond, near Sunset Oaks. They need to ensure that this project will not cause addtic impacts. They will contact Jack Moore for additional information on this issue.

Water Quality Discussion: (Type of Stormwater Treatment, Technical Characteristics, Non-presumptive Alternatives, Construction Phase Water Management and Erosion Control, Contaminated Sites, Ground Water Protection, etc.)

- Water quality treatment will be provided. Since this is an alteration to an existing roadway, they should be ab to use Section 5.8 criteria in the Basis of Review. Treat the DCIA for online retention.
- They may also need to provide equivalent treatment to offset proposed impervious areas that they are not able treat. Overall....they need to show a net benefit to water quality in each basin. They need to consider the existing treatment being provided in ditches in determining overall water quality benefit.

Operation And Maintenance, Legal Information: (Ownership or Perpetual Control, Eminent Domain, Work on District Property, Inspections During Const., O&M Entity, System O&M Instructions, Homeowner Association Documents, Coastal Zone Requirements, Public Safety, etc.)

- Provide evidence of owenership/control.

Application Type And Fee Required: (40D-4.041Permits Required, 40D-1.607 Fee Schedule, etc.)

- ERP Individual, $2500 fee, Forms A, C and E

Other: (Future Pre-Application Meetings, Fast Track, Submittal Date, Construction Start Date, Required District Permits - WUP, WOD, Well Construction, etc.)

- Schedule additional meetings as the design evolves.

Disclosure: The District ERP pre-application meeting process is a service made available to the public to assist interested parties in preparing for submittal of a complete permit application. Information shared at pre-application meetings is superseded by the actual permit application submittal. District permit decisions are based upon information submitted during the application process and Rules in effect at the time the application is complete.

Appendix C
Preliminary Pond Calculations

Project: Sam Allen/Park Rd. Reconst - Hillsborough
FPN:

Dsgn By: MMB Date: June 22, 2004
Chck By: TFS Date: July 1,2004

DRAINAGE BASIN AREA CALCULATIONS

Basin	Description	From Station	To Station	R/W Width	Basin Area (Ac.)	Cumulative Basin Area (Ac)
A	Park Road from I-4 North to Sam Allen Road	175+00	205+00	200	65.40	98.17
	Sam Allen from S-9 to Wilder	206+78	232+92	VARIES		
B	From S-4 to S-9	165+30	206+78	150	18.80	
C	From SR 39 to S-4	128+00	165+30	VARIES (120-145)	10.95	
D	From high point on Sam Allen to Sta 65+60	102+47	118+58	30	3.02	
	From Sta 65+60 to Sta 75+00	118+58	128+00	VARIES (30-105)		

Note: Basin Areas taken from Microstation.

EXISTING IMPERVIOUS AREA CALCULATIONS

Basin	Description	From Station	To Station	Existing Typical Section Description									Exist Imp Area (Ac)	Cumulative Exist Imp Area (ac)
A	Park	175+00	205+00	5	ft shldr	1	lanes @ 12	ft ea	0	ft shldr	2	directions	2.34	13.05
	Sam Allen	206+78	232+92	5	ft shldr	1	lanes @ 12	ft ea	0	ft shldr	2	directions	2.04	
	Wilder	0+00	13+91	2	ft shldr	1	lanes @ 12	ft ea	0	ft shldr	2	directions	0.89	
B	Sam Allen	165+30	206+78	5	ft shldr	1	lanes @ 12	ft ea	0	ft shldr	2	directions	3.24	
C	Sam Allen	128+00	165+30	5	ft shldr	1	lanes @ 12	ft ea	0	ft shldr	2	directions	2.91	
D	Sam Allen	102+47	118+58	0	ft shldr	1	lanes @ 12	ft ea	0	ft shldr	2	directions	0.89	
	Sam Allen	118+58	128+00	5	ft shldr	1	lanes @ 12	ft ea	0	ft shldr	2	directions	0.74	

PROPOSED IMPERVIOUS AREA CALCULATIONS

Basin	Description	From Station	To Station	Proposed Typical Section Description													Prop Imp Area (ac)	Cumulative Prop Imp Area (ac)
A	Park	175+00	205+00	5	ft s/w	0	ft curb	0	ft bike ln	2	lanes @ 12	ft ea	0	ft curb	5	ft shldr	2 directions	4.68	26.63
	Sam Allen (S-9 to Park)	206+78	209+63	5	ft s/w	5	ft shldr	4	ft bike ln	2	lanes @ 12	ft ea	2	ft curb	0	ft shldr	2 directions	0.52	
	Sam Allen (Park to Beg Taper)	209+63	218+00	5	ft s/w	5	ft shldr	0	ft bike ln	2	lanes @ 16	ft ea	2	ft curb	6	*turn ln	2 directions	1.92	
	Sam Allen (Beg to End Taper)	218+00	223+28	5	ft s/w	5	ft shldr	0	ft bike ln	2	lanes @ 19	ft ea	0	ft curb	0	ft shldr	2 directions	1.16	
	Sam Allen (Exist)	223+28	232+92	0	ft s/w	5	ft shldr	0	ft bike ln	1	lanes @ 12	ft ea	0	ft curb	0	ft shldr	2 directions	0.75	
	Wilder	0+00	13+91	0	ft s/w	0	ft curb	0	ft bike ln	1	lanes @ 12	ft ea	0	ft curb	2	ft shldr	2 directions	0.89	
B	Sam Allen	165+30	206+78	5	ft s/w	5	ft shldr	4	ft bike ln	2	lanes @ 12	ft ea	2	ft curb	0	ft shldr	2 directions	7.62	
C	Sam Allen	128+00	165+30	5	ft s/w	5	ft shldr	4	ft bike ln	2	lanes @ 12	ft ea	2	ft curb	0	ft shldr	2 directions	6.85	
D	Sam Allen	102+47	118+58	0	ft s/w	0	ft shldr	0	ft bike ln	1	lanes @ 12	ft ea	0	ft curb	0	ft shldr	2 directions	0.89	
	Sam Allen	118+58	122+50	0	ft s/w	5	ft shldr	0	ft bike ln	1	lanes @ 18	ft ea	2	ft curb	0	ft shldr	2 directions	0.45	
	Sam Allen	122+50	128+00	0	ft s/w	5	ft shldr	4	ft bike ln	2	lanes @ 12	ft ea	2	ft curb	0	ft shldr	2 directions	0.88	

Project: Sam Allen/Park Reconst - Hillsborough Dsgn by: MMB Date: 6/22/04

FPN: Check by: TFS Date: 7/1/2004

PROJECT AREA CALCULATIONS

Basin	From Sta.	To Sta.	Length (ft)	Existing Areas		Proposed Areas		Add'l Imp Area (ac)	Project Area (ac)
				Impervious Area (ac)	Pervious Area (ac)	Impervious Area (ac)	Pervious Area (ac)		
A	175+00	205+00	3000	5.28	60.12	9.94	55.46	4.66	65.40
	206+78	232+92	2614						
	0+00	13+91	1391						
B	165+30	206+78	4148	3.24	15.56	7.62	11.18	4.38	18.80
C	128+00	165+30	3730	2.91	8.04	6.85	4.10	3.94	10.95
D	102+47	118+58	1611	1.62	1.40	2.22	0.80	0.60	3.02
	118+58	128+00	942						
Totals			17436	13.05	85.12	26.63	71.54	13.58	98.17

EXISTING SOIL CURVE NUMBER CALCULATIONS

Areas by Hydrologic Group

Basin	(A) 39	(C) 74	(D or B/D) 80	(Pavement) 98	Weighted CN
A	0.00	20.04	40.08	5.28	79.61
B	0.00	0.00	15.56	3.24	83.10
C	0.00	0.00	8.04	2.91	84.79
D	0.14	0.00	1.26	1.62	87.78

PROPOSED SOIL CURVE NUMBER CALCULATIONS

Areas by Hydrologic Group

Basin	(A) 39	(C) 74	(D or B/D) 80	(Pavement) 98	Weighted CN
A	0.00	18.49	36.97	9.94	81.04
B	0.00	0.00	11.18	7.62	87.29
C	0.00	0.00	4.10	6.85	91.26
D	0.08	0.00	0.72	2.22	92.16

Project: Sam Allen/Park Reconst. Design By: MMB Date: June 22, 2004

FPN: Check By: TFS Date: July 1, 2004

REQUIRED POND VOLUME CALCULATIONS

(1) Basin #	(2) Project Area (ac)	(3) CN_{PRE}	(4) CN_{POST}	(5) S_{PRE} (in)	(6) S_{POST} (in)	(7) Q_{PRE} (in)	(8) Q_{POST} (in)	(9) V_{T1} Required (ac-ft)	(10) V_A Required (ac-ft)	(11) Total Volume Required (ac-ft)
A	65.40	79.61	81.04	2.56	2.34	10.32	10.52	5.45	1.09	6.54
B	18.80	83.10	87.29	2.03	1.46	10.81	11.36	1.57	0.86	2.43
C	10.95	84.79	91.26	1.79	0.96	11.03	11.88	0.91	0.78	1.69
D	3.02	87.78	92.16	1.39	0.85	11.43	11.99	0.25	0.14	0.39
Totals	98.17					43.59	45.75	8.18	2.87	11.05

(1) Pond Number

(2) Total Project Area

(3) Weighted Pre Curve Number (See Existing Soil Curve Number Calculations)

(4) Weighted Post Curve Number (See Proposed Soil Curve Number Calculations)

(5) Pre Soil Storage, $S_{PRE} = (1000 / CN_{PRE} - 10)$

(5) Post Soil Storage, $S_{POST} = (1000 / CN_{POST} - 10)$

(7) Pre Runoff Depth, $Q_{PRE} = (P - 0.2S_{PRE})^2 / (P + 0.8S_{PRE})$, where P = 100yr-24hr rainfall depth 12.96 inches

(8) Post Runoff Depth, Q_{POST} $(P - 0.2S_{POST})^2 / (P + 0.8S_{POST})$, where P = 100yr-24hr rainfall depth 12.96 inches

(9) Required Treatment Volume 1, V_{T1} = 1" x Total Project Area

(10) Required Attenuation Volume, $V_A = (Q_{POST} - Q_{PRE})$ x Project Area

(11) Total Volume Required, $V_{T+A} = V_{T2} + V_A$

Project: Sam Allen/Park Reconstruction - Hillsborough
FPN:
Design By: MMB Date: June 22, 2004
Check By: TFS Date: July 1, 2004

PROVIDED POND VOLUME CALCULATIONS

(1) Pond #	(2) Treat. Type	(3) Pond Area (ac)	Esmt. Area (ac)	(4) Established Water Table El. (ft)	(5) DHW El. (ft)	(6) Top of Berm El. (ft)	(7) Avg Grnd El. (ft)	(8) Area at Fence (ac)	(9) Area at TOB (ac)	(10) Area at DHW (ac)	(11) Area at Water Table (ac)	(12) Control Str El. (ft)	(13) Area at Control Str (ac)	(14) V_T Provided (ac-ft)	(15) V_A Provided (ac-ft)	(16) Total Volume Provided (ac-ft)	(17) Comments
SMF-A-1	Wet	4.60	0.26	107.00	109.00	110.00	113.50	4.52	4.24	3.49	3.20	108.50	3.41	4.96	1.72	6.69	Set SHWL at 2' below DHW. Use Impermeable PVC Pond Liner.
SMF-B-1	Wet	1.50	0.01	105.50	109.00	110.00	105.50	1.45	1.25	0.86	0.63	107.00	0.72	1.02	1.58	2.60	
SMF-B-2	Wet	1.60	0.02	106.00	109.00	110.00	106.00	1.55	1.37	0.96	0.74	107.50	0.85	1.19	1.35	2.54	
SMF-C-1	Wet	1.87	0.46	105.00	106.88	107.88	105.00	1.82	1.67	1.21	1.06	106.00	1.14	1.10	1.04	2.14	
SMF-C-2	Wet	1.86	0.39	105.00	106.88	107.88	105.00	1.81	1.66	1.21	1.05	106.00	1.13	1.09	1.03	2.12	
SMF-D-1	Wet	0.86	0.00	104.50	106.00	107.00	104.50	0.82	0.74	0.45	0.37	105.50	0.42	0.40	0.22	0.61	
SMF-D-2	Wet	0.60	0.03	104.00	106.00	107.00	106.40	0.57	0.55	0.31	0.23	105.50	0.28	0.38	0.15	0.53	Set SHWL at 2' below DHW. Use Impermeable PVC Pond Liner.

(1) Pond Site Alternative
(2) Treatment Type: Determined by the soil type and the depth of the water table obtained from the SCS / USDA Soils Survey for Hillsborough County
(3) Total Pond Site Area (Right of Way Area)
(4) Water Table Elevation: Determined from the SCS/ USDA Soils Survey for Hillsborough County -- assumed to be at existing ground (worst case scenario)
(5) Design Highwater Elevation (DHW): Lowest edge of pavement draining to pond - 1.0 foot of freeboard
(6) Top Of Berm Elevation (TOB): DHW elevation + 1 foot of freeboard (assumed)
(7) Average Ground Elevation: Elevation is based on the SWFWMD 1.0 ft contour maps
(8) Area at the Fence: Area of the fence line, determined by subtracting the 2.0 ft distance between the fence line and the right-of-way line
(9) Area at the TOB: Area of the top of berm of the pond
(10) Area at DHW: Determined by assuming 1-ft distance between the berm and DHW elevation
(11) Area at the Water Table elevation: The area at the Water Table elevation.
(12) Control Structure Elevation: The elevation of the control structure which is necessary to obtain the required treatment and retention volume in the pond
(13) Area at Control Elevation: The area at the elevation noted in column (12)
(14) V_T: The treatment + retention volume provided between the water table and the control structure elevation
(15) V_A: The attenuation volume provided between the control structure elevations and the DHW elevation
(16) Total Volume Provided (V_T + V_A): The total volume provided is determined by adding columns 14 and 15 (V_T and V_A).

Outfall Pipe Cost Estimate

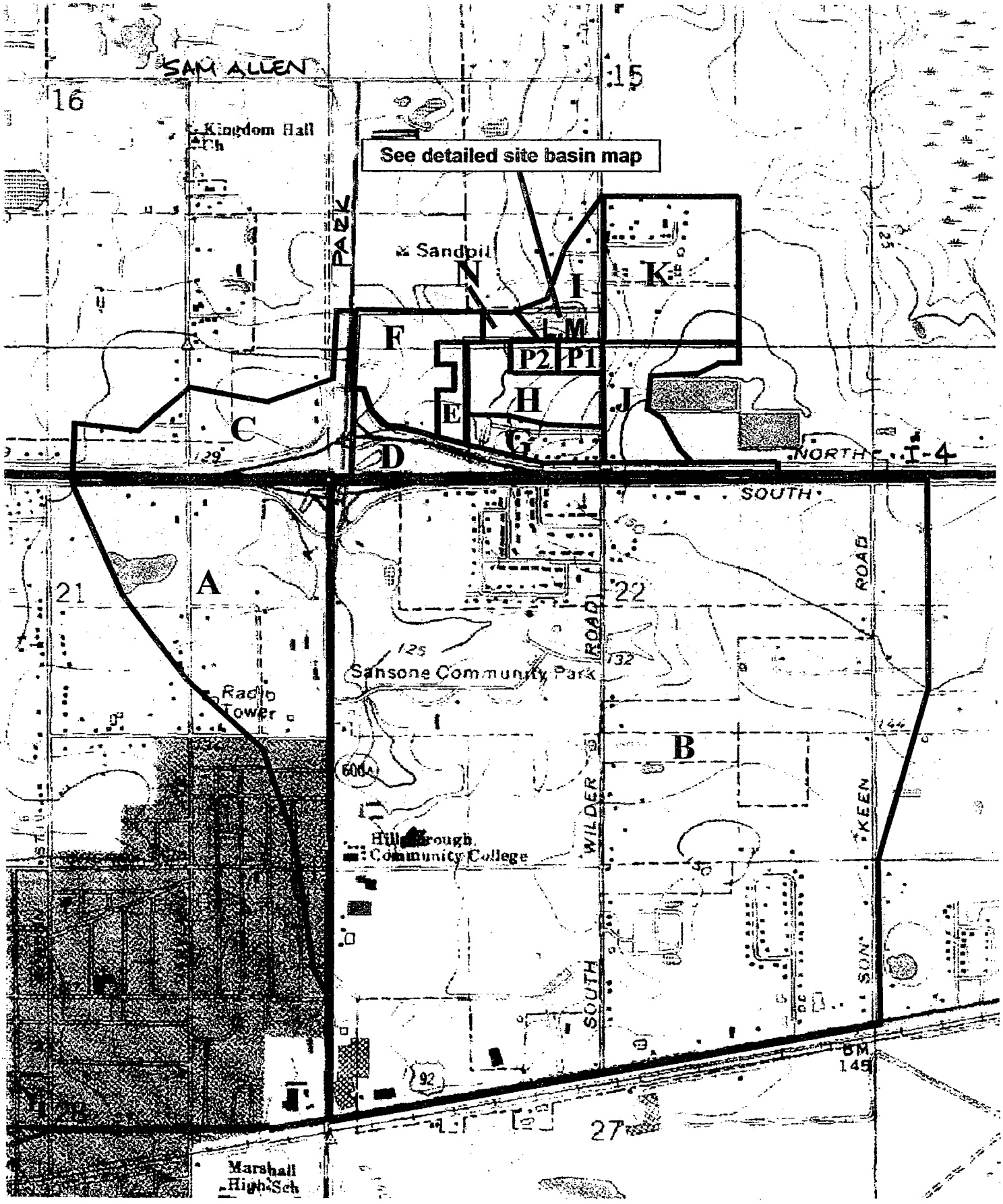
SMF	Approximate Length of Pipe	FDOT Item Average Unit Cost assuming 36" RCP	Cost Estimate
	(ft)	($)	($)
SMF-A-1	300	$73.98	$22,194
SMF-B-1	60	$73.98	$4,439
SMF-B-2	35	$73.98	$2,589
SMF-C-1	125	$73.98	$9,248
SMF-C-2	35	$73.98	$2,589
SMF-D-1	65	$73.98	$4,809
SMF-D-2	125	$73.98	$9,248

Impermeable Liner Cost Estimate

Basin	Area of Pond at DHW	Area of Pond at DHW	Area of Pond at DHW	FDOT Item Average Unit Cost Per SY	Cost Estimate
	(ac)	(ft)	(sy)	($)	($)
SMF-A-1	3.49	152024.4	16891.6	$34.66	$585,463
SMF-B-1	0	0	0	$34.66	$0
SMF-B-2	0	0	0	$34.66	$0
SMF-C-1	0	0	0	$34.66	$0
SMF-C-2	0	0	0	$34.66	$0
SMF-D-1	0	0	0	$34.66	$0
SMF-D-2	0.3	13068	1452	$34.66	$50,326

Appendix D
Drainage Maps from Area Projects:
Bill Heard Chevrolet ERP & I-4 (Segment 4)
Design Documentation

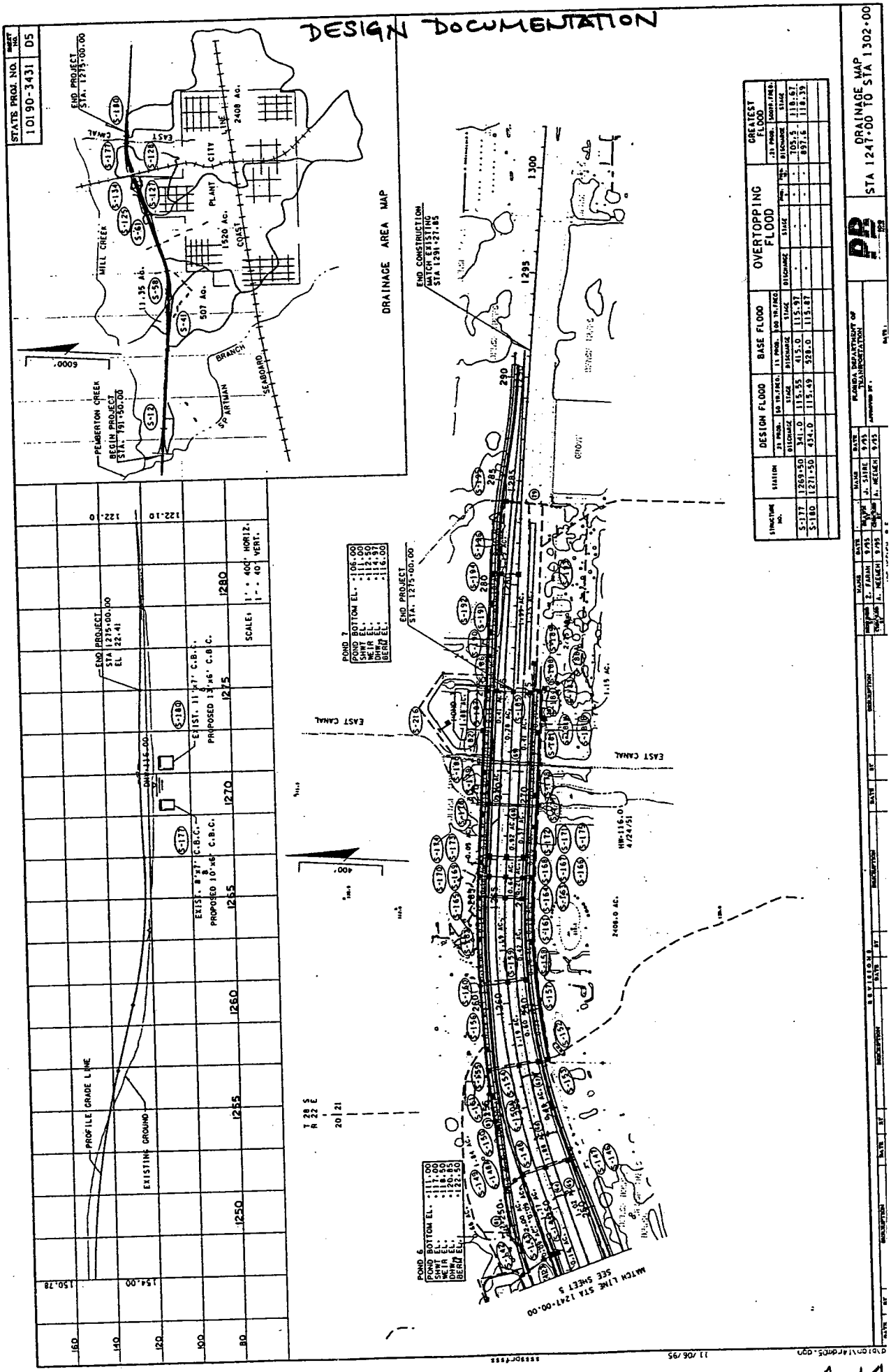
PERMIT No. 023895.001



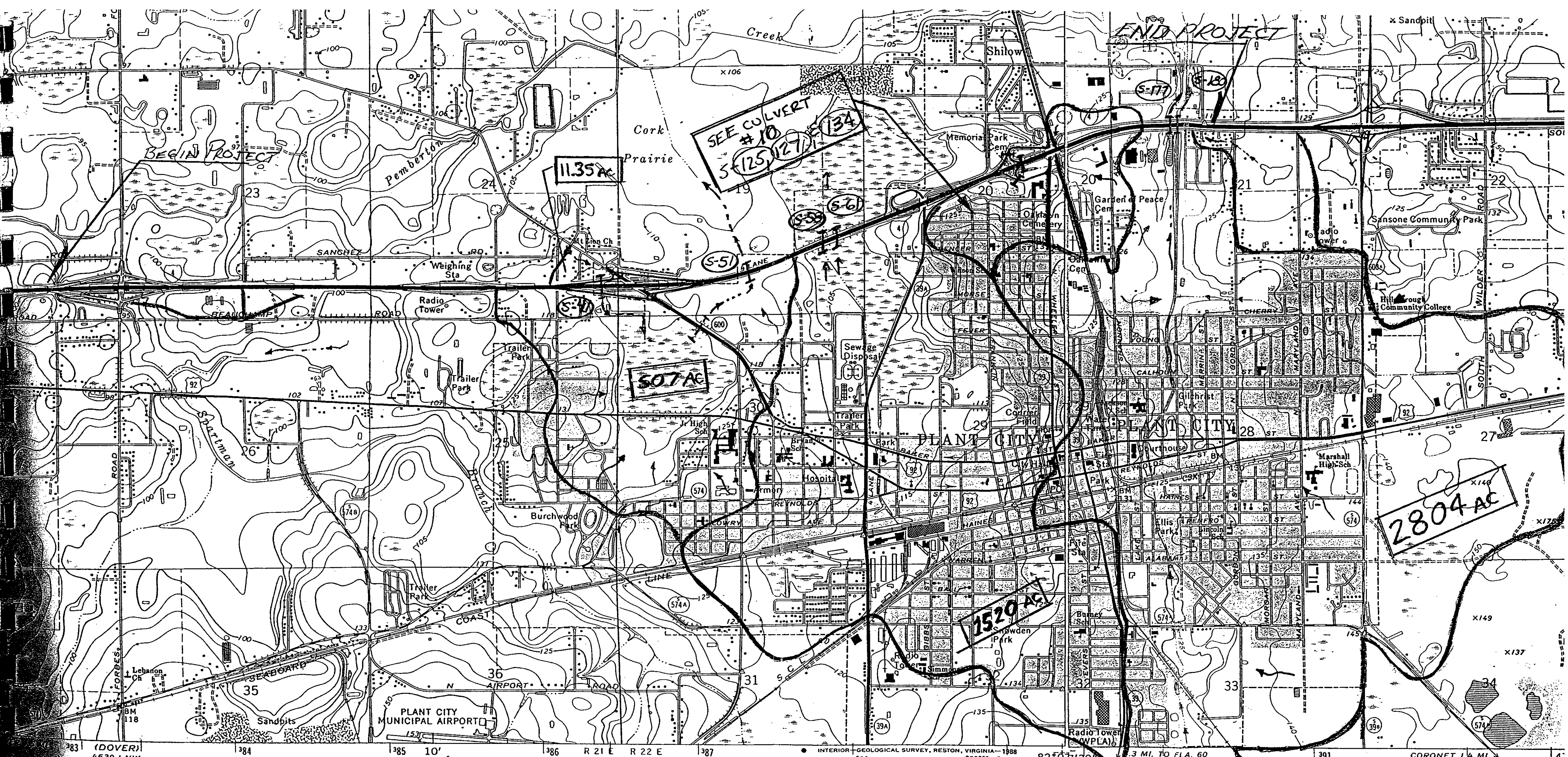
Basin Map - Proposed Conditions

I-4 (SEGMENT T)

DESIGN DOCUMENTATION



A-14



(DOVER) 4539 I NW

SCALE 1:24 000

0 — 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETRE

CONTOUR INTERVAL 5 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

FLORIDA

QUADRANGLE LOCATION

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

ROAD CLASSIFICATION

Primary highway, hard surface	Light-duty road, hard or improved surface
Secondary highway, hard surface	Unimproved road
Interstate Route / U. S. Route	State Route

UNIVERSAL MAP COMPANY
Division of
EDWARDS-PANTER SURVEYING, INC.
1520 Commercial Park Dr. - Phone 665-4601
Lakeland, Florida 33801

PLANT CITY WEST, FLA.
28082-A2-TF-024
PHOTOINSPECTED 1983
1975
DMA 4540 II SW—SERIES V847

Mapped, edited, and published by the Geological Survey

Control by USGS, NOS/NOAA, and Florida Department of Transportation

Topography by photogrammetric methods from aerial photographs taken November, December 1971. Field checked 1975

Supersedes Army Map Service Plant City map dated 1944

Projection and 10,000-foot grid ticks: Florida coordinate system, west zone (transverse Mercator)

1000-meter Universal Transverse Mercator grid ticks, zone 17, shown in blue. 1927 North American datum

To place on the predicted North American Datum 1983 move the projection lines 29 meters south and 18 meters west as shown by dashed corner ticks

Fine red dashed lines indicate selected fence and field lines where generally visible on aerial photographs. This information is unchecked

Red tint indicates area in which only landmark buildings are shown

UTM GRID AND 1975 MAGNETIC NORTH DECLINATION

Revisions shown in purple compiled in cooperation with State of Florida agencies from aerial photographs taken 1984 and other source data. This information not field checked. Map edited 1987

I-4 SEGMENT 4 DESIGN DOCUMENTATION

Appendix E
Preliminary Flood Plain Encroachment Calculations

PB PARSONS BRINCKERHOFF COMPUTATION SHEET

Page 1 of 2

Made by MMB

Date 7/26/04

Checked by

Date

Subject SAM ALLEN/PARK ROAD FLOOD PLAIN IMPACTS

100 YR FLOOD PLAIN IMPACTS

REFERENCE FIRM PANELS (1992)

120112 0270C (FORMERLY 275C)
120112 0290C (1984)

AFTER SUPER-IMPOSING THE 100 YR FLOODPLAIN OVER THE PROJECT SITE IN CADD, THE REVISED IMPACTS PER BASIN ARE AS FOLLOWS (ASSUME 1' DEPTH):

BASIN B

2.59 AC-FT - R/W TO R/W ONLY

FPC-B-1 AREA= 2.8 Ac (INCLUDES 0.2 Ac FOR ESMT.)

PARSONS BRINCKERHOFF COMPUTATION SHEET

Subject: SAM ALLEN/PARK ROAD
FLOOD PLAIN IMPACTS

Page 2 of 2
Made by MMB
Date 7/26/04
Checked by
Date

BASIN C

8.4 AC-FT - R/W TO R/W ONLY

IMPACTS FOR PROPOSED PONDS (AND EASEMENTS) ARE AS FOLLOWS:

SMF-C-1 = 2.33 AC-FT

SMF-C-2 = 2.25 AC-FT

DEPENDING ON THE SELECTED POND, FLOOD PLAIN IMPACTS RANGE FROM

10.65 ACFT TO 10.73

PROVIDED FLOOD PLAIN COMPENSATION SITE

= 11.19 AC-FT (INCLUDES ESMT OF 0.46 AC)

Appendix F
Projected SMF Costs

2004 SP 29 PM 1:51

MEMORANDUM

Date: September 21, 2004

To: Aurelie J. Anthony, Deputy District Right-of-Way Manager, Operations, FDOT District Seven

From: Marilyn Jackson, Right-of-Way Program Manager glc for MJ

CC: ~~Margaret Smith~~ Scott Farash
Toni Loyd
FDOT File Copy
HDR File Copy

Re: Cost Estimate

FP#:	257862 1
WPI#:	N/A
County:	Hillsborough
Description:	Sam Allen Road from Alexander Street Ext. to Park Rd. from I-4 to Sam Allen
Purpose:	Special Purpose
HDR#:	15383-05

Per your request, attached please find copies of the above referenced cost estimates submitted for distribution. The total of all phases is as follows:

Description	Total of All Phases	
Mainline	$561,400	
Option "A" Intersection Realignment	$3,177,400	
SMF-A-1	$0	
SMF-B-1	REVISED ~~$601,500~~	$563,100
SMF-B-2	REVISED ~~$1,162,000~~	$1,129,900
SMF-C-1	$465,100	
SMF-C-2	$870,200	
SMF-D-1	$610,400	
SMF-D-2	REVISED ~~$291,000~~	$108,900
FPC-B-1	$438,600	
FPC-C-1	$854,600	

Thank you for the opportunity to provide this service, and please feel free to call with questions or concerns.

HDR Engineering, Inc.
2202 N. West Shore Boulevard
Suite 250
Tampa, FL 33607-5755
Phone (813 282-2300
Fax (813) 282-2458
www.hdrinc.com

FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT SEVEN RIGHT OF WAY COST ESTIMATE

HDR#: 15383-05

FM#:	257862 1	Alternate:	Mainline	District:	Seven
County:	Hillsborough	Segment:	N/A	Date:	7-Sep-04
State Rd.:	N/A	FAP#:	0295-005	C.E. Sequence	N/A
Project Des.	Sam Allen Road from Alexander St. Ext. to Park Road & Park Road from I-4 to Sam Allen				

Parcels	Gross	Net
Commercial	0	0
Residential	0	0
Unimproved	5	3
Total Parcels	5	3

Estimated Relocatees:	
Business	0
Residential	0
Signs	0
Personal Property	1
Total Relocatees	1

R/W SUPPORT COSTS (PHASE 41)

						Amount
1. Direct Labor Cost	(Parcels	3	x	13,000 =	Rate)	39,000
2. Indirect Overhead	(Parcels	3	x	0 =	Rate)	0
3.						
					TOTAL PHASE 41	$39,000

R/W OPS (PHASE 4B)

								Amount
4. Appraisal Fees Through Trial					3	Parcels	x 12,000 =	36,000
5. Business Damage CPA Fees Through Trial					1	Claims	x 19,000 =	19,000
6. Court Reporter & Process Servers	75%	x	3	=	2	Parcels	x 500 =	1,000
7. Expert Witness	75%	x	3	=	2	Parcels	x 30,000 =	60,000
8. Mediators	50%	x	3	=	2	Parcels	x 2,400 =	4,800
9. Demolition, Asb. Abate., Survey, etc.					0	Imprvmet	x 15,000 =	0
10. Miscellaneous Contracts					1	Per Project	x 15,000 =	15,000
11. Appraisal Fee Review					2	Parcels	x 5,000 =	10,000
12.							TOTAL PHASE 4B	$145,800

R/W LAND COSTS (PHASE 43)

						Amount	Subtotal
13. Land, Improvements & Severance Damages and Cost to Cure Amount	124,224	x	130%	* Design plan stage	=	161,500	
14. Water Retention & Mit.	0	x	130%	(0 Parcels w/o R/W Acq)	=	0	
15. SUBTOTAL				(Lines 13 &14)			161,500
16. Admin. Settlements (Factor	45%	x	30%	of Line 15)	=	21,800	
17. Litigation Awards (Factor	60%	x	70%	of Line 15)	=	67,800	
18. Business Damages (Claims	1	x	0	)	=	1,600	
19. Bus. Damages Incr (Factor	25%	x	$ 1,600	)	=	400	
20. Owner Appr. Fees (Parcels	2	x	$10,000	)	=	20,000	
21. Owner CPA Fees (Claims	1	x	$10,000	)	=	10,000	
22. Defend.Atty Fees (Sum of Lines 16, 17 & 19)	90,000	x	40%	)	=	36,000	
23. Owner Expert Witn (Comm.+Unimp.)	0	+	3	) x 18,000	=	54,000	
24. Other Condemn. Costs	3	x	$500		=	1,500	
25. SUBTOTAL				(Lines 16 thru 24)	=		213,100
26.						TOTAL PHASE 43	$374,600

* *Design contingency for design plan stage:*
(1) PD&E plans - 130% (2) 30% plans - 125% (3) 60% plans - 120% (4) 90% plans -115% (5) 268 Date -110%

R/W ACQUISITION CONSULTANT (PHASE 42)

27. Acquisition Consultant-50% of parcels	$20,000	x	0	TOTAL PHASE 42	$0

RELOCATION COSTS (PHASE 45)

					Number		Amount
	Replacement Housing						
28. Owner	$20,000	x		0	=		0
29. Tenant	$10,000	x		0	=		0
	Move Costs						
30. Residential	$1,500	x		0	=		0
31. Business/Farm	$20,000	x		0	=		0
32. Personal Property	$2,000	x		1	=		2,000
33. (Lines 28 thru 32)						TOTAL PHASE 45	$2,000
34. Relocation Services Cost				$200	(Not in Phase Total)		
35.							
36.							
37.					(All Phases)	TOTAL ESTIMATE	$561,400

Real Estate:	Marilyn Jackson	Signed: Marilyn Jackson	Date: 9/21/04
Bus. Dam. :	Gerson Preston Robinson	Signed: By Attachment	Date:
Relocation:	N/A	Signed:	Date:
Overall Review:	Daniel Trosper	Signed: Daniel Trosper Jr	Date: 9/21/04

Cost Estimate Sequence #: Dated: In the Amount of $ Data Input Completion Date:

REMARKS: This estimate includes mainline requirements from 4 ownerships along the south side of Sam Allen Road from approximately Sta. #118+50 to Sta. #139.

The following indicates the estimator's confidence in the above estimate:

	Type A - indicates the most confidence
	Type B - indicates above average confidence
X	Type C - indicates below average confidence
	Type D - indicates the least or no confidence

Future Value Factors @	10%
Year One	1.1000
Year Two	1.2100
Year Three	1.3310
Year Four	1.4641
Year Five	1.6105

The following indicates the Department's purpose for this estimate:
Work Program Update: _____ Gaming 1: _____ Special Purpose: X Docs to RW: _____
Comments: _____

FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT SEVEN RIGHT OF WAY COST ESTIMATE

HDR#: 15383-05

FM#:	2578621	Alternate:	Option "A" Int. Realign.	District:	Seven
County:	Hillsborough	Segment:	N/A	Date:	7-Sep-04
State Rd.:	N/A	FAP#:	0295-005	C.E. Sequence	N/A
Project Des.	Sam Allen Road from Alexander St. Ext. to Park Road & Park Road from I-4 to Sam Allen				

Parcels	Gross	Net
Commercial	0	0
Residential	0	0
Unimproved	3	3
Total Parcels	3	3

Estimated Relocatees:	
Business	0
Residential	0
Signs	0
Personal Property	1
Total Relocatees	1

R/W SUPPORT COSTS (PHASE 41)

						Amount
1. Direct Labor Cost	(Parcels	3	x	13,000 =	Rate)	39,000
2. Indirect Overhead	(Parcels	3	x	0 =	Rate)	0
3.						

TOTAL PHASE 41 $39,000

R/W OPS (PHASE 4B)

							Amount
4. Appraisal Fees Through Trial				3	Parcels	x 12,000 =	36,000
5. Business Damage CPA Fees Through Trial				0	Claims	x 19,000 =	0
6. Court Reporter & Process Servers				2	Parcels	x 500 =	1,000
7. Expert Witness	75%	x 3	=	2	Parcels	x 30,000 =	60,000
8. Mediators	75%	x 3	=	2	Parcels	x 2,400 =	4,800
9. Demolition, Asb. Abate., Survey, etc.	50%	x 3	=	0	Imprvmet	x 15,000 =	0
10. Miscellaneous Contracts				1	Per Project	x 15,000 =	15,000
11. Appraisal Fee Review				2	Parcels	x 5,000 =	10,000
12.							

TOTAL PHASE 4B $126,800

R/W LAND COSTS (PHASE 43)

					Amount	Subtotal
13. Land, Improvements & Severance Damages and Cost to Cure Amount	1,270,100	x	130%	* Design plan stage =	1,651,100	
14. Water Retention & Mit.	0	x	130%	(0 Parcels w/o R/W Acq)	0	
15. SUBTOTAL				(Lines 13 &14)		1,651,100
16. Admin. Settlement (Factor	45%	x	30%	of Line 15) =	222,900	
17. Litigation Awards (Factor	60%	x	70%	of Line 15) =	693,500	
18. Business Damages (Claims	0	x	0	) =	0	
19. Bus. Damages Incr (Factor	25%	x	$ -	) =	0	
20. Owner Appr. Fees (Parcels	2	x	$10,000	) =	20,000	
21. Owner CPA Fees (Claims	0	x	$10,000	) =	0	
22. Defend Atty Fees (Sum of Lines 16, 17 & 19)	916,400	x	40%	) =	366,600	
23. Owner Expert Witn (Comm.+Unimp.)	0	+	3	) x 18,000 =	54,000	
24. Other Condemn. Costs	3	x	$500	=	1,500	
25. SUBTOTAL				(Lines 16 thru 24) =		1,358,500
26.						

TOTAL PHASE 43 $3,009,600

* *Design contingency for design plan stage:*
(1) PD&E plans -130% (2) 30% plans - 125% (3) 60% plans - 120% (4) 90% plans -115% (5) 268 Date -110%

R/W ACQUISITION CONSULTANT (PHASE 42)

27. Acquisition Consultant-50% of parcels $20,000 x 0

TOTAL PHASE 42 $0

RELOCATION COSTS (PHASE 45)

					Number		Amount
Replacement Housing							
28. Owner	$20,000	x		0	=		0
29. Tenant	$10,000	x		0	=		0
Move Costs							
30. Residential	$1,500	x		0	=		0
31. Business/Farm	$20,000	x		0	=		0
32. Personal Property	$2,000	x		1	=		2,000
33. (Lines 28 thru 32)							
34. Relocation Services Cost			$200	(Not in Phase Total)			
35.							
36.							
37.							

TOTAL PHASE 45 $2,000

(All Phases) TOTAL ESTIMATE $3,177,400

Real Estate:	Marilyn Jackson	Signed:	Date: 09/06/04
Bus. Dam.:	Gerson Preston Robinson	Signed: By Attachment	Date: 09/06/04
Relocation:	N/A	Signed:	Date:
Overall Review:	Daniel Trosper	Signed: Daniel Trosper Jr.	Date: 09/06/04

Cost Estimate Sequence #: Dated: In the Amount of $ Data Input Completion Date:

REMARKS: This estimate includes mainline requirements for the realignment of the Park Road/Sam Allen Road.

The following indicates the estimator's confidence in the above estimate:

	Type A - indicates the most confidence
	Type B - indicates above average confidence
X	Type C - indicates below average confidence
	Type D - indicates the least or no confidence

Future Value Factors @	10%
Year One	1.1000
Year Two	1.2100
Year Three	1.3310
Year Four	1.4641
Year Five	1.6105

The following indicates the Department's purpose for this estimate:

Work Program Update: _____ Gaming 1: _____ Special Purpose: X Docs to RW: _____

Comments: _____

FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT SEVEN RIGHT OF WAY COST ESTIMATE

HDR#: 15383-05

FM#:	257862 1	Alternate:	SMF-A-1	District:	Seven
County:	Hillsborough	Segment:	N/A	Date:	7-Sep-04
State Rd.:	N/A	FAP#:	0295-005	C.E. Sequence	N/A
Project Des.	Sam Allen Road from Alexander St. Ext. to Park Road & Park Road from I-4 to Sam Allen				

Parcels	Gross	Net
Commercial	0	0
Residential	0	0
Unimproved	1	0
Total Parcels	1	0

Estimated Relocatees:	
Business	0
Residential	0
Signs	0
Personal Property	1
Total Relocatees	1

R/W SUPPORT COSTS (PHASE 41)

							Amount
1. Direct Labor Cost	(Parcels	0	x	13,000 =	Rate)		0
2. Indirect Overhead	(Parcels	0	x	0 =	Rate)		0
3.						TOTAL PHASE 41	$0

R/W OPS (PHASE 4B)

								Amount
4. Appraisal Fees Through Trial					0	Parcels	x 12,000 =	0
5. Business Damage CPA Fees Through Trial					0	Claims	x 19,000 =	0
6. Court Reporter & Process Servers	75%	x	0	=	0	Parcels	x 500 =	0
7. Expert Witness	75%	x	0	=	0	Parcels	x 30,000 =	0
8. Mediators	50%	x	0	=	0	Parcels	x 2,400 =	0
9. Demolition, Asb. Abate., Survey, etc.					0	Imprvmet	x 15,000 =	0
10. Miscellaneous Contracts					0	Per Project	x 15,000 =	0
11. Appraisal Fee Review					0	Parcels	x 5,000 =	0
12.							TOTAL PHASE 4B	$0

R/W LAND COSTS (PHASE 43)

					Amount	Subtotal
13. Land, Improvements & Severance Damages and Cost to Cure Amount	0	x	130%	* Design plan stage =	0	
14. Water Retention & Mit.	0	x	130%	(0 Parcels w/o R/W Acq)	0	
15. SUBTOTAL				(Lines 13 &14)		0
16. Admin. Settlements (Factor	0%	x	0%	of Line 15) =	0	
17. Litigation Awards (Factor	60%	x	100%	of Line 15) =	0	
18. Business Damages (Claims	0	x	$0	) =	0	
19. Bus. Damages Incr (Factor	25%	x	$ -	) =	0	
20. Owner Appr. Fees (Parcels	0	x	$10,000	) =	0	
21. Owner CPA Fees (Claims	0	x	$10,000	) =	0	
22. Defend.Atty Fees (Sum of Lines 16, 17 & 19)	0	x	40%	) =	0	
23. Owner Expert Witn (Comm.+Unimp.)	0	+	0	) x 18,000 =	0	
24. Other Condemn. Costs	0	x	$500	=	0	
25. SUBTOTAL				(Lines 16 thru 24) =		0
26.					TOTAL PHASE 43	$0

* *Design contingency for design plan stage:*
(1) PD&E plans - 130% (2) 30% plans - 125% (3) 60% plans - 120% (4) 90% plans -115% (5) 268 Date -110%

R/W ACQUISITION CONSULTANT (PHASE 42)

27. Acquisition Consultant-50% of parcels $20,000 x 0 — TOTAL PHASE 42 $0

RELOCATION COSTS (PHASE 45)

					Number		Amount
Replacement Housing							
28. Owner	$20,000	x	0	=	0		
29. Tenant	$10,000	x	0	=	0		
Move Costs							
30. Residential	$1,500	x	0	=	0		
31. Business/Farm	$20,000	x	0	=	0		
32. Personal Property	$2,000	x	1	=	2,000		
33. (Lines 28 thru 32)						TOTAL PHASE 45	$0
34. Relocation Services Cost				$0	(Not In Phase Total)		
35.							
36.							
37.						(All Phases) TOTAL ESTIMATE	$0

Real Estate:	Marilyn Jackson	Signed:	Date: 09/06/04
Bus. Dam.:	N/A	Signed:	Date:
Relocation:	N/A	Signed:	Date:
Overall Review:	Daniel Trosper	Signed:	Date: 09/06/04

Cost Estimate Sequence #: Dated: In the Amount of $ Data Input Completion Date:

REMARKS: This site is currently owned by FDOT.

The following indicates the estimator's confidence in the above estimate:

	Type A - indicates the most confidence
	Type B - indicates above average confidence
X	Type C - indicates below average confidence
	Type D - indicates the least or no confidence

Future Value Factors @	10%
Year One	1.1000
Year Two	1.2100
Year Three	1.3310
Year Four	1.4641
Year Five	1.6105

The following indicates the Department's purpose for this estimate:
Work Program Update: _____ Gaming 1: _____ Special Purpose: X Docs to RW: _____
Comments: _____

FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT SEVEN RIGHT OF WAY COST ESTIMATE

HDR#: 15383-05

FM#:	257862 1	Alternate:	SMF-B-1	District:	Seven
County:	Hillsborough	Segment:	N/A	Date:	7-Sep-04
State Rd.:	N/A	FAP#:	0295-005	C.E. Sequence	N/A
Project Des	Sam Allen Road from Alexander St. Ext. to Park Road & Park Road from I-4 to Sam Allen				

Parcels	Gross	Net
Commercial	0	0
Residential	0	0
Unimproved	1	1
Total Parcels	1	1

Estimated Relocatees:	
Business	0
Residential	0
Signs	0
Personal Property	1
Total Relocatees	1

R/W SUPPORT COSTS (PHASE 41)

							Amount
1. Direct Labor Cost	(Parcels	1	x	13,000 =	Rate)		13,000
2. Indirect Overhead	(Parcels	1	x	0 =	Rate)		0
3.						TOTAL PHASE 41	$13,000

R/W OPS (PHASE 4B)

								Amount
4. Appraisal Fees Through Trial					1	Parcels	x 12,000 =	12,000
5. Business Damage CPA Fees Through Trial					0	Claims	x 19,000 =	0
6. Court Reporter & Process Servers	75%	x	1	=	1	Parcels	x 500 =	500
7. Expert Witness	75%	x	1	=	1	Parcels	x 30,000 =	30,000
8. Mediators	50%	x	1	=	1	Parcels	x 2,400 =	2,400
9. Demolition, Asb. Abate., Survey, etc.					0	Imprvmet	x 15,000 =	0
10. Miscellaneous Contracts					1	Per Project	x 15,000 =	15,000
11. Appraisal Fee Review					1	Parcels	x 5,000 =	5,000
12.							TOTAL PHASE 4B	$64,900

R/W LAND COSTS (PHASE 43)

						Amount	Subtotal
13. Land, Improvements & Severance Damages and Cost to Cure Amount							268,000
14. Water Retention & Mit.	0	x	130%	* Design plan stage	=	0	
15. SUBTOTAL	206,120	x	130%	(0 Parcels w/o R/W Acq)		268,000	
16. Admin. Settlements (Factor				(Lines 13 &14)			
17. Litigation Awards (Factor	0%	x	0%	of Line 15)	=	0	
18. Business Damages (Claims	60%	x	100%	of Line 15)	=	160,800	
19. Bus. Damages Incr (Factor	0	x	$0	)	=	0	
20. Owner Appr. Fees (Parcels	25%	x	$ -	)	=	0	
21. Owner CPA Fees (Claims	1	x	$10,000	)	=	10,000	
22. Defend Atty Fees (Sum of Lines 16, 17 & 19)	0	x	$10,000	)	=	0	
23. Owner Expert Witn (Comm.+Unimp.)	160,800	x	40%	)	=	64,300	
24. Other Condemn. Costs	0	+	1	) x 18,000	=	18,000	
25. SUBTOTAL	1	x	$500		=	500	
26.				(Lines 16 thru 24)	=		253,600
						TOTAL PHASE 43	$521,600

* *Design contingency for design plan stage:*
(1) PD&E plans - 130% (2) 30% plans - 125% (3) 60% plans - 120% (4) 90% plans -115% (5) 268 Date -110%

R/W ACQUISITION CONSULTANT (PHASE 42)

27. Acquisition Consultant-50% of parcels	$20,000	x	0	TOTAL PHASE 42	$0

RELOCATION COSTS (PHASE 45)

					Amount
Replacement Housing			Number		
28. Owner	$20,000	x	0	=	0
29. Tenant	$10,000	x	0	=	
Move Costs					
30. Residential	$1,500	x	0	=	
31. Business/Farm	$20,000	x	0	=	0
32. Personal Property	$2,000	x	1	=	2,000
33. (Lines 28 thru 32)					TOTAL PHASE 45 $2,000
34. Relocation Services Cost			$200	(Not In Phase Total)	
35.					
36.					
37.				(All Phases)	TOTAL ESTIMATE $601,500

REVISED

Real Estate:	Marilyn Jackson	Signed:	Marilyn Jackson Date: 09/06/04
Bus. Dam. :	N/A	Signed:	Date:
Relocation:	N/A	Signed:	Date:
Overall Review:	Daniel Trosper	Signed:	Daniel Trosper Date: 09/06/04

Cost Estimate Sequence #: Dated: In the Amount of $ Data Input Completion Date:

REMARKS: Administrative settlements and litigation awards have been changed to reflect one ownership. Administrative settlements are considered to be zero, while litigation is factored at 60% of land and improvements.

The following indicates the estimator's confidence in the above estimate:

	Type A - indicates the most confidence
	Type B - indicates above average confidence
X	Type C - indicates below average confidence
	Type D - indicates the least or no confidence

Future Value Factors @	10%
Year One	1.1000
Year Two	1.2100
Year Three	1.3310
Year Four	1.4641
Year Five	1.6105

The following indicates the Department's purpose for this estimate:
Work Program Update: _____ Gaming 1: _____ Special Purpose: X Docs to RW: _____
Comments: _____

FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT SEVEN RIGHT OF WAY COST ESTIMATE

HDR#: N/A

FM#:	257862 1	Alternate:	SMF-B-1	District:	Seven
County:	Hillsborough	Segment:	N/A	Date:	5-Nov-04
State Rd.:	N/A	FAP#:	0295-005	C.E. Sequence	N/A
Project Des.	Sam Allen Road from Alexander St. Ext. to Park Road & Park Road from I-4 to Sam Allen				

Parcels	Gross	Net
Commercial	0	0
Residential	0	0
Unimproved	1	1
Total Parcels	1	1

Estimated Relocatees:	
Business	0
Residential	0
Signs	0
Personal Property	1
Total Relocatees	1

R/W SUPPORT COSTS (PHASE 41)

							Amount
1. Direct Labor Cost	(Parcels	1	x	13,000 =	Rate)		13,000
2. Indirect Overhead	(Parcels	1	x	0 =	Rate)		0
3.						TOTAL PHASE 41	$13,000

R/W OPS (PHASE 4B)

								Amount
4. Appraisal Fees Through Trial					1	Parcels	x 12,000 =	12,000
5. Business Damage CPA Fees Through Trial					0	Claims	x 19,000 =	0
6. Court Reporter & Process Servers	75%	x	1	= 1	Parcels	x 500 =	500
7. Expert Witness	75%	x	1	= 1	Parcels	x 30,000 =	30,000
8. Mediators	50%	x	1	= 1	Parcels	x 2,400 =	2,400
9. Demolition, Asb. Abate., Survey, etc.					0	Imprvmet	x 15,000 =	0
10. Miscellaneous Contracts					1	Per Project	x 15,000 =	15,000
11. Appraisal Fee Review					1	Parcels	x 5,000 =	5,000
12.							TOTAL PHASE 4B	$64,900

R/W LAND COSTS (PHASE 43)

						Amount	Subtotal
13. Land, Improvements & Severance Damages and Cost to Cure Amount	0	x	130% * Design plan stage	=	0		
14. Water Retention & Mit.	190,111	x	130% (0 Parcels w/o R/W Acq)		247,100		
15. SUBTOTAL			(Lines 13 &14)				247,100
16. Admin. Settlements (Factor	0%	x	0% of Line 15)	=	0		
17. Litigation Awards (Factor	60%	x	100% of Line 15)	=	148,300		
18. Business Damages (Claims	0	x	$0)	=	0		
19. Bus. Damages Incr (Factor	25%	x	$ -)	=	0		
20. Owner Appr. Fees (Parcels	1	x	$10,000)	=	10,000		
21. Owner CPA Fees (Claims	0	x	$10,000)	=	0		
22. Defend.Atty Fees (Sum of Lines 16, 17 & 19)	148,300	x	40%)	=	59,300		
23. Owner Expert Witn (Comm.+Unimp.)	0	+	1) x 18,000	=	18,000		
24. Other Condemn. Costs	1	x	$500	=	500		
25. SUBTOTAL			(Lines 16 thru 24)	=		236,100	
26.					TOTAL PHASE 43		$483,200

* *Design contingency for design plan stage:*
(1) PD&E plans - 130% (2) 30% plans - 125% (3) 60% plans - 120% (4) 90% plans -115% (5) 268 Date -110%

R/W ACQUISITION CONSULTANT (PHASE 42)

27. Acquisition Consultant-50% of parcels	$20,000	x	0	TOTAL PHASE 42	$0

RELOCATION COSTS (PHASE 45)

Replacement Housing			Number		Amount	
28. Owner	$20,000	x	0	=	0	
29. Tenant	$10,000	x	0	=	0	
Move Costs						
30. Residential	$1,500	x	0	=	0	
31. Business/Farm	$20,000	x	0	=	0	
32. Personal Property	$2,000	x	1	=	2,000	
33. (Lines 28 thru 32)						TOTAL PHASE 45 $2,000
34. Relocation Services Cost			$200	(Not in Phase Total)		
35.						
36.						
37.				(All Phases)		TOTAL ESTIMATE $563,100

Real Estate:	Daniel Trosper	Signed:	Date: 11/05/04
Bus. Dam. :	N/A	Signed:	Date:
Relocation:	N/A	Signed:	Date:
Overall Review:	Daniel Trosper	Signed:	Date: 11/05/04

Cost Estimate Sequence #: Dated: In the Amount of $ Data Input Completion Date:

REMARKS: Administrative settlements and litigation awards have been changed to reflect one ownership. Administrative settlements are considered to be zero, while litigation is factored at 60% of land and improvements.
This is a revision of the estimate dated 9/6/04, with the size of the pond reduced from 2.25 acres to 1.5 acres, according to Pond Designer Mitch Blanco.

The following indicates the estimator's confidence in the above estimate:

	Type A - indicates the most confidence
	Type B - indicates above average confidence
X	Type C - indicates below average confidence
	Type D - indicates the least or no confidence

Future Value Factors @	10%
Year One	1.1000
Year Two	1.2100
Year Three	1.3310
Year Four	1.4641
Year Five	1.6105

The following indicates the Department's purpose for this estimate:
Work Program Update: _____ Gaming 1: _____ Special Purpose: X Docs to RW: _____
Comments: _____

FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT SEVEN RIGHT OF WAY COST ESTIMATE

HDR#: 15383-05

FM#:	257862 1	Alternate:	SMF-B-2	District:	Seven
County:	Hillsborough	Segment:	N/A	Date:	7-Sep-04
State Rd#:	N/A	FAP#:	0295-005	C.E. Sequence	N/A
Project Des.	Sam Allen Road from Alexander St. Ext. to Park Road & Park Road from I-4 to Sam Allen				

Parcels	Gross	Net
Commercial	0	0
Residential	0	0
Unimproved	1	1
Total Parcels	1	1

Estimated Relocatees:	
Business	0
Residential	0
Signs	0
Personal Property	1
Total Relocatees	1

R/W SUPPORT COSTS (PHASE 41)

							Amount
1. Direct Labor Cost	(Parcels	1	x	13,000 =	Rate)		13,000
2. Indirect Overhead	(Parcels	1	x	0 =	Rate)		0
3.						TOTAL PHASE 41	$13,000

R/W OPS (PHASE 4B)

								Amount
4. Appraisal Fees Through Trial					1	Parcels	x 12,000 =	12,000
5. Business Damage CPA Fees Through Trial					0	Claims	x 19,000 =	0
6. Court Reporter & Process Servers	75%	x	1	=	1	Parcels	x 500 =	500
7. Expert Witness	75%	x	1	=	1	Parcels	x 30,000 =	30,000
8. Mediators	50%	x	1	=	1	Parcels	x 2,400 =	2,400
9. Demolition, Asb. Abate., Survey, etc.					0	Imprvmet	x 15,000 =	0
10. Miscellaneous Contracts					1	Per Project	x 15,000 =	15,000
11. Appraisal Fee Review					1	Parcels	x 5,000 =	5,000
12.							TOTAL PHASE 4B	$64,900

R/W LAND COSTS (PHASE 43)

						Amount	Subtotal
13. Land, Improvements & Severance Damages and Cost to Cure Amount	0	x	130%	* Design plan stage	=	0	
14. Water Retention & Mit.	440,492	x	130%	(0 Parcels w/o R/W Acq)		572,600	
15. SUBTOTAL				(Lines 13 &14)			572,600
16. Admin. Settlement (Factor	0%	x	0%	of Line 15)	=	0	
17. Litigation Awards (Factor	60%	x	100%	of Line 15)	=	343,600	
18. Business Damages (Claims	0	x	$0	)	=	0	
19. Bus. Damages Incr (Factor	25%	x	$ -	)	=	0	
20. Owner Appr. Fees (Parcels	1	x	$10,000	)	=	10,000	
21. Owner CPA Fees (Claims	0	x	$10,000	)	=	0	
22. Defend.Atty Fees (Sum of Lines 16, 17 & 19)	343,600	x	40%	)	=	137,400	
23. Owner Expert Witn (Comm.+Unimp.)	0	+	1	) x 18,000	=	18,000	
24. Other Condemn. Costs	1	x	$500		=	500	
25. SUBTOTAL				(Lines 16 thru 24)	=		509,500
26.						TOTAL PHASE 43	$1,082,100

* *Design contingency for design plan stage:*
(1) PD&E plans - 130% (2) 30% plans - 125% (3) 60% plans - 120% (4) 90% plans -115% (5) 268 Date -110%

R/W ACQUISITION CONSULTANT (PHASE 42)

27. Acquisition Consultant-50% of parcels $20,000 x 0 — TOTAL PHASE 42 $0

RELOCATION COSTS (PHASE 45)

	Replacement Housing		Number		Amount
28. Owner	$20,000	x	0	=	0
29. Tenant	$10,000	x	0	=	0
Move Costs					
30. Residential	$1,500	x	0	=	0
31. Business/Farm	$20,000	x	0	=	0
32. Personal Property	$2,000	x	1	=	2,000
33. (Lines 28 thru 32)					TOTAL PHASE 45 $2,000
34. Relocation Services Cost				$200	(Not in Phase Total)
35.					
36.					
37.					(All Phases) TOTAL ESTIMATE $1,162,000

REVISED

Real Estate:	Marilyn Jackson	Signed:	Marilyn Jackson Date: 09/06/04
Bus. Dam.:	N/A	Signed:	Date:
Relocation:	N/A	Signed:	Date:
Overall Review:	Daniel Trosper	Signed:	Daniel Trosper Date: 09/06/04

Cost Estimate Sequence #: Dated: In the Amount of $ Data Input Completion Date:

REMARKS: Administrative settlements and litigation awards have been changed to reflect one ownership. Administrative settlements are considered to be zero, while litigation is factored at 60% of land and improvements.

The following indicates the estimator's confidence in the above estimate:

- Type A - indicates the most confidence
- Type B - indicates above average confidence
- X Type C - indicates below average confidence
- Type D - indicates the least or no confidence

Future Value Factors @	10%
Year One	1.1000
Year Two	1.2100
Year Three	1.3310
Year Four	1.4641
Year Five	1.6105

The following indicates the Department's purpose for this estimate:
Work Program Update: _____ Gaming 1: _____ Special Purpose: X Docs to RW: _____
Comments: _____

FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT SEVEN RIGHT OF WAY COST ESTIMATE

HDR#: N/A

FM#:	257862 1	Alternate:	SMF-B-2	District:	Seven
County:	Hillsborough	Segment:	N/A	Date:	5-Nov-04
State Rd.:	N/A	FAP#:	0295-005	C.E. Sequence	N/A
Project Des.	Sam Allen Road from Alexander St. Ext. to Park Road & Park Road from I-4 to Sam Allen				

Parcels	Gross	Net
Commercial	0	0
Residential	0	0
Unimproved	1	1
Total Parcels	1	1

Estimated Relocatees:	
Business	0
Residential	0
Signs	0
Personal Property	1
Total Relocatees	1

R/W SUPPORT COSTS (PHASE 41)

							Amount
1. Direct Labor Cost	(Parcels	1	x	13,000 =	Rate)		13,000
2. Indirect Overhead	(Parcels	1	x	0 =	Rate)		0
3.						TOTAL PHASE 41	$13,000

R/W OPS (PHASE 4B)

								Amount
4. Appraisal Fees Through Trial					1	Parcels	x 12,000 =	12,000
5. Business Damage CPA Fees Through Trial					0	Claims	x 19,000 =	0
6. Court Reporter & Process Servers	75%	x	1	= 1	Parcels	x 500 =		500
7. Expert Witness	75%	x	1	= 1	Parcels	x 30,000 =		30,000
8. Mediators	50%	x	1	= 1	Parcels	x 2,400 =		2,400
9. Demolition, Asb. Abate., Survey, etc.					0	Imprvmet	x 15,000 =	0
10. Miscellaneous Contracts					1	Per Project	x 15,000 =	15,000
11. Appraisal Fee Review					1	Parcels	x 5,000 =	5,000
12.							TOTAL PHASE 4B	$64,900

R/W LAND COSTS (PHASE 43)

						Amount	Subtotal
13. Land, Improvements & Severance Damages and Cost to Cure Amount	0	x	130%	* Design plan stage	=	0	
14. Water Retention & Mit.	427,042	x	130%	(0 Parcels w/o R/W Acq)		555,200	
15. SUBTOTAL				(Lines 13 &14)			555,200
16. Admin. Settlements (Factor	0%	x	0%	of Line 15)	=	0	
17. Litigation Awards (Factor	60%	x	100%	of Line 15)	=	333,100	
18. Business Damages (Claims	0	x	$0	)	=	0	
19. Bus. Damages Incr (Factor	25%	x	$ -	)	=	0	
20. Owner Appr. Fees (Parcels	1	x	$10,000	)	=	10,000	
21. Owner CPA Fees (Claims	0	x	$10,000	)	=	0	
22. Defend.Atty Fees (Sum of Lines 16, 17 & 19)	333,100	x	40%	)	=	133,200	
23. Owner Expert Witn (Comm.+Unimp.)	0	+	1	) x 18,000	=	18,000	
24. Other Condemn. Costs	1	x	$500		=	500	
25. SUBTOTAL				(Lines 16 thru 24)	=		494,800
26.						TOTAL PHASE 43	$1,050,000

* *Design contingency for design plan stage:*
(1) PD&E plans - 130% (2) 30% plans - 125% (3) 60% plans - 120% (4) 90% plans -115% (5) 268 Date -110%

R/W ACQUISITION CONSULTANT (PHASE 42)

27. Acquisition Consultant-50% of parcels	$20,000	x	0	TOTAL PHASE 42	$0

RELOCATION COSTS (PHASE 45)

Replacement Housing			Number		Amount	
28. Owner	$20,000	x	0	=	0	
29. Tenant	$10,000	x	0	=	0	
Move Costs						
30. Residential	$1,500	x	0	=	0	
31. Business/Farm	$20,000	x	0	=	0	
32. Personal Property	$2,000	x	1	=	2,000	
33. (Lines 28 thru 32)						TOTAL PHASE 45 $2,000
34. Relocation Services Cost			$200	(Not In Phase Total)		
35.						
36.						
37.				(All Phases)		TOTAL ESTIMATE $1,129,900

Real Estate:	Daniel Trosper	Signed:	Dan Trosper	Date:	11/05/04
Bus. Dam. :	N/A	Signed:		Date:	
Relocation:	N/A	Signed:		Date:	
Overall Review:	Daniel Trosper	Signed:	Dan Trosper	Date:	11/05/04

Cost Estimate Sequence #: Dated: In the Amount of $ Data Input Completion Date:

REMARKS: Administrative settlements and litigation awards have been changed to reflect one ownership. Administrative settlements are considered to be zero, while litigation is factored at 60% of land and improvements. This is a revision of the previous estimate, dated 9/6/04, with the pond szie reduced from 2.25 acres to 1.6 acres, according to Pond Designer Mitch Blanco.

The following indicates the estimator's confidence in the above estimate:

	Type A - Indicates the most confidence
	Type B - Indicates above average confidence
X	Type C - Indicates below average confidence
	Type D - Indicates the least or no confidence

Future Value Factors @	10%
Year One	1.1000
Year Two	1.2100
Year Three	1.3310
Year Four	1.4641
Year Five	1.6105

The following indicates the Department's purpose for this estimate:
Work Program Update: _____ Gaming 1: _____ Special Purpose: X Docs to RW: _____
Comments: _____

FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT SEVEN RIGHT OF WAY COST ESTIMATE

HDR#: 15383-05

FM#:	257862 1	Alternate:	SMF-C-1	District:	Seven
County:	Hillsborough	Segment:	N/A	Date:	7-Sep-04
State Rd.:	N/A	FAP#:	0295-005	C.E. Sequence	N/A
Project Des.	Sam Allen Road from Alexander St. Ext. to Park Road & Park Road from I-4 to Sam Allen				

Parcels	Gross	Net
Commercial	0	0
Residential	0	0
Unimproved	1	1
Total Parcels	1	1

Estimated Relocatees:	
Business	0
Residential	0
Signs	0
Personal Property	1
Total Relocatees	1

R/W SUPPORT COSTS (PHASE 41)

							Amount
1. Direct Labor Cost	(Parcels	1	x	13,000 =	Rate)		13,000
2. Indirect Overhead	(Parcels	1	x	0 =	Rate)		0
3.						TOTAL PHASE 41	$13,000

R/W OPS (PHASE 4B)

								Amount
4. Appraisal Fees Through Trial					1	Parcels	x 12,000 =	12,000
5. Business Damage CPA Fees Through Trial					0	Claims	x 19,000 =	0
6. Court Reporter & Process Servers	75%	x	1	=	1	Parcels	x 500 =	500
7. Expert Witness	75%	x	1	=	1	Parcels	x 30,000 =	30,000
8. Mediators	50%	x	1	=	1	Parcels	x 2,400 =	2,400
9. Demolition, Asb. Abate., Survey, etc.					0	Imprvmet	x 15,000 =	0
10. Miscellaneous Contracts					1	Per Project	x 15,000 =	15,000
11. Appraisal Fee Review					1	Parcels	x 5,000 =	5,000
12.							TOTAL PHASE 4B	$64,900

R/W LAND COSTS (PHASE 43)

						Amount	Subtotal
13. Land, Improvements & Severance Damages and Cost to Cure Amount	0	x	130%	* Design plan stage	=	0	
14. Water Retention & Mit.	149,186	x	130%	(0 Parcels w/o R/W Acq)		193,900	
15. SUBTOTAL				(Lines 13 &14)			193,900
16. Admin. Settlements (Factor	0%	x	0%	of Line 15)	=	0	
17. Litigation Awards (Factor	60%	x	100%	of Line 15)	=	116,300	
18. Business Damages (Claims	0	x	$0	)	=	0	
19. Bus. Damages Incr (Factor	25%	x	$ -	)	=	0	
20. Owner Appr. Fees (Parcels	1	x	$10,000	)	=	10,000	
21. Owner CPA Fees (Claims	0	x	$10,000	)	=	0	
22. Defend.Atty.Fees (Sum of Lines 16, 17 & 19)	116,300	x	40%	)	=	46,500	
23. Owner Expert Witn (Comm.+Unimp.)	0	+	1	) x 18,000	=	18,000	
24. Other Condemn. Costs	1	x	$500		=	500	
25. SUBTOTAL				(Lines 16 thru 24)	=		191,300
26.						TOTAL PHASE 43	$385,200

* *Design contingency for design plan stage:*
(1) PD&E plans - 130% (2) 30% plans - 125% (3) 60% plans - 120% (4) 90% plans -115% (5) 268 Date -110%

R/W ACQUISITION CONSULTANT (PHASE 42)

27. Acquisition Consultant-50% of parcels	$20,000	x	0	TOTAL PHASE 42 $0

RELOCATION COSTS (PHASE 45)

					Number		Amount
Replacement Housing							
28. Owner	$20,000	x			0	=	0
29. Tenant	$10,000	x			0	=	0
Move Costs							
30. Residential	$1,500	x			0	=	0
31. Business/Farm	$20,000	x			0	=	0
32. Personal Property	$2,000	x			1	=	2,000
33. (Lines 28 thru 32)							TOTAL PHASE 45 $2,000
34. Relocation Services Cost				$200	(Not In Phase Total)		
35.							
36.							
37.						(All Phases)	TOTAL ESTIMATE $465,100

Real Estate:	Marilyn Jackson	Signed:	Marilyn Jackson	Date:	09/06/04
Bus. Dam. :	N/A	Signed:		Date:	
Relocation:	N/A	Signed:		Date:	
Overall Review:	Daniel Trosper	Signed:	Daniel Trosper	Date:	09/06/04

Cost Estimate Sequence #: Dated: In the Amount of $ Data Input Completion Date:

REMARKS: Administrative settlements and litigation awards have been changed to reflect one ownership. Administrative settlements are considered to be zero, while litigation is factored at 60% of land and improvements.

The following indicates the estimator's confidence in the above estimate:

	Type A - indicates the most confidence
	Type B - indicates above average confidence
X	Type C - indicates below average confidence
	Type D - indicates the least or no confidence

Future Value Factors @	10%
Year One	1.1000
Year Two	1.2100
Year Three	1.3310
Year Four	1.4641
Year Five	1.6105

The following indicates the Department's purpose for this estimate:
Work Program Update: _____ Gaming 1: _____ Special Purpose: X Docs to RW: _____
Comments: _____

FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT SEVEN RIGHT OF WAY COST ESTIMATE

HDR#: 15383-05

FM#:	257862 1	Alternate:	SMF-C-2	District:	Seven
County:	Hillsborough	Segment:	N/A	Date:	7-Sep-04
State Rd.:	N/A	FAP#:	0295-005	C.E. Sequence	N/A
Project Des.	Sam Allen Road from Alexander St. Ext. to Park Road & Park Road from I-4 to Sam Allen				

Parcels	Gross	Net
Commercial	0	0
Residential	0	0
Unimproved	1	1
Total Parcels	1	1

Estimated Relocatees:	
Business	0
Residential	0
Signs	0
Personal Property	1
Total Relocatees	1

R/W SUPPORT COSTS (PHASE 41)

						Amount
1. Direct Labor Cost	(Parcels	1	x	13,000 =	Rate)	13,000
2. Indirect Overhead	(Parcels	1	x	0 =	Rate)	0
3.						

TOTAL PHASE 41 $13,000

R/W OPS (PHASE 4B)

							Amount
4. Appraisal Fees Through Trial				1	Parcels	x 12,000 =	12,000
5. Business Damage CPA Fees Through Trial				0	Claims	x 19,000 =	0
6. Court Reporter & Process Servers	75%	x 1	=	1	Parcels	x 500 =	500
7. Expert Witness	75%	x 1	=	1	Parcels	x 30,000 =	30,000
8. Mediators	50%	x 1	=	1	Parcels	x 2,400 =	2,400
9. Demolition, Asb. Abate., Survey, etc.				0	Imprvmet	x 15,000 =	0
10. Miscellaneous Contracts				1	Per Project	x 15,000 =	15,000
11. Appraisal Fee Review				1	Parcels	x 5,000 =	5,000
12.							

TOTAL PHASE 4B $64,900

R/W LAND COSTS (PHASE 43)

					Amount	Subtotal
13. Land, Improvements & Severance Damages and Cost to Cure Amount	0	x	130%	* Design plan stage =	0	
14. Water Retention & Mit.	318,483	x	130%	(0 Parcels w/o R/W Acq)	414,000	
15. SUBTOTAL				(Lines 13 &14)		414,000
16. Admin. Settlements (Factor	0%	x	0%	of Line 15) =	0	
17. Litigation Awards (Factor	60%	x	100%	of Line 15) =	248,400	
18. Business Damages (Claims	0	x	$0	) =	0	
19. Bus. Damages Incr. (Factor	25%	x	$ -	) =	0	
20. Owner Appr. Fees (Parcels	1	x	$10,000	) =	10,000	
21. Owner CPA Fees (Claims	0	x	$10,000	) =	0	
22. Defend Atty Fees (Sum of Lines 16, 17 & 19)	248,400	x	40%	) =	99,400	
23. Owner Expert Witn (Comm.+Unimp.)	0	+	1	) x 18,000 =	18,000	
24. Other Condemn. Costs	1	x	$500	=	500	
25. SUBTOTAL				(Lines 16 thru 24) =		376,300
26.						

TOTAL PHASE 43 $790,300

* *Design contingency for design plan stage:*
(1) PD&E plans - 130% (2) 30% plans - 125% (3) 60% plans - 120% (4) 90% plans -115% (5) 268 Date -110%

R/W ACQUISITION CONSULTANT (PHASE 42)

27. Acquisition Consultant-50% of parcels $20,000 x 0

TOTAL PHASE 42 $0

RELOCATION COSTS (PHASE 45)

					Number		Amount
Replacement Housing							
28. Owner	$20,000	x	0	=	0		
29. Tenant	$10,000	x	0	=	0		
Move Costs							
30. Residential	$1,500	x	0	=	0		
31. Business/Farm	$20,000	x	0	=	0		
32. Personal Property	$2,000	x	1	=	2,000		
33. (Lines 28 thru 32)							
34. Relocation Services Cost			$200	(Not In Phase Total)			

TOTAL PHASE 45 $2,000

35.
36.
37.

(All Phases) TOTAL ESTIMATE $870,200

Real Estate:	Marilyn Jackson	Signed:	Marilyn Jackson	Date: 09/06/04
Bus. Dam. :	N/A	Signed:		Date:
Relocation:	N/A	Signed:		Date:
Overall Review:	Daniel Trosper	Signed:	Daniel Trosper Jr	Date: 09/06/04

Cost Estimate Sequence #: Dated: In the Amount of $ Data Input Completion Date:

REMARKS: Administrative settlements and litigation awards have been changed to reflect one ownership. Administrative settlements are considered to be zero, while litigation is factored at 60% of land and improvements.

The following indicates the estimator's confidence in the above estimate:

	Type A - indicates the most confidence
	Type B - indicates above average confidence
X	Type C - indicates below average confidence
	Type D - indicates the least or no confidence

Future Value Factors @	10%
Year One	1.1000
Year Two	1.2100
Year Three	1.3310
Year Four	1.4641
Year Five	1.6105

The following indicates the Department's purpose for this estimate:
Work Program Update: _____ Gaming 1: _____ Special Purpose: X Docs to RW: _____
Comments: _____

FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT SEVEN RIGHT OF WAY COST ESTIMATE

HDR#: 15383-05

FM#:	257862 1	Alternate:	SMF-D-1	District:	Seven
County:	Hillsborough	Segment:	N/A	Date:	7-Sep-04
State Rd.:	N/A	FAP#:	0295-005	C.E. Sequence	N/A
Project Des.	Sam Allen Road from Alexander St. Ext. to Park Road & Park Road from I-4 to Sam Allen				

Parcels	Gross	Net
Commercial	0	0
Residential	0	0
Unimproved	1	1
Total Parcels	1	1

Estimated Relocatees:	
Business	0
Residential	0
Signs	0
Personal Property	1
Total Relocatees	1

R/W SUPPORT COSTS (PHASE 41)

							Amount
1. Direct Labor Cost	(Parcels	1	x	13,000 =	Rate)		13,000
2. Indirect Overhead	(Parcels	1	x	0 =	Rate)		0
3.						TOTAL PHASE 41	$13,000

R/W OPS (PHASE 4B)

								Amount
4. Appraisal Fees Through Trial					1	Parcels	x 12,000 =	12,000
5. Business Damage CPA Fees Through Trial					0	Claims	x 19,000 =	0
6. Court Reporter & Process Servers	75%	x	1	=	1	Parcels	x 500 =	500
7. Expert Witness	75%	x	1	=	1	Parcels	x 30,000 =	30,000
8. Mediators	50%	x	1	=	1	Parcels	x 2,400 =	2,400
9. Demolition, Asb. Abate., Survey, etc.					0	Imprvmet	x 15,000 =	0
10. Miscellaneous Contracts					1	Per Project	x 15,000 =	15,000
11. Appraisal Fee Review					1	Parcels	x 5,000 =	5,000
12.							TOTAL PHASE 4B	$64,900

R/W LAND COSTS (PHASE 43)

						Amount	Subtotal
13. Land, Improvements & Severance Damages and Cost to Cure Amount	0	x	130%	* Design plan stage	=	0	
14. Water Retention & Mit.	209,848	x	130%	(0 Parcels w/o R/W Acq)		272,800	
15. SUBTOTAL				(Lines 13 &14)			272,800
16. Admin. Settlement (Factor	0%	x	0%	of Line 15)	=	0	
17. Litigation Awards (Factor	60%	x	100%	of Line 15)	=	163,700	
18. Business Damages (Claims	0	x	$0	)	=	0	
19. Bus. Damages Incr (Factor	25%	x	$ -	)	=	0	
20. Owner Appr. Fees (Parcels	1	x	$10,000	)	=	10,000	
21. Owner CPA Fees (Claims	0	x	$10,000	)	=	0	
22. Defend.Atty Fees (Sum of Lines 16, 17 & 19)	163,700	x	40%	)	=	65,500	
23. Owner Expert Witn (Comm.+Unimp.)	0	+	1	) x 18,000	=	18,000	
24. Other Condemn. Costs	1	x	$500		=	500	
25. SUBTOTAL				(Lines 16 thru 24)	=		257,700
26.						TOTAL PHASE 43	$530,500

* *Design contingency for design plan stage:*
(1) PD&E plans -130% (2) 30% plans - 125% (3) 60% plans - 120% (4) 90% plans -115% (5) 268 Date -110%

R/W ACQUISITION CONSULTANT (PHASE 42)

27. Acquisition Consultant-50% of parcels	$20,000	x	0	TOTAL PHASE 42	$0

RELOCATION COSTS (PHASE 45)

					Number		Amount
Replacement Housing							
28. Owner	$20,000	x		0	=		0
29. Tenant	$10,000	x		0	=		0
Move Costs							
30. Residential	$1,500	x		0	=		0
31. Business/Farm	$20,000	x		0	=		0
32. Personal Property	$2,000	x		1	=		2,000
33. (Lines 28 thru 32)							
34. Relocation Services Cost			$200	(Not in Phase Total)		TOTAL PHASE 45	$2,000
35.							
36.							
37.						(All Phases) TOTAL ESTIMATE	$610,400

Real Estate:	Marilyn Jackson	Signed:	Marilyn Jackson	Date:	09/06/04
Bus. Dam.:	N/A	Signed:		Date:	
Relocation:	N/A	Signed:		Date:	
Overall Review:	Daniel Trosper	Signed:	Daniel Trosper	Date:	09/06/04

Cost Estimate Sequence #: Dated: In the Amount of $ Data Input Completion Date:

REMARKS: Administrative settlements and litigation awards have been changed to reflect one ownership. Administrative settlements are considered to be zero, while litigation is factored at 60% of land and improvements.

The following indicates the estimator's confidence in the above estimate:

	Type A - Indicates the most confidence
	Type B - Indicates above average confidence
X	Type C - Indicates below average confidence
	Type D - Indicates the least or no confidence

Future Value Factors @	10%
Year One	1.1000
Year Two	1.2100
Year Three	1.3310
Year Four	1.4641
Year Five	1.6105

The following indicates the Department's purpose for this estimate:

Work Program Update: _____ Gaming 1: _____ Special Purpose: X Docs to RW: _____

Comments: _____

REVISED

FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT SEVEN RIGHT OF WAY COST ESTIMATE

HDR#: 15383-05

FM#:	257862 1	Alternate:	SMF-D-2	District:	Seven
County:	Hillsborough	Segment:	N/A	Date:	7-Sep-04
State Rd.:	N/A	FAP#:	0295-005	C.E. Sequence	N/A
Project Des.	Sam Allen Road from Alexander St. Ext. to Park Road & Park Road from I-4 to Sam Allen				

Parcels	Gross	Net
Commercial	0	0
Residential	0	0
Unimproved	2	2
Total Parcels	2	2

Estimated Relocatees:	
Business	0
Residential	0
Signs	0
Personal Property	1
Total Relocatees	1

R/W SUPPORT COSTS (PHASE 41)

							Amount
1. Direct Labor Cost	(Parcels	2	x	13,000 =	Rate)		26,000
2. Indirect Overhead	(Parcels	2	x	0 =	Rate)		0
3.						TOTAL PHASE 41	$26,000

R/W OPS (PHASE 4B)

								Amount
4. Appraisal Fees Through Trial					2	Parcels	x 12,000 =	24,000
5. Business Damage CPA Fees Through Trial					0	Claims	x 19,000 =	0
6. Court Reporter & Process Servers	75%	x	2	=	2	Parcels	x 500 =	1,000
7. Expert Witness	75%	x	2	=	2	Parcels	x 30,000 =	60,000
8. Mediators	50%	x	2	=	1	Parcels	x 2,400 =	2,400
9. Demolition, Asb. Abate., Survey, etc.					0	Imprvmet	x 15,000 =	0
10. Miscellaneous Contracts					1	Per Project	x 15,000 =	15,000
11. Appraisal Fee Review					1	Parcels	x 5,000 =	5,000
12.							TOTAL PHASE 4B	$107,400

R/W LAND COSTS (PHASE 43)

						Amount	Subtotal
13. Land, Improvements & Severance Damages and Cost to Cure Amount	0	x	130%	* Design plan stage	=	0	
14. Water Retention & Mit.	36,817	x	130%	(0 Parcels w/o R/W Acq)		47,900	
15. SUBTOTAL				(Lines 13 &14)			47,900
16. Admin. Settlement (Factor	45%	x	30%	of Line 15)	=	6,500	
17. Litigation Awards (Factor	60%	x	70%	of Line 15)	=	20,100	
18. Business Damages (Claims	0	x	0	)	=	10,000	
19. Bus. Damages Incr (Factor	25%	x	$ 10,000	)	=	2,500	
20. Owner Appr. Fees (Parcels	2	x	$10,000	)	=	20,000	
21. Owner CPA Fees (Claims	0	x	$10,000	)	=	0	
22. Defend.Atty Fees (Sum of Lines 16, 17 & 19)	29,100	x	40%	)	=	11,600	
23. Owner Expert Witn (Comm.+Unimp.)	0	+	2	) x 18,000	=	36,000	
24. Other Condemn. Costs	2	x	$500		=	1,000	
25. SUBTOTAL				(Lines 16 thru 24)	=		107,700
26.						TOTAL PHASE 43	$155,600

* *Design contingency for design plan stage:*
(1) PD&E plans - 130% (2) 30% plans - 125% (3) 60% plans - 120% (4) 90% plans -115% (5) 268 Date -110%

R/W ACQUISITION CONSULTANT (PHASE 42)

27. Acquisition Consultant-50% of parcels	$20,000	x	0	TOTAL PHASE 42	$0

RELOCATION COSTS (PHASE 45)

			Number		Amount
Replacement Housing					
28. Owner	$20,000	x	0	=	0
29. Tenant	$10,000	x	0	=	0
Move Costs					
30. Residential	$1,500	x	0	=	0
31. Business/Farm	$20,000	x	0	=	0
32. Personal Property	$2,000	x	1	=	2,000
33. (Lines 28 thru 32)					
34. Relocation Services Cost			$200	(Not in Phase Total)	
35.				TOTAL PHASE 45	$2,000
36.					
37.				(All Phases) TOTAL ESTIMATE	$291,000

REVISED

Real Estate:	Marilyn Jackson	Signed:	Marilyn Jackson	Date: 09/07/04
Bus. Dam. :	Gerson Preston Robinson	Signed:	By Attachment	Date: 09/07/04
Relocation:	N/A	Signed:		Date:
Overall Review:	Daniel Trosper	Signed:	Daniel Trosper	Date: 09/07/04

Cost Estimate Sequence #: Dated: In the Amount of $ Data Input Completion Date:

REMARKS: Business damages attributable to crop loss for the pond area are included. The business damage claim is not counted in this estimate, because it is counted in the mainline estimate.

REVISED

The following indicates the estimator's confidence in the above estimate:

	Type A - indicates the most confidence
	Type B - indicates above average confidence
X	Type C - indicates below average confidence
	Type D - indicates the least or no confidence

Future Value Factors @	10%
Year One	1.1000
Year Two	1.2100
Year Three	1.3310
Year Four	1.4641
Year Five	1.6105

The following indicates the Department's purpose for this estimate:
Work Program Update: _____ Gaming 1: _____ Special Purpose: X Docs to RW: _____
Comments: _____

FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT SEVEN RIGHT OF WAY COST ESTIMATE

HDR#: 15383-05

FM#:	257862 1	Alternate:	SMF-D-2	District:	Seven
County:	Hillsborough	Segment:	N/A	Date:	12-Oct-04
State Rd.:	N/A	FAP#:	0295-005	C.E. Sequence	N/A

Project Des. Sam Allen Road from Alexander St. Ext. to Park Road & Park Road from I-4 to Sam Allen

Parcels	Gross	Net
Commercial	0	0
Residential	0	0
Unimproved	1	0
Total Parcels	1	0

Estimated Relocatees:	
Business	0
Residential	0
Signs	0
Personal Property	1
Total Relocatees	1

R/W SUPPORT COSTS (PHASE 41)

							Amount
1. Direct Labor Cost	(Parcels	0	x	13,000 =	Rate)		0
2. Indirect Overhead	(Parcels	0	x	0 =	Rate)		0
3.						TOTAL PHASE 41	$0

R/W OPS (PHASE 4B)

								Amount
4. Appraisal Fees Through Trial				0	Parcels	x	12,000 =	0
5. Business Damage CPA Fees Through Trial				0	Claims	x	19,000 =	0
6. Court Reporter & Process Servers	75%	x	0 =	0	Parcels	x	500 =	0
7. Expert Witness	75%	x	0 =	0	Parcels	x	30,000 =	0
8. Mediators	50%	x	0 =	0	Parcels	x	2,400 =	0
9. Demolition, Asb. Abate., Survey, etc.				0	Imprvmet	x	15,000 =	0
10. Miscellaneous Contracts				1	Per Project	x	15,000 =	15,000
11. Appraisal Fee Review				0	Parcels	x	5,000 =	0
12.							TOTAL PHASE 4B	$15,000

R/W LAND COSTS (PHASE 43)

					Amount	Subtotal
13. Land, Improvements & Severance Damages and Cost to Cure Amount	0	x	130%	* Design plan stage =	0	
14. Water Retention & Mit.	32,747	x	130%	(0 Parcels w/o R/W Acq)	42,600	
15. SUBTOTAL				(Lines 13 &14)		42,600
16. Admin. Settlements (Factor	45%	x	0%	of Line 15) =	0	
17. Litigation Awards (Factor	60%	x	100%	of Line 15) =	25,600	
18. Business Damages (Claims	0	x	0	) =	10,000	
19. Bus. Damages Incr (Factor	25%	x	$ 10,000	) =	2,500	
20. Owner Appr. Fees (Parcels	0	x	$10,000	) =	0	
21. Owner CPA Fees (Claims	0	x	$10,000	) =	0	
22. Defend.Atty Fees (Sum of Lines 16, 17 & 19)	28,100	x	40%	) =	11,200	
23. Owner Expert Witn (Comm.+Unimp.)	0	+	0	) x 18,000 =	0	
24. Other Condemn. Costs	0	x	$500	=	0	
25. SUBTOTAL				(Lines 16 thru 24) =		49,300
26.					TOTAL PHASE 43	$91,900

** Design contingency for design plan stage:*
(1) PD&E plans - 130% (2) 30% plans - 125% (3) 60% plans - 120% (4) 90% plans -115% (5) 268 Date -110%

R/W ACQUISITION CONSULTANT (PHASE 42)

27. Acquisition Consultant-50% of parcels	$20,000	x	0	TOTAL PHASE 42	$0

RELOCATION COSTS (PHASE 45)

			Number		Amount
Replacement Housing					
28. Owner	$20,000	x	0	=	0
29. Tenant	$10,000	x	0	=	0
Move Costs					
30. Residential	$1,500	x	0	=	0
31. Business/Farm	$20,000	x	0	=	0
32. Personal Property	$2,000	x	1	=	2,000
33. (Lines 28 thru 32)					TOTAL PHASE 45 $2,000
34. Relocation Services Cost			$200	(Not in Phase Total)	
35.					
36.					
37.				(All Phases)	TOTAL ESTIMATE $108,900

Real Estate:	Daniel Trosper	Signed:	Daniel Trosper	Date:	10/12/04
Bus. Dam. :	Gerson Preston Robinson	Signed:	By Attachment	Date:	09/07/04
Relocation:	N/A	Signed:		Date:	
Overall Review:	Daniel Trosper	Signed:	Daniel Trosper	Date:	10/12/04

Cost Estimate Sequence #: Dated: In the Amount of $ Data Input Completion Date:

REMARKS: This is a slight revision of the previous estimate for this pond, dated September 7, 2004. The pond site and the easement, according to Mitch Blanco of Parsons Brinckerhoff, can be shifted to avoid the Hillsborough County parcel.

Business damages attributable to crop loss for the pond area are included. The business damage claim is not counted in this estimate, because it is counted in the mainline estimate.

Adminstrative setlements and litigation awards have been changed to reflect one ownership. Administrative settlements are considered to be zero, while litigation is factored at 60% for land and improvements

The following indicates the estimator's confidence in the above estimate:

	Type A - indicates the most confidence
	Type B - indicates above average confidence
X	Type C - indicates below average confidence
	Type D - indicates the least or no confidence

Future Value Factors @	10%
Year One	1.1000
Year Two	1.2100
Year Three	1.3310
Year Four	1.4641
Year Five	1.6105

The following indicates the Department's purpose for this estimate:

Work Program Update: _____ Gaming 1: _____ Special Purpose: X Docs to RW: _____

Comments: _____

FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT SEVEN RIGHT OF WAY COST ESTIMATE

HDR#: 15383-05

FM#:	257862 1	Alternate:	FPC-B-1	District:	Seven
County:	Hillsborough	Segment:	N/A	Date:	7-Sep-04
State Rd.:	N/A	FAP#:	0295-005	C.E. Sequence	N/A
Project Des.	Sam Allen Road from Alexander St. Ext. to Park Road & Park Road from I-4 to Sam Allen				

Parcels	Gross	Net
Commercial	0	0
Residential	1	1
Unimproved	1	1
Total Parcels	2	2

Estimated Relocatees:	
Business	0
Residential	0
Signs	0
Personal Property	1
Total Relocatees	1

R/W SUPPORT COSTS (PHASE 41)

							Amount
1. Direct Labor Cost	(Parcels	2	x	13,000 =	Rate)		26,000
2. Indirect Overhead	(Parcels	2	x	0 =	Rate)		0
3.							
						TOTAL PHASE 41	$26,000

R/W OPS (PHASE 4B)

								Amount
4. Appraisal Fees Through Trial					2	Parcels	x 12,000 =	24,000
5. Business Damage CPA Fees Through Trial					1	Claims	x 19,000 =	19,000
6. Court Reporter & Process Servers	75%	x	2	=	2	Parcels	x 500 =	1,000
7. Expert Witness	75%	x	2	=	2	Parcels	x 30,000 =	60,000
8. Mediators	50%	x	2	=	1	Parcels	x 2,400 =	2,400
9. Demolition, Asb. Abate., Survey, etc.					1	Imprvmet	x 15,000 =	15,000
10. Miscellaneous Contracts					1	Per Project	x 15,000 =	15,000
11. Appraisal Fee Review					1	Parcels	x 5,000 =	5,000
12.							TOTAL PHASE 4B	$141,400

R/W LAND COSTS (PHASE 43)

						Amount	Subtotal
13. Land, Improvements & Severance Damages and Cost to Cure Amount	0	x	130%	* Design plan stage	=	0	
14. Water Retention & Mit.	84,784	x	130%	(0 Parcels w/o R/W Acq)		110,200	
15. SUBTOTAL				(Lines 13 &14)			110,200
16. Admin. Settlement (Factor	45%	x	30%	of Line 15)	=	14,900	
17. Litigation Awards (Factor	60%	x	70%	of Line 15)	=	46,300	
18. Business Damages (Claims	1	x	0	)	=	18,000	
19. Bus. Damages Incr (Factor	25%	x	$ 18,000	)	=	4,500	
20. Owner Appr. Fees (Parcels	2	x	$10,000	)	=	20,000	
21. Owner CPA Fees (Claims	1	x	$10,000	)	=	10,000	
22. Defend. Atty Fees (Sum of Lines 16, 17 & 19)	65,700	x	40%	)	=	26,300	
23. Owner Expert Witn (Comm.+Unimp.)	0	+	1	) x 18,000	=	18,000	
24. Other Condemn. Costs	2	x	$500		=	1,000	
25. SUBTOTAL				(Lines 16 thru 24)	=		159,000
26.						TOTAL PHASE 43	$269,200

* *Design contingency for design plan stage:*
(1) PD&E plans - 130% (2) 30% plans - 125% (3) 60% plans - 120% (4) 90% plans -115% (5) 268 Date -110%

R/W ACQUISITION CONSULTANT (PHASE 42)

27. Acquisition Consultant-50% of parcels	$20,000	x	0	TOTAL PHASE 42	$0

RELOCATION COSTS (PHASE 45)

					Number		Amount
Replacement Housing							
28. Owner	$20,000	x		0	=		0
29. Tenant	$10,000	x		0	=		0
Move Costs							
30. Residential	$1,500	x		0	=		0
31. Business/Farm	$20,000	x		0	=		0
32. Personal Property	$2,000	x		1	=		2,000
33. (Lines 28 thru 32)							
34. Relocation Services Cost			$200	(Not in Phase Total)		TOTAL PHASE 45	$2,000
35.							
36.							
37.						(All Phases) TOTAL ESTIMATE	$438,600

Real Estate:	Marilyn Jackson	Signed:	M. Marilyn Jackson	Date: 09/06/04
Bus. Dam.:	N/A	Signed:		Date:
Relocation:	N/A	Signed:		Date:
Overall Review:	Daniel Trosper	Signed:	Daniel Trosper fc	Date: 09/06/04

Cost Estimate Sequence #: Dated: In the Amount of $ Data Input Completion Date:

REMARKS: Terrace Drive appears to be unimproved in the area of FPC B1. We were unable to access the property and relied on aerials for valuation. According to the property appraiser's records, the site is improved with a SFR that is assessed at $550. This estimate assumes the improvement does not contribute value and demolition costs were included.

The following indicates the estimator's confidence in the above estimate:

	Type A - indicates the most confidence
	Type B - indicates above average confidence
X	Type C - indicates below average confidence
	Type D - indicates the least or no confidence

Future Value Factors @	10%
Year One	1.1000
Year Two	1.2100
Year Three	1.3310
Year Four	1.4641
Year Five	1.6105

The following indicates the Department's purpose for this estimate:
Work Program Update: _____ Gaming 1: _____ Special Purpose: X Docs to RW: _____
Comments: _____

FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT SEVEN RIGHT OF WAY COST ESTIMATE

HDR#: 15383-05

FM#:	257862 1	Alternate:	FPC-C-1	District:	Seven
County:	Hillsborough	Segment:	N/A	Date:	7-Sep-04
State Rd.:	N/A	FAP#:	0295-005	C.E. Sequence	N/A
Project Des.	Sam Allen Road from Alexander St. Ext. to Park Road & Park Road from I-4 to Sam Allen				

Parcels	Gross	Net
Commercial	0	0
Residential	1	1
Unimproved	2	2
Total Parcels	3	3

Estimated Relocatees:	
Business	0
Residential	0
Signs	0
Personal Property	2
Total Relocatees	2

R/W SUPPORT COSTS (PHASE 41)

						Amount
1. Direct Labor Cost	(Parcels	3	x	13,000 =	Rate)	39,000
2. Indirect Overhead	(Parcels	3	x	0 =	Rate)	0
3.						

TOTAL PHASE 41 $39,000

R/W OPS (PHASE 4B)

								Amount
4. Appraisal Fees Through Trial					3	Parcels	x 12,000 =	36,000
5. Business Damage CPA Fees Through Trial					0	Claims	x 19,000 =	0
6. Court Reporter & Process Servers	75%	x	3	=	2	Parcels	x 500 =	1,000
7. Expert Witness	75%	x	3	=	2	Parcels	x 30,000 =	60,000
8. Mediators	50%	x	3	=	2	Parcels	x 2,400 =	4,800
9. Demolition, Asb. Abate., Survey, etc.					1	Imprvmet	x 15,000 =	15,000
10. Miscellaneous Contracts					1	Per Project	x 15,000 =	15,000
11. Appraisal Fee Review					2	Parcels	x 5,000 =	10,000
12.								

TOTAL PHASE 4B $141,800

R/W LAND COSTS (PHASE 43)

						Amount	Subtotal
13. Land, Improvements & Severance Damages and Cost to Cure Amount	0	x	130%	* Design plan stage	=	0	
14. Water Retention & Mit.	265,092	x	130%	(0 Parcels w/o R/W Acq)		344,600	
15. SUBTOTAL				(Lines 13 &14)			344,600
16. Admin. Settlements (Factor	45%	x	30%	of Line 15)	=	46,500	
17. Litigation Awards (Factor	60%	x	70%	of Line 15)	=	144,700	
18. Business Damages (Claims	0	x	0	)	=	0	
19. Bus. Damages Incr (Factor	25%	x	$ -	)	=	0	
20. Owner Appr. Fees (Parcels	2	x	$10,000	)	=	20,000	
21. Owner CPA Fees (Claims	0	x	$10,000	)	=	0	
22. Defend. Atty Fees (Sum of Lines 16, 17 & 19)	191,200	x	40%	)	=	76,500	
23. Owner Expert Witn (Comm.+Unimp.)	0	+	2	) x 18,000	=	36,000	
24. Other Condemn. Costs	3	x	$500		=	1,500	
25. SUBTOTAL				(Lines 16 thru 24)	=		325,200
26.							

TOTAL PHASE 43 $669,800

* *Design contingency for design plan stage:*
(1) PD&E plans - 130% (2) 30% plans - 125% (3) 60% plans - 120% (4) 90% plans -115% (5) 268 Date -110%

R/W ACQUISITION CONSULTANT (PHASE 42)

27. Acquisition Consultant-50% of parcels $20,000 x 0

TOTAL PHASE 42 $0

RELOCATION COSTS (PHASE 45)

						Number		Amount
	Replacement Housing							
28. Owner	$20,000	x				0	=	0
29. Tenant	$10,000	x				0	=	0
	Move Costs							
30. Residential								
31. Business/Farm	$1,500	x				0	=	0
32. Personal Property	$20,000	x				0	=	0
33. (Lines 28 thru 32)	$2,000	x				2	=	4,000
34. Relocation Services Cost						$400	(Not in Phase Total)	
35.								
36.								
37.								

TOTAL PHASE 45 $4,000

(All Phases) TOTAL ESTIMATE $854,600

Real Estate:	Marilyn Jackson	Signed:	Marilyn Jackson	Date: 09/06/04
Bus. Dam. :	Gerson Preston Robinson	Signed:	By Attachment	Date:
Relocation:	N/A	Signed:		Date:
Overall Review:	Daniel Trosper	Signed:	Daniel Trosper PE	Date: 09/06/04

Cost Estimate Sequence #: Dated: In the Amount of $ Data Input Completion Date:

REMARKS: Parcel #3 is a recent sale representing a cut out of parcel #1.

The following indicates the estimator's confidence in the above estimate:

	Type A - indicates the most confidence
	Type B - indicates above average confidence
X	Type C - indicates below average confidence
	Type D - indicates the least or no confidence

Future Value Factors @	10%
Year One	1.1000
Year Two	1.2100
Year Three	1.3310
Year Four	1.4641
Year Five	1.6105

The following indicates the Department's purpose for this estimate:
Work Program Update: _____ Gaming 1: _____ Special Purpose: X Docs to RW: _____
Comments: _____

Appendix G
Review Comments and Responses

Blanco, Mitch

From: scott.farash@dot.state.fl.us
Sent: Wednesday, November 03, 2004 3:46 PM
To: Blanco, Mitch
Cc: Romero, John; kirk.bogen@dot.state.fl.us
Subject: Park Rd/Sam Allen Rd Road PD&E Study - WPI Seg. No. 257862-1 Final commentson Pond Site Report

Mitch,

Kirk had only one minor comment on the report:

Page 7, Section 2.1.1 title, revise as follows:

Field Review/Discussion with FDOT and Hillsborough County Maintenance

Scott Farash, Project Manager
scott.farash@dot.state.fl.us
D7 Modal Planning and Development - MS 7-500
(813) 975-6456 / SC 512-7813

GADDY
SHEET 1 OF 2

Drainage Review Comments
Alternative Stormwater Management Facility Report
Sam Allen Road and Park Road, from I-4 to Alexander Street Extension
WPI No. 257862-152-01
FAP No. 0295-005
Report Date: October 2004 (Revised)
FDOT Project Manager: Scott Farash
Date: October 26, 2004
Reviewer: Larry Gaddy

1. Section 4.1 indicates the ponds are sized based on treating the entire basin rather than the directly connected impervious area. This approach may be overly conservative in situations where the basin is large, so much so that it could result in more costly pond site recommendations. Significantly oversized ponds could eliminate one or more small sites from consideration and thus reduce the list of viable candidates.

2. The original FDOT drainage map would be a helpful addition to the report.

3. Section 4.1 indicates all basins, except Basin A, include more than one site option. This is apparently due to the availability of the parcel owned by FDOT, however the cost of that site is significant due to the need to line the pond. More options should be provided. The fact that FDOT owns the parcel isn't relevant. It should compete with other options. For example, if another option cost $500,000 (all acquisition and construction costs) and the fair market value of the FDOT parcel is $900,000, it represents an asset to FDOT and could, in fact, be sold as surplus property.

4 More information is required to justify cost and feasibility of SMF A-1. According to the Table, "Provided Pond Volume Calculations", the DHW elevation is 112.0 but the elevation of the pavement at the intersection of Park Road and Sam Allen Road is 110.3 (at crown), according to the contour map. Verify that the low edge of pavement elevation used to size pond is correct. The pond outfall isn't described, but it appears to connect to S-12. If it connects to S-12, verify that the headwater elevation will not be too high for the pavement elevation at the low point in the portion of roadway draining into SMF A-1.

5. Floodplain impacts have been based only on floodplains mapped by FEMA. Verify that the SWFWMD reviewer will accept this definition of floodplains. Most reviewers require mitigation for all floodplain impacts. Note that FEMA doesn't map small floodplains and SFWMD rules do not differential between FEMA floodplains and other floodplains.

6. SMF-B options appear to be located in a floodplain and will require compensation for impacts. These added costs should be included in matrix. Also see the SMF in Basin C. . .

7. Basin B drainage area size cannot be verified. More information should be provided to support the 18.8 (note table shows 150' R/W) and 84.2 acre values. Also, more explanation should be provided for the summary tables. For example, Basin B shows "Exist Imp Areas" of 3.24 acres and "Total Exist Imp Area" of 8.51.

8. Basin B attenuation calculations are based on the same basin area in pre and post conditions. This would be correct if the pre and post areas to the pond discharge point were the same, however they are not. The allowable discharge should be based on the pre existing R/W area that drains to the same outfall as the pond, unless it can be demonstrated that the outfall can accept added flow rates without harm, to the satisfaction of the reviewer. Check other basins for similar issues.

9. Design parameters for SMF B-1 conflicts with contour maps regarding average ground elevation and SHWT. Recent aerials show land alteration in the area. Verify values are correct.

10. Basin C value of 95.15 acres is unclear. Maps or more narrative should be included to clarify limits of this basin. Its relevance is also not clear, as it isn't used in calculations for treatment or attenuation volumes.

11. Basin C pond design is based on a pavement elevation that is approximately 4' higher than the existing pavement according to the SWFWM map. If that map reflects the existing road elevation, the report should include a discussion of the proposed profile and why the roadway must be raised so much. According to the existing Typical Section, the two lane roadway was located to be part of a future four lane facility. If the pavement is raised 4', the existing roadway cannot be salvaged. Is there a flooding problem that requires the pavement to be raised this much? If the road is now higher than shown on the contour map, this information would be a valuable addition to the report. See comment 2. The drainage map profile would supply this data.

12. Were Figure 6 basin limits obtained from FDOT drainage map? If not, the source should be provided. Some appear incorrect because the pipe sizes don't relate to the basin areas. At flood conditions, some basins probably combine.

13. The equal elevation base flood stages in the FEMA floodplain are more or less parallel to the road, thus it may be permissible to use one site for all impacts, affording the advantage of scale and limiting the acquisition to one parcel.

14. There may be a problem with locating the FPC sites so far south, as now proposed, because the SHWT at the site may be too high to allow compensation for lower level impacts at the roadway.

15. Was consideration given to the mined area west of SMFB-1? Depending on the elevations of the islands, they could be removed for impact credits.

Blanco, Mitch

From: scott.farash@dot.state.fl.us
Sent: Friday, October 22, 2004 8:40 AM
To: Blanco, Mitch; Romero, John
Cc: joe.thompson@dot.state.fl.us
Subject: Re: Draft Pond Site Report 2578621 Park/Sam Allen Rds.

I agree, the report should explain why there are no other viable sites.

Scott Farash, Project Manager
scott.farash@dot.state.fl.us
D7 Modal Planning and Development - MS 7-500
(813) 975-6456 / SC 512-7813

Joe Thompson/D7/FDOT
10/21/2004 05:25 PM

To: Scott Farash/D7/FDOT@FDOT
cc: Blanco@pbworld.com, Megan Arasteh/D7/FDOT@FDOT, RomeroJ@pbworld.com
Subject: Re: Draft Pond Site Report 2578621 Park/Sam Allen Rds. (Document link: Scott Farash)

The report should explain why there was only one FPC site per basin. You seem to say that other sites were investigated but only one site per basin was found to be viable.

Scott Farash/D7/FDOT
10/20/2004 04:38 PM

To: Joe Thompson/D7/FDOT@FDOT
cc: Megan Arasteh/D7/FDOT@FDOT, Blanco@pbworld.com, RomeroJ@pbworld.com
Subject: Re: Draft Pond Site Report 2578621 Park/Sam Allen Rds. (Document link: Joe Thompson)

There is a very limited amount of land available for floodplain compensation, because most of the area is in a floodplain. The sites selected were the only two viable sites investigated.

Scott Farash, Project Manager
scott.farash@dot.state.fl.us
D7 Modal Planning and Development - MS 7-500
(813) 975-6456 / SC 512-7813

Joe
Thompson/D7/FDOT

10/20/2004 04:08 PM

To: Scott Farash/D7/FDOT@FDOT

cc: Megan Arasteh/D7/FDOT@FDOT

Subject: Draft Pond Site Report 2578621 Park/Sam Allen Rds.

Where is the alternative site analysis for the floodplain comp sites?

Park Rd./Sam Allen Rd. PD&E Study
WPI Seg No. 257862-1
Draft Pond Siting Report
Response to Comments
October 27, 2004

Response to Comments from Kirk Bogen, FDOT

1. Page 7, Section 2.1.1 title, revise as follows: Field Review/Discussion with FDOT and Hillsborough County Maintenance.

Response: Section 2.1.1 title revised as noted.

Response to Comments from Larry Gaddy, PBS&J

1. Section 4.1 indicates the ponds are sized based on treating the entire basin rather than the directly connected impervious area. This approach may be overly conservative in situations where the basin is large, so much so that it could result in more costly pond site recommendations. Significantly oversized ponds could eliminate one or more small sites from consideration and thus reduce the list of viable candidates.

Response: Basin A, at 65.4 acres, is by far the largest sub-basin on the project. During the design phase, this basin will more than likely be revisited and any number of options will be analyzed to reduce the required pond size such as: a) bypassing of offsite runoff, b) providing compensatory treatment, and c) treating only the directly connected impervious area (DCIA). However, for the purposes of the pond siting report, the most conservative approach was taken. SMF-A-1 is located on FDOT owned property, so if the pond should get smaller (or larger) there is no cost to the FDOT.

Basins B – D are relatively smaller, ranging in area from 18.8 to 3.02 acres, so over-sizing the ponds is less of a concern. However, Basin C (10.95 ac), with SMF-C-1 and 2 located in the floodplain, the pond sizes and resulting floodplain impacts, will need to be minimized. Treatment of DCIA is an option. Another option is to provide equal treatment at an offsite location, so that no ponds will be placed in the floodplain. This too will be decided during the design phase. At this time SMF-C-1 and 2 have been conservatively sized and located on a large property with a single owner.

This project has major constraints with regards to pond siting. This area is developing rapidly, there are wetlands, and the 100 Year floodplain is widespread. Lastly, in general, the viable properties are not smaller sites, but large tracts of land with single owners.

2. The original FDOT drainage map would be a helpful addition to the report.

Response: This part of Park and Sam Allen Roads are under the jurisdiction of Hillsborough County. There is no FDOT drainage map covering the area.

3. Section 4.1 indicates all basins, except Basin A, include more than one site option. This is apparently due to the availability of the parcel owned by FDOT, however the cost of that site is significant due to the need to line the pond. More options should be provided. The fact that FDOT owns the parcel isn't relevant. It should compete with other options. For example, if another option cost $500,000 (all acquisition and construction costs) and the fair market value of the FDOT parcel is $900,000, it represents an asset to FDOT and could, in fact, be sold as surplus property.

Response: During a meeting on July 1, the FDOT requested that there be only one pond alternative for Basin A and that it be located on the FDOT owned parcel. In fact, SMF-A-1 is located to the rear of the property with the intention to sell the frontage in the future. Please refer to the meeting minutes included in Appendix A.

4 More information is required to justify cost and feasibility of SMF A-1. According to the Table, "Provided Pond Volume Calculations", the DHW elevation is 112.0 but the elevation of the pavement at the intersection

of Park Road and Sam Allen Road is 110.3 (at crown), according to the contour map. Verify that the low edge of pavement elevation used to size pond is correct. The pond outfall isn't described, but it appears to connect to S-12. If it connects to S-12, verify that the headwater elevation will not be too high for the pavement elevation at the low point in the portion of roadway draining into SMF A-1.

Response: Low edge of pavement has been revised to elevation 110. The revised calculations are included in Appendix C.

The outfall for SMF-A-1 is proposed to discharge into an existing ditch, at a point approximately 650' upstream of S-12. Culvert analysis of S-12 is to be done during the design phase. Please note that this part of Park and Sam Allen Roads has not flooded in over 25 years, as per Hillsborough County Maintenance.

5. Floodplain impacts have been based only on floodplains mapped by FEMA. Verify that the SWFWMD reviewer will accept this definition of floodplains. Most reviewers require mitigation for all floodplain impacts. Note that FEMA doesn't map small floodplains and SFWMD rules do not differential between FEMA floodplains and other floodplains.

Response: In addition to the floodplains mapped by FEMA, Hillsborough County has developed a SWMM model of the Hillsborough River watershed. According to this model, the 100-year floodplain elevation is lower than the FEMA elevation. For the purpose of the pond siting report, the FEMA elevations were used to calculate a more conservative floodplain impact. However, floodplain compensation areas will more than likely be reduced during the design phase.

6. SMF-B options appear to be located in a floodplain and will require compensation for impacts. These added costs should be included in matrix. Also see the SMF in Basin C. .

Response: According to the FEMA map of the area, SMF-B-1 and 2 are not located in the 100 Year floodplain. On the other hand, SMF-C-1 and 2 are located in the floodplain. Their locations came out of a meeting with the FDOT on July 1 2004. Please refer to Appendix A for the minutes. Preliminary flood plain impacts have been calculated and are included in Appendix D.

7. Basin B drainage area size cannot be verified. More information should be provided to support the 18.8 (note table shows 150' R/W) and 84.2 acre values. Also, more explanation should be provided for the summary tables. For example, Basin B shows "Exist Imp Areas" of 3.24 acres and "Total Exist Imp Area" of 8.51.

Response: The area of Basin B is 18.8 acres. The referenced table has been revised to show only the overall cumulative basin area of 98.17 acres. The "Total Exist Imp Area" for Basin B referred to the cumulative Exist Imp Area beginning from the first row and continuing downward. The referenced table has been revised to show only the overall cumulative Exist Imp Area of 13.05 acres.

8. Basin B attenuation calculations are based on the same basin area in pre and post conditions. This would be correct if the pre and post areas to the pond discharge point were the same, however they are not. The allowable discharge should be based on the pre existing R/W area that drains to the same outfall as the pond, unless it can be demonstrated that the outfall can accept added flow rates without harm, to the satisfaction of the reviewer. Check other basins for similar issues.

Response: In the existing condition, runoff from Basin B is conveyed to East Canal. In the proposed condition, SMF-B-1 and 2 discharge to an adjacent wetland that is a tributary of the East Canal. This wetland will more than likely be able to accept increased discharges. The floodplain for the East Canal is so vast, that in effect, the pre- and post-development discharge points are one and the same.

The proposed pond alternatives in Basin C are adjacent to a relatively large low area, which will more than likely be able to accept increased discharges. If needed, over attenuation can also be provided within the selected pond, making sure that the downstream culverts and properties are not adversely affected. Another option would be the use of a "smart box" on the stormsewer mainline so that pre/post attenuation does not increase to unacceptable levels. However, as with Basin A, the final design will be determined during the design phase.

9. Design parameters for SMF B-1 conflicts with contour maps regarding average ground elevation and SHWT. Recent aerials show land alteration in the area. Verify values are correct.

Response: Average ground elevation for SMF-B-1 has been revised to 105.5. The average ground elevation for SMF-B-2 has been revised to 106. The seasonal highwater table elevation continues to be conservatively set at the existing ground elevation. Preliminary pond sizing calculations have been revised as well.

10. Basin C value of 95.15 acres is unclear. Maps or more narrative should be included to clarify limits of this basin. Its relevance is also not clear, as it isn't used in calculations for treatment or attenuation volumes.

Response: The area of Basin C is 10.95 acres. The 95.15 acres referred to the cumulative basin area, beginning with Basin A and continuing to Basin B and including Basin C. The referenced table has been revised to show only the overall cumulative basin area of 98.17 acres for the whole project.

11. Basin C pond design is based on a pavement elevation that is approximately 4' higher than the existing pavement according to the SWFWM map. If that map reflects the existing road elevation, the report should include a discussion of the proposed profile and why the roadway must be raised so much. According to the existing Typical Section, the two lane roadway was located to be part of a future four lane facility. If the pavement is raised 4', the existing roadway cannot be salvaged. Is there a flooding problem that requires the pavement to be raised this much? If the road is now higher than shown on the contour map, this information would be a valuable addition to the report. See comment 2. The drainage map profile would supply this data.

Response: The low edge of pavement of 107.88 (column 6 of the Provided Pond Volume Calculation) was taken from cross sections of existing cross drains provided by the FDOT. These survey field notes will be included in the Appendix of the report.

12. Were Figure 6 basin limits obtained from FDOT drainage map? If not, the source should be provided. Some appear incorrect because the pipe sizes don't relate to the basin areas. At flood conditions, some basins probably combine.

Response: Basin limits for Figure 6 were developed using the contours of the USGS maps. Reference was also made to the Bill Heard Chevrolet (I-4 at Park Road) SWFWMD permit and the FDOT drainage map for I-4 (Segment 4). This drainage map information will be included in the appendix of the report.

According to USGS maps and field reviews, there exist large, broad low areas adjacent to the roadway. These low areas provide substantial storage, allowing for large basins relative to the existing culvert sizes.

13. The equal elevation base flood stages in the FEMA floodplain are more or less parallel to the road, thus it may be permissible to use one site for all impacts, affording the advantage of scale and limiting the acquisition to one parcel.

Response: Using best available data FPC-B-1 and FPC-C-1 were conservatively sized by assuming a one-foot depth per area of impact. During the design phase, the floodplain impact (and required compensation) per basin will be refined by the use of cross-sections, and Hillsborough County's SWMM model of the Hillsborough River watershed, which includes the East Canal. Ultimately, it may be feasible to use one site to compensate for all impacts. However, for the purposes of the Pond Siting Report, the two separate Flood Plain Compensation (FPC) sites are to remain, and serve as two viable alternatives.

14. There may be a problem with locating the FPC sites so far south, as now proposed, because the SHWT at the site may be too high to allow compensation for lower level impacts at the roadway.

Response: In the vicinity of the East Canal and just south of South Allen Road, the 100 Year Base Flood elevation is 108. Approximately 2000 feet south, the 100 Year Base Flood elevation is 109, resulting in a gradient of only 0.05%. The proposed site for FPC B-1, located east of East Canal, adjacent to the floodplain, has an average existing ground elevation of 110.5 and a low elevation of 109. Therefore, although FPC B-1 is located upstream of the impact, this should not have an adverse affect on the floodplain adjacent to Sam Allen Road

given the slight gradient of the existing flood plain and a minor difference of 1 foot between the Base Flood elevation and the existing ground elevation at the FPC site.

The proposed site for FPC C-1, located west of East Canal, adjacent to the floodplain, has an average existing ground elevation of 111 and a low elevation of 108. Therefore, although FPC C-1 is located upstream of the impact, this should not have an adverse affect on the floodplain adjacent to Sam Allen Road given the slight gradient of the existing flood plain.

15. Was consideration given to the mined area west of SMFB-1? Depending on the elevations of the islands, they could be removed for impact credits.

Response: The area west of SMF-B-1 was not considered because it is all wetlands. In fact, the current location of SMF-B-1 is adjacent to this wetland and encroaches on it by one acre.

Response to Comments from Joe Thompson, FDOT

1. The report should explain why there was only one FPC site per basin.

Response: An explanation of why there is only one FPC site per basin is included in section 4.3.5 (Page 19) of the Alternative Stormwater Management Facility Report.

BOGEN
1 OF 2

Blanco, Mitch

From: scott.farash@dot.state.fl.us
Sent: Friday, October 01, 2004 9:42 AM
To: Blanco, Mitch; Romero, John
Cc: kirk.bogen@dot.state.fl.us
Subject: Park Rd/Sam Allen Rd Road PD&E Study - WPI Seg. No. 257862-1 Draft Pond Site Report comments

Here are Kirk's comments on the first draft:

----- Forwarded by Scott Farash/D7/FDOT on 10/01/2004 09:39 AM -----

Kirk R Bogen/D7/FDOT
10/01/2004 08:59 AM

To: Scott Farash/D7/FDOT@FDOT
cc: Waddah Farah/D7/FDOT@FDOT
Subject: Re: Park Rd/Sam Allen Rd Road PD&E Study - WPI Seg. No. 257862-1 Draft Pond Site Report(Document link: Scott Farash)

I performed a cursory review of the report and offer the following comments:

No.	Page	Comment
1	Cover	Use WPI Seg No. 257862 instead of Districtwide FPN (make this correct throughout document).
2	Cover	Include FAP No in description.
3	Cover	Remove reference to Consultant from cover sheet.
4	ii	Provide footnote for abbreviations which are not inherent (i.e LEOP).
5	ii	The environmental data needs to be included before site selection can begin.
6	7	In section 2.1.1, was the local governments maintenance section contacted for local flooding problem since these are local roads.
7	Appendix G	Report should contain SWFWMD contours map with basins delineated to support the calculations. The quad maps are at too small of a scale to verify.

If you or the consultant have any question, please call or email me.
Thanks

BOGEN
2 OF 2

Kirk Bogen, District Project Development Engineer
FDOT District Seven
Modal, Planning & Development
kirk.bogen@dot.state.fl.us
(813) 975-6448 / SC 512-7805 / (800) 226-7220 x27805
FAX: (813) 975-6451 / SC 512-7808

Scott
Farash/D7/FDOT

09/30/2004 04:52 PM

To: Megan Arasteh/D7/FDOT@FDOT, Kirk R Bogen/D7/FDOT@FDOT

cc:

Subject: Re: Park Rd/Sam Allen Rd Road PD&E Study - WPI Seg. No. 257862-1 Draft Pond Site Report

Megan and Kirk,

Do you have any comments on the draft Pond Report by Parsons Brinckerhoff submitted for review on Sept. 7th?

I have received the ROW cost estimate for pond sites and Parsons is starting to prepare
the final draft of the report.

Scott Farash, Project Manager
scott.farash@dot.state.fl.us
D7 Modal Planning and Development - MS 7-500
(813) 975-6456 / SC 512-7813

DRAINAGE
1 OF 3

Blanco, Mitch

From: scott.farash@dot.state.fl.us
Sent: Friday, October 01, 2004 9:52 AM
To: Blanco, Mitch; Romero, John
Cc: megan.arasteh@dot.state.fl.us
Subject: Park Rd/Sam Allen Rd Road PD&E Study - WPI Seg. No. 257862-1 Draft Pond Site Report comments

25455212207SamAl lenRoadandPark...

Here are comments on the Report from our Drainage Design Dept.

Scott Farash, Project Manager
scott.farash@dot.state.fl.us
D7 Modal Planning and Development - MS 7-500
(813) 975-6456 / SC 512-7813

----- Forwarded by Scott Farash/D7/FDOT on 10/01/2004 09:47 AM -----

Megan Arasteh/D7/FDOT
09/30/2004 06:13 PM

To: Scott Farash/D7/FDOT@FDOT
cc: Kirk R Bogen/D7/FDOT
Subject: Sam Allen Road and Park Road PD&E (Alternat ive Stormwater Management Facility Report)

Attached please find the Drainage Review comments for the above project.

(See attached file: 25455212207SamAllenRoadandParkRoadPSR.doc)

Sam Allen Road and Park Road PD&E
Alternative Stormwater Management Facility Report
FPID 254552-1-22-07
September 21, 2004
Scott Farash, FDOT
Parsons, Brinkerhoff, Quade, & Douglas, Inc.
Mitch Blanco, PBQD
Thomas Ward, PBSJ

REF NO.	DRW. CODE	COMMENTS
		Drainage Documentation
1.	Gen EDX	It is difficult for the reviewer to verify drainage patterns using only USGS Quadrangle Maps. Please include SWFMWD aerial contours maps with next submittal.
2.	Gen EDX	Please delineate parcels with parcel identification numbers on aerial maps to show that the pond site alternatives are on one parcel and are in an economical location.
3.	i EDP	Basins B and C include flood plain impacts. The executive summary indicates that the Floodplain Compensation (FPC) "... was located upstream of the Basin...". Please coordinate with the SWFWMD to ensure an acceptable floodplain compensation approach. Normally the SWFWMD requires "cup for cup". In some cases, the SWFWMD may accept an approach that provides most of the volume at lower elevations as long as they are hydraulically connected to the low area(s) of impact(s). In other cases where the compensation site is above the floodplain impact areas and the contributing area is sufficient to provide the compensatory volume, the SWFWMD may require surface modeling to show that adverse impacts will not be created to the floodplain in the low area. Please document which approach is utilized.
4.	Gen. EDP	For Basin A, it does not appear that existing drainage patterns travel to the same path as for the proposed pond outfall. For example: Existing runoff north of Sam Allen Road will travel east along the north side of the roadway to S-9. The proposed runoff will be directed to SMF A and discharged through S-12, conveyed northerly in the existing ditch to the upstream end of S-9. This change in drainage

			patterns over estimates the allowable discharge to the upstream end of S-9 and may create an impact along the north-south ditch. In addition, the cross drains and conveyance ditches downstream of the pond will have to be evaluated to accommodate runoff from roadway widening, offsite flow and discharge from the proposed the pond. This basin requires re-analysis with the following alternatives: (1) over attenuate the runoff to match the pre-development conveyance at the upstream end of the cross drains, ditches downstream of the pond, and include additional R/W requirements. (2) create an alternative cross drain and/or conveyance ditch(es)/outfall from the pond including additional R/W requirements. This report must document which approach is utilized and include the cost associated with the viable alternative.
5.	Gen.	EDC	It appears that the proposed pond site in Basin C is on the upstream side of the alignment. Please see the above comment and provide one of the alternatives and additional cost necessary.
6.	Gen.	EDX	It appears that the source used to determine attenuation volume that is referenced in Section 4.1 may be incorrect. Please verify the page number (51?) and FDOT Stormwater Facility Handbook (January 2004?).
7.	Gen.	EDX	Please complete information identified on Tables 7, 8, 9 & 10 regarding archaeological sites, historical structures, protected/endangered species, wetland involvement, wetland mitigation methods/costs and R/W costs.
			<u>Plans</u>
1.	Gen.		Plans were not available for this phase review.

Park Rd./Sam Allen Rd. PD&E Study
WPI Seg No. 257862-1
Draft Pond Siting Report
Response to Comments
October 18, 2004

Response to Comments from Kirk Bogen, District Project Development Engineer

Cover Page

1. Use WPI Seg No. 257862 instead of Districtwide FPN (make this correct throughout document).

Response: Reference to Districtwide FPN has been removed from throughout the report and has been replaced with the WPI Seg Number.

2. Include FAP No in description.

Response: FAP No has been included in the description.

3. Remove reference to Consultant from cover sheet.

Response: Reference to Consultant has been removed from the cover. Consultant information remains inside the front cover.

Page ii

4. Provide footnote for abbreviations which are not inherent (i.e. LEOP).

Response: Low Edge of Pavement (LEOP) has been spelled out in the tables.

5. The environmental data needs to be included before site selection can begin.

Response: Environmental data is included in this submittal. However, information on contamination is to be provided by the FDOT and will be included in the final submittal.

Page 7

6. In section 2.1.1, was the local governments maintenance section contacted for local flooding problem since these are local roads.

Response: Park and Sam Allen are County roads; therefore Hillsborough County Maintenance was contacted for any history of flooding along the project area. Section 2.1.1 has been revised to reflect this information.
Appendix G

7. Report should contain SWFWMD contours map with basins delineated to support the calculations. The quad maps are at too small of a scale to verify.

Response: SWFWMD contoured aerials, showing drainage basins, SMF and FPC sites have been included in Appendix H.

Response to Comments from Drainage Design

Drainage Documentation

1. It is difficult for the reviewer to verify drainage patterns using only USGS Quadrangle Maps. Please include SWFWMD aerial contours maps with next submittal.
Response: SWFWMD contoured aerials, showing drainage basins, SMF and FPC sites have been included in Appendix H.

2. Please delineate parcels with parcel information numbers on aerial maps to show that the pond site alternatives are on one parcel and are in an economical location.

Response: Ponds and Flood Plain Compensation sites have been shown on Hillsborough County Property Appraiser's Maps and are included in Appendix G.

3. Basins B and C include flood plain impacts. The executive summary indicates that the Floodplain Compensation (FPC) "...was located upstream of the Basin...". Please coordinate with the SWFWMD to ensure an acceptable floodplain compensation approach. Normally the SWFWMD requires "cup for cup." In some cases, the SWFWMD may accept an approach that provides most of the volume at lower elevations as long as they are hydraulically connected to the low area(s) of impact(s). In other cases where the compensation site is above the floodplain impact areas and the contributing area is sufficient to provide the compensatory volume, the SWFWMD may require surface modeling to show that adverse impacts will not be created to the floodplain in the low area. Please document which approach is utilized.

Response: In the vicinity of the East Canal and just south of South Allen Road, the 100 Year Base Flood elevation is 108. Approximately 2000 feet south, the 100 Year Base Flood elevation jumps to 109, a gradient of only 0.05%. The proposed site for FPC B-1, located east of East Canal, adjacent to the floodplain, has an average existing ground elevation of 110.5 and a low elevation of 109. Therefore, although FPC B-1 is located upstream of the impact, this should not have an adverse affect on the floodplain adjacent to Sam Allen Road given the slight gradient of the existing flood plain and a minor difference of 1 foot between the Base Flood elevation and the existing ground elevation at the FPC site.

The proposed site for FPC C-1, located west of East Canal, adjacent to the floodplain, has an average existing ground elevation of 111 and a low elevation of 108. Therefore, although FPC C-1 is located upstream of the impact, this should not have an adverse affect on the floodplain adjacent to Sam Allen Road given the slight gradient of the existing flood plain.

4. For Basin A, it does not appear that the existing drainage patterns travel to the same path as for the proposed pond outfall. For example: Existing runoff north of Sam Allen Road will travel east along the north side of the roadway to S-9. The proposed runoff will be directed to SMF A and discharged through S-12, conveyed northerly in the existing ditch to the upstream end of S-9. This change in drainage patterns over estimates the allowable discharge to the upstream end of S-9 and may create an impact along the north-south ditch. In addition, the cross drains and conveyance ditches downstream of the pond will have to be evaluated to accommodate runoff from roadway widening, offsite flow and discharge from the proposed pond. This basin requires re-analysis with the following alternatives: (1) over attenuate the runoff to match the predevelopment conveyance at the upstream end of the cross drains, ditches downstream of the pond, and include additional R/W requirements. (2) create an alternative cross drain and/or conveyance ditch(es)/outfall from the pond including additional R/W requirements. This report must document which approach is utilized and include the cost associated with the viable alternative.

Response: In the existing condition, runoff from Sam Allen Road (east of Park Road) and offsite runoff from east of Wilder Road and south of Sam Allen Road is conveyed to both S-10 and S-11. The majority of the runoff discharges through S-10. However, it appears that S-11 serves as a "pop-off" for this drainage area as well, discharging to the upstream end of S-9. As shown in the report, the preliminary drainage design for Basin A includes offsite from east of Wilder Road and from the south of Sam Allen Road being allowed to enter SMF A-1. It is agreed that the existing path for a majority of this offsite flow is altered in the proposed condition. However, per the calculations provided in Appendix C, almost twice the required attenuation is

provided within SMF A-1. The intent is to provide over attenuation within the pond so that S-9 will not be overtopped. In addition, the final drainage design for Basin A will be refined during the design phase.

Other considerations for the drainage design for Basin A include:

a) **Bypassing runoff from Sam Allen Road (east of Park Road) and offsite runoff from east of Wilder Road and south of Sam Allen Road by connecting directly to S-9. Compensatory treatment could be provided within the pond. Over attenuation would not be required and may reduce the size of the pond.**
b) **Treat only the DCIA and either keep or reduce the size of the pond to provide over attenuation so that S-9 is not adversely affected.**
c) **Any combination of the above.**

Again, the final option will be decided during the design phase.

5. It appears that the proposed pond site in Basin C is on the upstream side of the alignment. Please see the above comment and provide one of the alternatives and additional cost necessary.

Response: The proposed pond alternatives in Basin C are adjacent to a relatively large low area, which will more than likely be able to accept increased discharges. There are also two existing cross drains, S-2 and S-3 north of the pond sites. Over attenuation can also be provided for within the selected pond, making sure that the downstream culverts and properties are adversely affected. Another option would be the use of a "smart box" on the stormsewer mainline so that pre/post attenuation does not increase to unacceptable levels. However, as with Basin A, the final design will be determined during the design phase.

6. It appears that the source used to determine attenuation volume that is referenced in Section 4.1 may be incorrect. Please verify the page number (51?) and FDOT Stormwater Facility Handbook (January 2004?).

Response: The latest FDOT Stormwater Facility Handbook came out in January of 2004. The referenced source is correct.

7. Please complete information identified on Tables 7, 8, 9 & 10 regarding archaeological sites, historical structures, protected/endangered species, wetland involvement, wetland mitigation methods/cost and R/W costs.

Response: Tables 7, 8, 9 & 10 have been completed with regards to archaeological sites, historical structures, protected/endangered species, wetland involvement, wetland mitigation methods/cost and R/W costs. Information on contamination is to be provided by the FDOT and will be included in the final submittal.

Plans

1. Plans were not available for this phase review.

Response: Noted.

Appendix H
Survey Field Notes

SOKKIA™

MADE IN U.S.A.

SOKKIA™

10190-XXXX CROSS-SECTION
BOOK
#000695

ELEVATIONS

INDEX:

WPIS 257862-1
SPN 10190-XXXX
SR* 553/PARK ROAD AND
CR 580/SAM ALLEN ROAD

C.R. 580/SAM ALLEN ROAD
FROM: A QUARTER MILE WEST OF THE SURVEY LINE OF THE PURPOSED S.R. 39
TO: A QUARTER MILE EAST OF PARK ROAD

AND ALSO

S.R. 39
FROM: 1200 FEET SOUTH OF C.R. 580/SAM ALLEN ROAD
TO: 1200 FEET NORTH OF C.R. 580/SAM ALLEN ROAD

AND ALSO

S.R. 553/PARK ROAD
FROM: A QUARTER MILE SOUTH OF S.R. 400/I-4
TO: C.R. 580/SAM ALLEN ROAD

INDEX:

CONTD FROM PG 25

CR - 580

SAM ALLEN ROAD
CROSS - SECTIONS
AT ℄ CROSS DRAINS

ENGLISH

BM	℄		ELEV.	ADJ. ELEV.
BM	4.63 (L) 10.37 (R) 15.00	110.314		105.684
73+28.50 PROFILE	104.80 3.51 29.2 M.H	100.79 3.53 24.4 ASPH.	107.02 3.29 18.7 ASPH.	107.30 3.01 8.4 ASPH.	103.40 2.91 1.4 ℄
51	100.16 4.16 42.4 ENC.	100.92 3.79 33.7 END	102.82 7.49 30' BOTTOM OF BOX	102.90 7.41 29.2 INV. WEST	102.79 7.52 29.2 INV. EAST
	NOTE: REFER TO PG. 27 FOR CROSS DRAIN DETAILS.				100.20 4.11 52. ASPH
T.P.	2.40 (L) 13.60 (R) 15.00	110.154	1.54 (L) 13.46 (R) 15.00	108.754	
BM			4.26 (L) 10.74 (R) 15.00	105.894 ERROR - 0.018	105.900

3-26-02
PARTLY CLOUDY 75°
WILSON AE-15
SN: 8192218

P.C. - D. SHAFFER
T - A. WILSON
I - L. CUREY

SET STANDARD F.D.O.T. BRASS DISK
ON A 4X4 CONCRETE MONUMENT
AT STATION 70+49.15, 20.87 LT.
STAMPED: BM 4 02

107.37 2.94 0 ℄	107.05 3.26 10.3 ASPH.	104.25 3.46 14.6 E.P.	106.5 3.8 19.5 T.21.8	106.3 4.0 25.8 T.10.5	100.5 3.8 31.2 END
	102.64 3.27 31.3 E.O.W.	102.64 3.27 31.9 B.O.W.	102.88 3.43 31.9 INV. EAST	102.84 3.42 31.9 INV. WEST	102.6 3.7 32 END
	102.8 7.5 34.6 T.10.5	104.3 6.0 39.7 T.10.8	104.4 5.9 44.7 ENC.	104.7 5.6 50.7 END	

NAIL IN ASPH.

Inverts differ from topo file

SET STANDARD F.D.O.T. BRASS DISK
ON A 4X4 CONCRETE MONUMENT
AT STATION 207+02.20, 79.30 LT.
STAMPED: BM 5 02

CONT'D FROM
PG. 26

C.R.-580

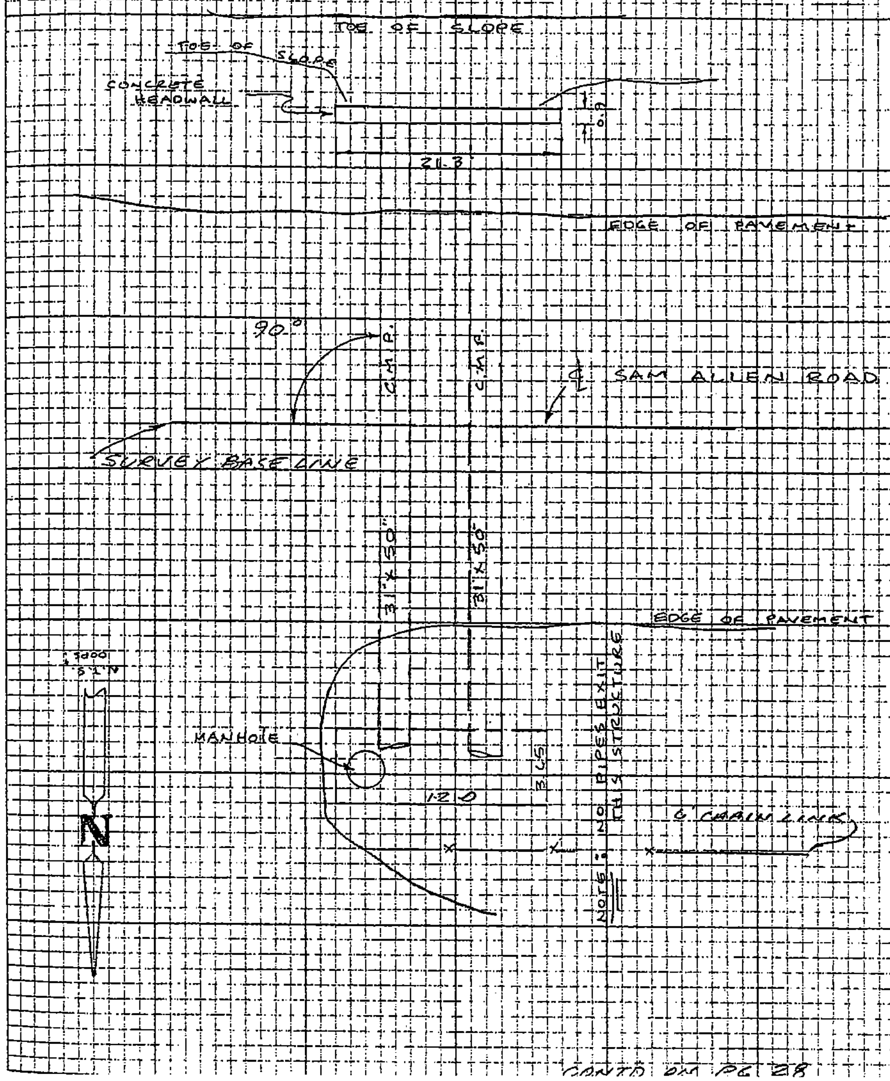
SAM ALLEN ROAD
CROSS - SECTIONS
AT CROSS - DRAINS

ENGLISH

CROSS DRAIN ACROSS
FROM FLEA MARKET

3-26-02
PARTLY CLOUDY 80°
NIKON AZ-1S
S/N: 319218

P.C. - D. SHAFER
ℛ - B. HUDSON
T - L. CURRY



CONT'D ON PG. 28

CONTD FROM PG 27

C.R. 580
SAM ALLEN ROAD
CROSS-SECTIONS AT CROSS DRAINS

ENGLISH

BM.	+			ELEV.	ADJ ELEV.
BM	5.00(D) 10.00 15.00	110.906			105.906
	105.3 5.4 37.2	102.6 4.3 30.3	108.1 2.8 19'	108.16 2.75 17'	108.23 2.68 5.5
402+76.6 PROFILE	T.O.B.	T.O.S.	T.O.B.	E.P.	ASPH
JUST EAST OF SR 39	101.7 9.2 45' GND	100.23 10.68 43.3 INV. 30" R.C.P.	104.21 6.70 43.3 B.O.W.	104.27 6.70 42.5 F.O.W.	104.1 6.8 42.2 T.O.S.
S-2	NOTE: REFER TO PG. 29 FOR CROSS-DRAIN DETAIL			101.2 9.7 70' GND	100.9 10.0 60' GND
T.P.	3.77(D) 11.23(R) 15.00	110.606	4.07(D) 10.93(R) 15.00	106.836	
BM.			4.92(D) 10.08(R) 15.00	105.686 ERROR = 0.002	105.684

3-12-02
CLOUDY 82°
NIKON A2-15
X: 819218.
DESCRIPTION

PC - D. STACER
PC - B. HARRISON
PC - L. CURRY

SET STANDARD F.D.O.T. BRASS DISK ON A 4"X4" CONCRETE MONUMENT AT STATION 402+02.46, 79.36 LT.
STAMPED: BM 5 02

108.25 2.64 0 6	107.88 3.03 18' E.P.	107.6 3.3 18.4 T.O.S.	108.0 2.9 20.8 T.O.B.	108.3 2.6 45.1 GND	108.39 2.52 45.3 F.O.W.
	104.31 6.10 45.9 B.O.W.	100.45 10.46 45.9 INV. 30" R.C.P.	102.0 8.9 47.6 GND	102.5 8.4 60' GND	102.3 8.6 70' GND

RIM OF MANHOLE

SET STANDARD F.D.O.T. BRASS DISK ON A 4"X4" CONCRETE MONUMENT AT STATION 70+49.15, 40.87 LT.
STAMPED: BM 4 02

CONTD FROM PG. 28

C.R. -580

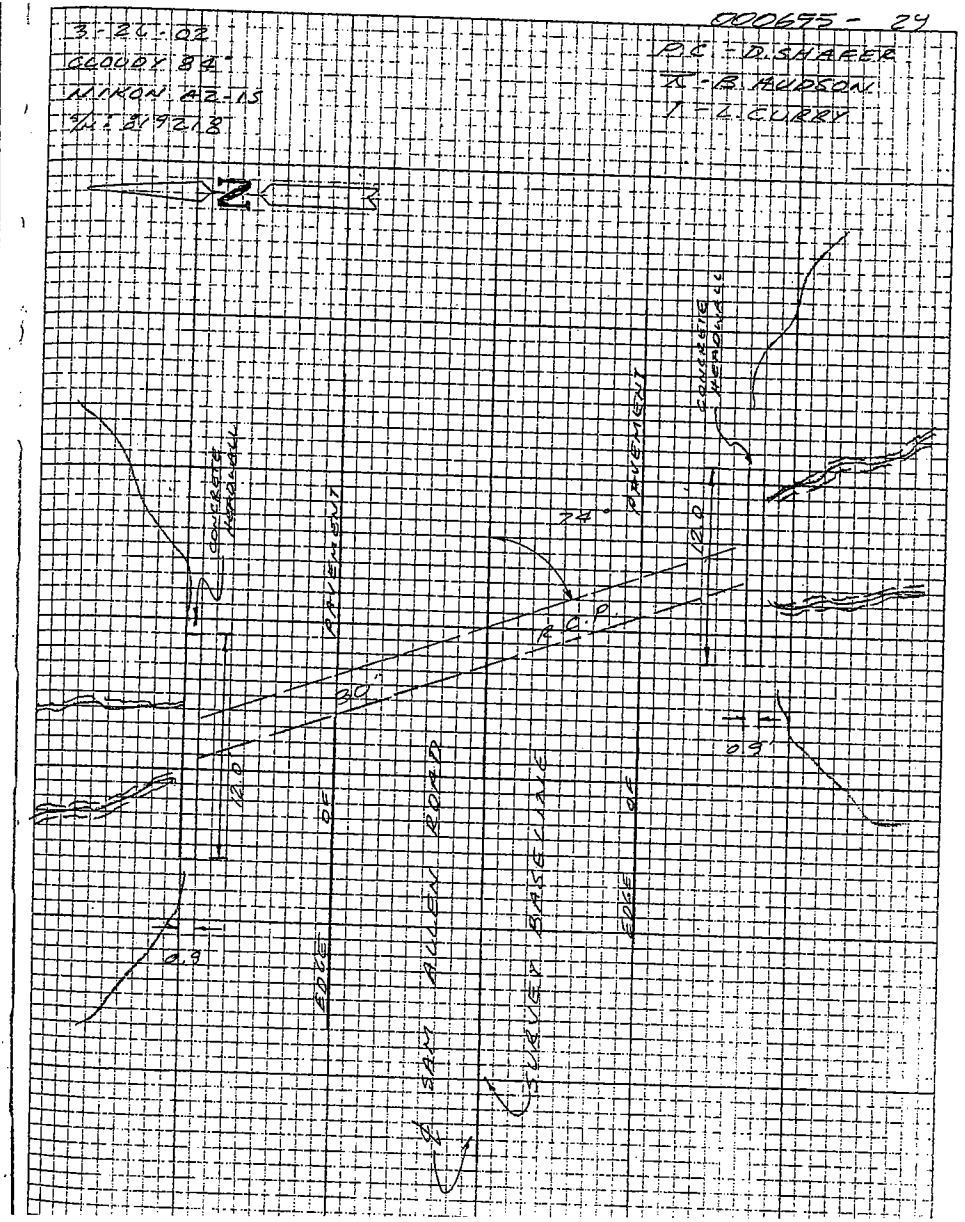
SAM ALLEN ROAD
CROSS - SECTIONS
AT CROSS - DRAINS

ENGLISH

000695 - 24

P.C. - D. SHAFER
R - R. HUDSON
I - L. CURRY

3-24-02
CLOUDY 82°
MIXON 22-15
9:30 AM 9218



CONT'D FROM PG 29

C.R. - 580

SAM ALLEN ROAD
CROSS - SECTIONS
AT ℄ CROSS DRAINS

ENGLISH

BM	+	℄		E.LEV.	ADJ. ELEV.
BM	5.08 (D) 9.92 (R) 15.00	111.574			106.494
	104.27 7.30	104.3 7.3	107.6 4.0	107.87 3.70	108.02 3.55
422+00 PROFILE	45.3 E.O.W.	44.7 T.O.S.	19.8 T.O.B.	17.6 E.P.	12.6 ASPH. L.L.
	105.2 2.0 73' T.O.B.	102.5 9.1 56' T.O.S.	101.4 10.2 46' GND	100.95 10.62 45.9 INV. 24" R.C.P.	104.23 7.29 45.9 B.O.W.
					101.3 10.3 81' T.O.S.
T.P.	4.87 (D) 10.13 (R) 15.00	113.184	3.20 (D) 11.74 (R) 15.00	108.314	
BM			6.31 (D) 8.69 (R) 15.00	106.874 ERROR: 0.007	106.867

5-3

3-27-02
PARTLY CLOUDY 72°
WIND 22-15
BY: B.P.A.B

ACCURTO - 30
P.C. - D. SHAFER
T - B. AUDSON
A - L. COREY

DESCRIPTION

SET STANDARD F.D.O.T. BRASS DISK
ON A 4X4 CONCRETE MONUMENT
AT STATION #17+04.21, 74.48 Rt.
STAMPED: BM 6 02.

108.19 3.38 20 18	107.97 3.60 11.9 ASPH 4.4	107.85 3.72 14.4 E.P.	107.7 3.9 20' T.O.B.	104.3 7.3 42.5 T.O.S.	104.2 7.00 23.1 E.O.W.
	104.54 7.01 43.7 B.O.W.	104.36 10.21 43.7 INV. 24" R.C.P.	101.9 9.7 44.3 GND	103.7 7.7 63.6 T.O.B.	104.2 7.0 47.5 T.O.S.
	108.7 2.9 82.1 T.O.B.	107.1 4.5 99.3 T.O.S.			

MAIL IN ASPH.

SET STANDARD F.D.O.T. BRASS DISK
ON A 4X4 CONCRETE MONUMENT
AT STATION #27+00.91, 43.30 Rt.
STAMPED: BM 7 02.

COMING FROM P.G. 2.0

C.R. - 580

SAM ALLEN ROAD
CROSS - SECTIONS
AT CROSS - DRAINS

ENGLISH

BM	+			ELEV.	ADJ. ELEV.
BM	7.03 (D) 7.97 (R) 15.00	113.725			104.695
	107.7	108.2	109.2	109.20	109.31
	6.0	5.5	4.5	4.53	4.42
438+85	41.3	29.8	17.4	17'	12.7
	END	END	END	E.P.	ASPH L.L.
TRIPLE CBC	99.71	99.74	99.74	107.74	107.73
	14.02	13.99	13.99	5.99	4.00
	42.2	42.2	42.2	42.2	42.2
	WEST INV.	CENTER INV.	EAST INV.	E.O.W.	E.O.W.
	2.0 x 10.0 BOX CULVERT				
S-4			99.3	99.4	100.1
			14.4	14.3	13.6
			24	66	42.4
			BOTTOM DITCH	BOTTOM DITCH	BOTTOM DITCH
T.P.	4.71 (D) 10.29 (R) 15.00	114.375	4.06 (D) 10.94 (R) 15.00	109.665	
BM			6.74 (D) 8.26 (R) 15.00	107.435 ERROR = 0.020	107.615

3-27-02
CLOUDY 75°
WITH A 2-45
JK2 8.1.7.2.1.8
DESCRIPTION

SET STANDARD F.D.O.T. BRASS DISK
ON A 4"x4" CONCRETE MONUMENT
AT STATION 438+00.89, 62.03 RT.
STAMPED: BM B 02

109.50	109.30	109.13	109.1	108.4	108.0
4.17	4.23	4.40	4.2	5.3	5.7
0	12	17'	17	30.4	41'
# 4	ASPH L.L.	E.P.	END	END	END
	107.94	107.94	99.93	99.89	99.90
	5.79	5.79	18.80	13.84	13.83
	41.5	42.3	42.3	42.3	42.3
	E.O.W.	E.O.W.	EAST INV.	CENTER INV.	WEST INV.
			2.0 x 10.0	BOX CULVERT	
	99.8	99.9	99.0		
	13.9	13.8	14.7		
	42.6	23	73'		
	BOTTOM DITCH	BOTTOM DITCH	BOTTOM DITCH		

NAIL IN ASPH.

SET STANDARD F.D.O.T. BRASS DISK
ON A 4"x4" CONCRETE MONUMENT
AT STATION 445+02.06, 62.57 RT.
STAMPED: BM 9 02

CULVERT - 01
P.C. - D. SHAFFER
K-B. HUDSON
J-A. CURRAY

CONT'D FROM PG. 31

C.R. 580

SAM ALLEN ROAD

CROSS-SECTIONS AT CROSS-DRAINS

ENGLISH

BM	+	K	—	ELEV.	ADJ ELEV
BM	5.07 (D) 9.93 (R) 15.00	113.718			108.648
	107.59	107.5	109.8	110.29	110.37
	6.13	6.2	3.9	3.43	3.35
452+75	44.3	44'	25'	18'	12.9
PROFILE	F.O.W.	T.O.S.	T.O.B.	E.P.	ASPH. L.L.
	100.7	103.1	103.7	102.98	107.59
	7.0	10.6	10.0	10.74	6.13
	69'	60.3	45'	44.9	44.9
	T.O.B.	T.O.S.	END	INV. 36" R.C.P.	B.O.W.
		102.5	102.9	103.3	104.9
		11.2	10.8	10.4	8.8
		112'	102'	98.6	89'
		GND	T.O.S.	ENC.	T.O.B.
T.P	3.21 (D) 11.79 (R) 15.00	113.528	3.40 (D) 11.60 (R) 15.00	110.318	
B.M.			5.91 (D) 9.09 (R) 15.00	107.618 ERROR: 0.003	107.615

S-5

3-22-02

PARTLY CLOUDY 84°

NIKON 132-15

S/N: 819218

DESCRIPTION

PC - D. SHAFER

R - B. HUDSON

A - L. CURRY

SET STANDARD F.D.O.T BRASS DISK ON A 4 X 4 CONCRETE MONUMENT AT STATION 453+98.20, 60.05 RT.

STAMPED: BM 10 02

110.59	110.33	110.15	110.1	107.6	107.3
3.13	3.39	3.57	3.6	2.1	2.4
0	13	18	19.4	41	43.9
B	ASPH.	E.P.	T.O.B.	T.O.S.	END
E	4.4				
	107.43	107.43	103.18	103.8	104.1
	6.29	6.29	10.54	9.2	9.6
	44.2	44.8	44.8	45'	44
	E.O.W.	B.O.W.	INV.	END	T.O.S.
			36" R.C.P.		
	104.3	108.1	108.3		
	2.4	5.6	5.4		
	64'	63.2	28		
	T.O.S.	T.O.B./ENC.	GND		

WALL IN ASPH

SET STANDARD F.D.O.T BRASS DISK ON A 4X4 CONCRETE MONUMENT AT STATION 445+00.06, 42.57 RT.

STAMPED: BM 9 02

CONT'D FROM PG. 32		C.R.-580 SAM ALLEN ROAD CROSS SECTIONS AT CROSS DRAINS			ENGLISH
BM	+			ELEV.	ADJ. ELEV.
BM	4.26 (D) 10.74 (R) 15.00	111.280			107.020
460+00 PROFILE	106.7 4.6 48.8 GND	106.9 4.4 45' T.O.S.	109.7 1.4 22' T.O.B.	110.20 1.08 17.5 E.P.	110.35 0.93 12.0 ASPH. L.L.
	102.5 8.8 70' T.O.S.	103.5 7.8 50 GND	102.21 9.07 49.8 INV. 36" R.C.P.	106.82 4.46 49.8 B.O.W.	106.82 4.46 49 F.O.W.
	5-6		104.0 7.3 102' GND	104.3 7.0 92' FNC.	104.0 7.3 81' T.O.B.
T.P.	1.62 (D) 13.38 (R) 15.00	112.220	6.68 (D) 8.32 (R) 15.00	110.600	
BM			3.56 (D) 11.44 (R) 15.00	108.660 ERROR: 0.012	108.248

3-22-02
PARTLY CLOUDY 25°
NIKON AZ-1S
S/N: 819218

P.C. - D. SHAFER
R - B. HUDSON
I - L. CURRY

DESCRIPTION

SET STANDARD F.D.O.T. BRASS DISK
ON A 4X4 CONCRETE MONUMENT
AT STATION 463+02.02, 59.18 RT.
STAMPED: BM 11 02

110.61 0.07 0 ℄	110.34 0.94 12' ASPH. L.L.	110.18 1.10 12' E.P.	109.7 1.6 22 T.O.B.	106.6 4.7 46.7 GND	102.0 9.28 47 F.O.W.
	102.00 9.28 47.8 B.O.W.	102.41 8.87 47.8 INV. 36" R.C.P.	103.1 8.2 48' GND	103.2 8.1 60.6 T.O.B./FNC.	102.3 9.0 66 ℄ DIT.
	105.3 6.0 78' T.O.B.	105.2 6.1 80' GND			

NAIL IN ASPH.

SET STANDARD F.D.O.T. BRASS DISK
ON A 4X4 CONCRETE MONUMENT
AT STATION 453+98.20, 60.05 RT.
STAMPED: BM 10 02

CONT'D FROM PG. 33

C.R. - 580

SAM ALLEN ROAD
CROSS- SECTIONS
AT CROSS- DRAINS

BM	+	℄		ELEV.	ADJ ELEV.
BM	6.33 (D) 8.67 (R) 15.00	113.350			107.020
467+00 PROFILE	108.36 4.99 48.4' F.O.W.	108.3 5.1 43' T.O.S.	110.2 3.2 18' T.O.B.	110.21 3.14 17.4 E.P.	110.35 3.00 12.7 ASPH.
S-7	104.5 8.9 80' GND	104.9 8.5 60' GND	105.1 8.3 45' GND	104.00 9.35 44.4 INV. 36" R.C.P.	108.36 4.99 44.4 B.O.W.
				105.1 8.3 102' GND.	105.1 8.3 92' FNC.
469+75.	107.2 6.2 47.6 GND	107.3 6.1 45' T.O.S.	109.9 3.5 24' T.O.B.	110.21 3.14 18.5 E.P.	110.31 3.04 14' ASPH
S-8	104.8 8.6 67' GND	104.8 8.6 49 GND	104.14 9.21 48.8 INV. 30" R.C.P.	107.57 5.78 48.8 B.O.W.	107.57 5.78 48' F.O.W.

NOTE: REFER TO PAGE 36 FOR STA. 469+75. DETAIL

ENGLISH

4-8-02
CLEAR 72°
NIKON AZ-1S
S/N. 819218

P.C. - D. SHAFER
⊼ - D. DULL
/ - R. DUCAS

DESCRIPTION
SET STANDARD FDOT BRASS DISK ON A 4x4 CONCRETE MONUMENT AT STATION 463+02.02, 59.18 Rt. STAMPED: BM 11 02

110.61 2.74 0 ℄	110.36 2.99 12.4 ASPH	110.09 3.26 17.4 ASPH.	110.02 3.33 20' E.P.	109.8 3.6 21 GND	
	110.0 3.4 27 T.O.B.	108.5 4.9 44.5 GND	108.56 4.79 45' F.O.W.	108.54 4.81 45.8 B.O.W.	104.15 9.22 45.8 INV. 36" R.C.P.
	104.9 8.5 46 GND	105.1 8.3 61 R/W	104.8 8.6 71 GND		
110.55 2.80 0 ℄	110.37 2.98 13.7 ASPH	110.20 3.15 19' E.P.	109.9 3.5 24 T.O.B.	107.3 6.1 46.5 T.O.S.	107.2 6.2 48.7 GND
	107.56 5.79 48.9 F.O.W.	107.54 5.81 49.7 B.O.W.	103.49 9.86 49.7 INV. 30" R.C.P.	104.4 9.0 50' GND	104.7 8.7 52.7 GND

THIS DOES NOT SEEM REASONABLE

CONT'D FROM PG. 34

C.R. -580

SAM ALLEN ROAD

CROSS - SECTIONS

AT CROSS DRAINS

ENGLISH

BM	+	AT ℄		ELEV.	ADJ. ELEV.
		113.350			
				104.1	104.2
				9.3	9.2
1491.75.				110'	100'
CONT'D				CND	FNC
T.P.	2.81 (D)	113.060	3.10 (D)	110.250	
	12.19 (R)		11.90 (R)		
	15.00		15.00		
BM			7.70 (D)	105.340	105.356
			7.30 (R)	ERROR = 0.004	
			15.00		

Z-B-02
CLEAR 24"
MYLAR A2-15
FN: 8192K8
DESCRIPTION

P.C. - D.S. MAHLER
K. D. DULAK
J. K. DUBAIS

	104.0	104.1	105.0
	8.8	8.3	8.4
0	57.9	19	80'
℄	CND	FNC	CND

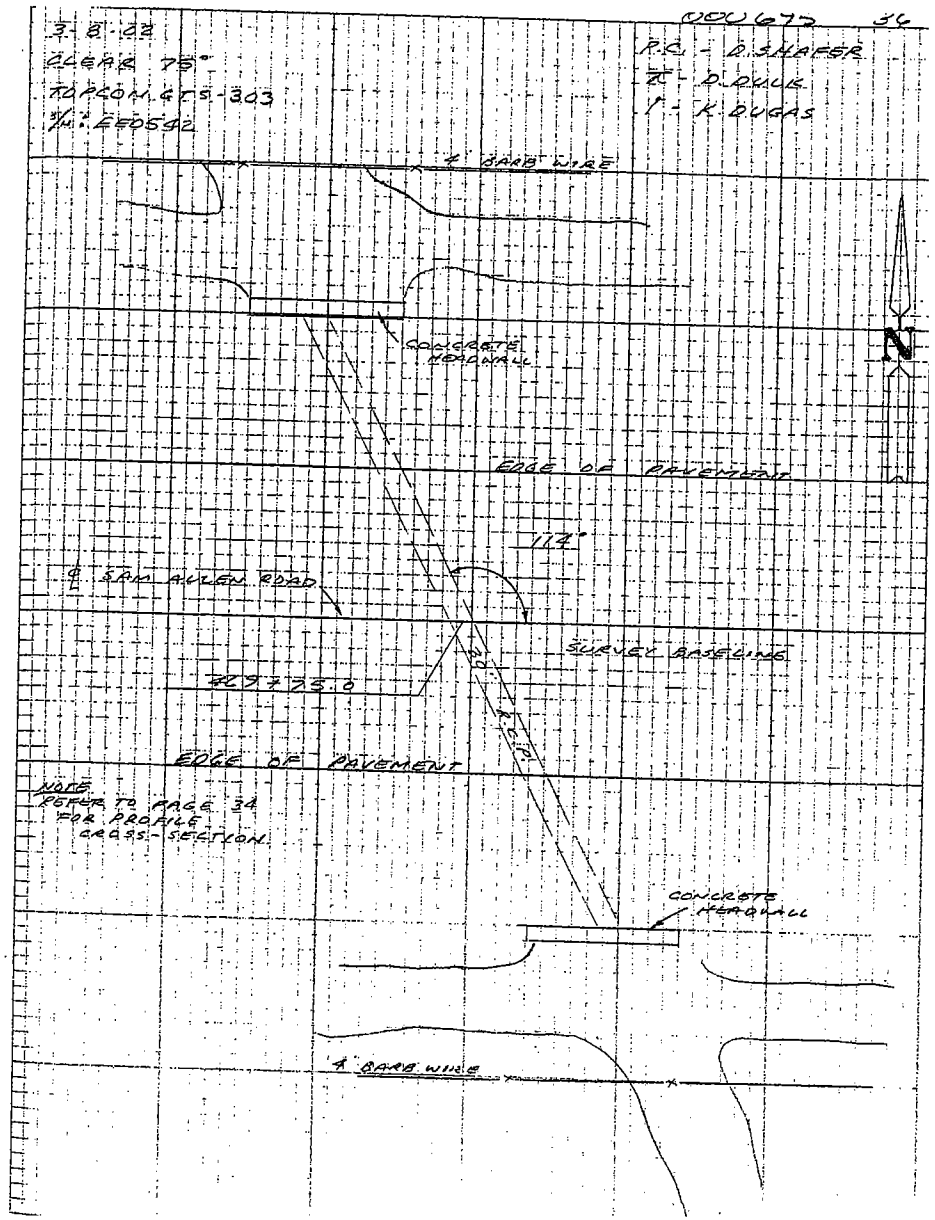
MARK IN ASPH

SET STANDARD E.D.O.T. BRASS DISK
ON A 24" CONCRETE MONUMENT
AT STATION 771+22.09, 22.73 LT.
STAMPED: BM 12 02

CONT'D FROM PG. 35

C.R. - 580
SAM ALLEN ROAD
CROSS - SECTIONS
AT CROSS - DRAINS

ENGLISH



CONT'D FROM PG. 36

C.R. - 580

SAM ALLEN ROAD CROSS-SECTIONS AT CROSS-DRAINS

ENGLISH

BM	+		−	ELEV.	ADJ. ELEV.
BM	6.45 (D) 8.55 (R) 15.00	112.000			105.550
480+34.4	109.4 2.60 52.2 F.O.W.	109.4 2.6 52' GND	110.3 1.71 22' E.P.	110.4 1.61 17' ASPH.	110.6 1.41 0.6 ℄
DOUBLE CBC	102 10.0 75' GND	102.6 9.4 53' GND	102.3 9.67 52.8 WEST INV. 5X9 BOX CULVERT	102.3 9.67 52.8 EAST INV. 5X9 BOX CULVERT	109.4 2.59 52.8 B.O.W.
S-9	NOTE: REFER TO PAGE 39 FOR CROSS-SECTION DETAIL		10.6 126' GND	10.6 116' FNC.	10.6 100' GND
T.P.	3.11 (D) 11.89 (R) 15.00	113.360	1.75 (D) 13.25 (R) 15.00	110.250	
485+00	107.1 6.3 43.8 GND	107.2 6.2 40.5 T.O.S.	109.0 4.4 29' T.O.B.	110.2 3.17 17' E.P.	109.6 3.74 13' ASPH.

2-8-02
CLEAR 75°
NIKON AZ-13
S/N 812218

P.C. - D. SHAFER
℄ - D. DULK
I - K. DUCAS

DESCRIPTION

SET STANDARD F.D.O.T. BRASS DISK ON A 4X4 CONCRETE MONUMENT AT STATION 481+49.13, 65.76 RT. STAMPED: BM 13 02

110.6 1.42 0 ℄	110.4 1.61 15' ASPH.	110.2 1.79 21.6 E.P.	109.5 2.5 52.5 GND	109.5 2.47 52.8 F.O.W.	109.5 2.47 53.7 B.O.W.
	102.5 9.49 53.7 EAST INV. 5X9 BOX CULVERT	102.5 9.49 53.7 WEST INV. 5X9 BOX CULVERT	102.5 9.5 54' GND	103.5 8.5 69' GND	104.1 7.9 77' T.O.S.
	106.8 5.2 81' T.O.B.	107.8 4.2 90' GND	107.8 4.2 120' GND.		

NAIL IN ASPH.

110.6 2.81 0 ℄	110.3 3.02 12' ASPH.	110.1 3.24 17.3 E.P.	108.3 5.1 37' T.O.B.	107.4 6.0 43.8 T.O.S.	107.6 5.73 44' F.O.W.

CONTD FROM PC. 37

C.R. 580
SAM ALLEN ROAD
CROSS-SECTIONS
AT CROSS-DRAINS

ENGLISH

BM	℄	C.R. 580	—	ELEV.	ADJ. ELEV.
		113.360			
	101.2 12.2 6.0' GND.	102.4 11.0 45' GND	102.3 11.02 44.8 INV. 42" R.C.P.	107.5 5.88 44.8' B.O.W.	107.5 5.87 44' F.O.W.
485+00 PROFILE					
		103.7 9.7 100' GND.	103.7 9.7 89.7' FNC.	102.7 10.7 75' T.O.B.	101.7 11.7 70.7 T.O.S.
BM			4.73 (o) 10.27 (e) 15.00	108.630 ERROR = 0.033	108.597

S-10

T.B.D.2
CLEAR TS
WIXOM AZ-15
TA: 879218
DESCRIPTION

P.C. - D. SHAFER
A - D. DULK
I - K. DUGAS

	107.6 5.73 44.8 B.O.W.	104.5 8.85 44.8 INV. 42" R.C.P.	102.7 10.7 45 C.L.D.	103.7 9.7 C.O. END	104.1 9.3 81.5 ENC.
D ℄ E					
	103.9 7.5 90 END				

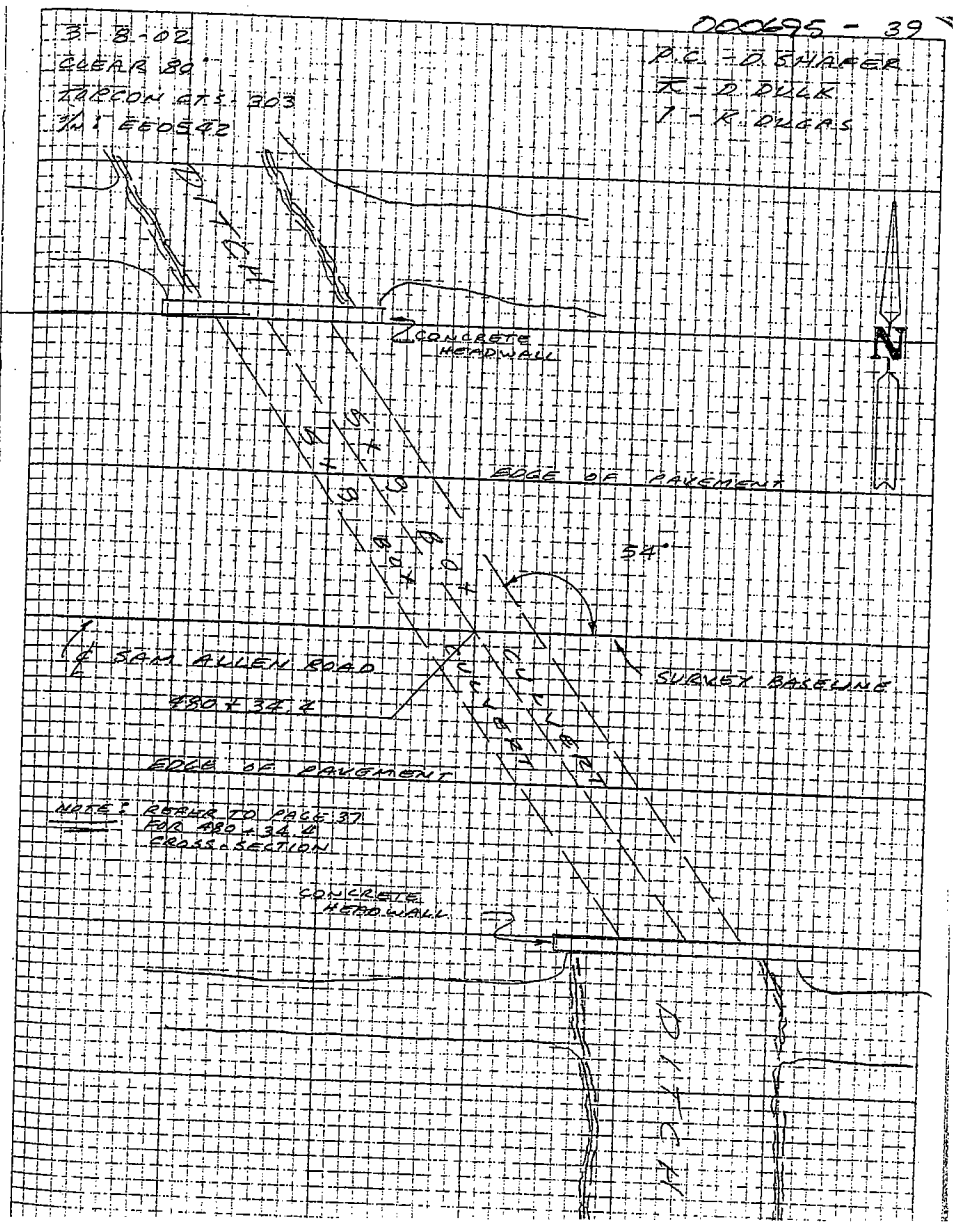
SET STANDARD F.D.O.T. BRASS DISK
ON A 4"x4" CONCRETE MONUMENT
AT STATION
STAMPED: TO 022 403

CONTD FROM PG. 38

C.R. - 580

SAM ALLEN ROAD
CROSS - SECTIONS
AT CROSS - DRAINS

ENGLISH



CONTD FROM PG. 53

C.R - 580

SAM ALLEN ROAD
CROSS - SECTIONS
AT CROSS - DRAINS

ENGLISH

		K	—	ELEV.	ADJ. ELEV.
BM	4.63 (D) 10.37 (R) 15.00	116.646			112.016
	111.1	112.8	113.0	112.94	113.31
	5.6	3.8	3.6	3.71	3.34
189+60,	66'	35.3	31'	30.2	14.6
PROFILE	T.O.S.	T.O.B	GND	E.P.	℄
DBL CBC	102.1	105.2	104.19	111.18	111.18
	10.5	11.4	12.46	5.47	5.47
	85'	70'	68.6	68.6	67.7
	℄ DITCH	GND.	I.N.V. 9'X5' BOX CULVERT	B.O.W	F.O.W
S-12					102.2
	NOTE: SEE CROSS-DRAIN DETAIL AT STA. 189+60 ON PG. 55				10.3
					95'
					℄ DITCH
T.P.	7.57 (D) 7.43 (R) 15.00	118.996	5.22 (D) 9.78 (R) 15.00	111.426	
BM			2.46 (D) 12.54 (R) 15.00	116.536 ERROR: 0.004	116.540

4-11-02
CLOUDY 80°
NIKON A2-1.5
TM: 81.82218
DESCRIPTION

P.C. - A. SHAFFER
T - A. DUCK
1 - K. DEGAS
2 - T. MOONEY

SET STANDARD E.D.O.T. BRASS DISK ON A 4"x4" CONCRETE MONUMENT AT STATION 184+98.59, 125.47 Rt.
STAMPED: BM 16 02

113.14	113.05	112.9	112.9	111.3	111.2
3.51	3.32	3.8	3.8	5.3	5.24
0	2.7	1.7	7.4	36.4	32.2
℄	E.P.	GND.	T.O.B.	T.O.S.	F.O.W.
	111.4	109.33	102.0	102.2	108.3
	5.24	7.32	12.6	9.5	8.4
	38.1	38.1	38.5	87'	120.5
	B.O.W.	INV. 2'x5' BOX CULVERT	CMP	℄ DITCH	℄ DITCH
	127.3	108.1			
	8.4	8.4			
	136.1	127			
	FNC.	GND			

TOP OF PIN

SET STANDARD E.D.O.T. BRASS DISK ON A 4"x4" CONCRETE MONUMENT AT STATION 185+00, 124.00 Rt.
STAMPED: BM 17 02

CONTD FROM PG. 54

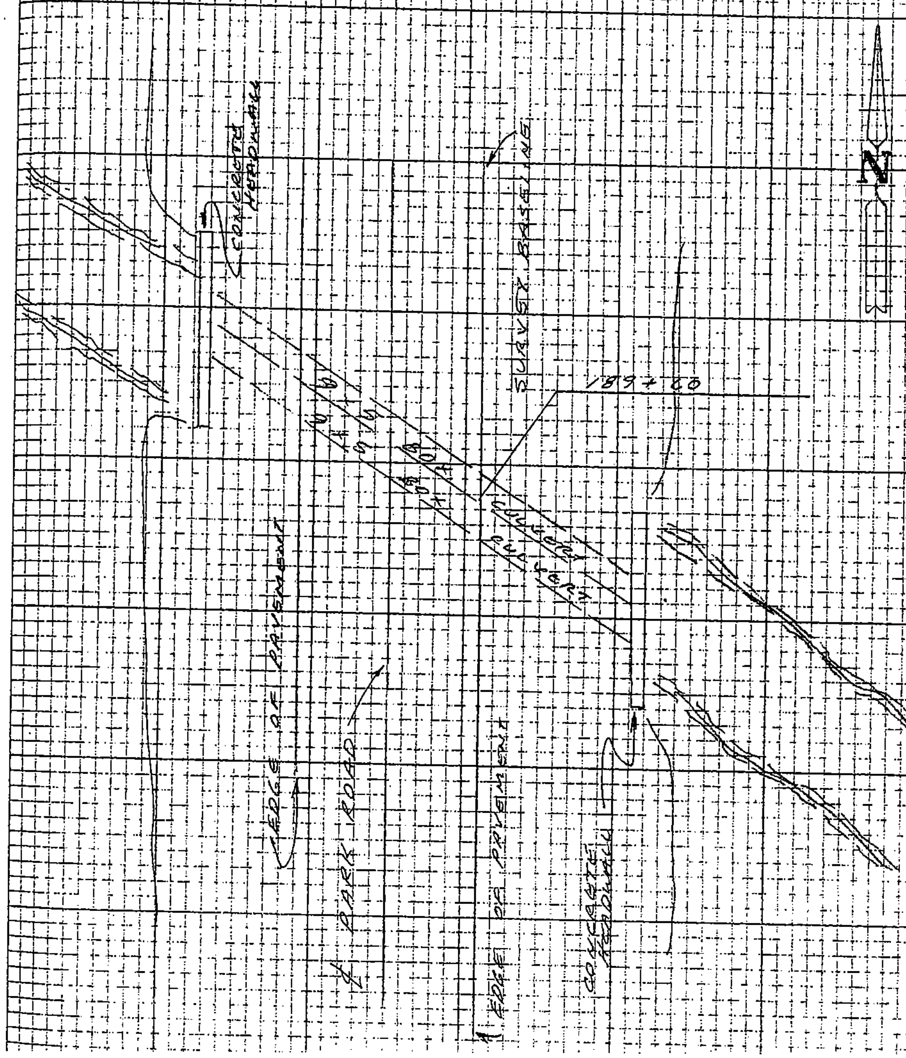
C.R. - 580

SAM ALLEN ROAD
CROSS - SECTIONS
AT CROSS - DRAINS

ENGLISH

7-11-02
CLOUDY 82°
TOPCON GTS-303
S/N: EE0582

R.C. - D. SHAFER
X - D. DUCK
/ - K. DUGAS
/ - J. MOONEY



CONTD FROM PG. 55

C.R. -580
SAM ALLEN ROAD
CROSS - SECTIONS
AT CROSS - DRAINS

ENGLISH

BM	+	℄		ELEV.	ADJ ELEV.
BM	6.22 (D) 8.78 (R) 15.00	114.817			108.597
202+21. PROFILE	C.C. 50' T.O.S.	4.2, 32' T.O.B.	4.1, 24' GND.	3.73 23.5 E.P.	3.48 11.5 ℄
S-11	9.5, 54' GND.	105.33 9.49 53.9 INV. 24 R.C.P.	6.29 53.9 B.O.W.	6.28 53.1 F.O.W.	6.6 52.5 GND.
			8.4 72' T.O.B.	9.4 68' T.O.S.	9.7, 64' ℄ DIT.
T.P.	3.90 (D) 11.10 (R) 15.00	113.707	5.01 (D) 9.99 (R) 15.00	109.807	
BM.			8.20 (D) 6.80 (R) 15.00	105.507 ERROR = 0.043	105.550

4-15-02
CLEAR 72°
NIKON AZ-15
S/N 819218
DESCRIPTION

P.C. - D. SHAFER
T - D. DUCK
I - K. DUGAS

SET STANDARD F.D.O.T. BRASS DISK
ON A 4X4 CONCRETE MONUMENT
AT STATION
STAMPED: 10 02 403

3.78 0 ℄	3.85 4.9 E.P.	4.0 2.9' GND	4.4, 14' T.O.B.	5.9 26.5 T.O.S.	6.2' 30' GND
	5.99 31' F.O.W.	5.98 31.9 B.O.W.	105.54 9.28 32' 24" R.C.P.	9.2 33' GND	9.2 42' T.O.S.
	7.4 51' T.O.B.	7.2 75' GND			

WALK IN ASPH.

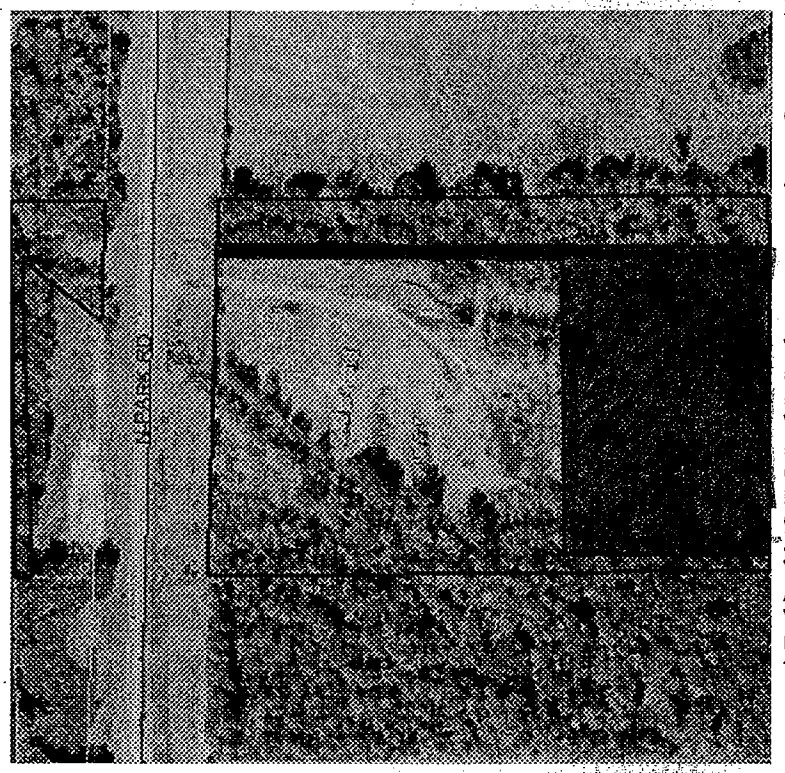
SET STANDARD F.D.O.T. BRASS DISK
ON A 4X4 CONCRETE MONUMENT
AT STATION 281+09.13, 65.76 RT.
STAMPED: BM 13 02

Appendix I
SMFs and FPCs Shown on Property Maps

Hillsborough County Property Appraiser
Parcel Query System

size:

owner
address
folio
pin
sec-twp-rge
legend
buffer
Layers:
Aerials + Parcels



FOLIO: 0898640000 PIN; P-15-28-22-ZZZ-000004-71400.0 ACREAGE: 15.56
10/8/2004 2:45:57 PM - 10/8/2004 2:46:00 PM

0 140 ft

VIEW CAMA INFORMATION

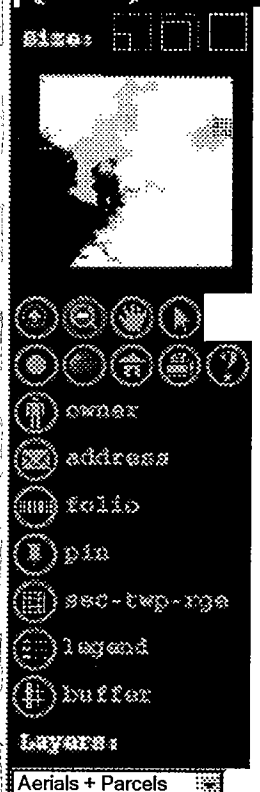
FOLIO:	0898640000
PIN NUMBER:	P-15-28-22-ZZZ-000004-71400.0
OWNER 1:	DEPT OF TRANSPORTATION
ADDRESS:	0 PLANT CITY
LEGAL DESC:	70.21 FT THN S 573.15 FT TO POB
DOR CODE:	8700

VALUE SUMMARY:

BUILDING VALUE:	$0
EXTRA FEATURE VALUE:	$0
LAND VALUE (MARKET):	$592,302
LAND VALUE (AGRI.):	$0
JUST (MARKET) VALUE:	$592,302
ASSESSED VALUE (A10):	$592,302
EXEMPT VALUE:	$592,302
TAXABLE VALUE:	$0

SMF-A-1

Hillsborough County Property Appraiser
Parcel Query System



VIEW CAMA INFORMATION

FOLIO:	0899030000
PIN NUMBER:	P-16-28-22-ZZZ-000004-71890.0
OWNER 1:	MAGOULAKIS JACK PAGE GUS
ADDRESS:	0 PLANT CITY
LEGAL DESC:	SW 1/4 OF NE 1/4 LESS S 90 FT FOR R/W
DOR CODE:	6000

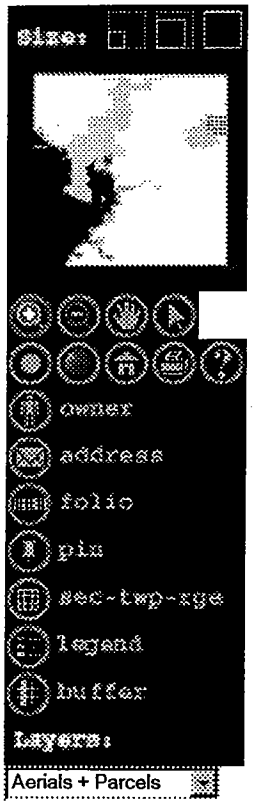
VALUE SUMMARY:

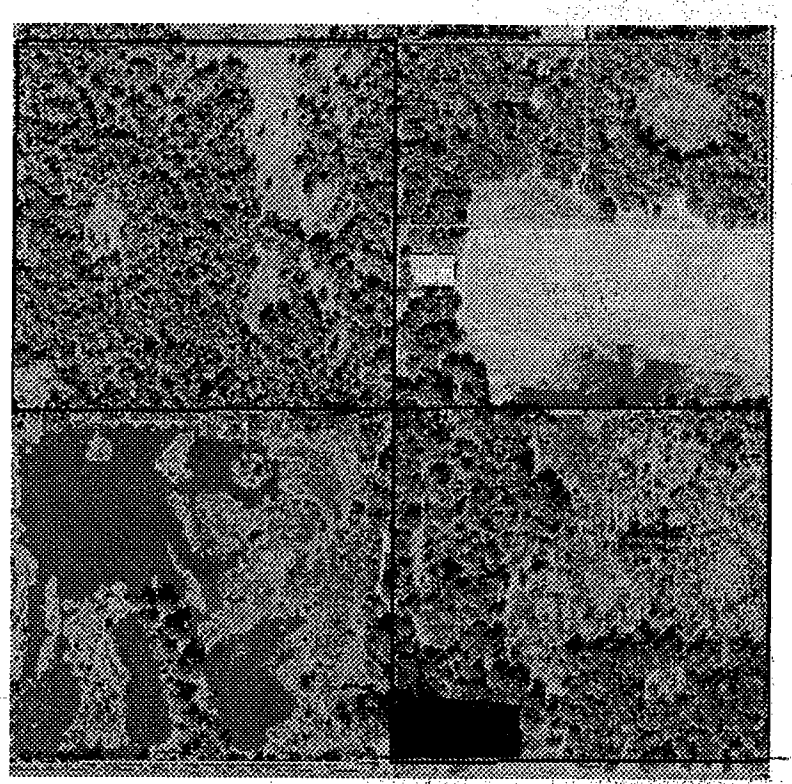
BUILDING VALUE:	$0
EXTRA FEATURE VALUE:	$0
LAND VALUE (MARKET):	$125,820
LAND VALUE (AGRI.):	$3,728
JUST (MARKET) VALUE:	$125,820
ASSESSED VALUE (A10):	$3,728
EXEMPT VALUE:	$0
TAXABLE VALUE:	$3,728

FOLIO: 0899030000 PIN; P-16-28-22-ZZZ-000004-71890.0 ACREAGE: 38.27
10/8/2004 2:49:27 PM - 10/8/2004 2:49:30 PM

0 282 ft

SMF-B-1





SAM ALLEN ROAD

FOLIO: 0899020000 PIN; P-16-28-22-ZZZ-000004-71880.0 ACREAGE: 77.66
10/8/2004 2:48:21 PM - 10/8/2004 2:48:23 PM

0 280 ft

MARYLAND

SHF-B-2

Hillsborough County Property Appraiser
Parcel Query System

size:

owner
address
folio
pin
sec-twp-rge
legend
buffer
Layers:
Aerials + Parcels

FOLIO: 0899180000 PIN; U-16-28-22-ZZZ-000004-72190.0 ACREAGE: 25.73
10/8/2004 2:52:17 PM - 10/8/2004 2:52:20 PM

0 280 ft

VIEW CAMA INFORMATION

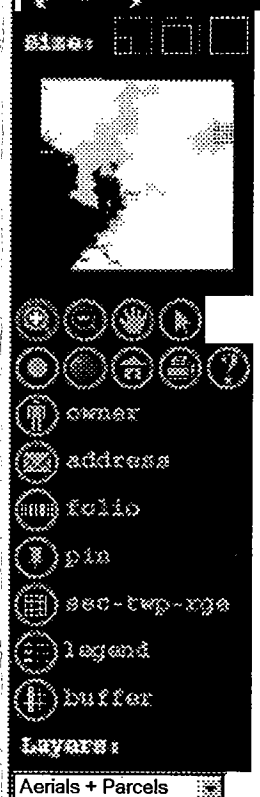
FOLIO:	0899180000
PIN NUMBER:	U-16-28-22-ZZZ-000004-72190.0
OWNER 1:	DCSS INVESTMENTS INC
ADDRESS:	606 E TERRACE DR UNINCORPORATED
LEGAL DESC:	E 5/8 OF SE 1/4 OF SW 1/4
DOR CODE:	0100

VALUE SUMMARY:

BUILDING VALUE:	$550
EXTRA FEATURE VALUE:	$0
LAND VALUE (MARKET):	$250,500
LAND VALUE (AGRI.):	$0
JUST (MARKET) VALUE:	$251,050
ASSESSED VALUE (A10):	$251,050
EXEMPT VALUE:	$0
TAXABLE VALUE:	$251,050

FPC-B-1

Hillsborough County Property Appraiser
Parcel Query System



VIEW CAMA INFORMATION

FOLIO:	0899070000
PIN NUMBER:	U-16-28-22-ZZZ-000004-71910.0
OWNER 1:	BOONE FLOYD M
	BOONE CATHERINE F
ADDRESS:	1111 SAM ALLEN RD
	UNINCORPORATED
LEGAL DESC:	E 346.47 FT OF NE 1/4 OF SW 1/4
DOR CODE:	6900

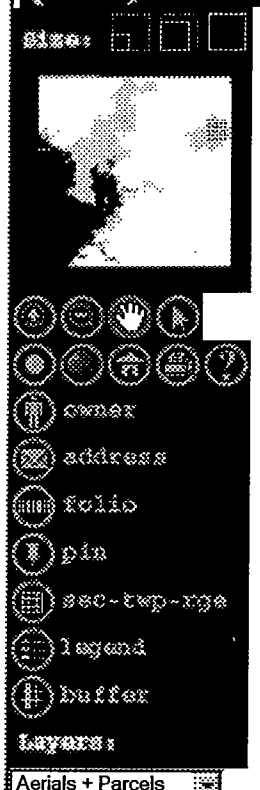
VALUE SUMMARY:	
BUILDING VALUE:	$14,553
EXTRA FEATURE VALUE:	$2,304
LAND VALUE (MARKET):	$131,600
LAND VALUE (AGRI.):	$43,250
JUST (MARKET) VALUE:	$148,457
ASSESSED VALUE (A10):	$60,107
EXEMPT VALUE:	$0
TAXABLE VALUE:	$60,107

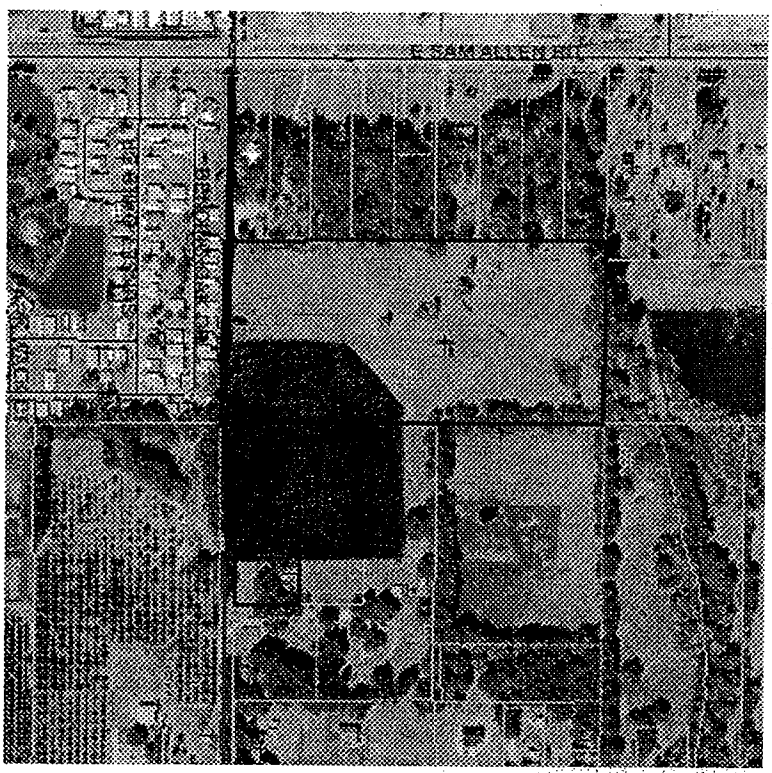
FOLIO: 0899070000 PIN: U-16-28-22-ZZZ-000004-71910.0 ACREAGE: 9.95
10/11/2004 9:16:47 AM - 10/11/2004 9:16:50 AM

0 284 ft

ACCESS EASE TO PPC-B-1

Hillsborough County Property Appraiser
Parcel Query System





VIEW CAMA INFORMATION

FOLIO:	0899150000
PIN NUMBER:	U-16-28-22-ZZZ-000004-72160.0
OWNER 1:	STALVEY BOBBY D AND MARY ANN
ADDRESS:	310 E TERRACE DR UNINCORPORATED
LEGAL DESC:	S 1/2 OF NW 1/4 OF SW 1/4
DOR CODE:	6000

VALUE SUMMARY:

BUILDING VALUE:	$0
EXTRA FEATURE VALUE:	$0
LAND VALUE (MARKET):	$200,000
LAND VALUE (AGRI.):	$5,000
JUST (MARKET) VALUE:	$200,000
ASSESSED VALUE (A10):	$5,000
EXEMPT VALUE:	$0
TAXABLE VALUE:	$5,000

FOLIO: 0899150000 PIN; U-16-28-22-ZZZ-000004-72160.0 ACREAGE: 22.36
10/11/2004 10:48:29 AM - 10/11/2004 10:48:32 AM

0 284 ft

F.P.C-C-1.

Hillsborough County Property Appraiser

Parcel Query System

VIEW CAMA INFORMATION

FOLIO:	0899390156
PIN NUMBER:	U-16-28-22-72Z-000000-00003.0
OWNER 1:	STALVEY BOBBY D STALVEY MARY ANN
ADDRESS:	0
LEGAL DESC:	LOT 3
DOR CODE:	4810

VALUE SUMMARY:	
BUILDING VALUE:	$56,988
EXTRA FEATURE VALUE:	$6,648
LAND VALUE (MARKET):	$117,600
LAND VALUE (AGRI.):	$0
JUST (MARKET) VALUE:	$181,236
ASSESSED VALUE (A10):	$181,236
EXEMPT VALUE:	$0
TAXABLE VALUE:	$181,236

FOLIO: 0899390156 PIN; U-16-28-22-72Z-000000-00003.0 ACREAGE: 11.76
10/11/2004 1:58:15 PM - 10/11/2004 1:58:17 PM

0 284 ft

FPC-C-1

Hillsborough County Property Appraiser
Parcel Query System

Size:

owner
address
folio
pin
sec-twp-rge
legend
buffer

Layers:

Aerials + Parcels

FOLIO: 0899390154 PIN: U-16-28-22-72Z-000000-00002.0 ACREAGE: 2
10/8/2004 3:00:37 PM - 10/8/2004 3:00:39 PM

0 274 ft

VIEW CAMA INFORMATION

FOLIO:	0899390154
PIN NUMBER:	U-16-28-22-72Z-000000-00002.0
OWNER 1:	STALVEY ROBERT M STALVEY RHONDA
ADDRESS:	0
LEGAL DESC:	LOT 2
DOR CODE:	6000

VALUE SUMMARY:	
BUILDING VALUE:	$0
EXTRA FEATURE VALUE:	$0
LAND VALUE (MARKET):	$32,000
LAND VALUE (AGRI.):	$500
JUST (MARKET) VALUE:	$32,000
ASSESSED VALUE (A10):	$500
EXEMPT VALUE:	$0
TAXABLE VALUE:	$500

F.P.C-C-1.

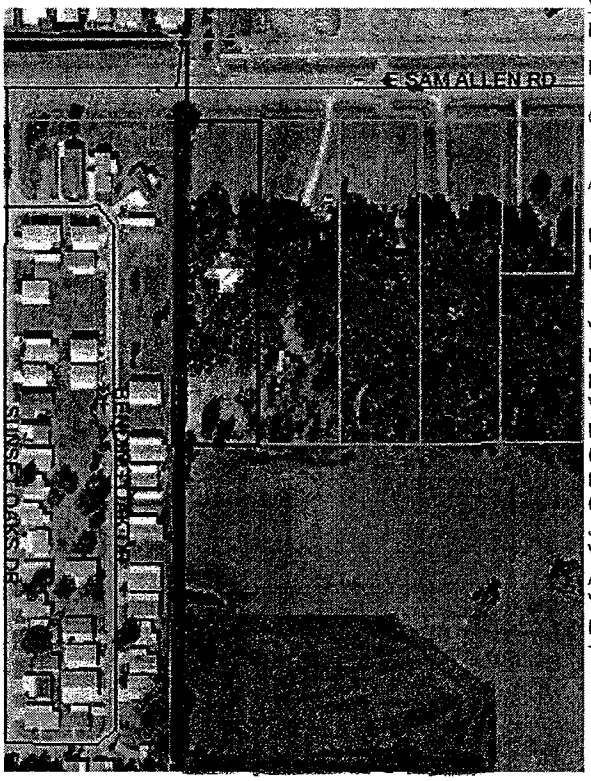
Hillsborough County Property Appraiser
Parcel Query System

Size:

owner
address
folio
pin
sec-twp-rge
legend
buffer

Layers:

Aerials + Parcels



VIEW CAMA INFORMATION

FOLIO:	0899070500
PIN NUMBER:	U-16-28-22-ZZZ-000004-71920.0
OWNER 1:	CAREY JOHN W ESTATE OF
ADDRESS:	601 E SAM ALLEN RD UNINCORPORATED
LEGAL DESC:	SAM ALLEN RD
DOR CODE:	0100

VALUE SUMMARY:

BUILDING VALUE:	$104,103
EXTRA FEATURE VALUE:	$0
LAND VALUE (MARKET):	$33,120
LAND VALUE (AGRI.):	$0
JUST (MARKET) VALUE:	$137,223
ASSESSED VALUE (A10):	$137,223
EXEMPT VALUE:	$0
TAXABLE VALUE:	$137,223

FOLIO: 0899070500 PIN; U-16-28-22-ZZZ-000004-71920.0 ACRE
10/11/2004 11:45:01 AM - 10/11/2004 11:45:03 AM

F.P.C-C-1

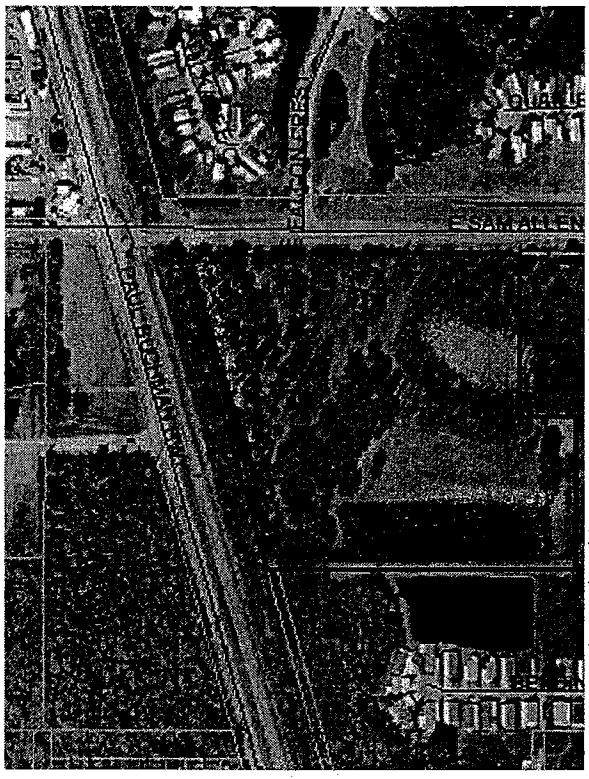
Hillsborough County Property Appraiser
Parcel Query System

Size:

owner
address
folio
pin
sec-twp-rge
legend
buffer

Layers:

Aerials + Parcels



FOLIO: 0899730100 PIN; P-17-28-22-ZZZ-000004-72830.0 ACRE
10/11/2004 12:26:42 PM - 10/11/2004 12:26:45 PM

VIEW CAMA INFORMATION

FOLIO:	0899730100
PIN NUMBER:	P-17-28-22-ZZZ-000004-72830.0
OWNER 1:	WALLER FERRIS
	WALLER PEGGY A
ADDRESS:	0
	PLANT CITY
LEGAL DESC:	W 850 FT THN E 892.09 FT TO POB
DOR CODE:	1000

VALUE SUMMARY:	
BUILDING VALUE:	$0
EXTRA FEATURE VALUE:	$0
LAND VALUE (MARKET):	$439,467
LAND VALUE (AGRI.):	$0
JUST (MARKET) VALUE:	$439,467
ASSESSED VALUE (A10):	$439,467
EXEMPT VALUE:	$0
TAXABLE VALUE:	$439,467

SMF. - C - 1.

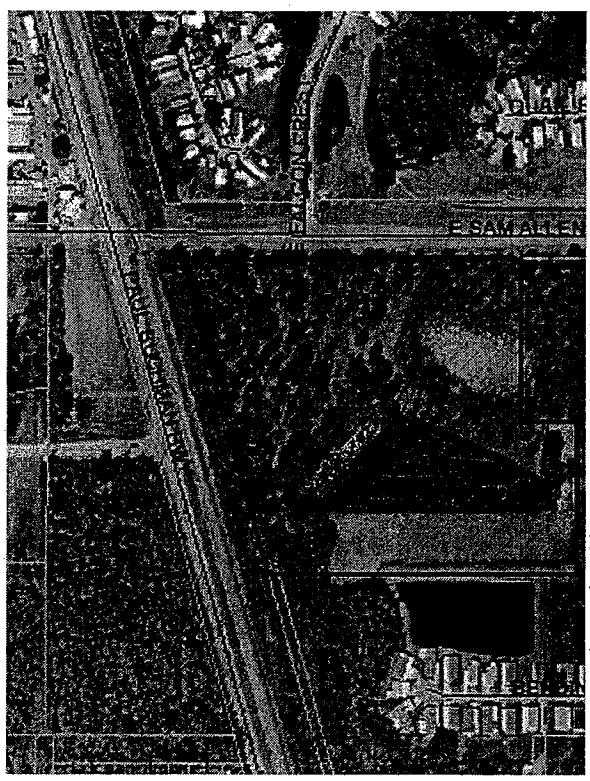
Hillsborough County Property Appraiser
Parcel Query System

Size:

owner
address
folio
pin
sec-twp-rge
legend
buffer

Layers:

Aerials + Parcels



VIEW CAMA INFORMATION

FOLIO:	0899730100
PIN NUMBER:	P-17-28-22-ZZZ-000004-72830.0
OWNER 1:	WALLER FERRIS
	WALLER PEGGY A
ADDRESS:	0
	PLANT CITY
LEGAL DESC:	W 850 FT THN E 892.09 FT TO POB
DOR CODE:	1000

VALUE SUMMARY:	
BUILDING VALUE:	$0
EXTRA FEATURE VALUE:	$0
LAND VALUE (MARKET):	$439,467
LAND VALUE (AGRI.):	$0
JUST (MARKET) VALUE:	$439,467
ASSESSED VALUE (A10):	$439,467
EXEMPT VALUE:	$0
TAXABLE VALUE:	$439,467

FOLIO: 0899730100 PIN; P-17-28-22-ZZZ-000004-72830.0 ACRE
10/11/2004 12:26:42 PM - 10/11/2004 12:26:45 PM

SMF-C-2.

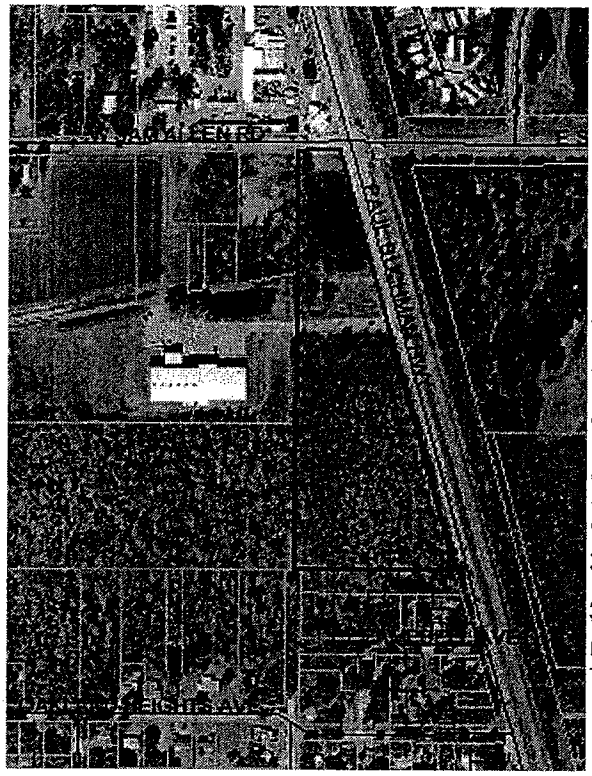
Hillsborough County Property Appraiser
Parcel Query System

Size:

owner
address
folio
pin
sec-twp-rge
legend
buffer

Layers:

Aerials + Parcels



VIEW CAMA INFORMATION

FOLIO:	0899740000
PIN NUMBER:	U-17-28-22-ZZZ-000004-72870.0
OWNER 1:	GRIMES CHARLES G AND BETTY J
ADDRESS:	0 UNINCORPORATED
LEGAL DESC:	FT FOR R/W
DOR CODE:	9900

VALUE SUMMARY:

BUILDING VALUE:	$0
EXTRA FEATURE VALUE:	$0
LAND VALUE (MARKET):	$58,985
LAND VALUE (AGRI.):	$0
JUST (MARKET) VALUE:	$58,985
ASSESSED VALUE (A10):	$58,985
EXEMPT VALUE:	$0
TAXABLE VALUE:	$58,985

FOLIO: 0899740000 PIN; U-17-28-22-ZZZ-000004-72870.0 ACRE
10/11/2004 12:56:35 PM - 10/11/2004 12:56:38 PM

SMF - D - 1.

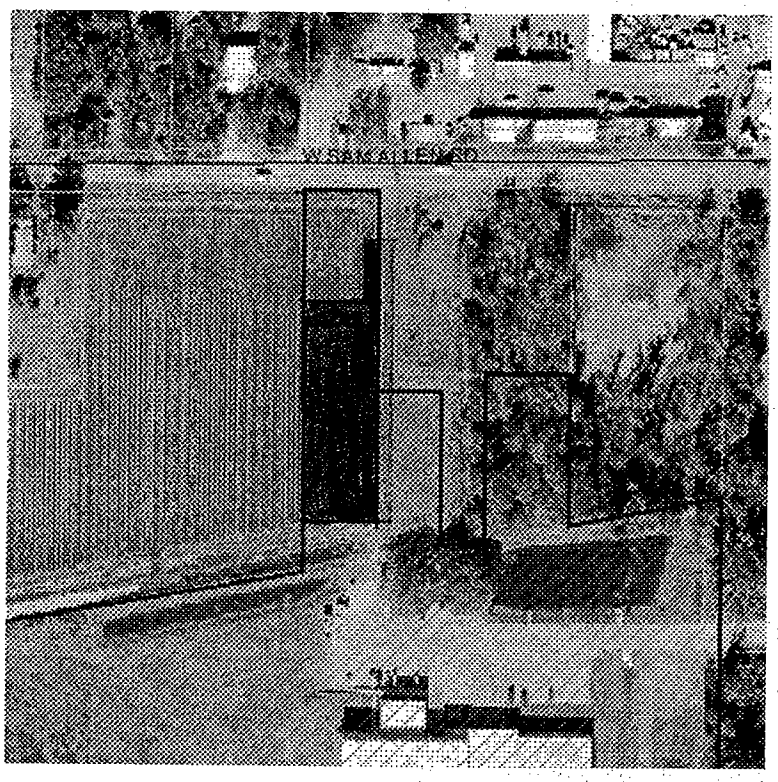
Hillsborough County Property Appraiser
Parcel Query System

Size:

owner
address
folio
pin
sec-twp-rge
legend
buffer

Layers:

Aerials + Parcels



FOLIO: 0899540000 PIN: U-17-28-22-ZZZ-000004-72620.0 ACREAGE: 42.46
10/11/2004 2:54:11 PM - 10/11/2004 2:54:12 PM

0 96 ft

VIEW CAMA INFORMATION

FOLIO:	0899540000
PIN NUMBER:	U-17-28-22-ZZZ-000004-72620.0
OWNER 1:	GRIMES CHARLES G AND BETTY J
ADDRESS:	3137 PAUL BUCHMAN HWY UNINCORPORATED
LEGAL DESC:	FT TO POB
DOR CODE:	5100

VALUE SUMMARY:

BUILDING VALUE:	$1,286,691
EXTRA FEATURE VALUE:	$67,577
LAND VALUE (MARKET):	$383,080
LAND VALUE (AGRI.):	$61,010
JUST (MARKET) VALUE:	$1,737,348
ASSESSED VALUE (A10):	$1,415,278
EXEMPT VALUE:	$0
TAXABLE VALUE:	$1,415,278

SMF-D-2

Appendix J
Draft Cultural Resource Assessment Survey Technical Memorandum

DRAFT
CULTURAL RESOURCE ASSESSMENT SURVEY
TECHNICAL MEMORANDUM

PARK ROAD/SAM ALLEN ROAD FROM I-4 TO ALEXANDER STREET EXTENSION PROPOSED POND AND FLOODPLAIN COMPENSATION (FPC) SITE ALTERNATIVES HILLSBOROUGH COUNTY, FLORIDA

Work Program Item Number: 257862 1
Federal Aid Project Number: 0295-005

Prepared for:

Florida Department of Transportation
District Seven
11201 North McKinley Drive
Tampa, Florida 33612-6456

Prepared by:

Archaeological Consultants, Inc.
8110 Blaikie Court, Suite A
Sarasota, Florida 34240

In association with:

Parsons Brinckerhoff
5405 West Cypress Street, Suite 300
Tampa, Florida 33607

August 2004

CULTURAL RESOURCE ASSESSMENT SURVEY
TECHNICAL MEMORANDUM
PARK ROAD/SAM ALLEN ROAD
FROM I-4 TO ALEXANDER STREET EXTENSION
PROPOSED POND AND FLOODPLAIN
COMPENSATION (FPC) SITE ALTERNATIVES
HILLSBOROUGH COUNTY, FLORIDA

1.0 INTRODUCTION

Archaeological Consultants, Inc. (ACI) conducted field survey of nine proposed pond and floodplain compensation (FPC) site alternatives for the Florida Department of Transportation (FDOT) as part of their Project Development and Environment (PD&E) Study for proposed improvements to Park Road/Sam Allen Road from I-4 to Alexander Street Extension in Hillsborough County, Florida. The proposed pond and FPC sites are located in Sections 15, 16 and 17 of Township 28 South, Range 22 East (USGS Plant City West, Fla. 1975; Plant City, East, Fla. 1975) (Figure 1).

The purpose of the survey was to locate and identify any prehistoric and historic period archaeological sites and historic structures located within or adjacent to the nine proposed pond and FPC site alternatives, and to assess their significance in terms of eligibility for listing in the NRHP according to criteria set forth in 36 CFR Section 60.4. This work was conducted in compliance with the provisions of the National Historic Preservation Act of 1966 (Public Law 89-665), as amended, and the implementing regulations 36 CFR 800, as well as with the provisions contained in the revised Chapter 267, Florida Statutes (F.S.). The historical/architectural and archaeological surveys were conducted in August 2004. All work was carried out in conformity with Part 2, Chapter 12 ("Archaeological and Historical Resources") of the Florida Department of Transportation's *Project Development and Environment Manual* (revised January 1999), and the standards contained in "The Historic Preservation Compliance Review Program of the Florida Department of State, Division of Historical Resources" Manual (revised November 1990). Field surveys were preceded by background research. Such work served to provide an informed set of expectations concerning the kinds of cultural resources which might be anticipated to occur within the project's Area of Potential Effect (APE), as well as a basis for evaluating any new sites found.

2.0 BACKGROUND RESEARCH

A review of archaeological and historical literature and data pertaining to the project was conducted. The purpose of this research was to ascertain the types of cultural resources known in the project vicinity, their temporal/cultural affiliations, site location information, and other relevant data. This review focused primarily on the background

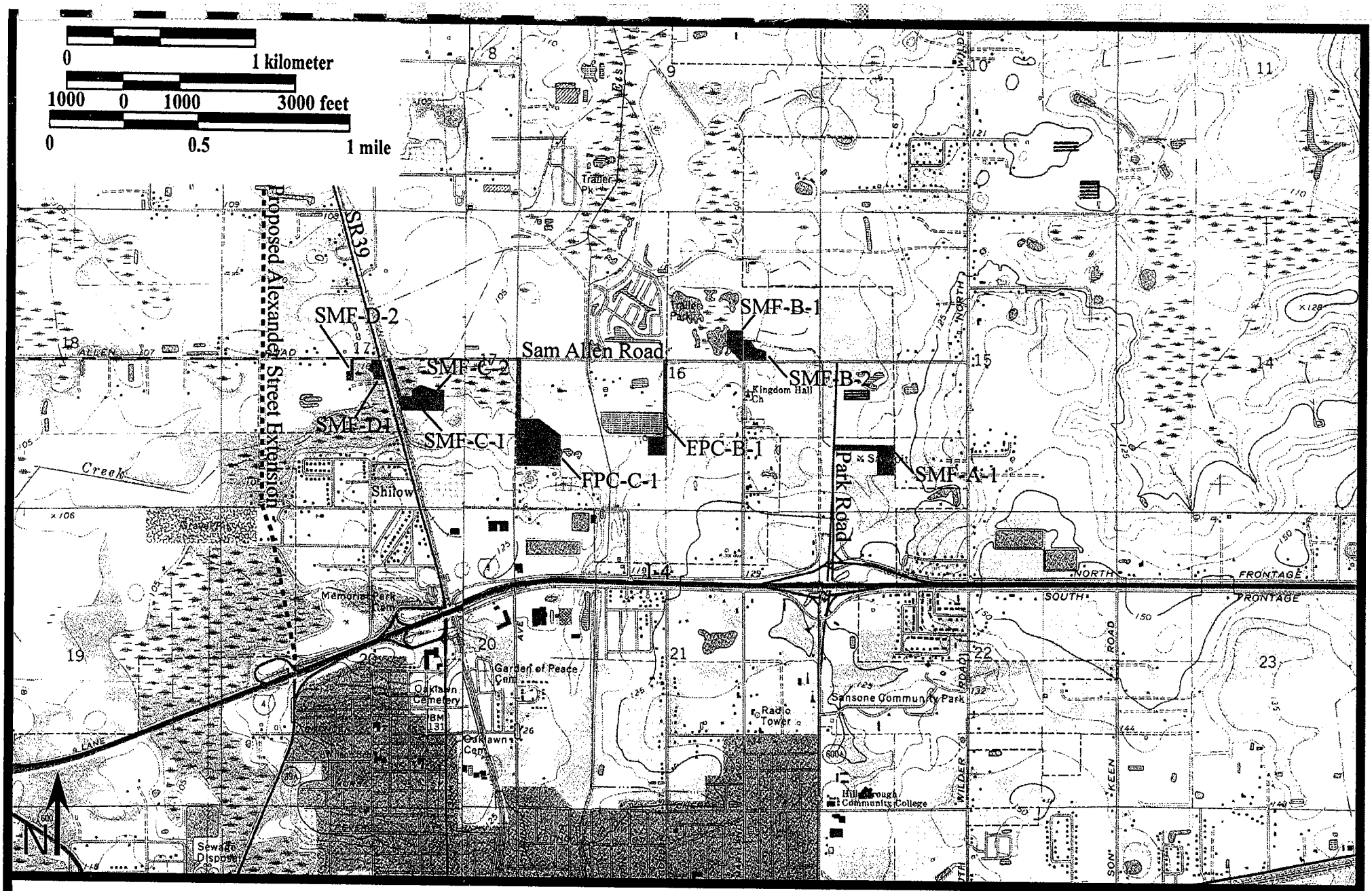


Figure 1. Location of Proposed Pond (SMF) and Floodplain Compensation Site (FPC) Alternatives (USGS Plant City West, Fla. 1975; Plant City East, Fla. 1975).

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research and field survey results conducted previously for the Park Road/Sam Allen Road PD&E Study (ACI 2003). Other relevant surveys included those for segments of SR 39 (ACI 1992, 1999), the Alexander Street Bypass/Alexander Street Extension (ACI 2000, 2002), Park Road (Estabrook 1992), and Interstate 4 (Janus Research/Piper Archaeology 1992)

Cultural resource assessment survey of the Park Road/Sam Allen Road PD&E Study resulted in the identification and evaluation of eight historic resources, including four previously recorded Frame Vernacular style residences. None is located within or adjacent to any proposed pond or FPC site alternative. No archaeological sites were found within the PD&E Study project. The only archaeological evidence discovered was a single waste flake. This artifact find was designated as an "archaeological occurrence."

A check of the Florida Master Site File (FMSF), conducted in August 2004, indicated that 13 recorded archaeological sites are located within approximately one mile of the proposed pond and FPC site alternatives. Most of these sites are lithic and artifact scatters, characterized by small areal extent and limited artifact density. None is considered potentially eligible for listing in the NRHP.

Based upon the results of background research, all proposed pond and FPC site alternatives were assigned to one of three site potential categories: high, moderate, and low. For prehistoric period archaeological sites, distance to a fresh water source, soil type and drainage, relative elevation, proximity to known sites, and overall integrity (i.e., the degree of modern land alterations) were the key variables used in the classification of each proposed pond and FPC site alternative. The potential for historic period archaeological sites was assessed on the basis of previous documentary research. As a result, all nine proposed pond and FPC site alternatives were considered to have a low site potential given the poorly drained soils, distance from a freshwater source. If present, the most typical aboriginal site types expected to occur were small, low artifact density lithic and/or artifact (lithic-ceramic) scatters. Based upon an examination of the nineteenth century federal surveyor's plat and field notes, no homesteads, forts, battle sites, military trails, or Native American (Seminole) encampments were expected.

Examination of the USDA's 1954 *Soil Survey of Hillsborough County* (compiled from 1948 aerials) indicated an absence of potential historic resources (50 years of age or older) within or adjacent to the proposed pond and FPC site alternatives.

3.0 SURVEY METHODS AND RESULTS

Historical/architectural field survey consisted of a reconnaissance of the land within and adjacent to the nine proposed pond and FPC site alternatives. As a result, no historic resources were identified. These findings are consistent with the preliminary background research.

Archaeological field survey included both ground surface inspection and systematic subsurface testing. Despite the generally low archaeological site potential for all site alternatives, most were archaeologically tested at a 164 ft interval. A total of 48 shovel tests were excavated within all but one of the alternatives (Table 1; Figure 2). Access for survey was denied by the owner of the Hoof & Horn Slaughterhouse property, site of the proposed FPC-C-1 alternative. All shovel tests measured 1.6 ft in diameter, and were excavated to a minimum depth of 3.3 ft. All soil removed was screened through a 0.25 inch mesh hardware cloth to maximize the recovery of cultural materials.

Table 1. A Summary of Archaeological Testing Results.

POND/FPC SITE	LOCATION T/R/SECTION	ARCH. CO POTENTIAL	NO. STS	RESULTS/ COMMENTS
SMF-A-1	28S/22E/15	Low	5	Negative
FPC-B-1	28S/22E/16	Moderate/Low	9	Negative
SMF-B-2	28S/22E/16	Moderate/Low	3	Negative
SMF-B-1	28S/22E/16	Low	3	Negative
FPC-C-1	28S/22E/16	Low	0	Access denied
SMF-C-1	28S/22E/17	Low	10	Negative
SMF-C-2	28S/22E/17	Low	13	Negative
SMF-D-1	28S/22E/17	Low	2	Negative
SMF-D-2	28S/22E/17	Low	3	Negative

As a result, no new archaeological sites were discovered within the proposed pond and FPC site alternatives. Existing conditions varied from unimproved land (Photos 1 and 2) to active agricultural use (Photo 3).

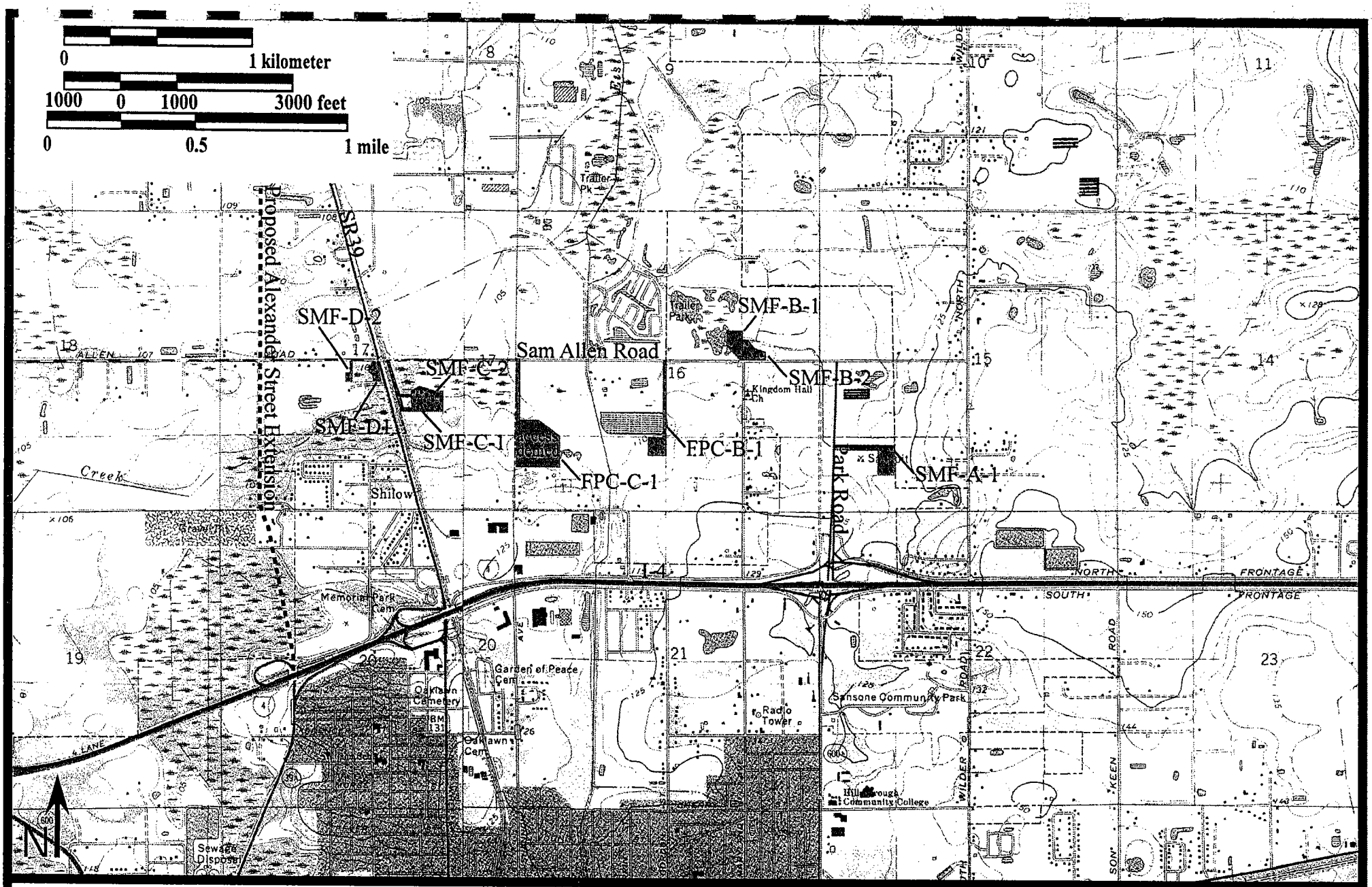

Figure 2. Location of Shovel Tests Within Proposed Pond (SMF) and Floodplain Compensation Site (FPC) Alternatives (USGS Plant City West, Fla. 1975; Plant City East, Fla. 1975).

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Photo 1. Looking east at SMF-B-2.

Photo 2. Looking east at SMF-C-2.

Photo 3. Looking north within the FPC-B-1 outfall area.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Background research and archaeological and historical/architectural field surveys indicated that no previously or newly recorded cultural resources are located within or adjacent to any of the proposed pond and FPC site alternatives. Therefore, project development will have no involvement with any cultural resources, including archaeological sites and historic resources, which are listed, determined eligible, or considered potentially eligible for listing in the NRHP. Although survey of proposed FPC-C-1 was not possible, this alternative is considered to have a low archaeological site potential, and therefore, no further work is recommended.

5.0 REFERENCES CITED

Archaeological Consultants, Inc. (ACI)

1992 A Cultural Resources Survey of State Road 39 from I-4 to U.S. 301 in Hillsborough and Pasco Counties. Manuscript on file, FDOT, District Seven, Tampa and ACI, Sarasota.

1999 Cultural Resource Assessment Survey Technical Memorandum, SR 39 from I-4 to U.S. 301 Project Development and Environment (PD&E) Reevaluation, Hillsborough and Pasco Counties. Manuscript on file, FDOT, District Seven, Tampa and ACI, Sarasota.

2000 Technical Memorandum. Preliminary Cultural Resource Assessment Survey of Two Proposed Alignments for the Alexander Street Bypass, Hillsborough County, Florida. Manuscript on file, FDOT, District Seven, Tampa and ACI, Sarasota.

2002 Cultural Resource Assessment Survey Update Technical Memorandum, Alexander Street Extension (CR 39) from north of I-4 (SR 400) to north of Knights Griffin Road, Proposed Pond and Floodplain Compensation Site (FCS) Alternates, Hillsborough County. Manuscript on file, FDOT, District Seven, Tampa and ACI, Sarasota.

2003 Cultural Resource Assessment Survey Report, Park Road/Sam Allen Road Project Development and Environment (PD&E) Study from I-4 to Alexander Street Extension, Hillsborough County, Florida. Manuscript on file, FDOT, District Seven, Tampa and ACI, Sarasota.

Estabrook, Richard W.

1992 A Cultural Resource Assessment Survey of Park Road from U.S. 92 to I-4, Hillsborough County, Florida. Manuscript on file, Division of Historical Resources, Tallahassee.

Janus Research/Piper Archaeology

1992 A Cultural Resource Assessment Survey of the Interstate 4 Improvements Project Right-of-Way from 50th Street to the Hillsborough/Polk County Line, Hillsborough County, Florida. Manuscript on file, Division of Historical Resources, Tallahassee.

United States Department of Agriculture (USDA)

1954 *Soil Survey of Hillsborough County, Florida.* Soil Conservation Service, Washington D. C.

1989 *Soil Survey of Hillsborough County, Florida.* Soil Conservation Service, Washington D. C.

United States Geological Survey (USGS)

1975 Plant City West, Fla. Quadrangle Map, MR 1983.

1975 Plant City East, Fla. Quadrangle Map, PR 1987, MR 1993.

ATTACHMENT
Survey Log Sheet

FMSF USE ONLY
FMSF Survey #

Form Date 8/31/04

Survey Log Sheet

Florida Master Site File
Version 2.0 9/97

Consult *Guide to the Survey Log Sheet* for detailed instructions.

Recorder of Log Sheet Joan Deming

Identification and Bibliographic Information

Survey Project (Name and project phase) Phase I, Park Road/Sam Allen Road, Proposed Pond and Floodplain Compensation Site Alternatives

Is this a continuation of a previous project? ☐ No ☒ Yes Previous survey#(s)

Report Title (exactly as on title page) CRAS Technical Memorandum, Park Road/Sam Allen Road from I-4 to Alexander Street Extension Proposed Pond and Floodplain Compensation (FPC) Site Alternatives, Hillsborough County, Florida

Report Author(s) (as on title page-individual or corporate) Archaeological Consultants, Inc. (ACI)

Publication Date (month/year) 8/04 Total Number of Pages in Report (Count text, figures, tables, not site forms) 8

Publication Information (if relevant, series and no. in series, publisher, and city. For article or chapter, cite page numbers. Use the style of *American Antiquity.* See *Guide to the Survey Log Sheet.)* Archaeological Consultants, Inc. P.O. Box 5103, Sarasota, FL 34277-5103

Supervisor(s) of Fieldwork (whether or not the same as author[s]) Joan Deming

Affiliation of Fieldworkers (organization, city) Archaeological Consultants, Inc.

Key Words/Phrases (Don't use the county, or common words like *archaeology, structure, survey, architecture.* Put the most important first. Limit each word or phrase to 25 characters). Sam Allen Road, Park Road, Proposed ponds, Plant City

Survey Sponsors (corporation, government unit, or person who is directly paying for fieldwork)

Name Florida Department of Transportation, District Seven

Address/Phone 11201 N. McKinley Drive, Tampa, FL 33612-6403

Mapping

Counties (List each one in which field survey was done-do not abbreviate) Hillsborough

USGS 1:24,000 Map(s): Names/Dates: Plant City West, Fla. 1975, MR 1983; Plant City East, Fla. 1987, MR 1993

Remarks (Use supplementary sheet[s] if needed) No new sites discovered. One site alternative was not tested due to denial of access by the landowner.

Description of Survey Area

Dates for Fieldwork: Start 8/13/04 End 8/18/04 Total Area Surveyed (fill in one) ____ hectares 9 acres

Number of Distinct Tracts or Areas Surveyed ____

If Corridor (fill in one for each) Width ____ meters ____ feet Length ____ kilometers ____ miles

Types of Survey (check all that apply) ☒ archaeological ☒ architectural ☒ historical/archival ☐ underwater ☐ other: ____

Survey Log Sheet of the Florida Master Site File

Research and Field Methods

Preliminary Methods (Check as many as apply to the project as a whole. If needed write others at bottom).

- [ ] Florida Archives (Gray Building)
- [ ] Florida Photo Archives (Gray Building)
- [X] FMSF site property search
- [X] FMSF survey search
- [ ] other (describe)
- [ ] library research - *(local public)*
- [ ] library-special collection- *(non local)*
- [ ] Public Lands Survey (maps at DEP)
- [ ] local informant(s)
- [ ] local property or tax records
- [ ] newspaper files
- [X] literature search
- [ ] Sanborn Insurance maps
- [X] windshield survey
- [X] aerial photography

Archaeological Methods (Describe the proportion of properties at which method was used by writing in the corresponding letter. Blanks are interpreted as "None.")

F(-ew: 0-20%, S(-ome: 20-50%); M(-ost: 50-90%); or A(-ll, Nearly all: 90-100%). If needed write others at bottom.

- [ ] Check here if NO archaeological methods were used.

___ surface collection, controlled
___ surface collection, uncontrolled
A shovel test-1/4" screen
___ shovel test-1/8" screen
___ shovel test-1/16" screen
___ shovel test-unscreened
___ other (describe):
___ other screen shovel test (size: _____)
___ water screen (finest size: _____)
___ posthole tests
___ auger (size: _____)
___ coring
___ test excavation (at least 1x2 m)
___ block excavation (at least 2x2 m)
___ soil resistivity
___ magnetometer
___ side scan sonar
___ unknown

Historical/Architectural Methods (Describe the proportion of properties at which method was used by writing in the corresponding letter. Blanks are interpreted as "None.")

F(-ew: 0-20%, S(-ome: 20-50%); M(-ost: 50-90%); or A(-ll, Nearly all: 90-100%). If needed write others at bottom.

- [ ] Check here if NO historical/architectural methods were used.

___ building permits
___ commercial permits
___ interior documentation
___ other (describe):
___ demolition permits
A exposed ground inspected
___ local property records
___ neighbor interview
___ occupant interview
___ occupation permits
S subdivision maps
S tax records
___ unknown

Scope/Intensity/Procedures Background research; historic structures windshield survey; archaeolgical survey with subsurface testing (mostly at 50 m intervals) in 8 or the 9 site alternatives. Shovel tests measured .5 m diameter by 1 m deep; 1/4" screen. Technical memorandum prepared.

Survey Results (cultural resources recorded)

Site Significance Evaluated? [X] Yes [ ] No If *Yes* , circle NR-eligible/significant site numbers below.

Site Counts: Previously Recorded Sites 0 Newly Recorded Sites 0

Previously Recorded Site #'s (List site #'s without "8." Attach supplementary pages if necessary)

Newly Recorded Site #'s (Are you sure all are originals and not updates? Identify methods used to check for updates, ie, researched the FMSF records). List site #s without "8." Attach supplementary pages if necessary.

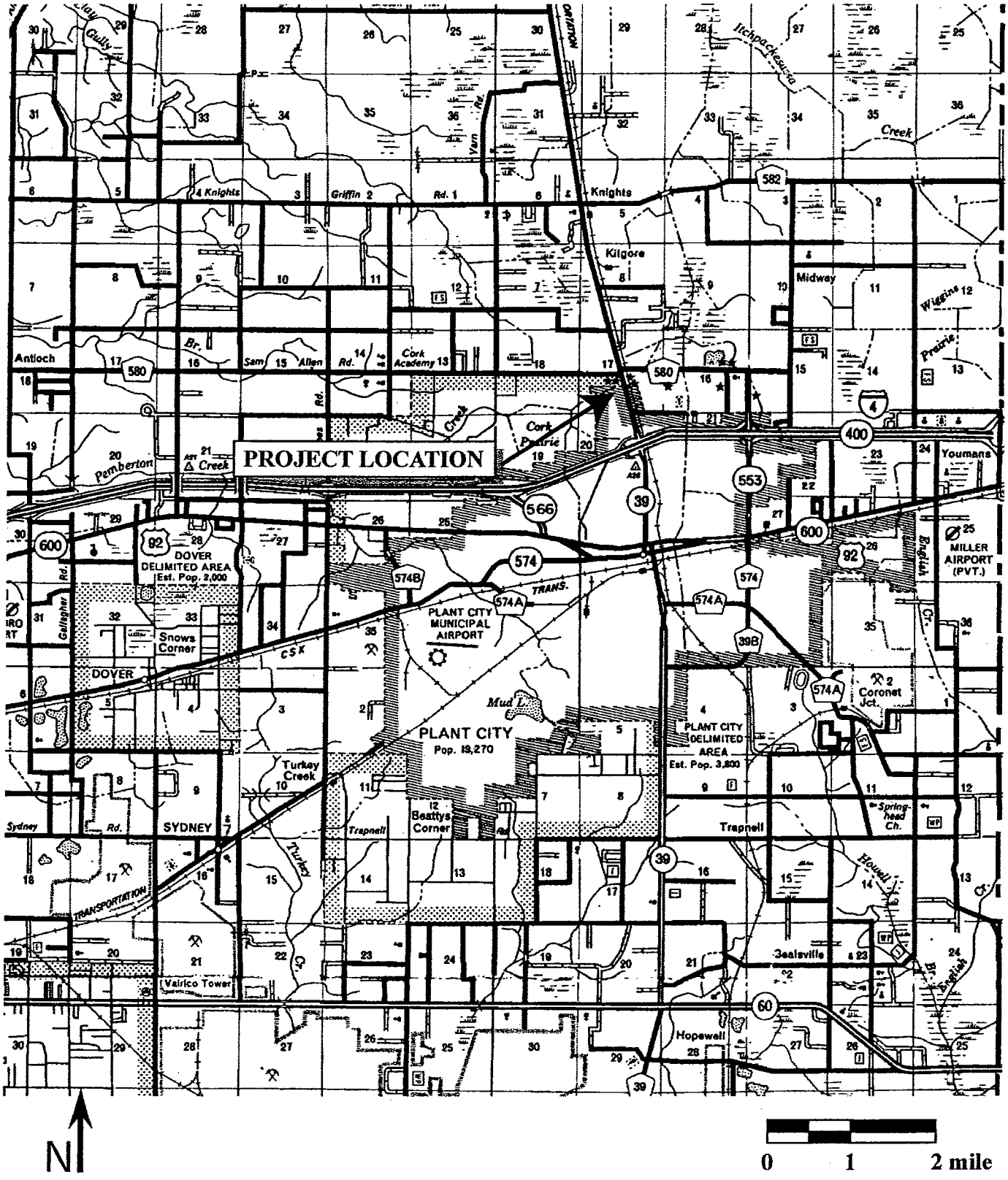
Site Form Used: [ ] SmartForm [ ] FMSF Paper Form [X] Approved Custom Form: Attach copies of written approval from FMSF Supervisor and Supervisor-signed form.

DO NOT USE ******** SITE FILE USE ONLY ********** DO NOT USE**

BAR Related
[ ] 872 [ ] 1A32
[ ] CARL [ ] UW

BHP Related
[ ] State Historic Preservation Grant
[ ] Compliance Review CRAT #

ATTACH PLOT OF SURVEY AREA ON PHOTOCOPIES OF USGS 1:24,000 MAP(S)



Location of Proposed Pond and Floodplain Compensation Alternatives (★). Hillsborough County, Township 28 South, Range 22 East (State Mapping Office 1976).

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Appendix K
Project Area on Aerials & SWFWMD Contoured Aerials