FINAL

PRELIMINARY ENGINEERING REPORT

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

Park Road and Sam Allen Road
From I-4 to the Alexander St. Extension

Hillsborough County, Florida

This project evaluates adding through lanes on Park Road from I-4 to Sam Allen Road and Sam Allen Road from Park Road to the proposed Alexander St. extension. The approximate length of the project is 2.5 miles.

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SECTION 1.0 SUMMARY

1.1 COMMITMENTS

Median Openings

The section of Sam Allen Road east of SR 39 has two entrances to Mobile Home Parks which are only 350 feet apart, Sunset Oaks Drive on the south side, and West Country Meadows Blvd. on the north side. The FDOT District 7 Median Review Committee recommended a median opening for Sunset Oaks Drive, since it is the only access to Sam Allen Road for this community. A median opening was not recommended for West Country Meadows Blvd., since there is another entrance to the Meadows community to the east, and the proximity to Sunset Oaks did not allow sufficient left turn deceleration and storage length. Some of the residents desired a five-lane section with a two way left turn lane for this short segment, to allow left turns in and out of both entrances. Since Sam Allen Road is a County owned and maintained road, the County's Engineering Department should have input on this issue. The County has not expressed a preference for the type of median at this location to date. When the design phase of this project begins, the County should be consulted for direction on this issue.

Signage on I-4

The existing signage on I-4 westbound directs truck traffic truck traffic seeking SR 39 to exit onto Park Road and Sam Allen Road. When the Alexander St. extension (FPN # 255585 1) is constructed, the truck route signage will be re-evaluated to determine if trucks should be re-routed off I-4 to Alexander St.

Traffic and Construction Noise

An analysis of traffic noise for the project concluded that noise barriers situated along the proposed ROW were determined to be a potentially feasible and cost reasonable abatement measure at two locations. The feasible and cost reasonable noise barriers are located at the Oaks and Meadows at Countrywood mobile home parks. These barriers could provide at least a 5 dBA reduction to 11 of the 16 affected residences at a cost below $35,000. See the Final Traffic Noise Analysis Technical Memorandum (FDOT, March 2005) for details.

Based on the noise evaluation performed to date, further consideration of noise barriers will be given during the project's final design process. The traffic noise barrier evaluation for each location will be refined using specific horizontal and vertical alignment data along with other factors that are developed

during final design.

A land use review will be implemented again during the project's Design Phase to identify noise sensitive sites that have received a building permit subsequent to the review of building permits for this noise study (11/9/04) but prior to the date of public knowledge (i.e., date that the project's environmental document is approved). If the review identifies noise sensitive sites that have been permitted prior to the date of public knowledge, then those noise sensitive sites will be evaluated for traffic noise and abatement considerations.

During final design, a commitment to construct feasible and reasonable noise abatement will be contingent upon the following conditions:

- Detailed noise analysis during the final design process supports the need for abatement.
- Detailed noise barrier analysis indicates that the cost of the barriers will not exceed the cost reasonable criteria.
- Community input regarding desires, types, heights, and locations of barriers is received by the FDOT and supports the construction of noise barriers.
- Preferences regarding compatibility with adjacent land uses, particularly as expressed by officials having jurisdiction over such lands, have been addressed.
- Safety and engineering aspects related to roadway users and adjacent property owners have been reviewed and any conflicts or issues resolved.
- Any other mitigating circumstances revealed during final design have been analyzed and resolved.

During the construction phase of the proposed project, short-term noise may be generated by stationary and mobile construction equipment. The construction noise will be temporary at any location and will be controlled by adherence to the most recent edition of the FDOT Standard Specifications for Road and Bridge Construction.

Using FDOT's listing of vibration sensitive sites; residences were identified as potentially sensitive to vibration caused during construction. If during final design it is determined that provisions to control vibration are necessary, the project's construction provisions can include the necessary provisions as needed.

Hazardous Materials Sites

Two of the potential contamination sites investigated received "Medium" or "High" risk evaluation ratings. These sites warrant additional assessment prior to the start of construction:

- Site 2 Former Spill Site (High) – north of the intersection of Park Road and Sam Allen Road
- Site 4 Boone's Wholesale Nursery, Inc. (Medium)

Contamination concerns for Site 2 relate to suspected soil and/or groundwater contamination from a reported hazardous waste spill. Soil and groundwater assessment should be conducted at this intersection to evaluate the potential presence of contaminants in this area prior to the start of construction.
Contamination concerns for Site 4 involve the presence of the petroleum and fertilizer, Above ground Storage Tanks (ASTs) located approximately 100 feet south of the existing Right of Way (ROW) of Sam Allen Road. Although no discharges have been documented, the potential for future discharges exists. An additional site reconnaissance is recommended prior to any construction in this area. If obvious signs of release are observed, a soil and groundwater investigation should be conducted to determine if impacts to construction could exist. See the Level I Hazardous Materials and Contamination Investigation Report, (FDOT, Nov. 30, 2004).

1.2 RECOMMENDATIONS

1.2.1 Typical Sections

The Recommended Alternative is a four lane divided typical section for both Park Road and Sam Allen Road:

Park Road's recommended typical section is suburban, with two 12-foot travel lanes and five foot paved shoulders on each side of a 46 foot wide raised median. Ditches are used to convey stormwater to ponds. Five-foot sidewalks are proposed adjacent to the ROW line. This typical will fit within the existing 200 ft of ROW. See Figure 9-1.

Sam Allen Road's recommended typical is a modified suburban section with two 12-foot travel lanes, and a four-foot bicycle lane each side of a 26 foot wide raised median with four foot inside shoulders. Five-foot sidewalks are proposed adjacent to the ROW line. Four foot paved inside shoulders separate the inside

travel lanes from the type "E" median curb. Swales are used to collect stormwater. Because the swales are not large enough to convey stormwater to ponds, an underground pipe system is to be used. This typical will fit within the existing 120-150 ft of ROW, except where the alignment has been shifted south at SR 39. See Figure 9-2.

The Recommended Alternative for Park Road fits inside the existing 200 ft ROW width. However, some ROW will be required on the south side of Sam Allen Road on either side of SR 39 to continue four lanes through the intersection. This will require approximately 1.6 acres, land which is currently undeveloped. The realignment of the intersection of Park and Sam Allen Roads will require about 5 acres on the southwest corner of the intersection.

Approximately 19 acres of ROW is required for pond and floodplain compensation sites. The total ROW needed for the ultimate design (with the curve intersection realignment), including the Sam Allen Road realignment at SR 39, ponds and floodplain sites, is 29.1 acres. The total ROW needed for the interim design (T-intersection at Park and Sam Allen Roads) is 24.1 acres.

1.2.2 Intersection Design

The realignment of the intersection of Park Road and Sam Allen Road was considered as part of this Study. This realignment would replace the existing T-intersection with a large radius curve between the two roads, so that traffic between Park Road and Sam Allen Road would become through traffic, with a T-intersection designed for Sam Allen Road east of the intersection. (See Appendix A, sheets 8 and 11, for concept plans of the curve intersection design.) The intersection realignment is considered as the ultimate design, with widening Park Road and Sam Allen Road to four lanes as a T-intersection being an interim solution. (See Appendix A for the T-intersection interim design.)

It is recommended that the intersection of Park Road and Sam Allen Road be considered for a traffic signal when the roads are widened to four lanes, whichever intersection option is selected. A signal warrant analysis should be done for this intersection during the design phase of this project.

SECTION 2.0 INTRODUCTION

2.1 OVERVIEW

The Florida Department of Transportation (FDOT) conducted a Project Development and Environment (PD&E) Study for the improvement of Park Road from I-4 to Sam Allen Road and from Sam Allen Road from the proposed Alexander Street extension to Park Road in Hillsborough County, Florida. The total project length is approximately 2.5 miles. Figure 2-1 illustrates the location and limits of the project and its relationship to the regional highway system.

The objective of the PD&E Study was to provide documented information and analyses to help the FDOT and the Federal Highway Administration (FHWA) reach a decision on the type, design and location of the necessary improvements to accommodate the future traffic demand in a safe and efficient manner. The PD&E Study satisfies the requirements of the National Environmental Policy Act (NEPA) and other federal and state requirements in order to qualify the project's future design, Right of Way acquisition, and construction phases for federal funding and implementation.

This report documents the information necessary to confirm the need for this project and develops and evaluates various improvement alternatives as they relate to the transportation facility. Information relating to the engineering and environmental characteristics essential for alignment criteria was set and build alternatives were developed. Comparison of alternatives was based on a variety of parameters using a matrix format. This analytical process identifies the build alternative that would have the least impact while providing the necessary improvements. The design year of the analysis is Year 2028. The No-Build Alternative was considered a viable alternative throughout this PD&E Study.

2.2 PURPOSE

This report identifies the current and future deficiencies that should be expected along Park Road and Sam Allen Road if the existing geometric characteristics are maintained, and presents feasible improvement alternatives that will meet future traffic demands. This report documents the development of all improvement alternatives after consideration of socioeconomic, cultural and environmental effects. This final report presents the recommended alternatives and how they were selected.

PARK RD & SAM ALLEN RD
[From I-4 To Alexander St Extension]
HILLSBOROUGH COUNTY
WPI Seg. No. 257862 1
FAP No. 0295-005

PROJECT LOCATION MAP

Figure 2-1

2.3 PROJECT DESCRIPTION

Park Road and Sam Allen Road are local roads which act as a connector between the east side of Plant City and SR 39. This route is used by traffic traveling between Plant City and Zephyrhills to the north. The location and limits of the project are shown in Figure 2-1. This location map illustrates all intersecting streets and roadways. The project is located partly in the City of Plant City, including Park Road and Sam Allen Road from Park Road to about 6/10 mile west of Park Road. The remaining section of Sam Allen Road west to SR 39 is in unincorporated Hillsborough County.

The existing roadways are two lane rural roads with twelve foot wide lanes and five foot paved shoulders. Sam Allen Road was extended from SR 39 to Wilder Road as a two lane road in 1993, to allow for traffic to take this route around Plant City to SR 39.

This project is intended to ensure that the capacity of the roads will be sufficient through the design year, 2028.

SECTION 3.0 NEED FOR IMPROVEMENT

3.1 DEFICIENCIES

Park Road from I-4 to Sam Allen Road and Sam Allen Road from SR 39 to Park Road are two-lane rural roadways.

A PD&E Study was completed on SR 39 from I-4 to US 301, with FHWA approval received on November 17, 2000. The Study recommended widening SR 39 from two lanes to four lanes. That Study (WPI Seg. No. 255099 1 and No. 256298 1) also recommended a new alignment for SR 39 to the west of the existing SR 39 by extending Alexander Street north.

The traffic volume for 2002 along Park Road was 8,300 vehicles per day (vpd), Sam Allen Road 2002 volume was 6,600 vpd. The projected traffic volume for the year 2028 is 17,700 vpd for Park Road and 14,100 vpd for Sam Allen Road. These projected traffic volumes are over the AADT limit of 13,100 vpd for two lane roads classified as "Transitioning into Urbanized", with a minimum desired Level of Service "C".

To accommodate the expected continued growth in traffic, these roads will require four travel lanes, two in each direction. For a more detailed explanation of traffic volumes and analysis, see Section 6 of this report, which summarizes the Traffic Technical Memorandum for this PD&E Study.

3.1 SAFETY

The crash history from 1998-2001 for the project corridor was reviewed for high crash incident locations or other safety problems. Most of the crashes on the corridor were at the intersections of Sam Allen Road with SR 39 and Park Road. See Section 4.1.8 for detailed discussion of the crash history. Recommendations to improve safety are noted in Section 9.12.

3.2 CONSISTENCY WITH TRANSPORTATION PLANS

The Hillsborough County Metropolitan Planning Organization (MPO) has the responsibility of developing a Long Range Transportation Plan (LRTP) for the county to serve the needs of the metropolitan area over

the next 20 to 25 years. The adopted 2025 LRTP has identified these sections of Park Road and Sam Allen Road to be improved from two lanes to four lanes. The proposed improvements are consistent with the Hillsborough County Local Government Comprehensive Plan, the Hillsborough County MPO's Long Range Transportation Plan, and the City of Plant City's Local Government Comprehensive Plan.

3.3 SOCIAL/ECONOMIC DEMANDS

According to population projections from Hillsborough County and the regional traffic model developed by FDOT's Planning Department, travel demand is expected to continue to grow in this area, doubling from the present volumes by the design year. Much of the land in the area is undeveloped, with some low lying wet areas. Currently, there are mobile home parks on Sam Allen Road east of SR 39, which are being expanded on land adjacent to the road, and other residences. Park Road is mostly vacant land at present, with a new car dealership business recently constructed just north of I-4. The future land use of this area is planned to be mostly residential on Sam Allen Road and commercial on Park Road.

3.4 MODAL INTERRELATIONSHIPS

There are no rail, mass transit, or High Occupancy Vehicle (HOV) lanes planned for these local roads. There are no existing bus stops within the project limits; however, bus bays could be added at certain locations if bus service is started in the future.

SECTION 4.0 EXISTING CONDITIONS

4.1 EXISTING ROADWAY CHARACTERISTICS

4.1.1 Functional Classification

Park Road and Sam Allen Road are local roads, not on the State system; therefore, they are not classified. However, classifications of other important roads in the study area are:

S.R. 39: Rural Principal Arterial

US 92: Urban Principal Arterial

I-4: Urban Principal Arterial (Interstate)

S.R. 553 (Park Rd. south of I-4): Urban Minor Arterial

4.1.2 Typical Sections

Throughout the project limits, Park and Sam Allen Roads are currently 2-lane rural roadways with 12 foot wide lanes, five foot wide paved shoulders, and drainage ditches. The existing Typical Sections are shown in Figures 4-1 and 4-2.

4.1.3 Pedestrian and Bicycle Facilities

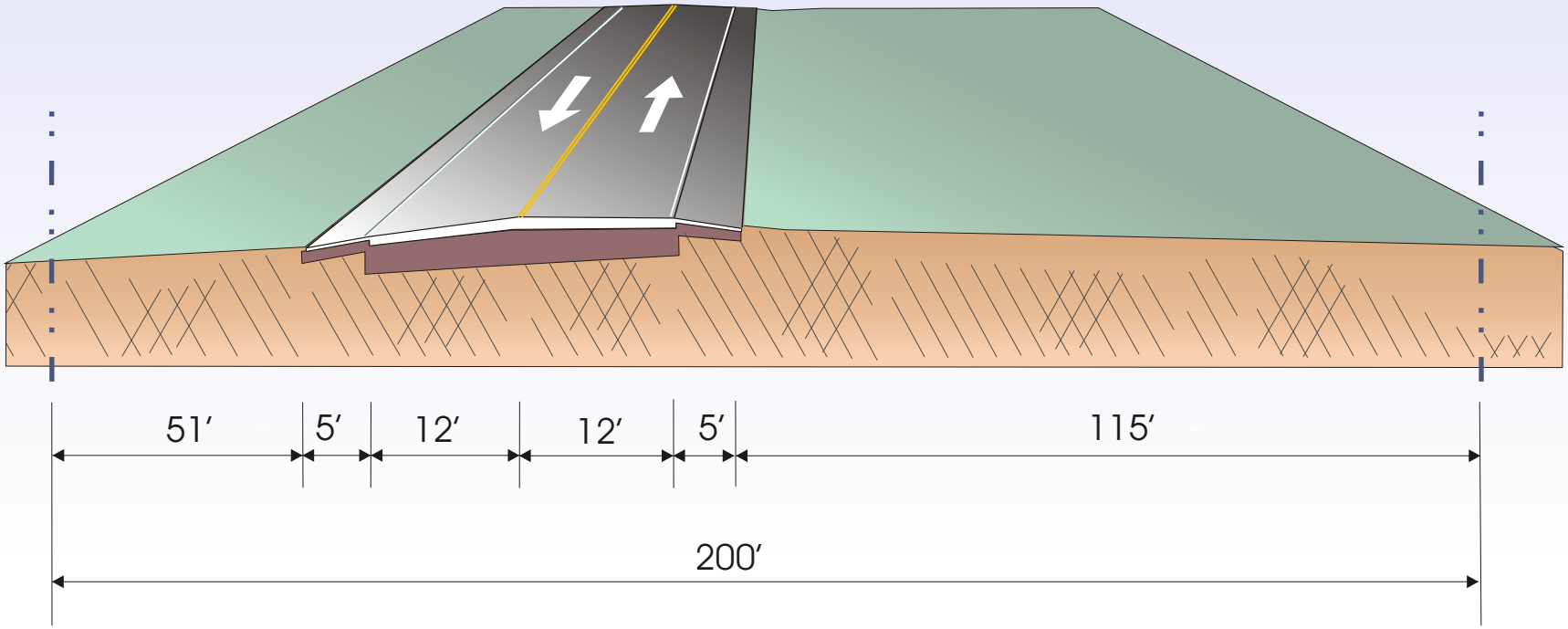
There are no pedestrian sidewalks on Sam Allen Road, except what was recently constructed in front of the Country Meadows Mobile Home Park as part of their new development adjacent to the road. Park Road has no existing sidewalk; however a five foot sidewalk exists at the access roads north of I-4.

The existing five foot paved shoulders on both Park and Sam Allen Roads are available for bicycle use.

4.1.4 Right of Way

The existing Right of Way (ROW) width was obtained from Redi-Maps, Plat books and ROW maps dated July 2003 completed for the Alexander St. extension (Design project WPI 255585 1). A ROW Control Survey was completed in 2003, establishing baselines for Sam Allen and Park Roads. The existing ROW is approximately 200 feet for Park Road. Sam Allen Road ROW width varies between 120 and 150 feet east of SR 39. Maintained ROW on Sam Allen west of SR 39 is 50 feet in width, according to the maps for WPI 255585 1.

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



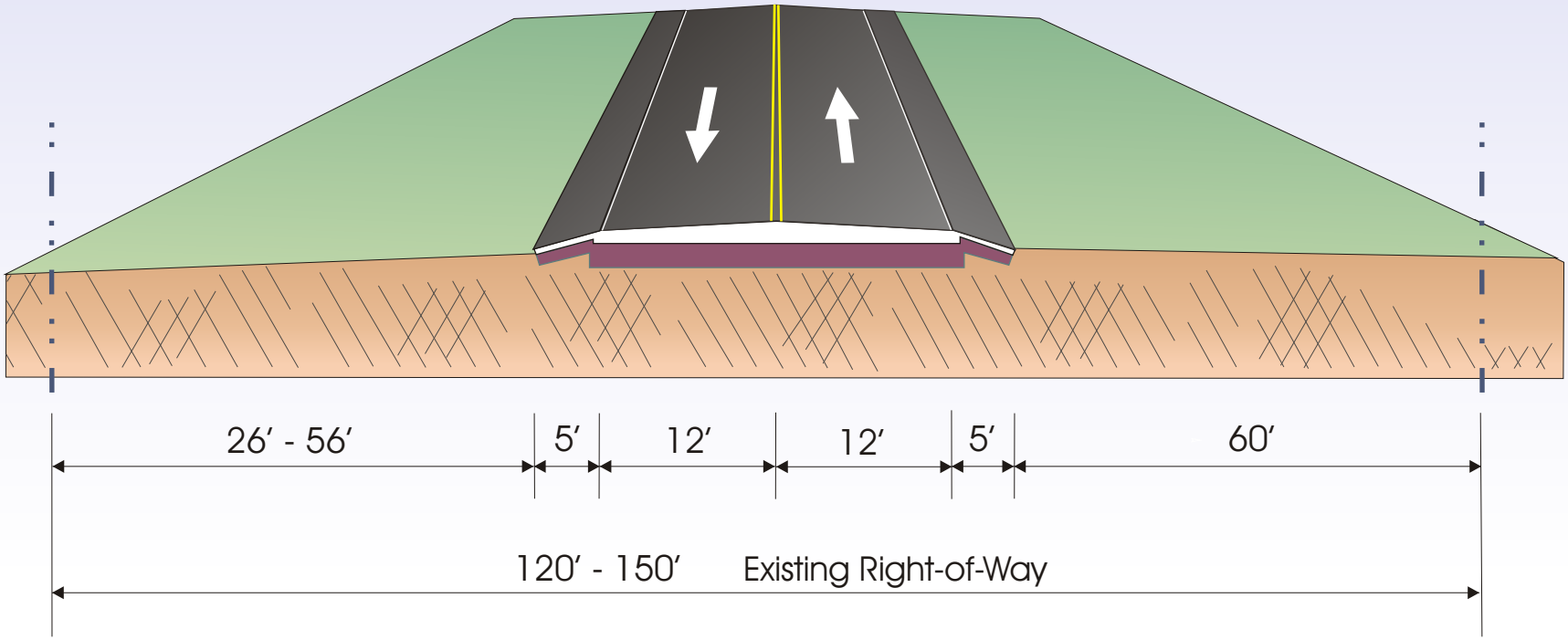
Not to scale

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

WPI SEG 257862 1
FAP NO 0295-005

Figure 4-1

SAM ALLEN RD
Existing Typical Section
West of SR 39 to Park Rd
Two Lane Rural Typical Section



Not to scale

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

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Figure 4-2

4.1.5 Horizontal Alignment

Table 4-1 summarizes the existing horizontal alignment characteristics on Sam Allen Road based on the FDOT ROW Control Survey and baseline alignment survey completed in February 2003.

TABLE 4-1 EXISTING HORIZONTAL ALIGNMENT ALONG PARK ROAD

P.I. BASELINE STATION	TANGENT BEARING	DISTANCE [Feet]
165+05.18		
	N 00° 01’ 03” W	1334.26’
178+39.44		
	N 00° 29’ 17” W	2646.55’
204+85.99		

TABLE 4-2 EXISTING HORIZONTAL ALIGNMENT ALONG SAM ALLEN ROAD

P.I. BASELINE STATION	TANGENT BEARING	DISTANCE [Feet]
40+00.00		
	N 89° 15’ 58.38” E	703.00’
47+03.00		
	N 89° 42’ 35.04” E	2645.42’
73+48.42		
	N 89° 49’ 21.25” E	151.58’
Equation: Sta.75+00.00 = Sta. 401+51.88		
	N 89° 49’ 20.98” E	2481.93’
426+33.81		
	N 89° 45’ 13.19” E	2707.22’
453+41.04		
	N 89° 44’ 52.15” E	2680.41’
480+21.44		
	N 89° 30’ 49.74” E	296.74’
483+18.19		
	N 89° 30’ 31.77” E	1320.55’
496+38.73		

4.1.6 Vertical Alignment

A limited amount of Vertical Alignment information was obtained by survey, with elevations taken every 500 feet on the centerlines of the existing pavement on Park and Sam Allen Roads. The profile of Park Road drops from elevation 128' just north of I-4 to elevation 110' at Sam Allen Road. The of the existing centerline of Sam Allen Road is fairly flat, varying between 107' and 110' in elevation between the new Alexander St. extension and Park Road.

4.1.7 Drainage

A Draft Alternative Stormwater Management Facility Report has been completed for this Study. The report is summarized below.

4.1.7.1 Soils Information

The Soils Conservation Service (SCS) Soil Survey of Hillsborough County was used to identify the soils within the project corridor. The soil types are summarized in the Alternative Stormwater Management Facility Report, and are illustrated in Figure 4-3.

4.1.7.2 Base Floodplains

The 100-year flood inundates a majority of Sam Allen Road. Floodplain data was taken from the following Flood Insurance Rate Maps: 120112 0270 D, 120112 0290 C.

Project Area 1: Park Road, from I-4 north to Sam Allen Road lies within Zone C-Areas of minimal flooding (no shading).

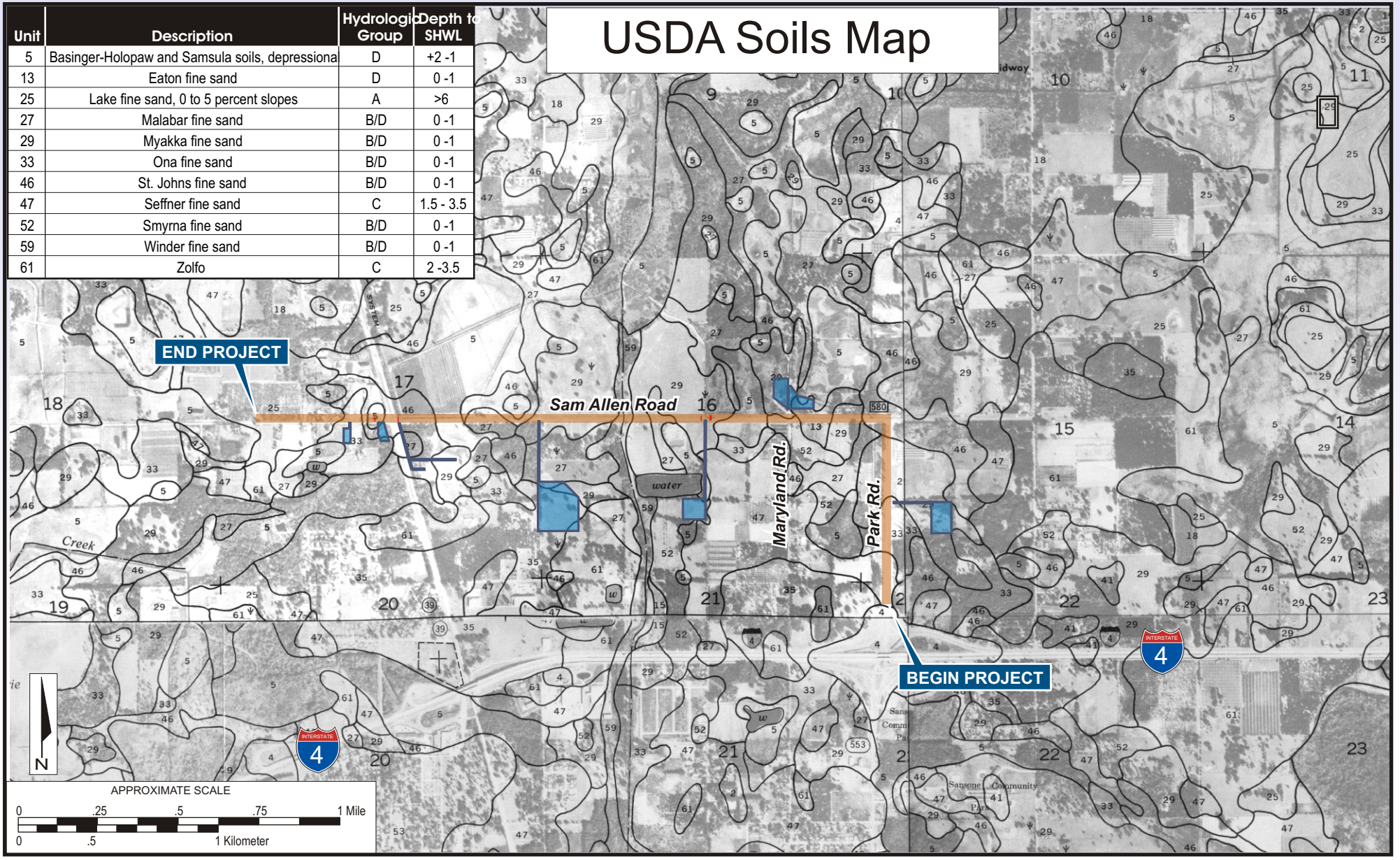
Project Area 2: Sam Allen Road, from Maryland Avenue east to Wilder Road also lies within Zone C.

Project Area 3: Sam Allen Road, from Maryland Avenue west 1500' lies within Zone B – Areas between the 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)

Project Area 4: Sam Allen Road, from Project Area 3 west 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.

USDA Soils Map

Unit	Description	Hydrologic Group	Depth to SHWL
5	Basinger-Holopaw and Samsula soils, depressiona	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

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

WPI SEG 257862 1
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Figure 4-3

Project Area 5: 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', lies within Zone A, Areas of 100-year flood; base flood elevations not determined.

The project will not support base floodplain development that is incompatible with existing floodplain management programs. It is anticipated that compensating storage ponds will be required to offset the floodplain encroachment impacts.

4.1.7.3 Regulated Floodways

There is no regulatory floodway involvement for the proposed project.

4.1.7.4 Existing Stormwater Management Facilities

There are no existing stormwater facilities within the existing Right of Way on Park and Sam Allen Roads.

4.1.7.4 Existing Cross Drains

Existing cross drain information was obtained by survey completed in 2003, it is summarized in Table 4-3.

Table 4-3 EXISTING CROSS DRAIN INFORMATION

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

4.1.7 Geotechnical Data

In the design phase of the project, it is recommended that a geotechnical investigation be performed at each recommended pond site. The SCS Soil Survey (see section 4.1.7.1) was used to approximate the depth to seasonal high water table, since no soil borings were performed. For the purposes of preliminary pond site analysis the seasonal high water table was assumed to be at the existing ground level.

4.1.8 Accident Data

The crash history from 1998-2001 for the project corridor was reviewed to determine if there is a significant crash problem. Crash records were obtained from the Hillsborough County Sheriff's office and the City of Plant City's Police department. The crash records indicated 7 crashes in 1998, 10 crashes in 1999, 8 crashes in 2000, and 18 crashes in 2001. The 43 crashes included 19 rear end, 18 left turn, and 12 fixed objects.

A majority of the crashes occurred at the intersections of SR 39/Sam Allen Road (12) and Park/Sam Allen Road (18). The number of crashes during the night (9) indicates no special need for lighting.

For the period investigated, the most common type of crash was rear end collisions (19 total). This type of crash commonly occurs on road segments, which are operating above capacity, with traffic backups causing the need for sudden stops and slow speeds.

A total of 10 rear end collisions occurred on Park Road, involving northbound traffic stopping at the T-intersection with Sam Allen Road.

4.1.9 Traffic Signals, Locations and Intersection Design

There is one traffic signal within the project limits at SR 39. Turning movement counts were taken at this location to perform a detailed analysis. See Section 6 of this report for traffic data and analysis. The existing intersection lane configurations are shown on Figure 4-4.

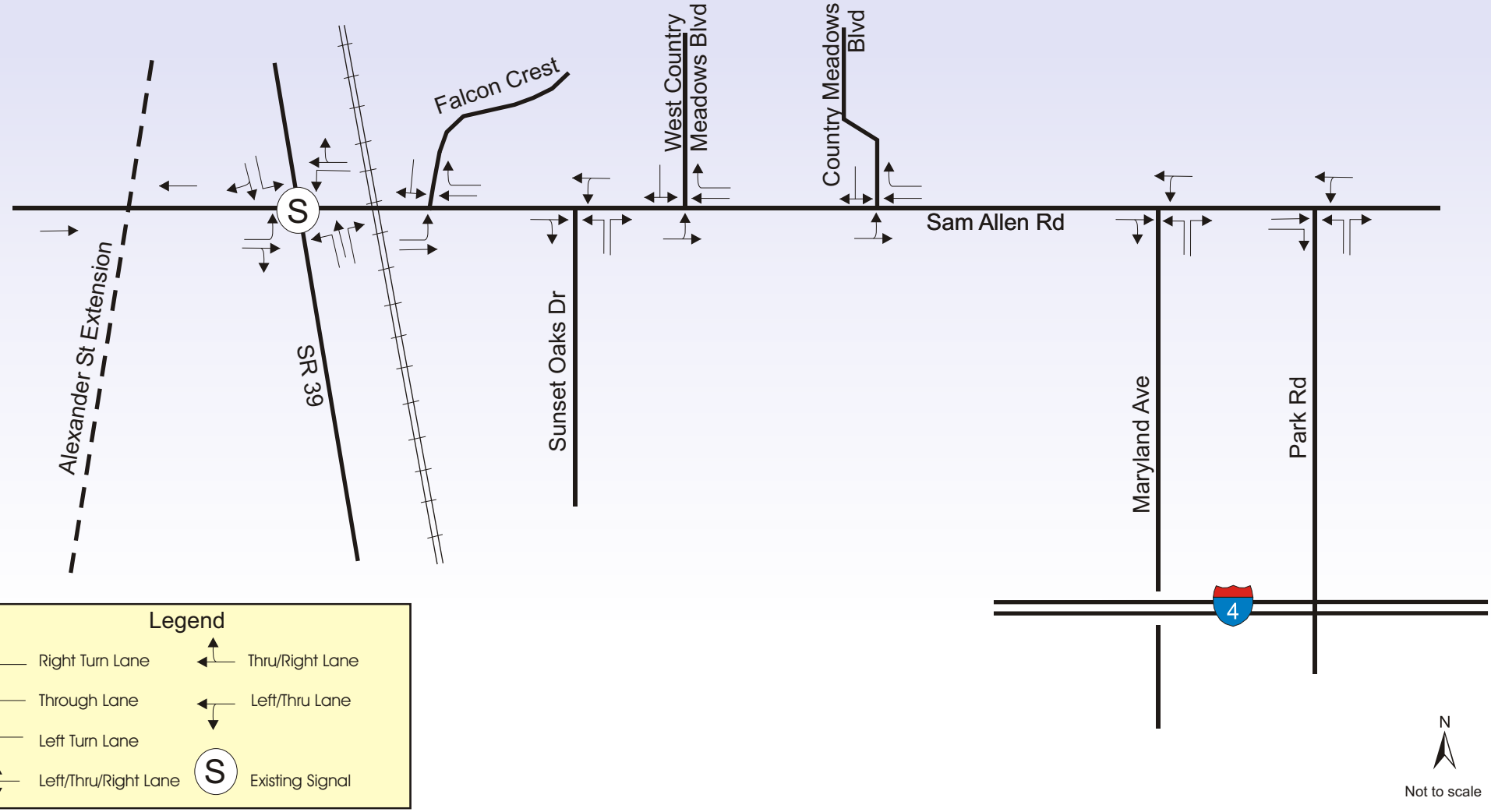
4.1.10 Lighting

There is no existing overhead street lighting on Sam Allen or Park Roads within the project limits.

4.1.11 Utilities

A Utility Assessment Package has been completed for this project. In order to ultimately evaluate potential utility conflicts associated with the most feasible improvements alternative, all available information has been obtained concerning the location and characteristics of major existing or proposed utilities with the project corridor. A list of utility owners "contact" list is shown below.

SAM ALLEN RD
Existing Intersection
Lane Configurations



Legend

- Right Turn Lane
- Through Lane
- Left Turn Lane
- Left/Thru/Right Lane
- Thru/Right Lane
- Left/Thru Lane
- S — Existing Signal

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

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Figure 4-4

AT&T	Bright House Network	Central Florida Gas
6000 Metro West, Suite 201	2728 S. Faulkenburg Road	1705 7th Avenue SW
Orlando, FL 32835	Riverview, FL 33569	Winter Haven, FL 33880

City of Plant City	Tampa Electric	Verizon
302 West Reynolds Street	2200 E. Sligh Avenue	120 East Lime Street
Plant City, FL 33566	Tampa, FL 33610	Lakeland, FL 33801

4.1.12 Structural and Operational Conditions

Park and Sam Allen Roads are local roads, so pavement condition ratings are not available. The surface of both roads is asphalt, which is in reasonably good condition.

There are a number of side streets on Sam Allen Road without left or right turn lanes. To improve safety and capacity, turn lanes were considered at these locations.

4.1.13 Railroad Crossings

There is one at grade railroad crossing within the project limits, owned by CSX Transportation, on the east side of SR 39. The railroad crossing ID number is 626426C. The rail in this section is double track, the crossing surface is asphalt. The crossing has two gates, signs, and flashing lights. Currently, there are approximately 45 total train movements per day across Sam Allen Road.

4.1.14 Posted Speed Limits

The existing posted speed limit for Sam Allen Road is 50 mph. Park Road has a posted speed limit of 45 mph.

4.2 EXISTING BRIDGES

There is one bridge culvert which meets the qualifications to be included in the National Bridge Inventory, a triple 7’ X 10’ box culvert, on Sam Allen Road just east of the Country Meadows Mobile Home Park. There are no other bridges within the Study limits.

4.3 ENVIRONMENTAL CHARACTERISTICS

4.3.1 Land Use Data

Existing land use consists of a mixture of undeveloped, residential, agricultural, and commercial land. Much of the land in the area is undeveloped, with some low lying wet areas. There is a Farmer's Market and Flea Market at the intersection of SR 39 and Sam Allen Road. Currently, there are mobile home parks on Sam Allen Road east of SR 39, which are being expanded on land adjacent to Sam Allen Road, and other residences. Park Road is mostly vacant land at present, with a new car dealership business recently constructed just north of I-4.

The future land use of this area is planned to be mostly residential on Sam Allen Road and commercial on Park Road. A map of the planned land usage from the Hillsborough County MPO is shown in Figure 4-5. Plant City's future land use is shown in Figure 4-6.

4.3.2 Cultural Features

There are no public parks, schools, libraries, or other public facilities within the Study limits. For a summary of the Cultural Resource Assessment Survey (CRAS) see Section 9.14.3 "Archaeological and Historical Resources" in this report.

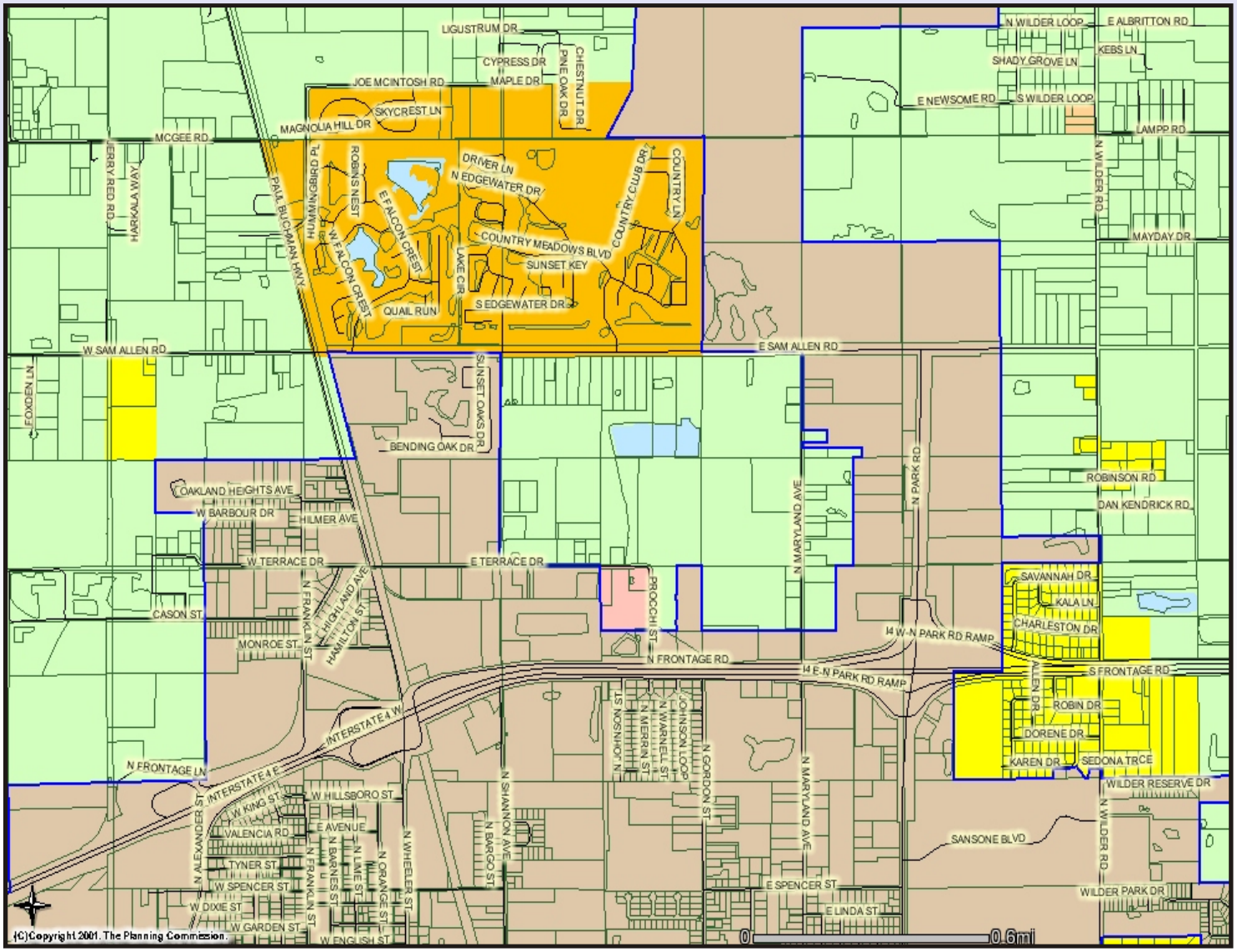
4.3.3 Natural and Biological Features

A Wetland Evaluation Report /Biological Assessment has been completed for this project. Suitable habitats for federally listed species were investigated by FDOT staff. The project corridor was mapped in adherence to *Florida Land Use, Cover and Forms Classification System* (FDOT 1999). Surveys were then conducted in each habitat type for species known to occur or utilize the classified habitats. For the survey results, see Section 9.14.7.

4.3.4 Hazardous Materials Sites

The Park Road/Sam Allen Road corridor consists primarily of residential and vacant, undeveloped properties. A large plant nursery, mobile home parks, and a large produce market are located along the corridor. Each site was visually assessed during the site inspection. Very minor amounts of debris, such as paper, bottles, and cans, were observed along the corridor. Power poles, overhead electrical lines, and subsurface utility markers were also observed along the corridor. Several of the residential structures appear to be serviced by private wells and septic systems.

Hillsborough County Future Land Use Map



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

WPI SEG 257862 1
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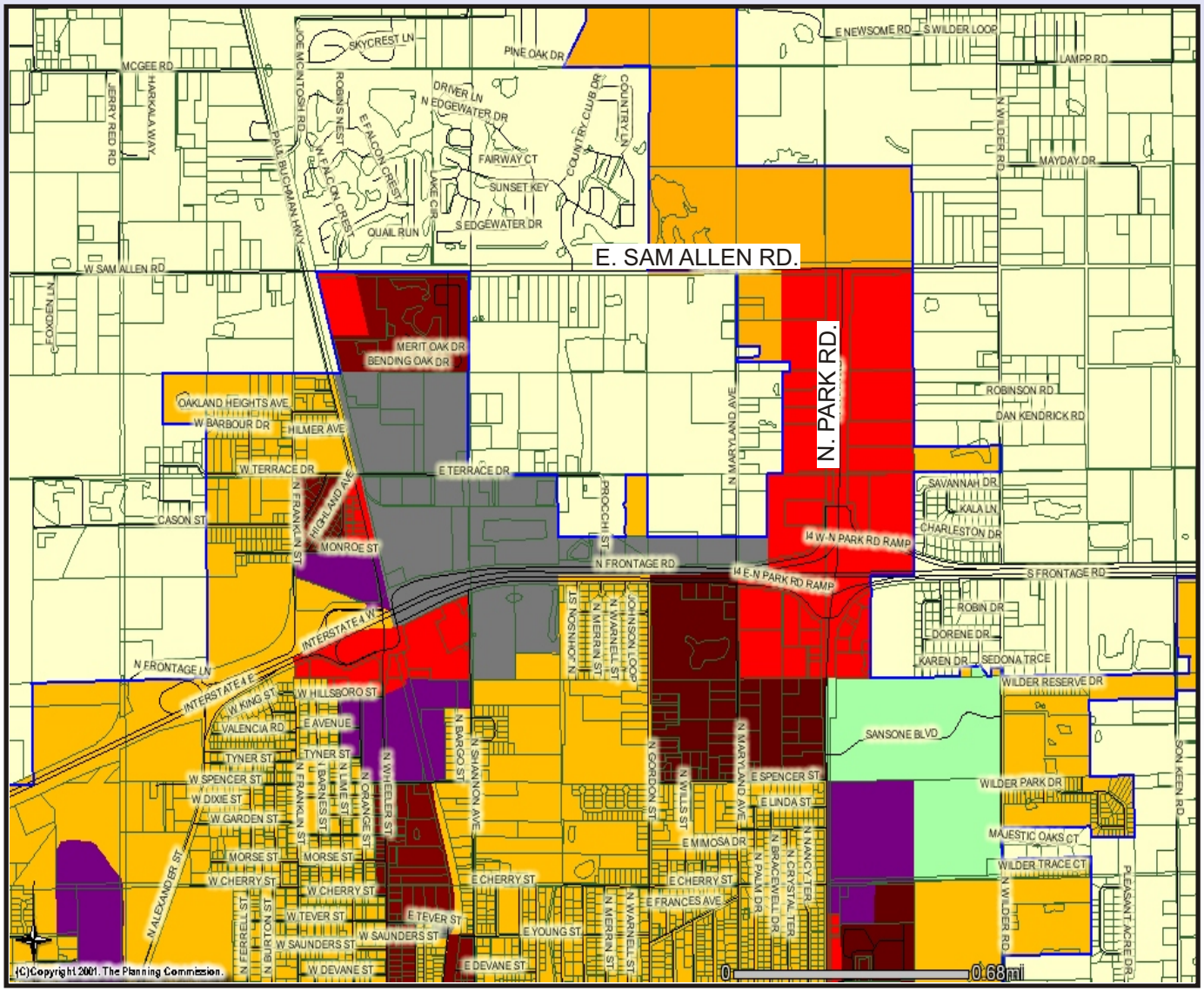
Figure 4-5

Plant City Future Land Use Map



Legend

Service Area Boundaries
- Tampa Service Area
- Urban Service Area
- Other

Jurisdiction Boundaries
- Roads
- Parcels

Plant City Future Land Use
- COMMERCIAL (20 DU/ACRE, FAR.35)
- DOWNTOWN CORE
- RESIDENTIAL - 20 (20 DU/ACRE, FAR.35)
- INDUSTRIAL (FAR.50)
- RESIDENTIAL - 6 (6 DU/ACRE, FAR.25)
- RESIDENTIAL - 12 (12 DU/ACRE, FAR.35)
- MAJOR PUBLIC / SEMI PUBLIC
- RESIDENTIAL - 4 (4 DU/ACRE)
- MAJOR RECREATION AND OPEN SPACE
- MIXED USE - RESIDENTIAL/COMMERCIAL (160 ACRE MINIMUM)
- MIXED USE - RESIDENTIAL/COMMERCIAL/INDUSTRIAL (1000 ACRE MINIMUM)
- TRANSITIONAL AREA (DUE TO ANNEXATION)
- WATER
- Other

Jurisdiction
- BAY
- PINELLAS COUNTY
- PLANT CITY
- TAMPA
- TEMPLE TERRACE
- Other

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

WPI SEG 257862 1
FAP NO 0295-005

Figure 4-6

Five sites within the project corridor were identified as having the potential for contamination involvement with the proposed project. These sites were evaluated and rated either "No", "Low", "Medium", or "High" for having potential petroleum or hazardous materials contamination. See Table 4-3 for a summary.

Three of these sites were rated "Low". These sites either have no potential to adversely impact the construction project or have had soil and/or groundwater contamination remediated to the satisfaction of the Florida Department of Environmental Protection. Further environmental assessment is not recommended for these parcels.

The following sites received "Medium" or "High" risk evaluation ratings, these sites warrant additional assessment prior to the start of construction:

- Site 2 Former Spill Site (High) – north of the intersection of Park Road and Sam Allen Road
- Site 4 Boone's Wholesale Nursery, Inc. (Medium)

Contamination concerns for Site 2 relate to suspected soil and/or groundwater contamination from a reported hazardous waste spill. Soil and groundwater assessment should be conducted at this intersection to evaluate the potential presence of contaminants in this area prior to the start of construction.
Contamination concerns for Site 4 involve the presence of the petroleum and fertilizer, Above ground Storage Tanks (ASTs) located approximately 100 feet south of the existing Right of Way (ROW) of Sam Allen Road. Although no discharges have been documented, the potential for future discharges exists. An additional site reconnaissance is recommended prior to any construction in this area. If obvious signs of release are observed, a soil and groundwater investigation should be conducted to determine if impacts to construction could exist. See the Level I Hazardous Materials and Contamination Investigation Report, (FDOT, Nov. 30, 2004).

TABLE 4-4

Contamination Risk Evaluation Summary

Park Road from I-4 to Sam Allen Road

And

Sam Allen Road from Alexander St. Extension to Park Road

Risk Evaluation Table

Site No.	Facility Name	Facility Address	FDEP Fac. ID	Storage Tanks	Materials	Risk
1	ProSource One	4094 Paul Buchman Hwy	8624881	Yes	Petroleum/Pest.	Low
2	Former Spill Site	Park Rd/Sam Allen Rd		No	Haz. Waste	High
3	Former Texaco # 24-203-1313	3801 Paul Buchman Hwy	8521257	No-Closed	Petroleum	Low
4	Boone's Wholesale Nursery, Inc.	3201 N. Maryland Ave.	9101794	Yes	Petroleum/Fert.	Medium
5	Country Village Power Equipment/Produce Market	3301 Paul Buchman Hwy.		No	Used Oil/Engine Fluids	Low

SECTION 5.0 DESIGN CONTROLS AND STANDARDS

Proposed design criteria are given in Table 5-1, along with the applicable standards.

TABLE 5-1: PROPOSED DESIGN CRITERIA FOR PARK ROAD

DESIGN ELEMENT	CRITERIA	SOURCE
Functional Classification	Minor Arterial	Hillsborough County
Design Year	2028	FDOT
Design Speed	**55** mph	1. Chapter II
Design Vehicle	WB-50	1. Chapter II
Horizontal Alignment		
Maximum Superelevation	0.10	2. Table 2.8.3
Maximum Curvature	6° 30'	2. Table 2.8.3
Maximum Curvature w/o Superelevation	0° 30'	2. Table 2.9.2
Max. Deflection w/o Horizontal Curve	0° 45'	2. Table 2.8.1a
Minimum Length of Horizontal Curve	825' Desirable, 400' Minimum	2. Table 2.8.2a
Vertical Alignment		
Maximum Grade (Flat Terrain)	3.0% rural areas; 5.0% urban areas	2. Table 2.6.1
Minimum Grade	N/A	2. Table 2.6.4
Min. K Value for Crest Vertical Curves	185	2. Table 2.8.5
Min. K Value for Sag Vertical Curves	115	2 Table 2.8.6
Max. Change In Grade w/o Vertical Curve	0.50%	2. Table 2.6.2
Min. Roadway Base Clearance above DHW	1'	2. Section 2.6.1
Roadway Cross-Section		
Lane Widths	12' Preferred; 11' Minimum	2. Table 2.1.1
	5' Paved Shoulders	2. Table 2.1.2
Cross Slopes	2%	2. Figure 2.1.1
Median Width	22' Minimum; 29.5' for dual left turn lanes	2. Table 2.2.1
Horizontal Clearance	Clear Zone Width, 30'	2. Section 2.11
Minimum Border Width	40'	2. Table 2.5.1
Right-Of-Way Requirements	Typical fits in existing 200' ROW	
Access Classification		
Existing & Proposed	Class 3 "Restrictive"	3. Section 6
Minimum Level Of Service	C	4. Table 4-2

SOURCES

1. AASHTO "Policy On Geometric Design Of Highways And Streets" (2000)
2. FDOT Plans Preparation Manual, Volume I English (Revised January 2004)
3. Hillsborough County Land Development Code
4. Florida's Level Of Service Standards And Guidelines Manual For Planning (2002)

TABLE 5-2: PROPOSED DESIGN CRITERIA FOR SAM ALLEN ROAD

DESIGN ELEMENT	CRITERIA	SOURCE
Functional Classification	Minor Arterial	Hillsborough County
Design Year	2028	FDOT
Design Speed	**50** mph	1. Chapter II
Design Vehicle	WB-50	1. Chapter II
Horizontal Alignment		
Maximum Superelevation	0.05	2. Table 2.8.3
Maximum Curvature	6° 30'	2. Table 2.8.3
Maximum Curvature w/o Superelevation	N/A	2. Table 2.9.2
Max. Deflection w/o Horizontal Curve	1° 00'	2. Table 2.8.1a
Minimum Length of Horizontal Curve	750' Desirable, 400' Minimum	2. Table 2.8.2a
Vertical Alignment		
Maximum Grade (Flat Terrain)	5.0% rural areas; 7.0% urban areas	2. Table 2.6.1
Minimum Grade	0.3%	2. Table 2.6.4
Min. K Value for Crest Vertical Curves	136	2. Table 2.8.5
Min. K Value for Sag Vertical Curves	96	2 Table 2.8.6
Max. Change In Grade w/o Vertical Curve	1.0%	2. Table 2.6.2
Min. Roadway Base Clearance above DHW	1'	2. Section 2.6.1
Roadway Cross-Section		
Lane Widths	12' Preferred; 11' Minimum	2. Table 2.1.1
	4' Bicycle Lanes	2. Table 2.1.2
Cross Slopes	2%	2. Figure 2.1.1
	Bicycle Cross Slopes Should Match Cross Slope Of Outside Lane	
Median Width	22' Minimum; 29.5' for dual left turn lanes	2. Table 2.2.1
Horizontal Clearance	Clear Zone Width, 24'	2. Section 2.11
Minimum Border Width	24', variance will be required	2. Table 2.5.2
Right-Of-Way Requirements	Varies: 120' Minimum	
Access Classification		
Existing & Proposed	Class 3 "Restrictive"	3. Section 6
Minimum Level Of Service	C	4. Table 4-2

SOURCES
1. AASHTO "Policy On Geometric Design Of Highways And Streets" (2000)
2. FDOT Plans Preparation Manual, Volume I English (Revised January 2004)
3. Hillsborough County Land Development Code
4. Florida's Level Of Service Standards And Guidelines Manual For Planning (2002)

SECTION 6.0 TRAFFIC

The traffic data and analysis in this section was taken from the *Traffic Technical Memorandum, December 2004,* for this project.

6.1 EXISTING CONDITIONS

Park and Sam Allen roads are currently two lane rural roadways, with swales to handle stormwater runoff. Park Road transitions from a four lane divided roadway just north of I-4. The Park Road/Sam Allen Road corridor primarily consists of residential and vacant, undeveloped properties. A large plant nursery, mobile home parks, and a produce market are located on the corridor.

There is one existing traffic signal within the project limits: at SR 39 and Sam Allen Road. Turning movement counts were taken at this signalized intersection and also at Park Road and Sam Allen Road to perform a detailed analysis. There is one railroad crossing within the project limits. The existing posted speed limit for Park Road is 45 mph. Sam Allen Road is currently posted at 50 mph.

As mentioned previously, this project is designated for improvement in the Hillsborough County MPO's LRTP. Additional lanes are anticipated to accommodate future traffic conditions along this roadway project. The majority of the existing undeveloped properties along these roads are expected to develop as residential uses on Sam Allen Road, and commercial uses on Park Road.

Access Management

Park and Sam Allen Roads are categorized as access Class 3 facilities by the Hillsborough County Public Works Dept. This Class is assigned to roadway segments where existing land use and roadway sections have not been built out to the maximum or where the probability of significant land use change in the near future is high. The minimum recommended signal spacing for this classification is 2640 feet. The minimum spacing for median openings is 1320 feet for directional and 2640 feet for a full opening.

6.2 TRAFFIC ANALYSIS ASSUMPTIONS

The FDOT has developed a Regional Planning Transportation Analysis Model for District Seven to arrive at the projected 2025 traffic.

The following steps were used to develop the 2028 traffic:

1) The 2025 Model outputs of the Tampa Bay Regional Model (TBRPM) were reviewed.
2) A comparison of the latest 2025 land use forecasts to the 1999 land use base year was completed. The Land Use variables doubled in the area, from Baker St. to the south, Knights-Griffin Road to the north, Charlie Taylor Road to the east and Thonotosassa Road to the west.
3) The TBRPM is a regional model and is not always sensitive to minor local roads. Because of this, sketch planning traffic forecasting methodology was used in combination with the TBRPM.
4) The 2028 traffic was extrapolated from 2025 traffic.

The 2002 AADT traffic volumes and the Design Year 2028 AADT volumes for the Build Alternatives are shown in Table 6-1.

The actual 2002 turning movement counts at each intersection were adjusted with the TURNS 4 program to obtain design hour movement volumes for the design year 2028. The TURNS 4 program uses AADT volumes, K and D factors along with the actual counts to arrive at balanced turning movement volumes.

The design hour traffic (2028) conditions were determined for the existing roadway and for the Build alternatives. The design hour factors used for the highway capacity analysis are a K_{30} factor of 9.65 percent, and a D (Directional factor) of 54.96 percent.

The Highway Capacity Software (HCS-3) was used to determine existing operating conditions within the project limits. Since Park and Sam Allen Roads are currently two lane undivided roadways, the HCS two lane highway options was used to evaluate the existing roadway.

The Highway Capacity Manual (HCM) definition for level terrain is any combination of horizontal and vertical alignments that permits heavy vehicles to maintain approximately the same speed as passenger cars. Given the existing characteristics of this roadway facility, the level terrain option was selected as the most appropriate.

The minimum Level of Service for an “Area Transitioning into Urbanized Area” is LOS C, from the 2002 Level of Service Handbook, published by the FDOT Systems Planning Office.

6.3 EXISTING TRAFFIC VOLUMES

The 2002 AADT volumes are shown in Table 6-1.

6.4 TRAFFIC VOLUME PROJECTIONS

The projected 2028 Design Year AADT Volumes are shown in Table 6-1.

Table 6-1

Average Annual Daily Traffic Volumes (AADT)			
Road Section	**2002 Existing**	**2025 Regional Model**	**2028 Projected**
Sam Allen Road West of Park Road	6,600	13,200	14,100
Sam Allen Road East of Park Road	3,700	7,400	10,800
Park Road	8,300	16,600	17,700

6.5 LEVEL OF SERVICE

6.5.1 Arterial Analysis

The Build Alternatives improve Park Road and Sam Allen Road to four lane divided roadways. The Arterial Level of Service for the Recommended Alternative is B, and the No-Build Alternative LOS is D, which does not meet the minimum requirement, LOS C.

6.5.2 Intersection Analysis

Existing Conditions

The signalized intersections were analyzed to determine the current Level of Service using the Highway Capacity software program. Turning movement counts taken in January 2002 were used for the intersection analysis. The existing lane configurations are shown in Figure 4-4. A summary of the results of the HCS analysis is shown in Table 6-2.

Proposed Design

The TURNS 4 program was used to project the 2002 turning movement counts to the 2028 Design Year. The AADT volumes were input into the TURNS 4 program for the projection.

Two intersections were analyzed: 1) Sam Allen Road/SR 39 (currently has a signal), and 2) the intersection of Park Road with Sam Allen Road. This intersection is not signalized at present, but is anticipated to require signalization due to the projected additional traffic.

The intersection LOS summary is shown in Table 6-2. The Build Alternative had an acceptable LOS in the design year 2028, for both intersections. The No-Build Alternative does not meet the requirement of LOS C in the design year 2028.

Table 6-2

Intersection LOS Summary			
Intersection	**2002 Existing**	**2028 No-Build**	**2028 Build**
Sam Allen & SR 39	C	E	C
Park Road & Sam Allen Road	B	D	B

6.6 REFERENCES

1. Traffic Technical Memorandum; FDOT District Seven, revised December 2004.
2. Florida's Level of Service Handbook; FDOT Planning Department; Tallahassee, FL; 2000.
3. 2025 Long Range Transportation Plan; Hillsborough County Metropolitan Planning Organization (MPO); Tampa, FL; Adopted on November 2001.
4. Highway Capacity Manual; Transportation Research Board, Washington, D.C., 2000.

SECTION 7.0 CORRIDOR ANALYSIS

7.1 EVALUATION OF ALTERNATIVE CORRIDORS

The sections of Park and Sam Allen Roads being studied are a designated truck route connecting the east side of Plant City to SR 39. This route relieves the traffic demand on the principal east-west routes in Plant City, SR 574 (Reynolds St.) and U.S. 92 (Baker St.), and also on SR 39. These roads, along with Park Road south of I-4 and Alexander St. (which is being extended north to connect with SR 39) create a loop around Plant City for trucks and through traffic to avoid the congestion in the center of Plant City and reduce the downtown traffic volume.

There are a number of different types of travel demands on Park and Sam Allen Roads in this area, including:

- Through traffic from Plant City to Zephyrhills on SR 39, and Dade City and destinations further north on U.S. 301.
- Access to businesses and residences in the area, including mobile home parks. Most of the 300-400 MHP residents are seasonal residents, who live there only in the winter months.

There are three north-south roads in Plant City which allow traffic across I-4:

- SR 39 was considered for widening to four lanes in a past PD&E Study, (WPI No. 255099 1 and No. 256298 1). Widening SR 39 in Plant City was not considered viable because of the railroad on one side, and a cemetery on the other.
- Alexander Street was selected as the recommended alternative in the past PD&E Study mentioned above, to be widened to four lanes and extended to SR 39, creating an alternate route to SR 39 on the west side of Plant City.
- Park Road is the only viable alternate corridor to SR 39 on the east side of Plant City.

Alternative corridors considered to connect the east side of Plant City to SR 39 north of I-4 are discussed below:

SR 574 (Reynolds St.) and U.S. 92 (Baker St.) Widening to Alexander St.

These roads are acting as a one-way pair, with two lanes in each direction. Reynolds and Baker Streets connect to Alexander Street, which is being extended to SR 39 north of I-4. Widening these

roads to four lanes would improve the capacity; however the cost of Right-of-Way acquisition and the number of business relocations required make this alternative not viable.

Park Road, extended to Knights-Griffin Road

Another alternate route that allows traffic to bypass the downtown area of Plant City would be to extend Park Road north of Sam Allen Road to Knights-Griffin Road, a distance of 2.3 miles. This would require ROW acquisition for the new alignment, which would also have extensive wetland impacts in this area. Knights-Griffin Road would have to be widened instead of Sam Allen Road to SR 39. For these reasons, this alternative was not considered as viable.

7.2 SELECTION OF VIABLE CORRIDORS

The only corridor considered viable is Park Road and Sam Allen Road.

SECTION 8.0 ALTERNATIVE ALIGNMENT ANALYSIS

To develop improved roadway facilities that are in the best overall public interest, engineering, environmental, and economic factors as well as social/cultural conditions must be taken into consideration. The improved roadways should be designed to safely and efficiently accommodate the projected design-year vehicular traffic as well as bicycle and pedestrian traffic. The design and alignment of the improved facility must consider sensitive environmental conditions and areas. Sites potentially contaminated with hazardous and/or petroleum materials should be avoided. The alignment should be placed so as to optimize the possibilities for construction staging and maintenance of traffic. Access control techniques to promote safe and efficient operations should be used. These criteria have a direct bearing on the selection of the preferred preliminary design concepts.

Included in the following sections are the roadway improvement alternative concepts developed for Park Road and Sam Allen Road, preceded by the "No-Build" Alternative.

8.1 NO BUILD ALTERNATIVE

The No-Build Alternative consists of canceling the project or postponing improvements beyond the Design Year 2028, and providing routine road maintenance. Certain advantages and disadvantages would be associated with the implementation of the No-Build Alternative.

The advantages of the No-Build Alternative include:

- No new construction costs.
- No temporary disruption to traffic due to construction activities.
- No ROW acquisitions.
- No business and residential relocations.
- No environmental effects due to construction activities

The disadvantages of the No-Build Alternative include:

- Unacceptable levels of service on the existing roadway network.
- Increased traffic congestion causing increased road user costs due to travel delay.
- Deterioration of air quality caused by traffic congestion.

- Further deterioration of the existing safety deficiencies due to the traffic increases; increase of economic losses due to increase in vehicle collisions.
- Increased roadway maintenance costs.
- No improved stormwater management via stormwater attenuation and treatment.

Postponement of the project may jeopardize its future economic feasibility due to escalation of construction and ROW costs. During the time that the project's development is delayed, land development could occur that would escalate land values and increase potential business damages.

The No-Build Alternative remained under consideration throughout the alternatives evaluation process and Public Hearing stage.

8.2 TRANSPORTATION SYSTEM MANAGEMENT

The objective of Transportation System Management (TSM) is to create additional capacity without constructing additional through lanes. This is accomplished by measures such as adding turn lanes at intersections, changing signal timing and phases and removing on-street parking. The possibility of using TSM as an alternative to adding through lanes was considered and rejected for the following reason.

The traffic analysis (see Section 6) showed that at least four through lanes were required to meet the projected demand of the year 2025. Since four lanes are needed to meet the required arterial LOS, intersection improvements alone will not suffice.

It should be noted, however, that the three entrances to MHP's on Sam Allen Road east of SR 39 do not have left and right turn lanes in all directions. Since the widening of Sam Allen Road to four lanes is not funded for ROW acquisition or construction in FDOT's Five Year Work Program, and may not happen for at least 10 years, an interim project to add turn lanes where possible should be considered by Hillsborough County. These minor enhancements would improve safety and access to the MHP's.

8.3 BUILD ALTERNATIVES

At the beginning of the Study, detailed information was collected, documented, and evaluated on the environmental, socioeconomic, land use, archaeological, and historical features for the area. This information was then used to develop the conceptual design and alternatives analysis for the Study.

The advantages of the Build Alternatives include:

- Accommodation of projected traffic.
- Acceptable levels of service for traffic.
- Improved drainage and water quality treatment.
- Consistency with the LRTP

The disadvantages of the Build Alternatives include:

- Minor environmental and socio-economic impacts.
- Temporary construction inconvenience and delays.

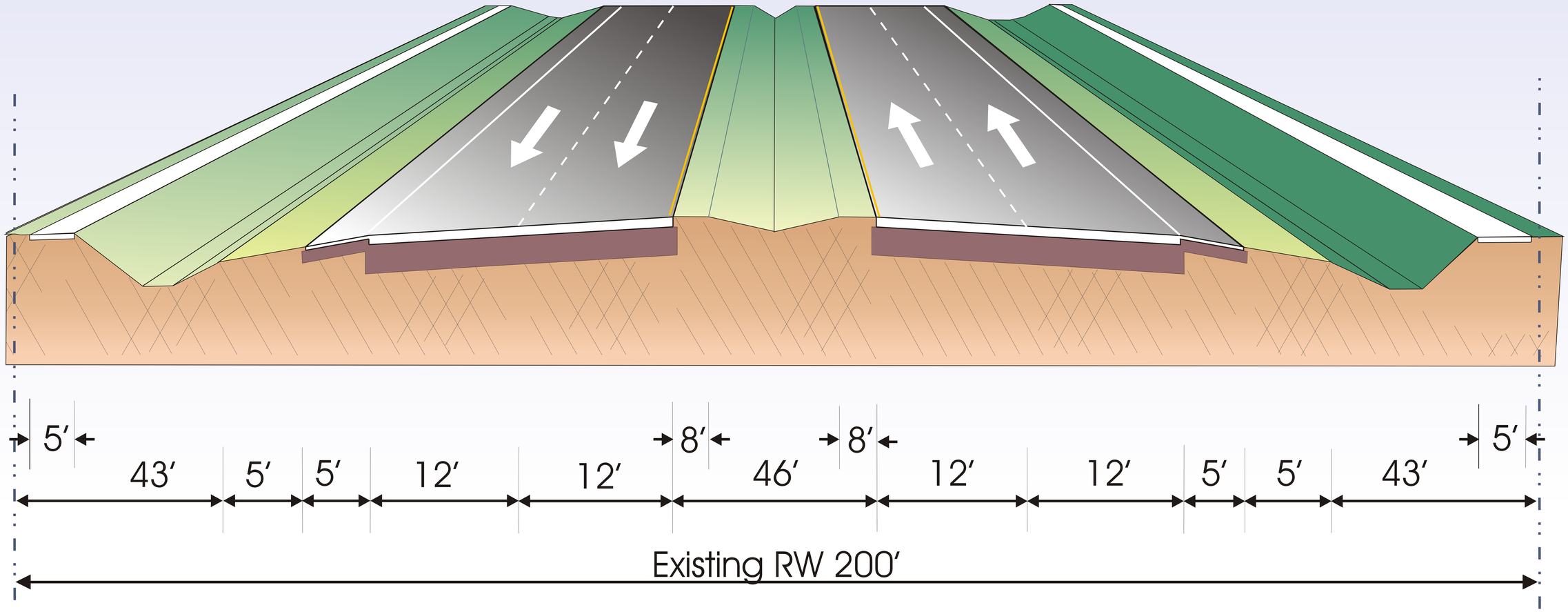
Park Road Alternatives

The only alternative considered initially for Park Road was a rural typical section. As a result of input from the City of Plant City, the rural typical section below has been revised. The City requested that a raised median be used, rather than a depressed median, to allow more opportunity for landscaping. The section of Park Road south of I-4 has already been landscaped, and they desire to continue this landscaping north to Sam Allen Road. The suburban typical section described below was developed after the Public Hearing.

- Rural Typical Section: Park Road has an existing ROW width of 200 feet, which allows the existing four lane rural typical section just north of I-4 to be extended to Sam Allen Road without additional ROW acquisition. This typical section for Park Road has 12-ft travel lanes, 5-ft paved shoulders, a 46-ft wide depressed grass median, and open roadside ditches on both sides for drainage. Five-foot sidewalks are provided adjacent to the ROW line. The proposed design speed for this typical section is 55 mph. (See Figure 8-1.)

- Suburban Typical Section: This typical section for Park Road has 12-ft travel lanes, 5-ft paved shoulders, a 46-ft wide raised grass median with type “E” curb and gutter, and open roadside ditches on both sides for drainage. Five-foot sidewalks are provided adjacent to the ROW line. The proposed design speed for this typical section is 45 mph. (See Figure 8-2.)

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



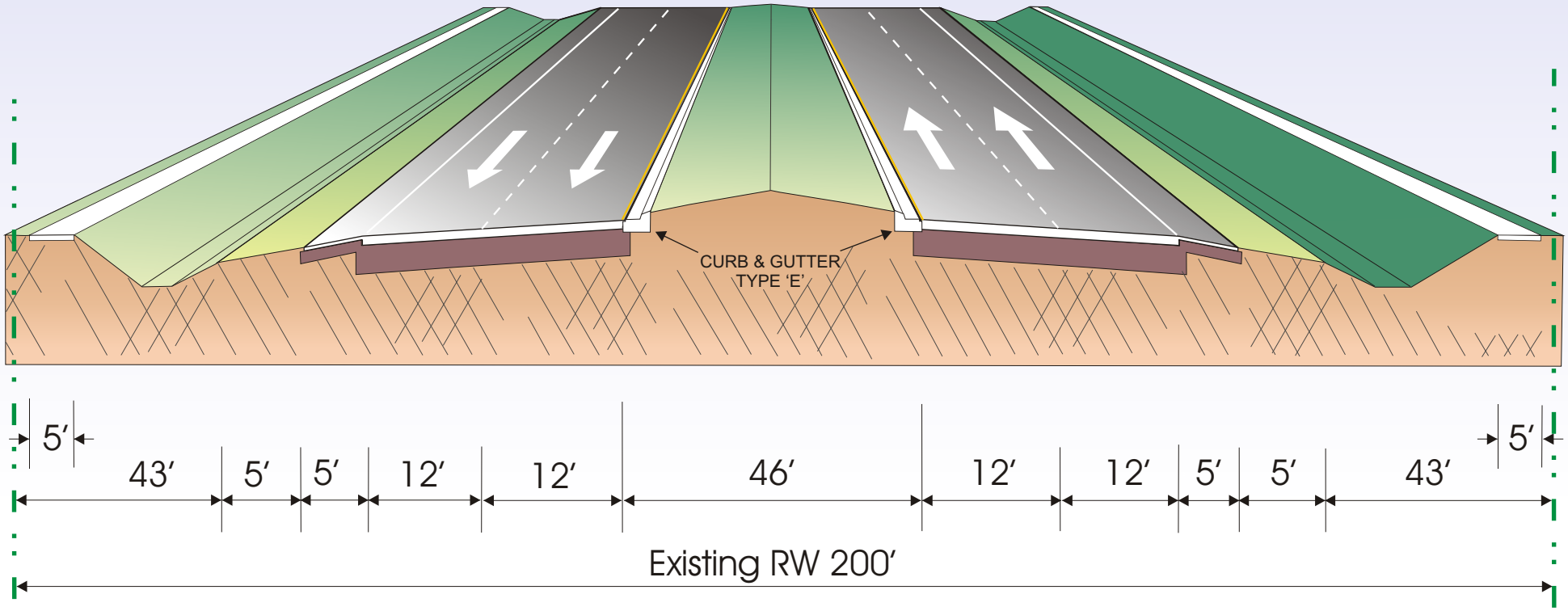
Design Speed = 55 mph

Not to scale

PARK RD / SAM ALLEN RD
From I-4 to Alexander St Extension
PD&E STUDY
WPI SEG 257862 1
FAP NO 0295-005

Figure 8-1

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



Design Speed = 45 mph

Not to scale

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

WPI SEG 257862 1
FAP NO 0295-005

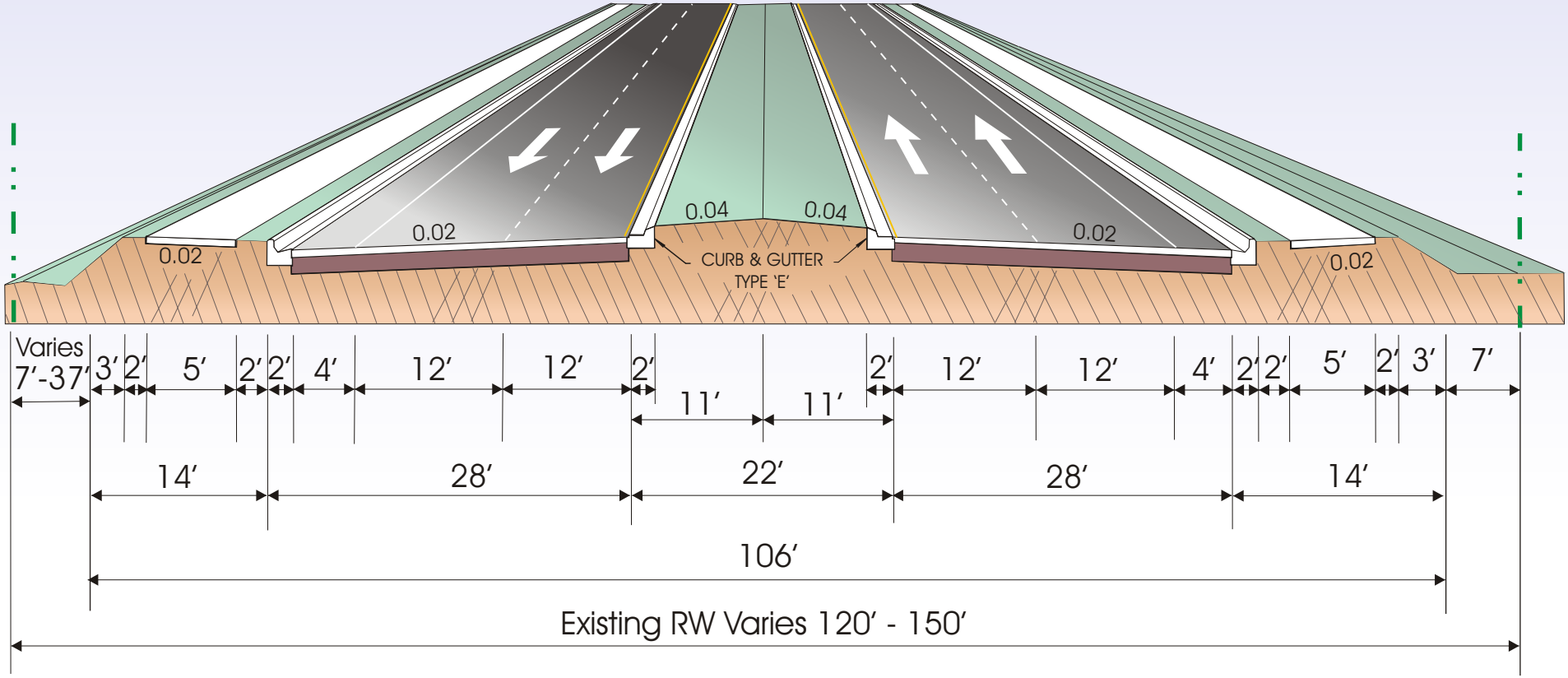
Figure 8-2

Sam Allen Road Alternatives

A number of alternative four-lane typical sections were considered for Sam Allen Road:
(Because of the businesses and mobile home parks on the north side of Sam Allen Road, the alternative typicals requiring ROW were aligned to acquire any ROW needed from the south side of the road.)

- Urban Typical Section: This was considered even though the area is relatively undeveloped because of the limited existing ROW width, 120-150 feet. An urban typical would require only 106 feet of ROW. This typical section has two 12-foot travel lanes and four-foot bicycle lanes on each side of a 22-foot wide raised median, with type "E" median curb. Five-foot sidewalks are provided for pedestrians. The stormwater is collected with curb and gutter, using underground pipes to carry the runoff water to stormwater ponds. This typical section has a maximum design speed of 45 mph. (See Figure 8-3.)
- Rural Typical Section: A rural typical fits with the area's current state of development and a design speed of 55 mph. This typical section is 194 feet wide, requiring 44-74 feet of additional ROW on Sam Allen Road from SR 39 to Park Road. This typical section has two 12-foot travel lanes and five-foot outside paved shoulders on each side of a 46-foot wide depressed median. Stormwater is conveyed to ponds by ditches. Five-foot sidewalks are provided adjacent to the ROW line. (See Figure 8-4.)
- Suburban Typical Section: The suburban typical section proposed initially had a border width of 30 feet and a median width of 30 feet, resulting in a required ROW width of 148 feet. This typical requires ROW along Sam Allen Road from SR 39 east for one mile, where the existing ROW is only 120 feet wide. This typical section has two 12-foot travel lanes and five-foot outside paved shoulders on each side of a 30-foot wide raised median. Stormwater is conveyed to ponds by ditches. Four foot paved inside shoulders separate the inside travel lanes from the type "E" median curb. Five-foot sidewalks are provided adjacent to the ROW line. The proposed design speed for this typical section is 50 mph. (See Figure 8-5.)
- Modified Suburban Typical Section: After discussion with the Design Department, the border width for the suburban typical was reduced to 23 feet and the median width was reduced to 26 feet, avoiding the need for ROW on Sam Allen Road mentioned above. The reduced border width and median width will require a design variance. This typical section has two 12-foot travel lanes and five-foot outside paved shoulders on each side of a 26-foot wide raised median. Five-foot sidewalks are provided adjacent to the ROW line. Four foot paved inside shoulders separate the inside travel lanes from the type "E" median curb. Swales are used to collect stormwater. Because

SAM ALLEN RD
From west of SR 39 to Park Rd
Proposed Typical Section
Urban 4-Lane Divided Typical Section

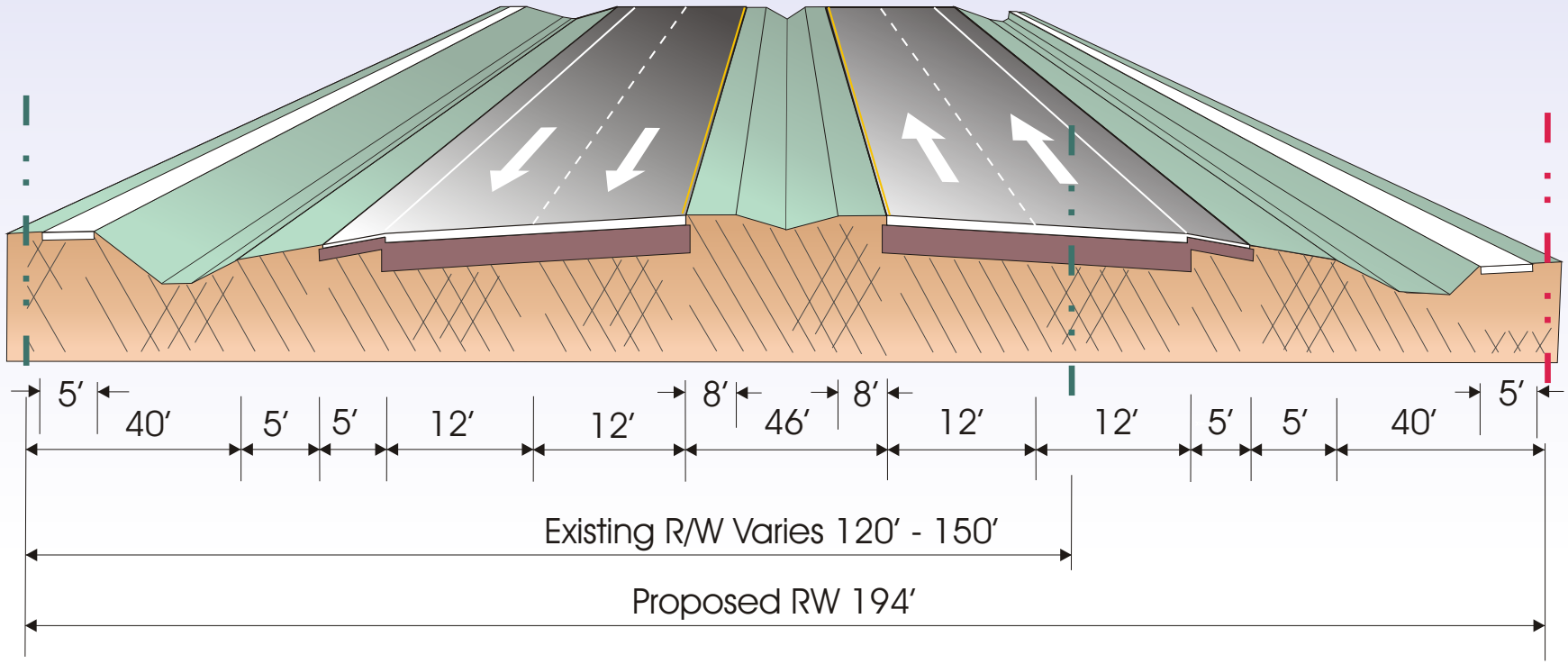


Not to scale

PARK RD / SAM ALLEN RD
From I-4 to Alexander St Extension
PD&E STUDY
WPI SEG 257862 1
FAP NO 0295-005

Figure 8-3

SAM ALLEN RD
From west of SR 39 to Park Rd
Proposed Typical Section
Rural 4-Lane Divided Typical Section



Design Speed = 55 mph

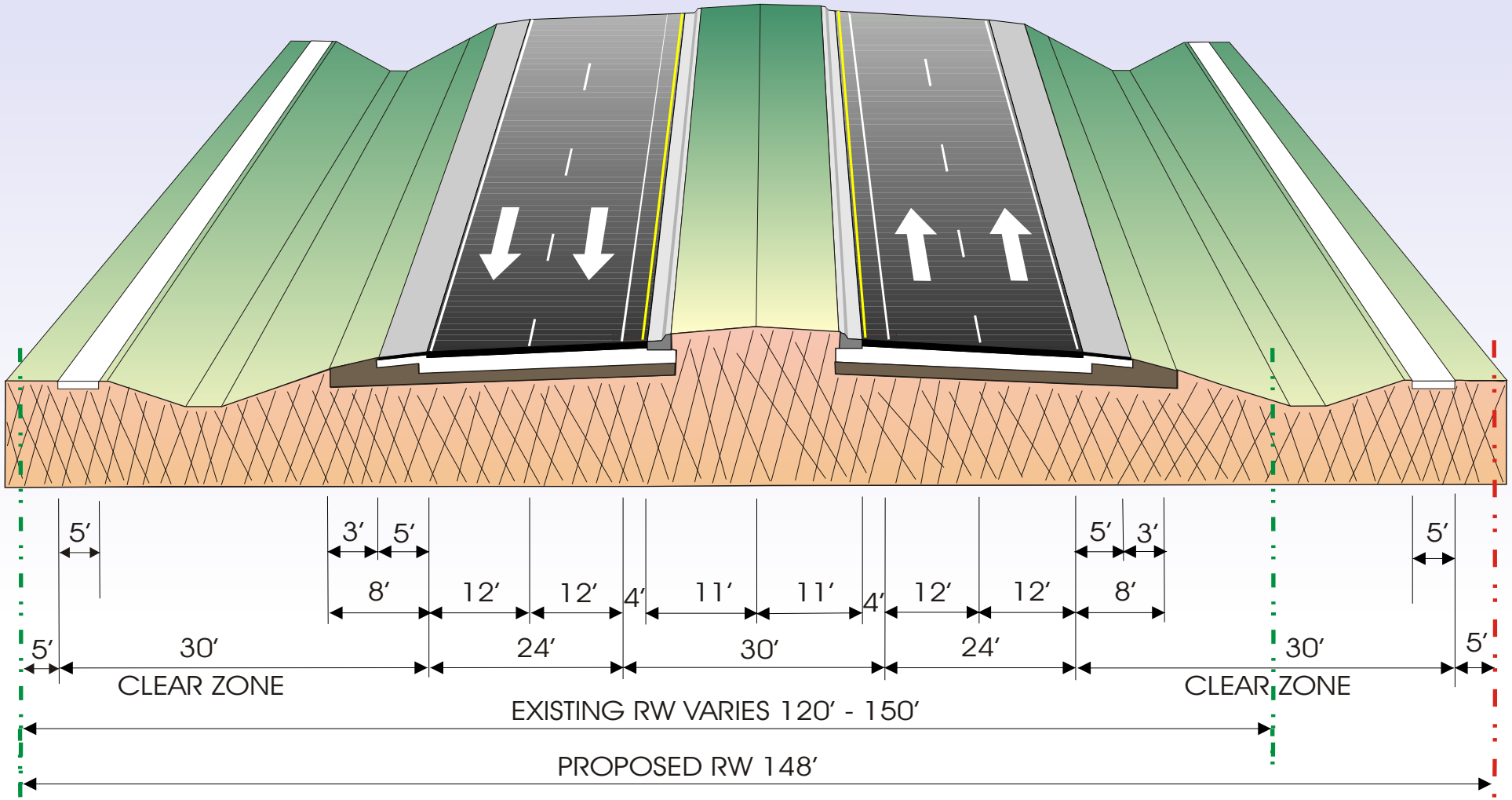
Not to scale

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

WPI SEG 257862 1
FAP NO 0295-005

Figure 8-4

SAM ALLEN RD
From west of SR 39 to Park Rd
Proposed Typical Section
Suburban 4-Lane Divided Typical Section



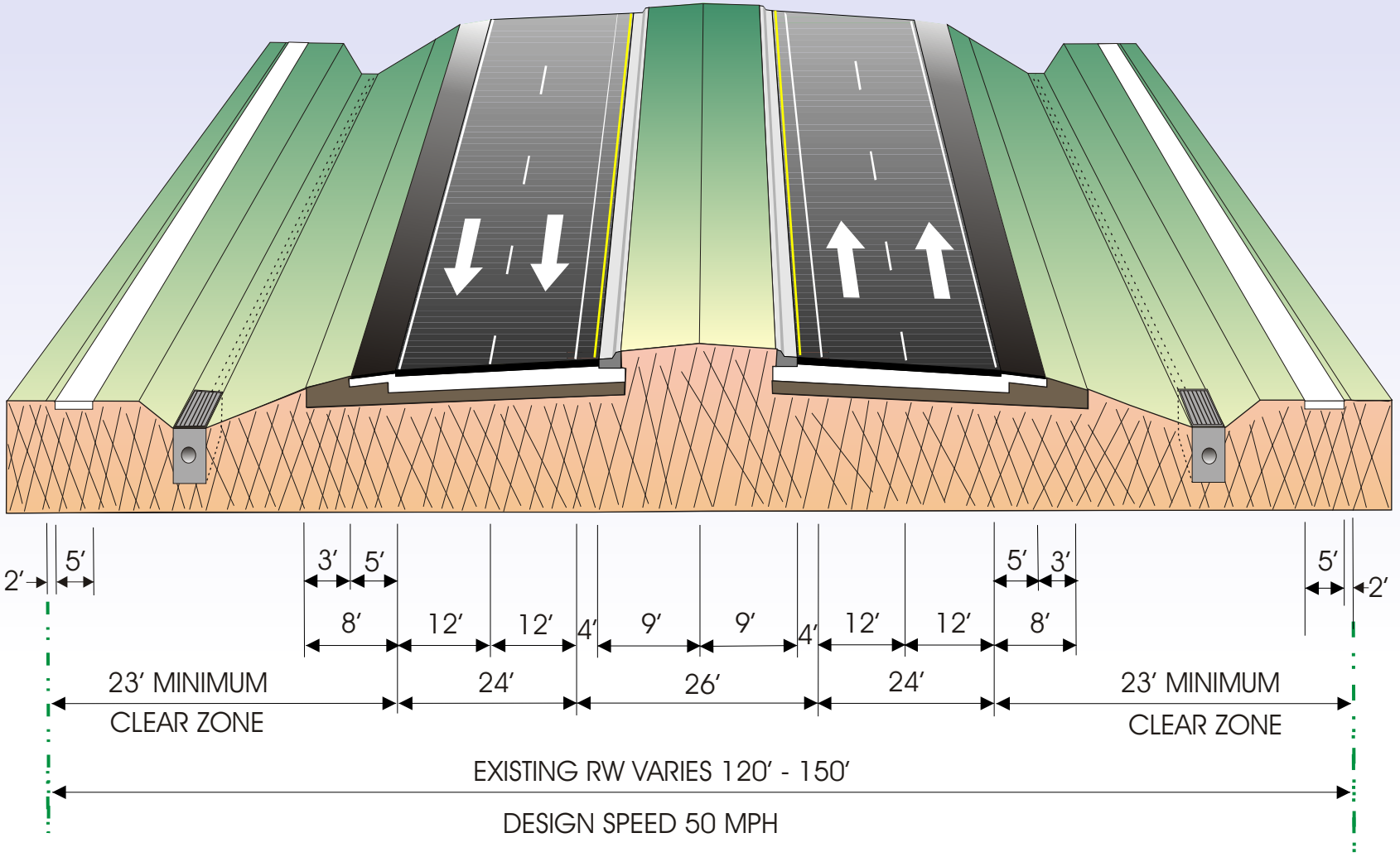
Not to scale

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

WPI SEG 257862 1
FAP NO 0295-005

Figure 8-5

SAM ALLEN RD
From west of SR 39 to Park Rd
Proposed Typical Section
Modified Suburban 4-Lane Divided Typical Section



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

WPI SEG 257862 1
FAP NO 0295-005

Figure 8-6

the swales are not large enough to convey stormwater to ponds, an underground pipe system is used. The proposed design speed for this typical section is 50 mph. This typical will fit within the existing 120-150 ft of ROW, except where the alignment has been shifted south at SR 39. (See Figure 8-6.)

The realignment of the intersection of Park Road and Sam Allen Road has been considered during this Study. This realignment would replace the existing T-intersection with a curve between the two roads, so that traffic between Park Road and Sam Allen Road would become through traffic, with a T-intersection designed for Sam Allen Road east of the intersection. (See Appendix A, sheets 8 and 11, for concept plans of the curve intersection design.) The intersection realignment is considered as the ultimate design, with widening Park Road and Sam Allen Road to four lanes as a T-intersection being an interim solution. (See Appendix B for the T-intersection interim design.)

8.4 EVALUATION MATRIX

The evaluation matrix comparing the Build Alternatives, 1) the curve realignment of the intersection of Park Road and Sam Allen Road, 2) the interim T-intersection design, and 3) the No-Build Alternative, is shown in Figure 8-7.

8.5 RECOMMENDED ALTERNATIVE

The Recommended Alternative is a four lane divided typical section for both Park Road and Sam Allen Road. The realignment of the intersection of Park Road and Sam Allen Road has been considered during this Study. This realignment would replace the existing T-intersection with a curve between the two roads, so that traffic between Park Road and Sam Allen Road would become through traffic, with a T-intersection designed for Sam Allen Road east of the intersection. The intersection realignment is considered as the ultimate design, with widening Park Road and Sam Allen Road to four lanes as a T-intersection being an interim solution.

Park Road's recommended typical section is suburban, with two 12-foot travel lanes and five foot paved shoulders on each side of a 46 foot wide raised median. Ditches are used to convey stormwater to ponds. Five-foot sidewalks are added adjacent to the ROW line. See Figure 9-1.

After a thorough analysis of the viable Alternatives, including environmental and social impacts, costs of construction and ROW, the modified suburban typical has been selected as the Recommended Alternative

Evaluation Matrix

EVALUATION FACTORS	ALTERNATIVES		
	Recommended Alternative with Curve Intersection	Recommended Alternative with T-Intersection	No-Build Alternative
BUSINESS EFFECTS			
Number of businesses expected to be relocated	none	none	none
RESIDENTIAL EFFECTS			
Number of residences expected to be relocated	none	none	none
ROW INVOLVEMENT			
Number of parcels	10	8	none
Area of ROW to be acquired in acres, including ponds	29.1	24.1	none
COMMUNITY EFFECTS (within ROW)			
EFFECTS ON CULTURAL/HISTORIC RESOURCES AND PUBLIC PARKS			
Number of historic sites/structures within or adjacent to ROW	none	none	none
Number of noise sensitive sites	16	16	none
NATURAL ENVIRONMENTAL EFFECTS			
Total wetland area encroachment in acres	1.87	1.82	none
FLOODPLAIN AND FLOODWAY ENCROACHMENT			
Area of base floodplain encroachment in acres	14	14	none
Area of base floodway encroachment in acres	none	none	none
POTENTIAL PETROLEUM POLLUTANT AND HAZ ARDOUS MATERIAL CONTAMINATED SITES			
Number of potential petroleum pollutant contaminated sites	1	1	none
Number of potential hazardous material contaminated sites	1	1	none
ESTIMATED PROJECT COSTS (Present value in million $)			
ROW acquisition cost	$6.4	$3.2	none
Engineering cost, 15% of Construction Cost	$3.1	$3.0	none
Construction cost	$20.6	$19.9	none
Construction Engineering & Inspection, 15% of Const.	$3.1	$3.0	none
TOTAL COST	**$33.2**	**$29.1**	**none**

Note: Matrix has been revised since the Public Hearing.

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

WPI SEG 257862 1
FAP NO 0295-005

Figure 8-7

for Sam Allen Road.

Sam Allen's recommended typical is a modified suburban section with two 12-foot travel lanes, and a four-foot bicycle lane each side of a 26 foot wide raised median. Five-foot sidewalks are added adjacent to the ROW line. Four foot paved inside shoulders separate the inside travel lanes from the type "E" median curb. Swales are used to collect stormwater. Because the swales are not large enough to convey stormwater to ponds, an underground pipe system is to be used. See Figure 9-2.

This alternative was chosen as the Recommended Alternative because it had the least overall community impacts, considering residents and businesses, historical sites, community facilities. While the urban typical for Sam Allen Road required no additional ROW, safety was also a consideration, and curbs should not be used next to travel lanes with a design speed of 50 mph or greater. The modified suburban typical also had the lowest total cost, including R/W and construction costs, of any of the viable alternatives.

SECTION 9.0 PRELIMINARY DESIGN ANALYSIS

9.1 DESIGN TRAFFIC VOLUMES

The Design Traffic Volumes are detailed in Section 6, Traffic.

9.2 TYPICAL SECTIONS

The Recommended Alternative is a four lane divided typical section for both Park Road and Sam Allen Road:

Park Road's recommended typical section is suburban, with two 12-foot travel lanes and five foot paved shoulders on each side of a 46 foot wide raised median. Ditches are used to convey stormwater to ponds. Five-foot sidewalks are added adjacent to the ROW line. See Figure 9-1.

Sam Allen Road's recommended typical is a modified suburban section with two 12-foot travel lanes, and a four-foot bicycle lane each side of a 26 foot wide raised median. Five-foot sidewalks are added adjacent to the ROW line. Four foot paved inside shoulders separate the inside travel lanes from the type "E" median curb. Swales are used to collect stormwater. Because the swales are not large enough to convey stormwater to ponds, an underground pipe system is to be used. See Figure 9-2.

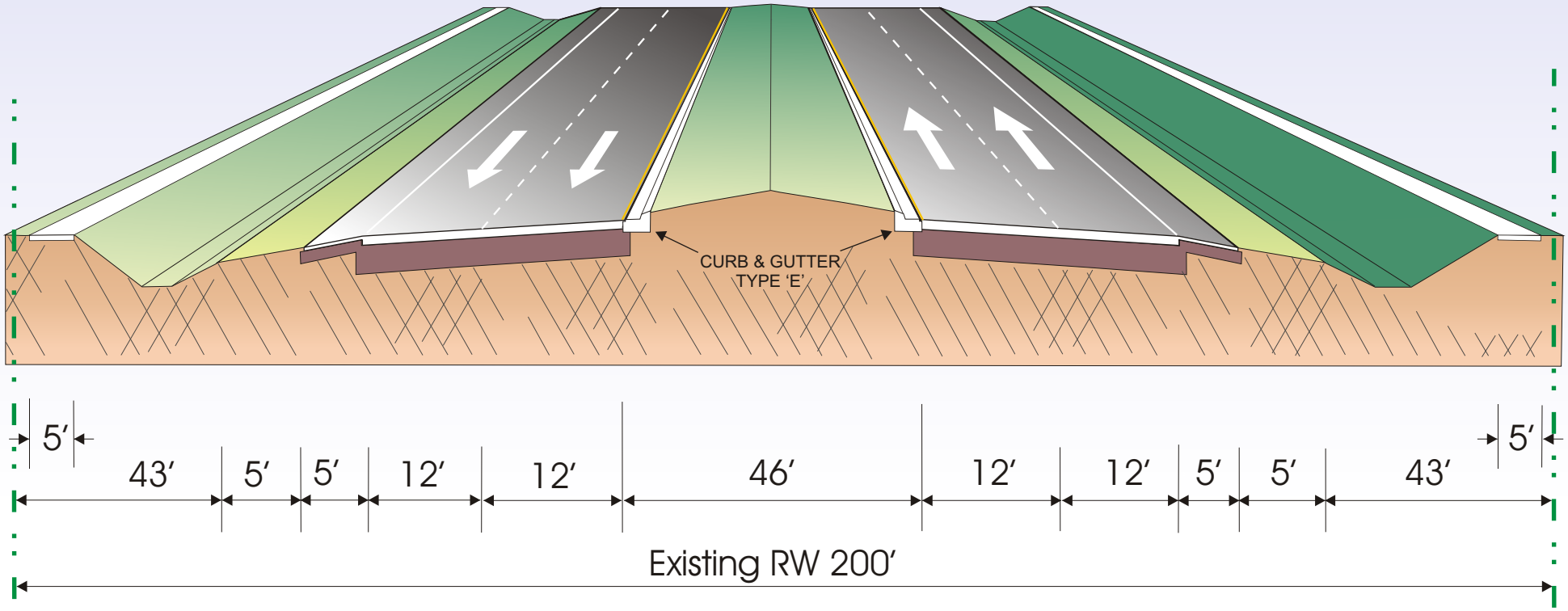
9.3 INTERSECTION CONCEPTS AND SIGNAL ANALYSIS

There is one existing signalized intersection within the project limits. A signal is proposed at the intersection of Park and Sam Allen Roads, to improve the level of service. An intersection analysis was done at these two locations, using HCS software, to verify that LOS C or better will be maintained in the design year, 2028. The traffic analysis was previously summarized in Section 6.6.

Two options are being considered at the intersection of Park and Sam Allen Roads:

1) The widening Park Road and Sam Allen Road to four lanes as a T-intersection. This is considered to be an interim solution.
2) The realignment of the intersection of Park Road and Sam Allen Road as a large radius curve between the two roads, so that traffic between Park Road and Sam Allen Road would become through traffic, with a T-intersection designed for Sam Allen Road east of the intersection. The

PARK RD
From I-4 to Sam Allen Rd
Recommended Typical Section
Suburban 4-Lane Divided Typical



Design Speed = 55 mph

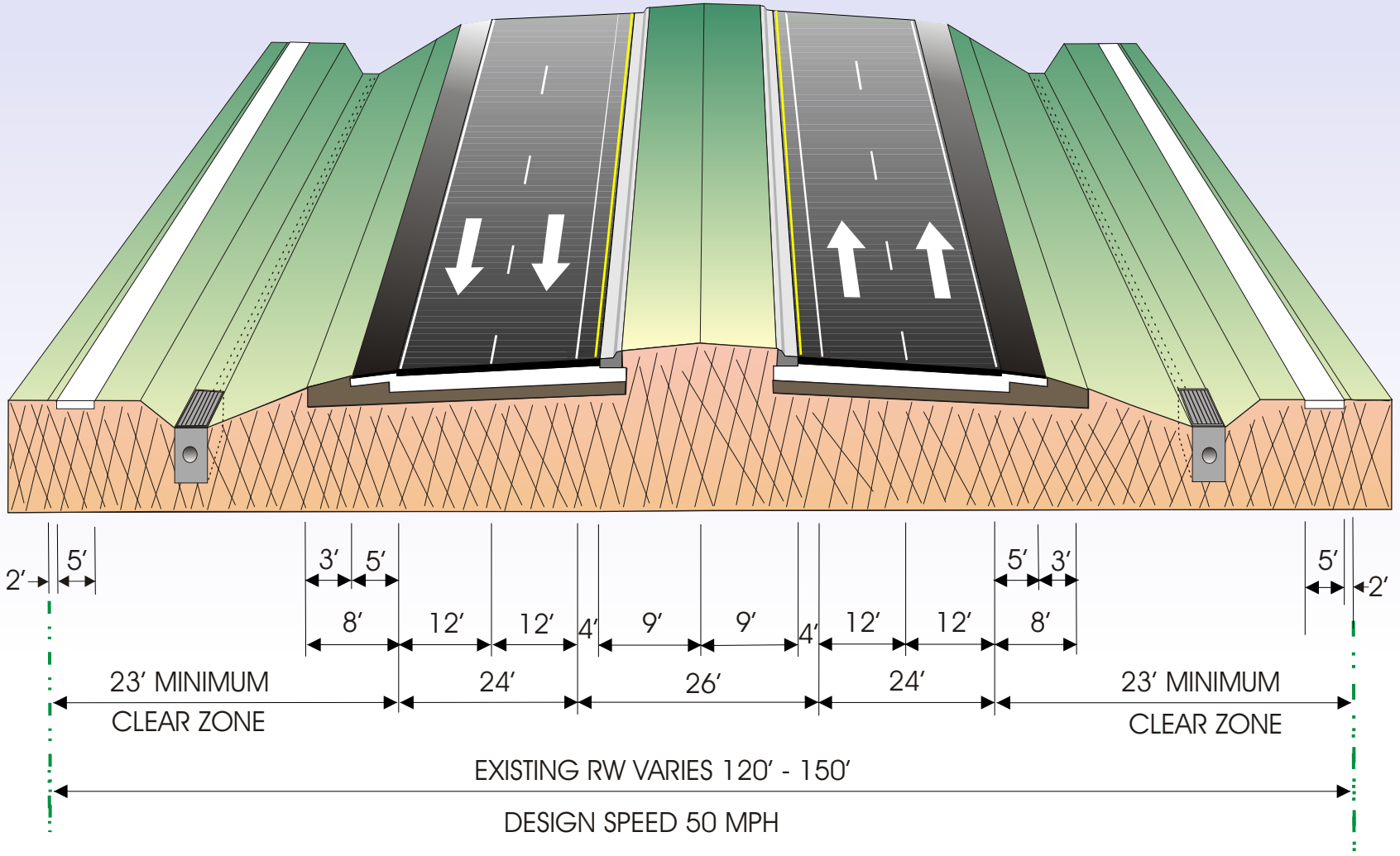
Not to scale

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

WPI SEG 257862 1
FAP NO 0295-005

Figure 9-1

SAM ALLEN RD
From west of SR 39 to Park Rd
Recommended Typical Section
Modified Suburban 4-Lane Divided Typical Section



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

WPI SEG 257862 1
FAP NO 0295-005

Figure 9-2

intersection realignment is considered as the ultimate design.

9.4 ALIGNMENTS AND RIGHT OF WAY NEEDS

The Recommended Alternative, a four-lane suburban typical section, fits inside the existing ROW along Park Road. However, some ROW will be required on the south side of Sam Allen Road on either side of SR 39 to continue four lanes through the intersection. This will require approximately 1.6 acres, land which is currently undeveloped. The realignment of the intersection of Park and Sam Allen Roads will require about 5 acres on the southwest corner of the intersection. The proposed ROW is shown on the plan sheets in Appendix A.

Approximately 19 acres of ROW is required for pond and floodplain compensation sites. The total ROW needed for the ultimate design (with the curve intersection realignment), including the Sam Allen Road realignment at SR 39, ponds and floodplain sites, is 29.1 acres. The total ROW needed for the interim design (T-intersection at Park and Sam Allen Roads) is 24.1 acres.

9.4.1 Vertical Alignment

The proposed grade is expected to be about the same elevation as the existing grade for the both roads. The existing grade on Park Road drops from elevation 128’ just north of I-4 to elevation 110’ at Sam Allen Road. The existing grade on Sam Allen Road is almost flat, with very little change in grade. A minimum profile grade of 0.3% will be needed to allow for drainage with curb and gutter in the event that Sam Allen Road is widened to a six lane urban section in the future.

9.5 RELOCATIONS

The proposed ROW needed to realign Sam Allen Road to the south and build four lanes through the intersection with SR 39 is currently vacant land. No relocations are anticipated.

No relocations are anticipated for the pond and floodplain compensation sites, as vacant land is available.

9.6 RIGHT OF WAY COSTS

The Alternatives Evaluation Matrix in section 8.4 summarized the estimated ROW costs for the project. The estimate includes costs of ROW acquisition needed at SR 39 and the pond and floodplain compensation sites.

The total estimated ROW cost with the intersection of Park and Sam Allen Roads remaining as a "T" intersection is $3.2 million. This includes the acquisition on Sam Allen Road at SR 39, ponds and floodplain compensation sites. The estimated ROW cost of the curve realignment of the intersection of Park and Sam Allen Roads is $3.2 million, for a total project ROW cost of $6.4 million.

9.7 CONSTRUCTION COSTS

The Alternatives Evaluation Matrix in section 8.4 summarized the estimated construction costs. The costs were calculated with the use of the Departments' Long Range Estimate (LRE) method.

The construction cost for the Recommended Alternative is $19.9 million with the T-intersection option, and $20.6 million with the curve realignment of the intersection.

9.8 PRELIMINARY ENGINEERING AND CONSTRUCTION ENGINEERING COSTS

The costs of engineering (final design) and Construction Engineering and Inspection (CEI) were each estimated as 15 percent of the construction costs: $3.0 million with the T-intersection option, and $3.1 million with the curve realignment of the intersection.

9.9 RECYCLING OF SALVAGEABLE MATERIALS

During construction of the project, recycling of re-useable materials will occur to the greatest extent possible. Where possible, milling and overbuilding of the existing pavement to use in the new pavement will be considered to reduce the volume of the materials that need to be hauled and disposed of away from the project and to reduce the cost of purchasing materials suitable for pavement construction.

9.10 USER BENEFITS

The public will realize numerous benefits after the recommended build alternative is constructed, including savings in travel time and vehicle operating costs as the projected traffic volumes approach the capacity of the existing two-lane section, and traffic accident reduction. The proposed improvements are expected to reduce traffic accident types such as head-on, rear-end, and angle-type collisions due to separating opposing traffic with a divided median and adding left and right turn lanes on high volume side streets. With the curve realignment option of the intersection of Park and Sam Allen Roads, there is an additional benefit of reduced delay and improved capacity as the major traffic flow is continuous, with the 90^0 turn eliminated.

9.11 PEDESTRIAN AND BICYCLE FACILITIES

To accommodate bicyclists, the Recommended Alternative for both Park and Sam Allen Roads include a 5-foot paved shoulder on each side of the roadway. Sidewalks are also included adjacent to the ROW, away from the travel lanes.

9.12 SAFETY

The proposed improvements are anticipated to upgrade Park and Sam Allen Roads to safe and efficient transportation facilities. The five-foot paved shoulders will allow bicyclists to share the roadway with motor vehicles while observing the rules of the road. The increased roadway capacity is expected to result in less congestion as traffic increases, therefore reducing the probability for accidents. Separation of northbound and southbound traffic to a divided four-lane roadway is expected to reduce head-on vehicle collisions.

A total of 10 rear end collisions occurred on Park Road in the four year period 1998-2001, involving northbound traffic stopping at the T-intersection with Sam Allen Road. Installing a traffic signal at this intersection, to replace the existing stop sign for northbound traffic, would improve safety here as well as improve the intersection capacity. It is also recommended that an advance warning stop sign be placed at this intersection, until a traffic signal is installed with the Park Road Design project, FPN 257862-2.

9.13 ECONOMIC AND COMMUNITY DEVELOPMENT

As previously presented in Section 3.3, the Hillsborough County MPO's LRTP calls for widening these two-lane roads to four-lane divided roadways to improve the traffic capacity. This transportation plan was developed after thorough evaluation of the future population and development growth in the region of the project.

The proposed improvements, developed through the process previously described in Section 8, respond to and fully accommodate the projected need for upgrading these roads to maintain the desired LOS. The improved capacity will accommodate the significant future population growth mentioned in Section 3.4.

9.14 ENVIRONMENTAL IMPACTS

9.14.1 Land Use

The future land uses in the vicinity of the project were previously discussed in Section 4.3.1. Since, as discussed in Section 4.3, the proposed improvements are consistent with the long range planning for this region of Hillsborough County, they complement the future land use plans.

9.14.2 Community Cohesion

The proposed improvements should have minimal adverse effect on community cohesion. The proposed improvements will not divide or separate neighborhoods or other community areas from one another. The project will not isolate an ethnic group or neighborhoods, separate residences from community facilities or substantially change travel patterns. The project is not anticipated to adversely affect elderly persons, handicapped individuals, transit-dependent individuals, low income or minority populations.

The improvement of Sam Allen Road to a four lane road with a median will allow for safer crossing between developments by the Countrywood Mobile Home Park residents.

9.14.3 Archaeological and Historical Resources

A Cultural Resource Assessment Survey (CRAS) Report has been completed for this project. The findings are summarized below.

Archaeological: Background research and a review of the Florida Master Site File (FMSF), and the National Register of Historic Properties (NRHP), indicated that no archaeological sites have been recorded previously within the archaeological Area of Potential Effect (APE). In addition, a review of relevant site locational information for environmentally similar areas within the project vicinity indicated a variable probability for the occurrence of prehistoric sites. The background research also indicated that sites, if present, would most likely be small lithic or artifact scatters characterized by small areal extent and low artifact density. As a result of field survey, no new archaeological sites were discovered. A single artifact, also known as an "archaeological occurrence," was identified within the existing Sam Allen Road right-of way. This find is not considered significant, and therefore, is not potentially eligible for listing in the NRHP. In a letter dated August 29, 2003, the SHPO has concurred that the project will have no effect on listed archaeological sites.

A separate Cultural Resource Assessment has been completed for the potential pond and floodplain compensation sites. In a letter dated November 18, 2004, the SHPO has concurred that the pond and floodplain compensation sites will have no effect on listed archaeological sites.

Historical/Architectural: A Cultural Resource Assessment, including background research and a field survey was completed for this project in April 2003. Background research and historical/architectural field survey resulted in the identification and evaluation of eight historic properties (50 years of age or older) along Sam Allen Road. These include four previously recorded Frame Vernacular style residences (8HI5350, -5351, -5352, and -5357) constructed between 1919 and 1943.

None was considered eligible for the NRHP (Almy et al. 1992). In addition, four new historic resources (8HI8548, -85549, -8550, and -8551) were recorded. These Frame Vernacular and Ranch style residences, built between 1925 and 1953, exhibit styles which are typical to the area. Most of the buildings have undergone extensive alterations, and the limited research available did not indicate any historical significance. Therefore, none appears eligible for listing in the NRHP. In a letter dated August 29, 2003, the SHPO has concurred that the project will have no effect on any listed historic structures.

A separate Cultural Resource Assessment has been completed for the potential pond and floodplain compensation sites. In a letter dated November 18, 2004, the SHPO has concurred that the pond and floodplain compensation sites will have no effect on any listed historic structures.

9.14.4 Section 4(f) Properties

There are no Section 4(f) Properties within the project limits.

9.14.5 Wetlands

Wetlands will be affected by the proposed improvements. The majority of the effects will occur to the project area's water conveyance systems. Minor encroachments will occur to forested wetlands and scrub/shrub wetlands adjacent to the current facility. The total acreage of wetland impacts is estimated to be approximately 1.37 acres for mainline construction. Depending on stormwater management facilities and floodplain compensation sites selection, wetland effects may increase by approximately an additional half acre, for a project total of 1.87 acres.

9.14.6 Water Quality Impacts

A Water Quality Impact Evaluation (WQIE) has been prepared for this project to identify surface water and ground water impacts resulting from storm water runoff. The additional pavement constructed will create more runoff, which will be conveyed in ditches to stormwater ponds for treatment.

The proposed Storm Water facility design will include, at minimum, the water quantity requirements for water quality impacts as required by the SWFWMD in Rule(s) Chapters 40D-4, 40D-40, 40D-400, F.A.C. Therefore, no further mitigation for water quality impacts will be needed.

9.14.7 Threatened and Endangered Species

The Biological Assessment section of the combined Wetland Evaluation Report/Biological Assessment was discussed previously in section 4.3.3. The results of the Biological Assessment Surveys are summarized below:

FEDERAL SPECIES INVOLVEMENT SUMMARY

The project has been evaluated for impacts on federally protected threatened and endangered species. A literature review was conducted to determine those possibly threatened or endangered species, which may inhabit the project area. Following the literature review surveys were conducted along the study corridor for the presence of listed species.

Based on the above results of the literature review and the field surveys conducted for the proposed roadway improvements, the Department has determined that no federally listed threatened or endangered species will be affected by the project. Furthermore, the proposed project is not located in an area designated as critical habitat by the U.S. Department of the Interior. The U. S. Fish and Wildlife Service (USFWS) concurred in writing with this determination on January 11, 2005.

9.14.8 Potential Hazardous Materials Sites

The findings of Hazardous Materials investigations for this project were summarized in section 4.3.4. A total of five sites along the project corridor with a potential for having an impact on the project were identified and evaluated. Three of these sites were rated as Low or No risk, with no further environmental assessment recommended.

The following sites received "Medium" or "High" risk evaluation ratings:

- Site 2 Former Spill Site (High) – north of the intersection of Park Road and Sam Allen Road
- Site 4 Boone's Wholesale Nursery, Inc. (Medium)

A Level II soil and groundwater investigation is recommended for these locations. See the Level I Hazardous Material Report (revised November 10, 2004) for specific recommendations.

9.14.9 Noise Effects

A Traffic Noise Analysis Technical Memorandum (FDOT, March 2005) was prepared for this Study. Noise level changes were analyzed and the need for noise abatement for the proposed improvements was considered. The results of this analysis are summarized below.

For the Design Year (2028) Build condition, 16 residences are predicted to experience noise levels that approach or exceed the NAC. Noise abatement measures were evaluated for these noise sensitive sites. An evaluation of traffic system management techniques, alignment modifications and property acquisition

indicated that these abatement measures were not feasible or cost reasonable. Land use controls can be used by local planning officials to minimize development or redevelopment of noise sensitive land uses in proximity to Sam Allen Road and Park Road. A copy of the Traffic Noise Analysis Technical Memorandum will be furnished to local officials to assist them in establishing compatible land uses for future development.

Providing noise barriers as a means of abating traffic noise was also evaluated. In this evaluation, noise barriers were modeled along the proposed right-of-way (ROW) of Sam Allen Road adjacent to the affected noise sensitive sites (noise barriers were not evaluated along Park Road because there were not any noise sensitive sites located along its length within the project limits). Five different residential areas were considered, and noise barriers at two locations have been determined to be a potentially feasible and cost reasonable abatement measure.

A noise barrier with a driveway opening to accommodate Sunset Oak Drive is anticipated to provide at least a 5 dBA reduction to all five of the affected residences located in the Oaks at CountryWood residential development at a cost below $35,000 per benefited residence. Similarly, a noise barrier with a driveway opening to accommodate West Country Meadows Boulevard is anticipated to benefit all six of the affected residences located in the Meadows at CountryWood residential development along Don Tab Way at a cost below $35,000 per benefited residence.

During the design phase of this project, the FDOT is committed to further evaluate noise barriers at the two locations described above. Engineering details developed during the design phase will be incorporated into the noise barrier analysis. The design analysis will be used to refine the feasible and cost reasonable evaluation of the noise barriers. A length and height will be refined if the noise barrier is determined to be a feasible and cost reasonable abatement measure in the design analysis.

Based on the noise analysis performed to date, there appears to be no feasible and cost reasonable abatement measures to mitigate for traffic noise at the remaining five residences along the project corridor with predicted noise levels that approach or exceed the NAC for the Design Year Build condition.

9.14.10 Air Quality Effects

In accordance with the Clean Air Act Amendments of 1990 and Part 2, Chapter 16 of the FDOT's PD&E Manual, an air quality analysis has been conducted for this project utilizing the FDOT COSCREEN98 (revised September 2002) air quality screening model. The screening test is intended to allow an appropriate level of analysis for transportation projects that have very little or no affect on air quality. The COSCREEN98 computer program makes a number of conservative assumptions about the project and indicates whether the project needs a more detailed computer analysis. The roadway intersection with the highest total volume and the lowest total departure speeds were analyzed for the No-Build and Build scenarios for both the opening year (2008) and the design year (2028). The worst-case Carbon Monoxide (CO) and one- and eight-hour levels are not predicted to meet or exceed the one- or eight-hour national ambient air quality standards (NAAQS) for the pollutant with either the No-Build or Build alternatives. As such, the project "passes" the Screening Test.

The project is located in an area that has been designated as maintenance for the ozone standards under the criteria provided in the Clean Air Act Amendments of 1990. This project is included in the urban area's current approved conforming Transportation Improvement Plan (TIP) and the area's conforming long-range plan. This project is included in the area's Conformity Determination Report. The project's design concept and scope are the same as that which was found in the conforming plan and ITP.

9.15 UTILITY IMPACTS

As previously discussed in section 4.1.12, a number of utility distribution lines are located in the existing ROW. Construction of this project may require relocation of some utilities.

9.16 TRAFFIC CONTROL PLAN

Park and Sam Allen Roads are local roads that provide an essential route in the Plant City area for traffic from the southeast section of Plant City to SR 39 north of I-4. These roads also provide access to mobile home parks, plant nurseries, a car dealership, and other private properties. Local traffic should be maintained for these residences and businesses during construction.

The following construction sequence is recommended to maintain traffic along Park Road:

Phase 1 Construct the new northbound roadway to the east of the existing alignment, limiting lane closures to off-peak hours only.

Phase 2 Shift all traffic to the newly built roadway. Reconstruct the existing pavement for the proposed southbound lanes.

A similar construction sequence is recommended to maintain traffic along Sam Allen Road:

Phase 1 Construct the new eastbound roadway to the south of the existing alignment, limiting lane closures to off-peak hours only.

Phase 2 Shift all traffic to the newly built roadway. Build the new westbound lanes.

9.17 RESULTS OF PUBLIC INVOLVEMENT PROGRAM

A comprehensive Public Involvement Program has been implemented as part of this Study. The purpose of this Program was to inform and solicit responses from all interested parties including local residents, public officials, agencies, and business owners. The program included a Kickoff letter, an Advance Notification Package, and a Public Hearing. Coordination included presentations to Hillsborough County representatives and mobile home park residents. The Public Involvement Program and the results of its implementation are documented in the Comments and Coordination Report. A brief summary of the major steps in this process is presented in this section.

9.17.1 Kick-off Letter

A Kickoff Flyer was mailed on May 13, 2002, to public officials and local government agencies. The purpose of this flyer was to inform them of the start of the project and get comments regarding issues and concerns. Public officials mentioned no special concerns.

9.17.2 Advance Notification

In accordance with the PD&E Manual, an Advance Notification (AN) package was first mailed to the Department of Community Affairs (DCA) on February 14, 2002. Responses from the agencies were collected by the DCA and sent to the Department on April 29, 2002.

9.17.4 Public Hearing

A Public Hearing was held on January 18th, 2005, at the Meadows Community Center, 723 Country Meadows Boulevard, Plant City, Florida. The Hearing included both informal and formal sessions. The informal session began at 4:00 p.m. and lasted until 6:00 p.m. During that time, the public could view a continuous-loop project video, view the conceptual plans and project documents on display, speak to the court reporter in a one-on-one setting, or ask questions of Department representatives. Project handouts were available to all attendees. At 6:00 p.m., the Department gave a formal presentation regarding the project and its probable environmental effects. The presentation was followed by an opportunity to provide formal public comment. The court reporter transcribed the entire formal portion. Following the formal portion of the Hearing, the informal portion resumed until 7:00 p.m.

Ninety-eight (98) people signed in at the Hearing. Three (3) people commented on the project during the informal open house, eight (8) people commented during the formal portion of the Public Hearing, and a total of seventeen (17) written comments were received between January 18, 2005 and January 28, 2005. A copy of the official Public Hearing transcript is included in the Comments and Coordination Report.

Displays included a plan view on aerial photography of the Recommended "Build" Alternative, including the realignment of the intersection of Sam Allen Road and Park Road with a large radius curve. A total of 17 written comments were received. Key issues raised included:

- The designation of Park Road and Sam Allen Road as a Truck Route
- Access in and out of the Meadows Mobile Home Park

9.17.5 Other Public Meetings and Input

A meeting was held at the Hillsborough County Government Center, with representatives from the Hillsborough County Public Works and Planning Departments, to discuss alternatives for this Study. Input was also received from the City of Plant City's Engineering Department.

A presentation was also made to the residents of the Country Meadows Mobile Home Park, displaying the build alternatives and explaining the alternatives development process. The residents had an opportunity to express their concerns and views of the Study's planned improvements.

9.18 VALUE ENGINEERING

A Value Engineering (V.E.) Study was completed in December 2004. The V.E. Team recommended using the frontage road on the north side of I-4, from SR 39 to Park Road, as an alternative to widening Park and Sam Allen Roads. This recommendation was rejected for the following reasons:

- The frontage road has small radius curves connecting to Park Road and SR 39 making them unsuitable for truck traffic. Correcting this deficiency would require additional ROW at Park Road and SR 39.
- The existing Right of Way width on the frontage road is sufficient for the existing two lanes, to add additional lanes would require ROW along the entire length of the frontage road.
- The existing pavement thickness was designed to handle the local traffic only. The additional truck traffic may require total reconstruction of the frontage road.
- The above considerations may make the frontage road improvements more costly and have more community impacts than the recommended alternative.

9.19 DRAINAGE

The existing drainage conditions were summarized in Section 4.1.7. The existing box culvert crossdrains are in good condition and can be extended for this project.

The 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 recommended alternative as part of the entire PD&E Study. This study 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.

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 (see Table 4-2). 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.

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 preferred SMF sites are listed in Table 9-1.

Table 9-1
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
ALTERNATIVE STORMWATER MANAGEMENT REPORT, PAGE NO. FOR BASIN ALTERNATIVES	21	22	23	24
TOTAL ESTIMATED COSTS	$607,657	$657,539	$483,348	$168,474

The following alternative floodplain compensation sites were evaluated for each basin.

1) Basin A: None
2) Basin B: FPC-B-1
3) Basin C: FPC-C-1
4) 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 recommended 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. Also, the recommended site, in its present location, results in the least amount of impact by the access easement. In addition, this site is the only large undeveloped site. Also, any property north of Sam Allen Road and adjacent to the floodplain is currently developed for residential use.
The locations of the alternative FPC sites are shown on Figure 4-3.

9.20 BRIDGE ANALYSIS

There is one bridge culvert which meets the qualifications to be included in the National Bridge Inventory, a triple 7' X 10' box culvert, on Sam Allen Road just east of the Country Meadows Mobile Home Park. This box culvert will have to be extended for the proposed widening on Sam Allen Road and will require structural design. There are no other bridges within the Study limits.

9.21 SPECIAL FEATURES

There are no special features planned for this project.

9.22 ACCESS MANAGEMENT

Since the project involves widening from a two lane section to four lanes with a divided median, median openings are proposed at the locations with the highest turning volumes. The existing access management conditions are discussed in Section 6.1. For these Access Class 3 roads, the minimum recommended spacing for a directional opening is 1320 feet, for a full median opening is 2640 feet. A summary of the proposed median openings is shown below. These locations were reviewed and approved by the Median Review Committee meeting on September 2nd, 2004.

Table 9-2
Summary of Median Openings

Connection	Median Type	Median Spacing (FT)	Meets Criteria	Remarks
Sam Allen Rd.				
SR 39	F			Existing Traffic Signal
Falcon Crest St. E	F	500	No	(See Note Below)*
		1670	No	
Sunset Oaks Dr.	F			
		1874	No	
Country Meadows Blvd.	F			
		2480	No	
Maryland Av.	F			
		1638	No	
Park Rd.	F			Proposed Traffic Signal
Park Rd.				
I-4 Frontage Rd.	F			
		1510	No	
(Proposed Opening)	F			(For U-turns)
		1560	No	
Sam Allen Road	F			Proposed Traffic Signal

Note: "F" means Full median opening.

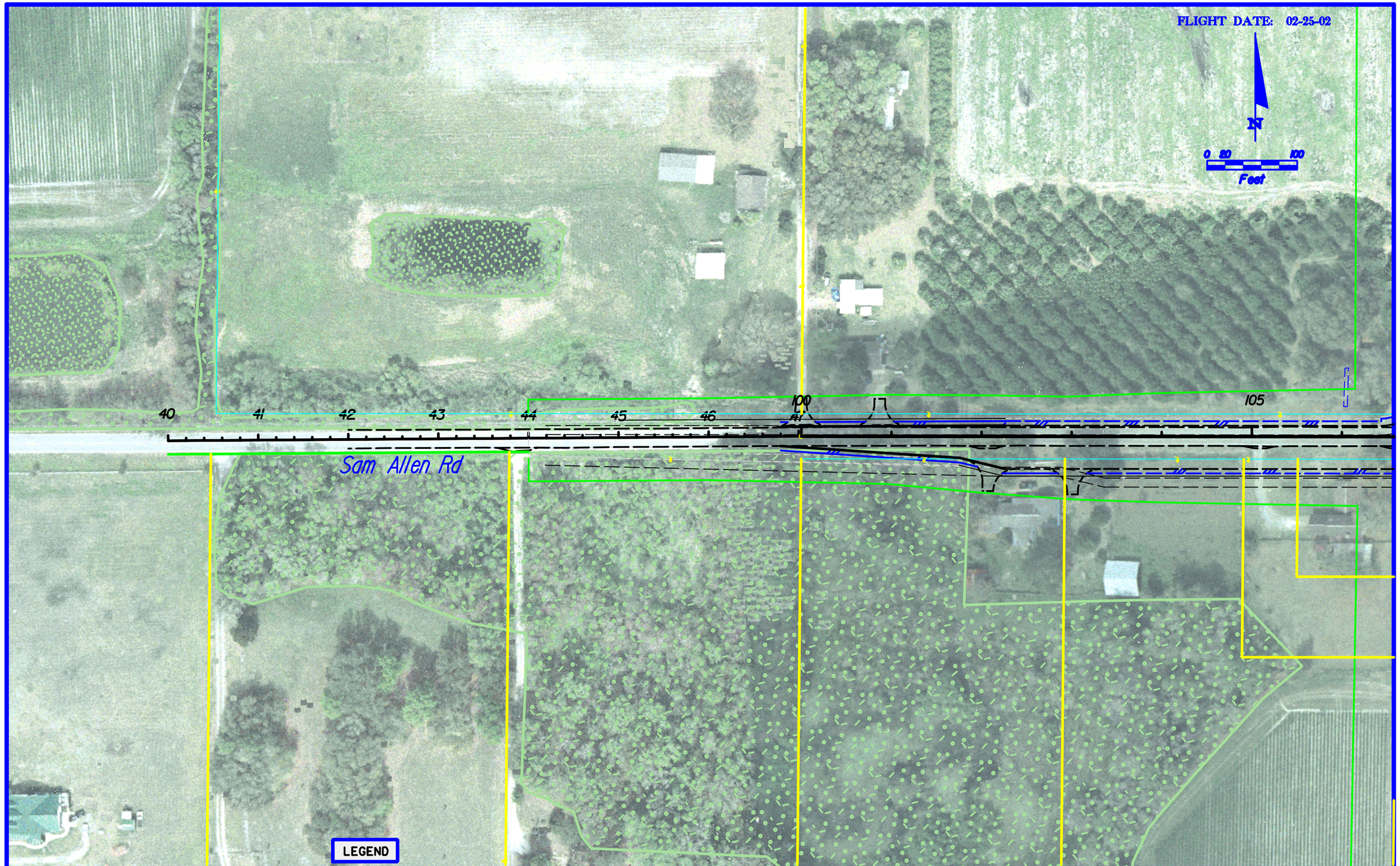
* Falcon Crest St. median opening may need to be closed in the future when the westbound left turn lane at SR 39 needs extension or when westbound traffic regularly queues past Falcon Crest St.

9.23 AESTHETICS AND LANDSCAPING

The City of Plant City has expressed their intention to landscape Park Road from I-4 to Sam Allen Road. The section of Park Road south of I-4 has already been landscaped, and they desire to continue this landscaping north to Sam Allen Road. To accommodate this request, the typical section for Park Road was changed from a depressed median to a raised median, to allow more opportunity for landscaping.

Appendix A

Conceptual Design Plans
With Curve Realignment of the Intersection of
Park and Sam Allen Roads



EXISTING RIGHT OF WAY
B/L SURVEY & C/L CONSTR
PROPOSED RIGHT OF WAY
TRAFFIC SIGNAL

POTENTIAL CONTAMINATION SITE
BODY OF WATER

PROPOSED POND AND FLOODPLAIN COMPENSATION SITES
WETLANDS

PROPOSED PAVEMENT
PROPOSED MEDIAN
PROPOSED SIDEWALK
PROP CURB & GUTTER

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NAME	COUNTY	FINANCIAL PROJECT ID
SAM ALLEN	HILLSBOROUGH	257862-1-21-01

PARK RD / SAM ALLEN RD PD&E STUDY
Four Lane Suburban Typical Section
Curve Intersection Realignment

SHEET NO.
01

$DATE$ $TIME$ $FILE$

FLIGHT DATE: 02-25-02

N

0 50 100
Feet

SPEEDY
SIGNS

Sam Allen Rd

Alexander St Extension

Potential
Stormwater
Pond Site
SMF-D-2

LEGEND

- EXISTING RIGHT OF WAY
- B/L SURVEY & C/L CONSTR
- PROPOSED RIGHT OF WAY
- TRAFFIC SIGNAL
- POTENTIAL CONTAMINATION SITE
- BODY OF WATER
- PROPOSED POND AND FLOODPLAIN COMPENSATION SITES
- WETLANDS
- PROPOSED PAVEMENT
- PROPOSED MEDIAN
- PROPOSED SIDEWALK
- PROP CURB & GUTTER

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NAME	COUNTY	FINANCIAL PROJECT ID
SAM ALLEN	HILLSBOROUGH	257862-1-21-01

PARK RD / SAM ALLEN RD PD&E STUDY
Four Lane Suburban Typical Section
Curve Intersection Realignment

SHEET NO.
02

$DATE$ $TIME$ $FILE$

MATCH SHEET NO. 13

FARMER'S MARKET

COUNTRY VILLAGE POWER EQUIPMENT

5

Sam Allen Rd

CSX RAILROAD

Raven Cir

Chickadee

Falcon Crest St E

THE LAKES

FLIGHT DATE: 02-25-02

N

0 80 100

Feet

MATCH SHEET NO. 2

MATCH SHEET NO. 4

130 129 128 127 126 125 124 123 122

135

Sam Allen Rd

Potential Stormwater Pond Site SMF-D-2

Potential Stormwater Pond Site SMF-C-1

SR 39

MATCH SHEET NO. 12

LEGEND

EXISTING RIGHT OF WAY
B/L SURVEY & C/L CONSTR
PROPOSED RIGHT OF WAY
TRAFFIC SIGNAL

POTENTIAL CONTAMINATION SITE
BODY OF WATER

PROPOSED POND AND FLOODPLAIN COMPENSATION SITES
WETLANDS

PROPOSED PAVEMENT
PROPOSED MEDIAN
PROPOSED SIDEWALK
PROP CURB & GUTTER

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NAME	COUNTY	FINANCIAL PROJECT ID
SAM ALLEN	HILLSBOROUGH	257862-1-21-01

PARK RD / SAM ALLEN RD PD&E STUDY
Four Lane Suburban Typical Section
Curve Intersection Realignment

SHEET NO.
03

#DATE$ #TIME$ #FILE$

FLIGHT DATE: 02-25-02

Pedcock Pd

Quail Run

MEADOWS WEST

N

0 80 160

Feet

Don Tab Way

Recommended Barrier
Location
10 ft. high
559 ft. long

Sam Allen Rd

140 145 150

Recommended Barrier
Location
8 ft. high
346 ft. long

Sam Allen Rd

Recommended Barrier
Location
8 ft. high
291 ft. long

Myrtle Oak Loop

Sunset Oaks Dr

LEGEND

EXISTING RIGHT OF WAY
B/L SURVEY & C/L CONSTR
PROPOSED RIGHT OF WAY
TRAFFIC SIGNAL

POTENTIAL CONTAMINATION SITE
BODY OF WATER

PROPOSED POND AND FLOODPLAIN COMPENSATION SITES
WETLANDS

PROPOSED PAVEMENT
PROPOSED MEDIAN
PROPOSED SIDEWALK
PROP CURB & GUTTER

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NAME	COUNTY	FINANCIAL PROJECT ID
SAM ALLEN	HILLSBOROUGH	257862-1-21-01

PARK RD / SAM ALLEN RD PD&E STUDY
Four Lane Suburban Typical Section
Curve Intersection Realignment

SHEET NO.
04

$DATE$ $TIME$ $FILE$

South Edgewater Drive

MEADOWS WEST

FLIGHT DATE: 02-25-02

N

0 80 100
Feet

West Country Meadows Blvd

15' Set Back

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

15' Set Back

30' Wetland Conservation Area Set Back

Augusta Ct

Recommended Barrier Location
10 ft. high
50 ft. long

Sales Office

15' Set Back

30 29 28 27 26 25 24 23 22 21 20 19 18 17 16

PROPOSED STORMWATER DETENTION POND

Mit. Drainage Easement

30' Set Back

5' Sidewalk

Sam Allen Rd

5' Sidewalk

30' Set Back

155 160 165

Potential Floodplain Compensation Site FPC-C-1

LEGEND

EXISTING RIGHT OF WAY
B/L SURVEY & C/L CONSTR
PROPOSED RIGHT OF WAY
TRAFFIC SIGNAL

POTENTIAL CONTAMINATION SITE
BODY OF WATER

PROPOSED POND AND FLOODPLAIN COMPENSATION SITES
WETLANDS

PROPOSED PAVEMENT
PROPOSED MEDIAN
PROPOSED SIDEWALK
PROP CURB & GUTTER

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NAME	COUNTY	FINANCIAL PROJECT ID
SAM ALLEN	HILLSBOROUGH	257862-1-21-01

PARK RD / SAM ALLEN RD PD&E STUDY
Four Lane Suburban Typical Section
Curve Intersection Realignment

SHEET NO.
05

$DATE$ $TIME$ $FILE$

FLIGHT DATE: 02-25-02

MEADOWS EAST

Country Lane

Country Meadows Blvd

Andrews Ln

Sam Allen Rd

15' Set Back

30' Set Back

5' Sidewalk

8' Sidewalk

30' Wetland Conservation Area Set Back

PROPOSED STORMWATER DETENTION POND

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

170 175 180

0 80 160 Feet

Potential Floodplain Compensation Site FPC-B-1

LEGEND

EXISTING RIGHT OF WAY
B/L SURVEY & C/L CONSTR
PROPOSED RIGHT OF WAY
TRAFFIC SIGNAL

POTENTIAL CONTAMINATION SITE
BODY OF WATER
PROPOSED POND AND FLOODPLAIN COMPENSATION SITES
WETLANDS

PROPOSED PAVEMENT
PROPOSED MEDIAN
PROPOSED SIDEWALK
PROP CURB & GUTTER

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NAME	COUNTY	FINANCIAL PROJECT ID
SAM ALLEN	Hillsborough	257862-1-21-01

PARK RD / SAM ALLEN RD PD&E STUDY
Four Lane Suburban Typical Section
Curve Intersection Realignment

SHEET NO. 06

$DATE$ $TIME$ $FILE$

FLIGHT DATE: 02-25-02

Potential Stormwater Pond Site SMF-B-1

Sam Allen Rd

N

0 50 100

Feet

185 190 195

4

Maryland Av

LEGEND

EXISTING RIGHT OF WAY
B/L SURVEY & C/L CONSTR
PROPOSED RIGHT OF WAY
TRAFFIC SIGNAL

POTENTIAL CONTAMINATION SITE
BODY OF WATER

PROPOSED POND AND FLOODPLAIN COMPENSATION SITES
WETLANDS

PROPOSED PAVEMENT
PROPOSED MEDIAN
PROPOSED SIDEWALK
PROP CURB & GUTTER

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NAME	COUNTY	FINANCIAL PROJECT ID
SAM ALLEN	HILLSBOROUGH	257862-1-21-01

PARK RD / SAM ALLEN RD PD&E STUDY
Four Lane Suburban Typical Section
Curve Intersection Realignment

SHEET NO.
07

$DATE$ $TIME$ $FILE$

FLIGHT DATE: 02-25-02

N

0 20 100
Feet

Sam Allen Rd

2

200

205

210

MATCH SHEET NO. 07

MATCH SHEET NO. 09

Park Rd

MATCH SHEET NO. 11

LEGEND

- EXISTING RIGHT OF WAY
- B/L SURVEY & C/L CONSTR
- PROPOSED RIGHT OF WAY
- TRAFFIC SIGNAL
- POTENTIAL CONTAMINATION SITE
- BODY OF WATER
- PROPOSED POND AND FLOODPLAIN COMPENSATION SITES
- WETLANDS
- PROPOSED PAVEMENT
- PROPOSED MEDIAN
- PROPOSED SIDEWALK
- PROP CURB & GUTTER

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NAME	COUNTY	FINANCIAL PROJECT ID
SAM ALLEN	HILLSBOROUGH	257862-1-21-01

PARK RD / SAM ALLEN RD PD&E STUDY
Four Lane Suburban Typical Section Curve Intersection Realignment

SHEET NO.
08

$DATE$ $TIME$ $FILE$

FLIGHT DATE: 02-25-02

N

0 50 100

Feet

Sam Allen Rd

215 220 225

MATCH SHEET NO. 8

LEGEND

EXISTING RIGHT OF WAY
B/L SURVEY & C/L CONSTR
PROPOSED RIGHT OF WAY
TRAFFIC SIGNAL

POTENTIAL CONTAMINATION SITE
BODY OF WATER

PROPOSED POND AND FLOODPLAIN COMPENSATION SITES
WETLANDS

PROPOSED PAVEMENT
PROPOSED MEDIAN
PROPOSED SIDEWALK
PROP CURB & GUTTER

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NAME	COUNTY	FINANCIAL PROJECT ID
SAM ALLEN	HILLSBOROUGH	257862-1-21-01

PARK RD / SAM ALLEN RD PD&E STUDY
Four Lane Suburban Typical Section
Curve Intersection Realignment

SHEET NO. 09

$DATE$ $TIME$ $FILE$

FLIGHT DATE: 02-25-02

0 50 100
Feet

CHANCEY'S
CATFISH
SHACK

MATCH SHEET NO. 11

180

185

Park Rd

FUTURE
BILL HEARD
CHEVROLET

LEGEND

EXISTING RIGHT OF WAY
B/L SURVEY & C/L CONSTR
PROPOSED RIGHT OF WAY
TRAFFIC SIGNAL

POTENTIAL CONTAMINATION SITE
BODY OF WATER
PROPOSED POND AND FLOODPLAIN COMPENSATION SITES
WETLANDS

PROPOSED PAVEMENT
PROPOSED MEDIAN
PROPOSED SIDEWALK
PROP CURB & GUTTER

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NAME	COUNTY	FINANCIAL PROJECT ID
PARK RD	HILLSBOROUGH	257862-1-21-01

PARK RD / SAM ALLEN RD PD&E STUDY
Four Lane Suburban Typical Section
Curve Intersection Realignment

SHEET NO.
10

#DATE# #TIME#

FLIGHT DATE: 02-25-02

0 20 100
Feet

MATCH SHEET NO. 10

190

195

Park Rd

200

MATCH SHEET NO. 8

Potential Stormwater Pond Site SMF-A-1

LEGEND

EXISTING RIGHT OF WAY
B/L SURVEY & C/L CONSTR
PROPOSED RIGHT OF WAY
TRAFFIC SIGNAL

POTENTIAL CONTAMINATION SITE
BODY OF WATER

PROPOSED POND AND FLOODPLAIN COMPENSATION SITES
WETLANDS

PROPOSED PAVEMENT
PROPOSED MEDIAN
PROPOSED SIDEWALK
PROP CURB & GUTTER

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NAME	COUNTY	FINANCIAL PROJECT ID
PARK RD	HILLSBOROUGH	257862-1-21-01

PARK RD / SAM ALLEN RD PD&E STUDY
Four Lane Suburban Typical Section
Curve Intersection Realignment

SHEET NO.
11

$DATE$ $TIME$ $FILE$

FLIGHT DATE: 02-25-02

0 20 100
Feet

MATCH SHEET NO. 3

SR 39

113 114 115 116 117 118 119 120 121 122 123

CXS RAILROAD

Potential Stormwater Pond Site

LEGEND

EXISTING RIGHT OF WAY
B/L SURVEY & C/L CONSTR
PROPOSED RIGHT OF WAY
TRAFFIC SIGNAL

POTENTIAL CONTAMINATION SITE
BODY OF WATER
PROPOSED POND AND FLOODPLAIN COMPENSATION SITES
WETLANDS

PROPOSED PAVEMENT
PROPOSED MEDIAN
PROPOSED SIDEWALK
PROP CURB & GUTTER

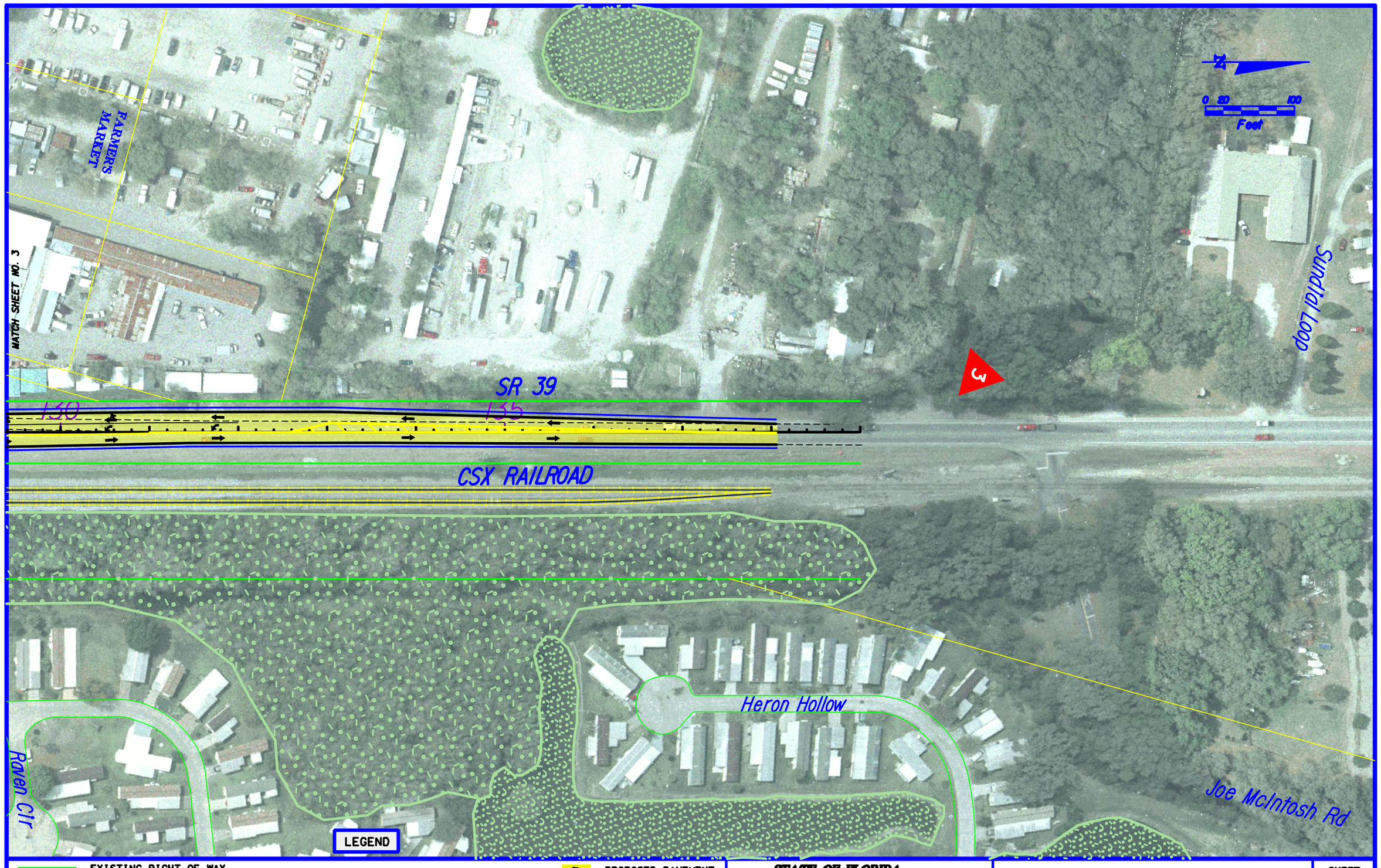
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NAME	COUNTY	FINANCIAL PROJECT ID
SR 39	HILLSBOROUGH	257862-1-21-01

PARK RD / SAM ALLEN RD PD&E STUDY
Four Lane Suburban Typical Section
Curve Intersection Realignment

SHEET NO.
12

$DATE$ $TIME$ $FILE$



STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 39	HILLSBOROUGH	257862-1-21-01

PARK RD / SAM ALLEN RD PD&E STUDY
Four Lane Suburban Typical Section
Curve Intersection Realignment

SHEET NO. 13

$DATE$ $TIME$ $FILE$

Appendix B

Conceptual Design Plans
With the Intersection of Park and Sam Allen Roads
As a T-intersection

FLIGHT DATE: 02-25-02

Potential Stormwater Pond Site SMF-B-1

Sam Allen Rd

N

0 50 100 Feet

185 190 195

Maryland Av

4

LEGEND

EXISTING RIGHT OF WAY
B/L SURVEY & C/L CONSTR
PROPOSED RIGHT OF WAY
TRAFFIC SIGNAL

POTENTIAL CONTAMINATION SITE
BODY OF WATER
PROPOSED POND AND FLOODPLAIN COMPENSATION SITES
WETLANDS

PROPOSED PAVEMENT
PROPOSED MEDIAN
PROPOSED SIDEWALK
PROP CURB & GUTTER

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NAME	COUNTY	FINANCIAL PROJECT ID
SAM ALLEN	HILLSBOROUGH	257862-1-21-01

PARK RD / SAM ALLEN RD PD&E STUDY
Four Lane Suburban Typical Section
Interim Intersection Design

SHEET NO.
07

$DATE$ $TIME$ $FILE$

FLIGHT DATE: 02-25-02

N

0 20 100
Feet

Sam Allen Rd

2

200

205

210

205

Park Rd

MATCH SHEET NO. 7

MATCH SHEET NO. 9

MATCH SHEET NO. 11

LEGEND

EXISTING RIGHT OF WAY
B/L SURVEY & C/L CONSTR
PROPOSED RIGHT OF WAY
TRAFFIC SIGNAL

POTENTIAL CONTAMINATION SITE
BODY OF WATER

PROPOSED POND AND FLOODPLAIN COMPENSATION SITES
WETLANDS

PROPOSED PAVEMENT
PROPOSED MEDIAN
PROPOSED SIDEWALK
PROP CURB & GUTTER

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NAME	COUNTY	FINANCIAL PROJECT ID
SAM ALLEN	HILLSBOROUGH	257862-1-21-01

PARK RD / SAM ALLEN RD PD&E STUDY
Four Lane Suburban Typical Section
Interim Intersection Design

SHEET NO.
08

#DATE# #TIME# #FILE#

FLIGHT DATE: 02-25-02

N

0 50 100

Feet

Sam Allen Rd

215

220

225

MATCH SHEET NO. 8

LEGEND

EXISTING RIGHT OF WAY
B/L SURVEY & C/L CONSTR
PROPOSED RIGHT OF WAY
TRAFFIC SIGNAL

POTENTIAL CONTAMINATION SITE
BODY OF WATER
PROPOSED POND AND FLOODPLAIN COMPENSATION SITES
WETLANDS

PROPOSED PAVEMENT
PROPOSED MEDIAN
PROPOSED SIDEWALK
PROP CURB & GUTTER

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NAME	COUNTY	FINANCIAL PROJECT ID
SAM ALLEN	HILLSBOROUGH	257862-1-21-01

PARK RD / SAM ALLEN RD PD&E STUDY
Four Lane Suburban Typical Section
Interim Intersection Design

SHEET NO.
09

$DATE$ $TIME$ $FILE$

FLIGHT DATE: 02-25-02

0 50 100
Feet

CHANCEY'S CATFISH SHACK

MATCH SHEET NO. 11

I80

I85

Park Rd

FUTURE BILL HEARD CHEVROLET

LEGEND

EXISTING RIGHT OF WAY
B/L SURVEY & C/L CONSTR
PROPOSED RIGHT OF WAY
TRAFFIC SIGNAL

POTENTIAL CONTAMINATION SITE
BODY OF WATER

PROPOSED POND AND FLOODPLAIN COMPENSATION SITES
WETLANDS

PROPOSED PAVEMENT
PROPOSED MEDIAN
PROPOSED SIDEWALK
PROP CURB & GUTTER

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NAME	COUNTY	FINANCIAL PROJECT ID
PARK RD	HILLSBOROUGH	257862-1-21-01

PARK RD / SAM ALLEN RD PD&E STUDY
Four Lane Suburban Typical Section
Interim Intersection Design

SHEET NO.
10

$DATE$ $TIME$

FLIGHT DATE: 02-25-02

0 20 100
Feet

MATCH SHEET NO. 10

MATCH SHEET NO. 8

190

195

200

Park Rd

Potential Stormwater Pond Site SMF-A-1

LEGEND

EXISTING RIGHT OF WAY
B/L SURVEY & C/L CONSTR
PROPOSED RIGHT OF WAY
TRAFFIC SIGNAL

POTENTIAL CONTAMINATION SITE
BODY OF WATER

PROPOSED POND AND FLOODPLAIN COMPENSATION SITES
WETLANDS

PROPOSED PAVEMENT
PROPOSED MEDIAN
PROPOSED SIDEWALK
PROP CURB & GUTTER

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NAME	COUNTY	FINANCIAL PROJECT ID
PARK RD	HILLSBOROUGH	257862-1-21-01

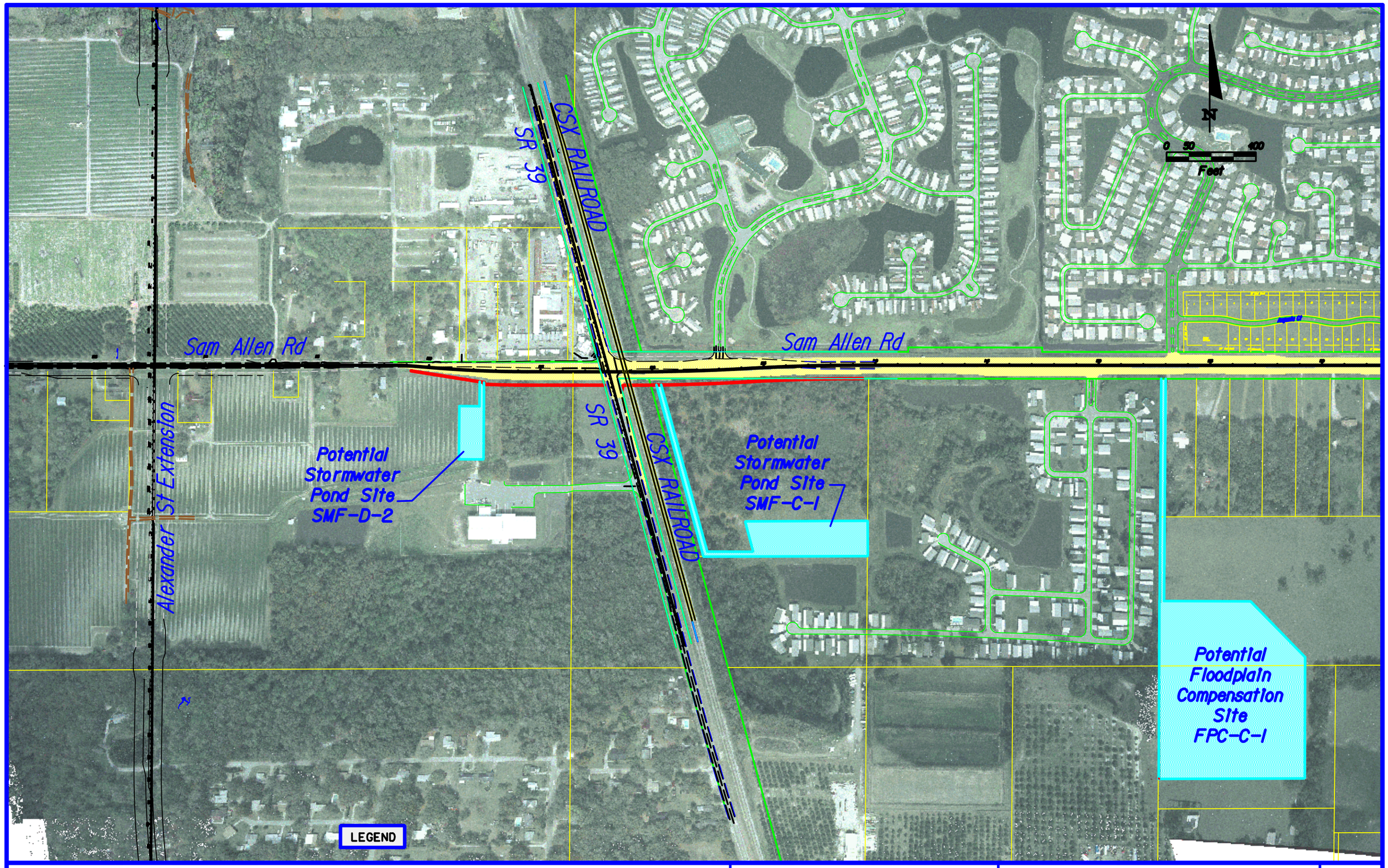
PARK RD / SAM ALLEN RD PD&E STUDY
Four Lane Suburban Typical Section
Interim Intersection Design

SHEET NO.
11

$DATE$ $TIME$ $FILE$

Appendix C

Potential Pond Site Locations


N
0 50 100
Feet
Sam Allen Rd
Sam Allen Rd
SR 39
SR 39
CSX RAILROAD
CSX RAILROAD
St Extension
Alexander St
Potential Stormwater Pond Site SMF-D-2
Potential Stormwater Pond Site SMF-C-1
Potential Floodplain Compensation Site FPC-C-1
LEGEND
EXISTING RIGHT OF WAY
B/L SURVEY & C/L CONSTR
PROPOSED RIGHT OF WAY
TRAFFIC SIGNAL
POTENTIAL CONTAMINATION SITE
BODY OF WATER
PROPOSED POND AND FLOODPLAIN COMPENSATION SITES
WETLANDS
PROPOSED PAVEMENT
PROPOSED MEDIAN
PROPOSED SIDEWALK
PROP CURB & GUTTER
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION
PARK RD
HILLSBOROUGH
257862-1-21-01
PARK RD / SAM ALLEN RD PD&E STUDY
Potential Pond Sites
SHEET NO.
1

Potential Stormwater Pond Site SMF-B-1

Sam Allen Rd

Sam Allen Rd

N

0 50 400

Feet

Maryland Av

Park Rd

Potential Stormwater Pond Site SMF-A-1

Potential Floodplain Compensation Site FPC-B-1

LEGEND

EXISTING RIGHT OF WAY
B/L SURVEY & C/L CONSTR
PROPOSED RIGHT OF WAY
TRAFFIC SIGNAL

POTENTIAL CONTAMINATION SITE
BODY OF WATER

PROPOSED POND AND FLOODPLAIN COMPENSATION SITES
WETLANDS

PROPOSED PAVEMENT
PROPOSED MEDIAN
PROPOSED SIDEWALK
PROP CURB & GUTTER

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

PARK RD	HILLSBOROUGH	257862-1-21-01

PARK RD / SAM ALLEN RD PD&E STUDY
Potential Pond Sites

SHEET NO. 2