

Florida Department of Transportation
Project Development and Environment (PD&E) Study

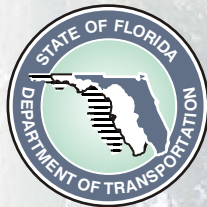
Contamination Screening Evaluation Report

U.S. 98 DADE CITY BYPASS

**From U.S. 301 South to U.S. 301 North
Dade City, Pasco County**

W.P.I. Segment No. 256423 1
Federal-Aid Project No. 3112-017P

**Florida Department
of Transportation**
District Seven
Tampa, Florida



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March 2001

CONTAMINATION SCREENING EVALUATION REPORT

WPI Segment Number: 256423 1
Federal-Aid Project Number: 3112-017P

US 98
(State Road 533)
Dade City Bypass

From US 301 South to US 301 North
in
Pasco County, Florida

The proposed action consists of upgrading US 98 from a two-lane to a four-lane divided highway for approximately 1.6 miles.

*Florida Department of Transportation
District Seven
Tampa, Florida*

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March 2001



EXECUTIVE SUMMARY

A Level I Contamination Screening of the US 98 Dade City Bypass project corridor was conducted to determine the potential for contamination of the US 98 Dade City Bypass right-of-way from adjacent properties and business operations. Abutting sites were identified based on regulatory standards as potential sources of hazardous materials and petroleum contamination. Sites with suspected or documented contamination were further evaluated for potential contamination risks with respect to potential construction effects and right-of-way acquisition.

This Contamination Screening Evaluation Report (CSER) was prepared pursuant to the Federal Highway Administration's (FHWA's) Technical Advisory T 6640.8A, dated October 30, 1987, and in accordance with the FDOT's PD&E Manual, Part 2, Chapter 22, dated February 8, 1994, as further modified and clarified by the District Contamination Impact Coordinator. The purpose of this report is to present the preliminary findings of a literature and file review of the potential for finding hazardous materials and petroleum contamination on parcels along the proposed alignment which may affect the proposed improvements.

Twenty-five sites were identified as possibly having the potential for contamination. The sites were identified by windshield survey; examination of 1966, 1974, 1982, and 1998 historic aerial photography; and a review of the original US 98 construction drawings, local Florida Department of Environmental Protection (FDEP) files and Dade City Directories. Of the 25 sites, four are potential hazardous materials sites and 21 are potential petroleum sites.

The four hazardous materials sites were given a rating of LOW.

Of the 21 petroleum sites, 15 sites were considered to have a LOW potential for contamination, two sites were considered to have a MEDIUM potential for contamination, two sites were considered to have a HIGH potential for contamination and two sites were considered to have NO potential for contamination.

Three Build Alternatives (Alternative 2 - Left, Alternative 3 - Right and Alternative 4 - Center) are being considered for the length of the project. They would all incorporate a four-lane divided urban typical section. *The potential for contamination associated with the various alternatives is shown below:*

	Alternative 2	Alternative 3	Alternative 4
Risk	(left)	(right)	(center)
High	2	2	2
Medium	1	2	2
Low	5	6	7
No	0	1	1

Based on the risk rating assigned to each potential contamination site, it is anticipated that Alternative 2 would minimize the contamination concerns.

It is recommended that the following four sites be further analyzed through a Level 2 Contamination Assessment prior to the design phase of this project to verify or refute the potential contamination concerns:

1. HIGH - Site No. 23W - Pat's Food Mart (a.k.a United 500)
2. MEDIUM - Site No. 25W - Git In Go Food Store/Texaco (formerly Presto Food Mart)
3. HIGH - Site No. 30W - J.H. Williams Oil Company, Inc.
4. MEDIUM - Site No. 36E - La Pasa Dita (formerly Cracker Shack, a.k.a. United 500)

The Level 2 Contamination Assessment should include field screening with an organic vapor analyzer (OVA) and the collection of soil and groundwater samples for laboratory analysis. If the results of the testing indicate no evidence of soil or groundwater contamination, the rating of the site could be revised downward. Typically, the rating of field tested sites with no evidence of contamination would be revised to LOW. Because of the nature of the businesses conducted (e.g. gasoline service stations), some sites could remain rated as having a MEDIUM potential even if field testing did not reveal the presence of contamination.

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1.0 INTRODUCTION

The Florida Department of Transportation (FDOT) is conducting a Project Development and Environment (PD&E) Study to document the preliminary engineering concept for the improvements to the US 98 Dade City Bypass corridor from the vicinity of the US 301 South intersection to the vicinity of the US 301 North intersection in Dade City, Pasco County. The total length of the study corridor is about 1.6 miles. The purpose of the PD&E Study is to develop engineering and environmental data and document information which will aid the FDOT and the Federal Highway Administration (FHWA) in determining the type, design, and location of the proposed improvements; and the effects, if any, associated with the proposed alternatives, including a No-Build Alternative.

As part of the PD&E Study, a Level I Contamination Screening of the project corridor was conducted. This Contamination Screening Evaluation Report (CSER) was prepared pursuant to the FHWA Technical Advisory T 6640.8A, dated October 30, 1987, and in accordance with the FDOT's PD&E Manual, Part 2, Chapter 22, dated February 8, 1994, as further modified and clarified by the District Contamination Impact Coordinator.

The purpose of this report is to present the preliminary findings of a literature, file, and field review of the potential for finding hazardous materials or petroleum contamination on parcels adjacent to the proposed alignment which may affect the construction of the proposed improvements. This report identifies and evaluates known and potential hazardous materials and petroleum involvement; presents recommendations concerning these involvements; and discusses possible effects to the various alignments being considered. The evaluation included document and file research (including historic aerial photography), coordination with the Florida Department of Environmental Protection (FDEP), site reconnaissance, and interviews with property and business owners.

2.0 PROJECT DESCRIPTION

The FDOT is proposing improvements to the US 98 Dade City Bypass from the vicinity of the US 301 South intersection to the vicinity of the US 301 North intersection, in Dade City, Pasco County, a distance of about 1.6 miles. The proposed improvements consist of widening the existing two-lane rural roadway to an urban four-lane divided highway.

2.1 Study Area

US 98 is an east-west arterial highway across the central and panhandle regions of Florida. US 98 traverses peninsular Florida in a northwesterly direction from Palm Beach to the Panhandle. Through the project area, US 98 runs in a northerly direction bypassing the downtown area of Dade City in Pasco County. The US 98 Dade City Bypass PD&E Study is located within the limits of Dade City in eastern Pasco County. Typically, the existing US 98 Dade City Bypass is a two-lane rural roadway through the project area. Turn lanes have been added at select intersections. The right-of-way contains numerous jogs and setbacks and varies in width from 60 feet to 115 feet.

The topography of this section of Pasco County consists of low rolling hills interspersed with many lakes and low, wet areas. Pasco County is in the central or mid-peninsular physiographic zone of the Florida Peninsula. The county is characterized by discontinuous highlands in the form of ridges separated by broad valleys.

The ridges are above the static level of the water in the aquifer, but the broad valleys are below it. Broad shallow lakes are common on the valley floors, and smaller deep lakes are on the ridges.

The project area lies along the eastern edge of the Brooksville Ridge and the western edge of the Western Valley regions of Pasco County.

US 301 is considered to be the approximate boundary of the Brooksville Ridge in the project area. Considerable local relief has developed along the ridge with elevations ranging from about 70 feet to 300 feet. Several thousand feet of sedimentary rock, principally various limestone formations, underlie the county. A few feet of sand cover the Brooksville Ridge. There is little surface drainage.

The Western Valley contains the valleys of the Withlacoochee and Hillsborough Rivers and consists mainly of poorly drained sandy soils. Most of the soils have a loamy subsoil, ranging from acid to alkaline over short distances. Outcroppings of limestone are common. Dade City falls within the Withlacoochee River drainage basin.

Elevations throughout the project corridor range from about 75 feet National Geodetic Vertical Datum (NGVD), 1929 at the northern end of the project to about 95 feet at the southern end.

Surface water flow is typically west to east throughout the project area. Groundwater flow often follows the general direction of the surface topography. However, a documented subsurface investigation at the site of the J.H. Williams Oil Company, Inc. fuel depot at the intersection of Meridian Avenue revealed that the groundwater flow direction in that area is to the southwest, away from the existing US 98 Dade City Bypass right-of-way.

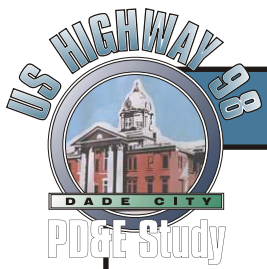
The project location is shown in Figure 1.

2.2 Corridor Evaluation

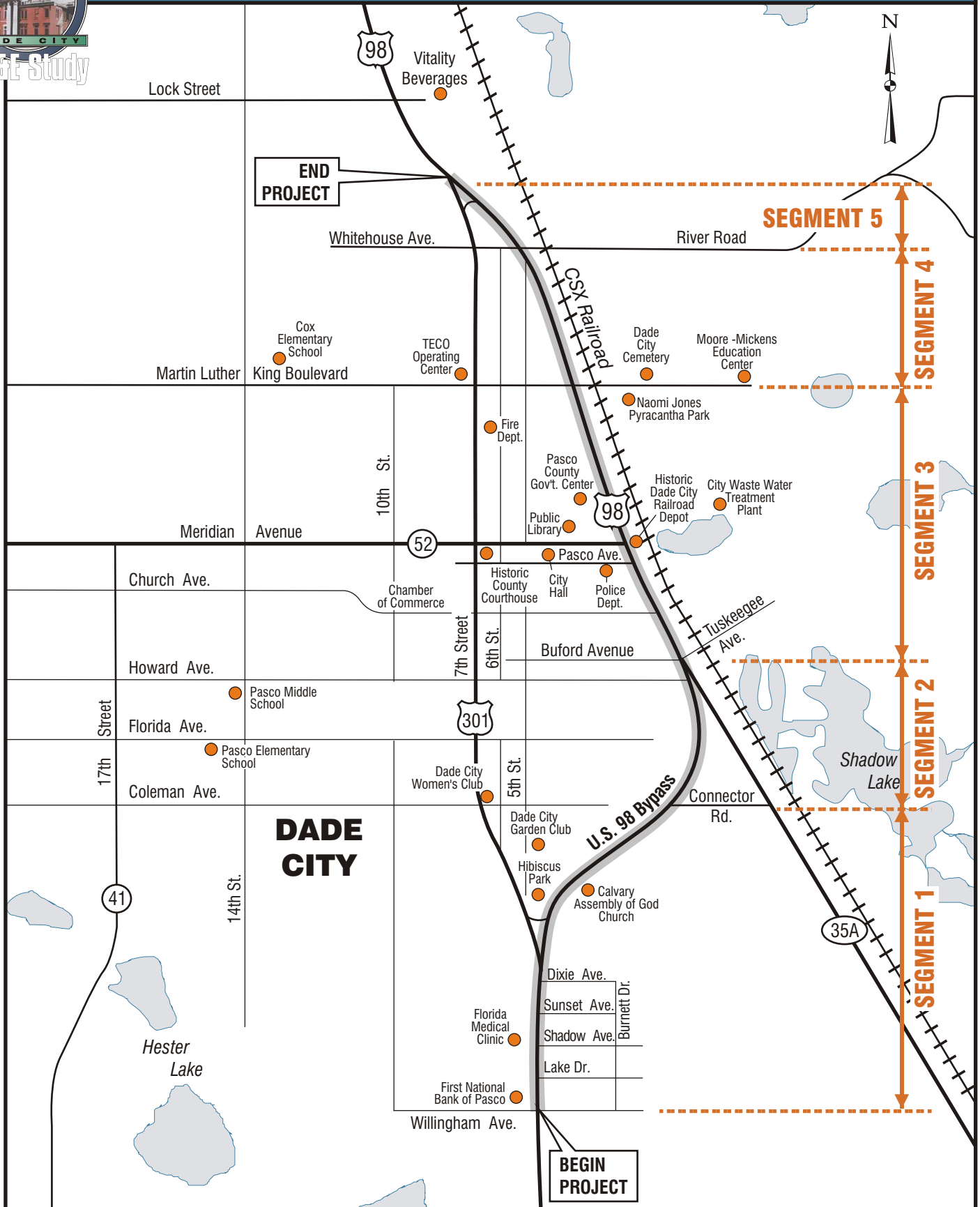
A corridor analysis was performed for this project (US 98 Bypass Corridor Analysis Technical Memorandum, March 2000). The area evaluated for alternative corridors is bounded by US 301 (7th Street) to the west and the US 98 Dade City Bypass to the east. The southern and northern limits of the corridor analysis are the US 98 Dade City Bypass intersections with US 301 South and US 301 North, respectively.

The corridor analysis concluded that improvements to the existing US 98 Dade City Bypass corridor are an integral part of the overall long-range transportation plan for Pasco County and Dade City. Factors such as cultural effects, gross relocations (business and residential), community disruption, changes in traffic patterns and land use and right-of-way costs were considered in making the determination that alternative corridors are not viable options to the existing US 98 Dade City Bypass corridor.

The corridor analysis proposed that the improvements to the US 98 Dade City Bypass consist of widening the existing corridor to a four-lane urban divided typical section with turn lanes, as appropriate.



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PROJECT LOCATION MAP

Figure
1

2.3 Alternatives Considered

Various alternatives were considered for the US 98 Dade City Bypass project, including No-Build, Multimodal, Transportation Systems Management, and Construction alternatives. The No-Build Alternative will remain a viable alternative throughout the study process until after the Public Hearing, when the final recommendation will be made.

Three alignment alternatives (left, right and center) are being considered for the length of the project. These alignment alternatives proposed would all incorporate a *four-lane divided urban typical section*. This typical section would contain a 22-foot wide raised median, four 12-foot lanes (two in each direction), 4-foot bike lanes in each direction, and 12-foot borders (containing a 2-foot curb and gutter, a 3-foot utility strip, a 5-foot sidewalk, and a 2-foot back-of-sidewalk buffer) in both directions. This would require a minimum typical section width of 102 feet. Left turn lanes would be accommodated within the median. Where exclusive right turn lanes are necessary, an additional 12 feet of right-of-way would be required. The proposed four-lane typical section is shown in Figure 2.

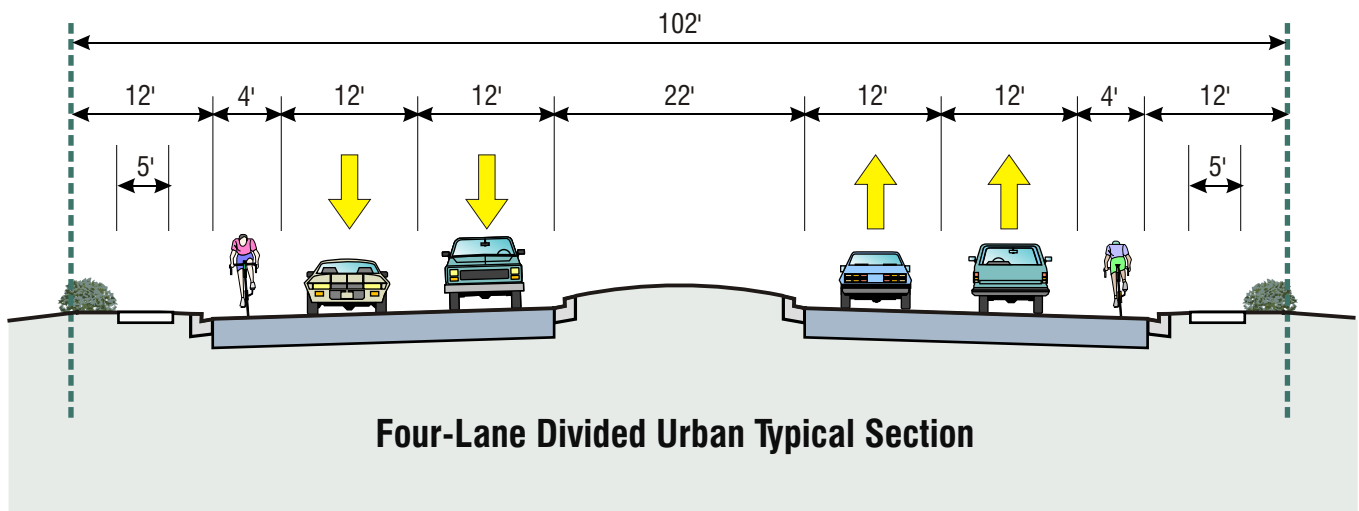
Section 6.0 - Alternative Analysis contains additional information regarding the alignment alternatives being considered.

3.0 LAND USE

3.1 Existing Land Use

Comparison of aerial photos taken at different years and other historic documentation provided valuable information about current land use in the US 98 Dade City Bypass corridor and the changes in land use that have occurred over time. To provide a comparison of land use changes, the following information was used:

- The 1989 Pasco County and 1988 Dade City Existing Land Use Maps;
- 1977 Southwest Florida Water Management District (SWFWMD) aerial photography;
- 1966, 1974, 1982, 1998 Pasco County Aerial Photography 1:2000 (1"=200');
- 1998 Pasco County Tax Maps;
- Dade City Directories - years available 1979, 1991, 1992, 1995, 1996, and 1997;
- Field inspections in April through August 1999;
- FDOT Construction Plans for US 98: State Project Numbers 14130-3501 July 24, 1979; 14130-3502 January 8, 1985; 14130-3503 June 8, 1988; 14130-3504 March 26, 1987, 14130-3505 October 16, 1992;
- FDOT Construction Plans for US 301: State Project Numbers 14050-3530, March 6, 1985; and 14050-3550, November 19, 1998;



- US 98 Dade City Bypass project corridor United States Geological Survey (USGS) Quadrangle Maps, Scale 1:24,000: Dade City, FLA, 1960; and
- Dade City Storm Water Master Plan, Michaels Engineering, Inc., 1965.

Insert Figure 2 - Proposed Four-Lane Typical Section

The following is a brief description of the existing land uses and the general location for these uses.

Residential

Less than 5 percent of the US 98 Dade City Bypass project corridor contains residential areas. Low and medium density residential areas are scattered throughout the project vicinity; however, most residential properties are not adjacent to the US 98 Dade City Bypass right-of-way. Residential properties adjacent to the existing right-of-way are located in the area of the US 301 South intersection, along the north side of the US 98 Dade City Bypass between US 301 South and CR 35A, and on the west side of the US 98 Dade City Bypass between Martin Luther King Boulevard and Whitehouse Avenue.

Commercial & Services

About 50 percent of the US 98 Dade City Bypass project corridor contains developed commercial uses. Strip commercial areas are located on both sides of the US 98 Dade City Bypass at the intersection with CR 35A, along the west side of the US 98 Dade City Bypass south of Meridian Avenue and along the intersection with US 301 North. Scattered commercial properties are present for the length of the project including a car dealership, restaurants, convenience stores, gasoline stations and an abandoned fuel depot.

Vacant & Undeveloped

Less than 20 percent of the US 98 Dade City Bypass project corridor contains vacant and undeveloped lands. Vacant areas are scattered along the project corridor intermixed with the residential and commercial properties. The majority of the currently vacant and undeveloped land is shown for commercial uses on the future land use maps.

Industrial

Less than 1 percent of the US 98 Dade City Bypass project corridor contains industrial uses. A large industrial area containing Vitality Beverages, Inc. (formerly Lykes-Pasco Citrus Processing Plant) is located east of the US 98 Dade City Bypass at the northern end of the project.

Agricultural

Agricultural land is present along both sides of the US 98 Dade City Bypass between the intersections of US 301 South and CR 35A. This represents less than 1 percent of the project corridor.

Recreation/Open Space

Less than 10 percent of the US 98 Dade City Bypass project corridor contains recreation/open space areas. A portion of an abandoned public ball field is located south of the intersection with Martin Luther King Boulevard. A stormwater management pond and floodplain compensation area for the expansion of the East Pasco County Government Center occupy several acres adjacent to the US 98 Dade City Bypass south of the abandoned ball field. Open space exists between US 98 and the CSX railroad north and south of Meridian Avenue and Martin Luther King Boulevard. The East Pasco County Government Center, located north of Meridian Avenue, contains open space adjacent to the US 98 Dade City Bypass.

Existing Special Land Use Conditions

Certain types of land uses are particularly important due to the special conditions surrounding them and the hardships involved in the relocation of such areas. Examples of this found adjacent to the project corridor are the CSX railroad right-of-way to the east of the US 98 Dade City Bypass and the historic Dade City train station at Meridian Avenue. The Calvary Assembly of God Church, Hibiscus Park and the Dade City Garden Club (housed in a historic former church) are located near the intersection with US 301 South.

The existing land use is shown in Figure 3.

3.2 Future Land Use

The 1988 Dade City and 2010 Pasco County Future Land Use Maps show that land use in the US 98 Dade City Bypass corridor will remain predominantly commercial/retail uses with areas of residential, industrial and public lands. The proposed improvements to the US 98 Dade City Bypass would utilize the existing corridor and land use is not anticipated to change significantly as a result of the improvements.

The future land use is shown in Figure 4.

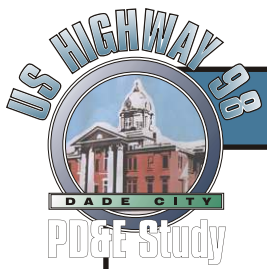
4.0 HYDROGEOLOGIC FEATURES

4.1 Corridor Topography & Soils

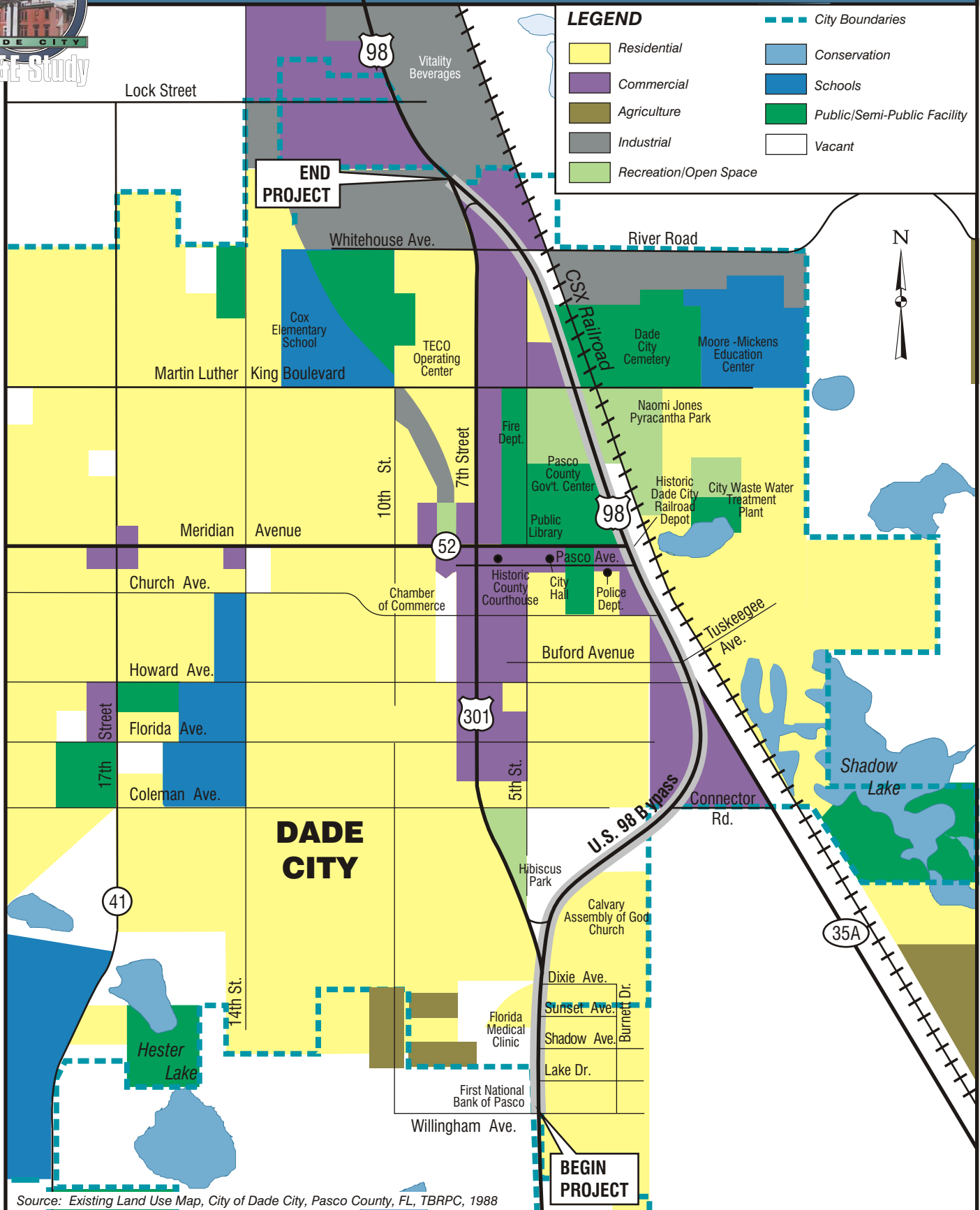
The geotechnical data reviewed for this study includes the US Department of Agriculture, Soil Conservation Service (now Natural Resource Conservation Service (NRCS)), Soil Survey of Pasco County (Soil Survey), June 1982; the US Geological Survey (USGS), Quadrangle Map “Dade City, Florida, 1960,” for the respective sections of this project; 1977 SWFWMD aerial photographs of the existing alignment; FDOT roadway construction plans prepared for the existing roadway; and the Preliminary Geotechnical Report, March 2000, prepared for this project. A windshield survey was performed to identify areas where existing pavement conditions indicate the possible presence of unsuitable subsurface conditions (peat, muck) beneath roadways; to observe general topography, soil and groundwater conditions along the alignment; and to identify areas where significant pavement distress is present within the mainline roadway.

The Soil Survey was reviewed with respect to near-surface soil conditions along the project. The geology of Pasco County can briefly be described as surficial sands and clay, sandy clays and clayey sands overlying limestone.

The Soil Survey indicates that there are four mapping units within the project area. The predominant soil groups are Tavares Urban Land Complex and miscellaneous Urban Land in the northern and central portions of the project with Quartzipsamments, Lake and Placid Fine Sands in the southern portion. The soils groups are summarized in Table 1.



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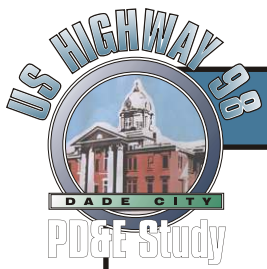
Source: Existing Land Use Map, City of Dade City, Pasco County, FL, TBRPC, 1988

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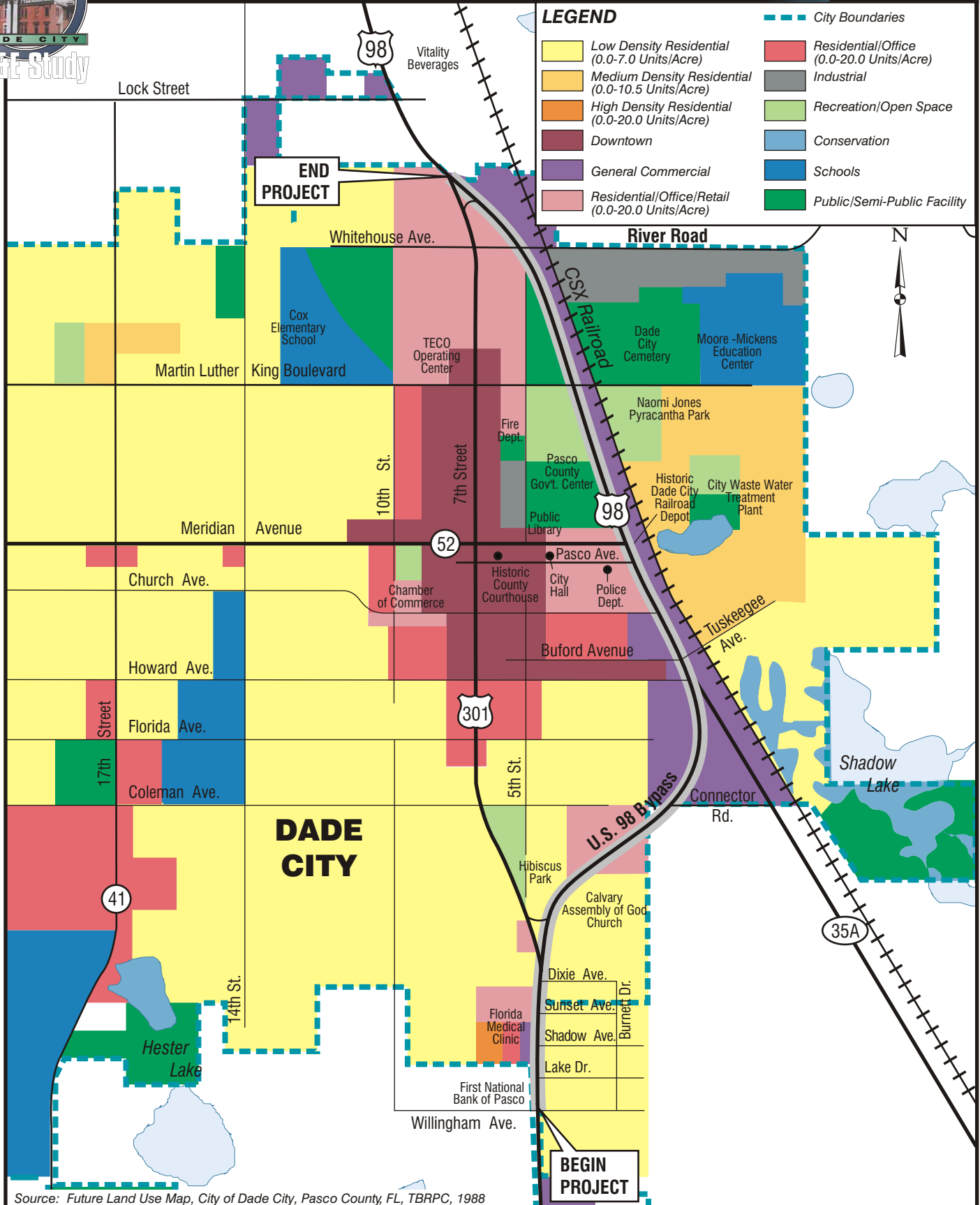


EXISTING LAND USE MAP

Figure
3



U.S. 98 DADE CITY BYPASS PD&E STUDY



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FUTURE LAND USE MAP

Figure
4

Table 1
SUMMARY OF SOILS GROUPS

US 98 Dade City Bypass Project Development and Environment Study

Soil Name (Map Unit No.)	Depth (inch)	Classification		Permeability (inch/hour)	Seasonal High Water Table Depth (feet)	Hydrologic Group
		AASHTO ¹ Group	USCS ² Group			
Tavares Urban Land Complex (15)	0 - 86	A-3	SP ³ , SP-SM ⁴	>20	3.5 - 6	A
Urban Land (38)	Soils so altered that identification is not feasible.					-
Quartzipsammments (24)	0 - 60	A-3	SP, SP-SM	High	>6	-
Lake (32)	0 - 80	A-3/A-2-4	SP-SM	6 - 20	>6	A
Placid (70)	0 - 80	A-3/A-2-4	SP, SP-SM, SM ⁵	6 - 20	0-1.0	B/D

Source: Soil Survey of Pasco County, NRCS, June 1982.

Notes:

¹American Association of State Highway and Transportation Officials

²Unified Soil Classification System

³SP - Poorly graded sand (with gravel)

⁴SP-SM - Poorly graded sand (with sand and gravel)

⁵SM - Silty sand (with gravel)

Hand auger borings were performed generally every 500 feet offset right and left of the survey baseline to evaluate the subsurface conditions along the proposed roadway alignment. The auger borings were performed to depths of 5 feet below existing grades. In the area of the potential stormwater ponds, hand auger borings were advanced generally 1 to 2 feet below the ground water level encountered in the borings or to a maximum depth of 10 feet.

The groundwater table was not encountered to a depth of 5 feet in any of the shallow borings adjacent to the existing roadway. Groundwater was encountered at about 7 feet below land surface (bls) in the area of potential Pond Location 1 (right of roadway between Station 58+00 to Station 61+00) and at 4 feet bls in the area of potential Pond Location 4 at about 80 feet left of Station 77+60.

Seasonal high groundwater table (SHGWT) depths were estimated along the roadway alignment from several of the auger borings. Generally, the SHGWT within and adjacent to the existing right-of-way is estimated to be greater than 5 feet bls. In the areas of the potential pond locations, the SHGWT is estimated to range from 3 feet to >10 feet bls. Refer to the Preliminary Geotechnical Report prepared for this project, for specific SHGWT locations and depths.

The USGS topographic survey map was reviewed for ground surface features. The natural ground surface elevations along the project vary from 70 feet to 95 feet National Geodetic Vertical Datum

(NGVD) of 1929.

The hydrologic soil groups range from A to D throughout the project length. The soils along the Brooksville Ridge generally fall in hydrologic group A (which includes most of the corridor), while the soils in the Western Valley generally fall into the C and D hydrologic groups. An area of D hydrologic group soil lies to the east of the US 98 Dade City Bypass between the intersections of US 301 South and CR 35A in the southern end of the project corridor. Group A soils have a high infiltration rate (low runoff potential) when thoroughly wet. They are mainly deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission. Group D soils have a very slow infiltration rate (high runoff potential) when thoroughly wet. They consist chiefly of clays having a high shrink-swell potential, a permanent high water table, a claypan or clay layer at or near the surface, and are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

A copy of the soil survey map for the US 98 Dade City Bypass corridor is shown in Figure 5.

4.2 Utilities

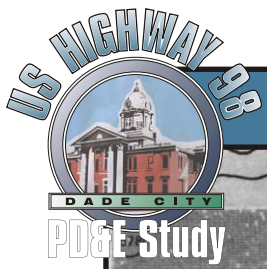
Utilities providing service within the project corridor are listed below.

Peoples Gas Systems, Inc. - 2-inch and 12-inch steel gas lines are located on the east side of the US 98 Dade City Bypass for the length of the project.

Sprint Florida United - Buried copper telephone cable exists on the east side of the US 98 Dade City Bypass from the southern end of the project at Dixie Avenue north for about 220 feet and on the west side of the US 98 Dade City Bypass from Bougainvillea Avenue to about Palm Avenue. Crossings in these areas exist at Dixie Avenue, both north and south of the Calvary Assembly of God Church property, and just north of the Jarrett-Skeen Ford Lincoln Mercury Dealership. Buried copper telephone cable exists on the east side of the US 98 Dade City Bypass from Tuskegee Avenue for about 250 feet north where it crosses the US 98 Dade City Bypass and runs on the west side to about 70 feet north of Meridian Avenue. The cable crosses to the east side of the US 98 Dade City Bypass north of Meridian Avenue and runs to just south of Pond Avenue where it crosses the US 98 Dade City Bypass and runs adjacent to the CSX railroad tracks up to just north of Merideth Avenue. The cable then runs west and turns north near the Vitality Beverages, Inc. (former Lykes- Pasco) property.

Buried copper telephone cable runs along the east side of the US 98 Dade City Bypass from about US 98/US 301 North to north of Lock Street. A crossing exists at Lock Street.

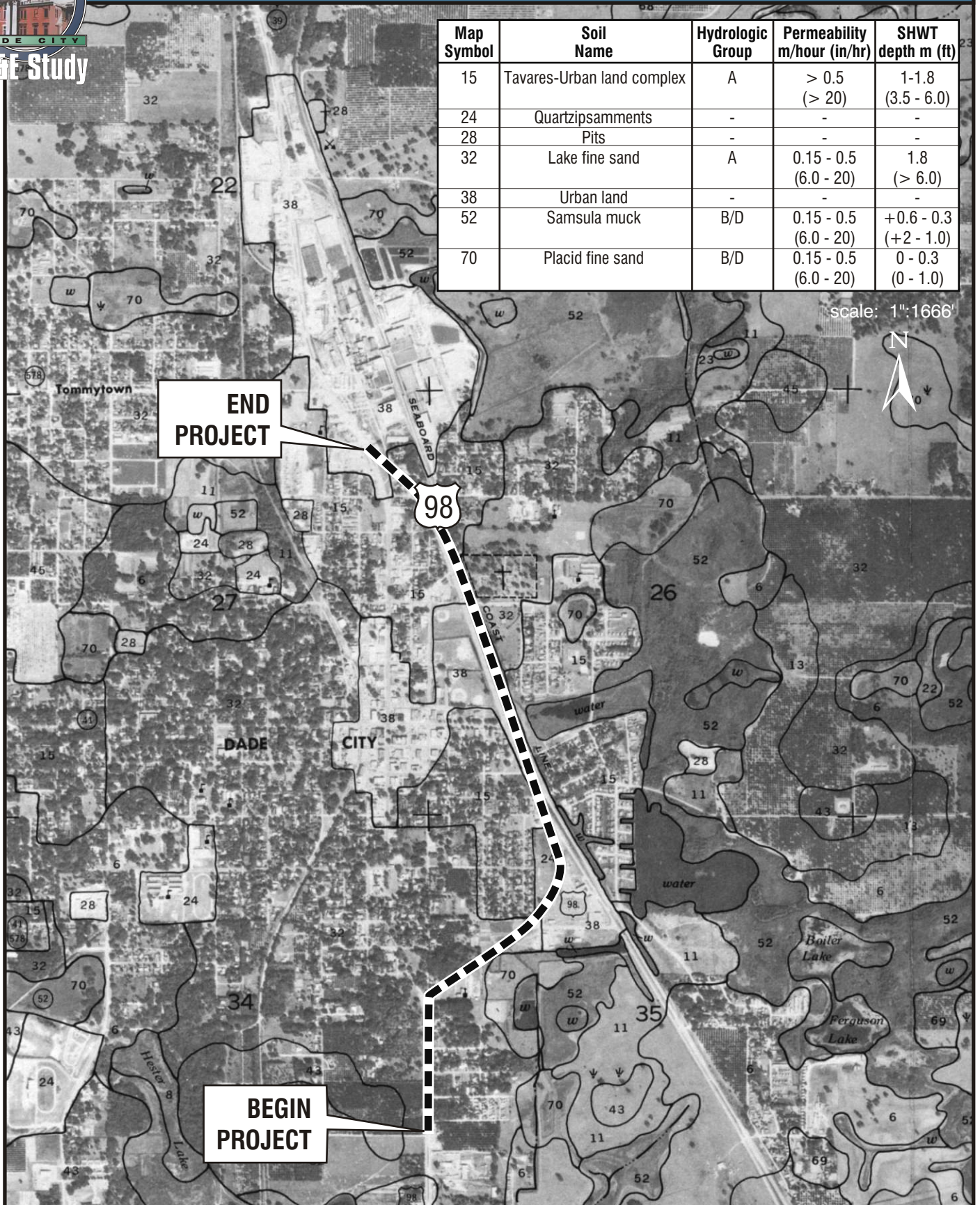
TECO - Two 13,200 volt overhead electric pole lines are located approximately 6 feet inside the west right-of-way line of the US 98 Dade City Bypass. The first electric pole line begins at CR 35A and continues north to River Road. The second electric pole line begins at Pond Avenue and extends beyond the US 98 Dade City Bypass/US 301 project limits.



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Map Symbol	Soil Name	Hydrologic Group	Permeability m/hour (in/hr)	SHWT depth m (ft)
15	Tavares-Urban land complex	A	> 0.5 (> 20)	1-1.8 (3.5 - 6.0)
24	Quartzipsamments	-	-	-
28	Pits	-	-	-
32	Lake fine sand	A	0.15 - 0.5 (6.0 - 20)	1.8 (> 6.0)
38	Urban land	-	-	-
52	Samsula muck	B/D	0.15 - 0.5 (6.0 - 20)	+0.6 - 0.3 (+2 - 1.0)
70	Placid fine sand	B/D	0.15 - 0.5 (6.0 - 20)	0 - 0.3 (0 - 1.0)

scale: 1"=1666'



Dade City, Pasco County

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SOILS MAP

Figure

5

5.0 METHODOLOGY

This CSER was prepared pursuant to the FHWA's Technical Advisory T 6640.8A, dated October 30, 1987, and in accordance with the FDOT's PD&E Manual, Part 2, Chapter 22, dated February 8, 1994, as further modified and clarified by the District Contamination Impact Coordinator.

A Level I Contamination Screening of the US 98 Dade City Bypass corridor was conducted to determine potential hazardous materials and petroleum involvement within the proposed project limits from properties or operations located adjacent to the project. A windshield survey was performed as the initial identification for potential hazardous materials and petroleum sites. Identified sites were researched for evidence of documented contamination. These parcels were further evaluated for potential contamination with respect to the anticipated construction effects and right-of-way acquisition. Site visits (including vacant lands) and interviews with site personnel, property owners and long time residents were conducted. Suggested data (found in the contamination screening checklist in the PD&E Manual) were used to record the findings for each facility evaluated. Copies of the Contamination Field Inspection Forms are included in the project file.

Information requested during the interviews included current and prior activities conducted at the site, types of potential contaminants stored at the site, and maintenance activities. An interview with the Pasco County Office of Disaster Preparedness was also conducted. Information provided is discussed at the end of this section and documentation provided is included in Appendix A.

Subsequent coordination with appropriate regulatory agencies was undertaken. FDEP site specific files were researched in person and support documentation is referenced throughout this report. When necessary for further clarification, site specific documentation is included in Appendix B. The following FDEP and US Environmental Protection Agency (EPA) data were used as support documentation for the evaluation process:

FDEP

1. Standard Radius Report, January 15, 1999 - A Master List utilizing a Geographic Information System integrated database.
2. Stationary Tanks Inventory System List (TANKS), January 15, 1999 - This list identifies those facilities or locations that have registered aboveground and underground petroleum fuel storage tanks pursuant to the notification requirements found in applicable chapters of the Florida Administrative Code. Facilities and/or locations that have registered for inclusion in the FDEP Drycleaning Solvent Cleanup Program also appear on this list. (Eleven sites within the US 98 Dade City Bypass project corridor appeared on this list.)
3. Petroleum Contamination Tracking System Report (PCTS), January 15, 1999 - This list identifies facilities and/or locations that have notified the FDEP of a possible release of contaminants from petroleum storage systems. Sites that have been accepted into the EDI, PLIRP, ATRP or PCPP programs are typically issued a rank and score relative to the severity of the release that has occurred. The score that a site receives is compiled by assigning numerical values relative to the circumstances of the release. The rank is determined by the value of the score issued to the site and represents the priority that the State has placed on initiating cleanup activities at the site. In general, a site that is issued a

high score is assigned a relatively low numerical rank. A low rank value indicates a higher priority for response from the State. (Seven sites within the US 98 Dade City Bypass project corridor appeared on this list.)

4. Florida State Funded Action Sites List (SFAS), January 15, 1999 - The Florida SFAS list contains facilities and/or locations that have been identified by the FDEP as having known environmental contamination and are currently being addressed through State funded cleanup action. This list contains information on which the FDEP District office has taken the lead role in overseeing the assessment and cleanup activities required for a site, the Project Manager responsible for the site, the last known status of the site, and the type of activity that is or was conducted on the site. (No data were found for the US 98 Dade City Bypass project corridor.)
5. Florida Sites List (SITES), January 15, 1999 - The Florida SITES list contains facilities and/or locations that have been identified by the FDEP as having known or suspected environmental contamination. According to the FDEP, this list has not been updated since 1989. The SITES list contains information on which an agency (FDEP, EPA or local) has taken the lead role in overseeing the assessment and cleanup activities required for a site as well as the project manager who is responsible for the site. (No data were found for the US 98 Dade City Bypass project corridor.)
6. Solid Waste Facilities List (SLDWST), January 15, 1999 - This list identifies locations that have been permitted to conduct solid waste landfilling activities or other waster handling activities such as those conducted at transfer stations. In addition, sites handling bio-hazardous wastes are also included on this list. (No data were found for the US 98 Dade City Bypass project corridor.)
7. Hazardous Waste Compliance & Enforcement Tracking System RPT (COMHAZ), November 3, 1998 - This report identifies facilities and/or locations that have notified the FDEP of their activities relative to the handling of hazardous wastes. (Six sites within the US 98 Dade City Bypass project corridor appeared on this list.)

EPA

8. National Priorities List (NPL), January 15, 1999 - The NPL is a listing of facilities and/or locations where environmental contamination has been confirmed. The NPL was devised as a method for the EPA to prioritize these sites for the purpose of taking remedial action as funded by the Hazardous Waste Substance Superfund program, which was initially established under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). This report identifies those sites which presently appear, or have in the past appeared on the NPL. (No data were found for the US 98 Dade City Bypass project corridor.)
9. Comprehensive Environmental Response, Compensation and Liability Information System List (CERCLIS), January 15, 1999 - The CERCLIS list contains facilities and/or locations that the EPA is investigating to determine if an existing or threatened release of hazardous substance is present. The CERCLIS list contains sites which have been proposed for inclusion on the NPL, are actually on the NPL and/or are in the screening and assessment phase for possible inclusion on the NPL. (No data were found for the US 98 Dade City Bypass project corridor.)
10. No Further Remedial Action Planned List (NFRAP), January 15, 1999 - The NFRAP list contains facilities and/or locations that the EPA has removed from the CERCLIS list as requiring investigation to determine if an existing or threatened release of hazardous substances is present. (No data were found for the US 98 Dade City Bypass project

corridor.)

11. Emergency Response Notification System List (ERNS), January 15, 1999 - The ERNS list is a database used to store information on the notification of oil discharges and hazardous substances releases. The ERNS database integrates both initial notification information of releases of oil and hazardous substances as well as additional follow-up information for those incidents. This report is a compilation of data from 1987 to present. This report indicates the date of the reported incident, the type and quantity of materials involved and the reported incident details and response actions that were taken. (Two sites within the US 98 Dade City Bypass project corridor appeared on this list.)
12. RCRIS Handlers With Corrective Action (CORRACTS), January 15, 1999 - This database is a listing of Hazardous Waste handlers that have undergone Resource Conservation and Recovery Act (RCRA) corrective action activity. This report exhibits the facility identification number, name and address of those RCRA handlers appearing on this database as well as the nationally-defined corrective action core events that have occurred at these sites. (No data were found for the US 98 Dade City Bypass project corridor.)
13. Hazardous Waste Data Management System List (HWDMS), February 1, 1991 - The HWDMS list is a historical database once maintained by the EPA which identifies those facilities or locations that have notified the EPA of their activities relative to the handling of hazardous wastes. Each site exhibited on the report will have its status indicated beneath the facility name and location information. The HWDMS list is no longer an active database and has been replaced by the RCRIS list. (Five sites within the US 98 Dade City Bypass project corridor appeared on this list.)
14. Resource Conservation and Recovery Information System (RCRIS), January 15, 1999 - This list identifies those facilities or locations that have notified the EPA of their activities relative to the handling of hazardous wastes. Each site exhibited on the report will have its status indicated beneath the facility name and location information. (Six sites within the US 98 Dade City Bypass project corridor appeared on this list.)
15. Facility Index Data System List (FINDS), January 15, 1999 - The FINDS list identifies facilities and/or locations that are subject to regulation under certain EPA programs, due to operations conducted at these sites. (Six sites within the US 98 Dade City Bypass project corridor appeared on this list.)
16. Toxic Release Inventory System List (TRIS), January 15, 1999 - The TRIS list identifies those facilities that are required to submit annual reports relative to the estimated release of toxic chemicals to the environment, as stipulated under Section 313 of the Emergency Planning and Community Right-To-Know Act or Title III of the Superfund Amendment and Reauthorization Act of 1986. This report provides information on the release of listed toxic chemicals in their communities and provides the EPA with release information to assist in determining the need for future regulations. Facilities subject to these provisions must report the quantities of both routine and accidental releases of listed toxic chemicals. (One site within the US 98 Dade City Bypass project corridor appeared on this list.)

Copies of the FDEP and US EPA reports are included in the project files.

The Tampa Bay Local Emergency Planning Committee (LEPC), District 8 was created in 1988 to help the public and emergency responders address hazardous materials public safety issues. The LEPC facilitates regional hazardous materials emergency responses and compliance with hazardous materials reporting laws. Title III of the Superfund Amendments and Reauthorization Act (SARA), also known as the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA), requires public and private facilities that use, produce or store extremely hazardous substances or hazardous chemicals to report their inventories on an annual basis.

The Tampa Bay Regional Planning Council serves as the public access repository for the reports filed under Sections 311/312 of EPCRA in the District 8 LEPC area, which includes Pasco County. This information is used to compile hazardous materials emergency response plans which are put into action in the event of a chemical emergency. Facilities that have extremely hazardous materials at or above established threshold amounts at any time during the year are required to report annually to the LEPC.

A hazards analysis is performed by the county in which the facility is located. The analysis looks at the amounts of materials present, the risk to the surrounding community and public facilities vulnerable to potential release such as schools or hospitals. Pasco County Office of Disaster Preparedness was contacted in June 1999 regarding information for the US 98 Dade City Bypass project. A copy of the Product Identification Form, provided by the Office of Disaster Preparedness is included in Appendix A.

Incident Report Number: 99-06074 (received on June 30, 1999)
Product Name: Manex - this material is stable under normal conditions.
Composition: Maneb - 37% by weight; Ethylene Thiourea - trace % by weight
Hazardous Classification: Slight for health and fire; minimal for reactivity

2.5 gallons of Manex fell from a vehicle and spilled on the roadway at US 301 and the US 98 Dade City Bypass south in Dade City. The roadside was washed and cleaned up; cleanup was approved by the FDEP. The case was closed on June 30, 1999. Manex is a registered vendor trademark.

OSHA: This product is considered hazardous under the OSHA Hazardous Communication Standard (29 CFR 1910.1200).

TSCA: All product components are on the TSCA Chemical Inventory - Griffin Corporation, PO Box 1847, Rocky Ford Road, Valdosta, GA 31603.

CERCLA: Releases of this material to air, land or water are not reportable to the National Response Center under the Comprehensive Environmental Response, Compensation, and Liability Act or to the state and local emergency planning committees under the Superfund Amendments and Reauthorization Act (SARA) Title III Section 304 and 40 CFR Part 302.

RCRA: When a decision is made to discard this material as supplied, it does not meet RCRA's characteristic definition of ignitability, corrosivity, or reactivity and is not listed in 40 CFR 261.33 SARA Title III.

311/312 Hazard Categories: This product has been reviewed according to the EPA "Hazard Categories" and is categorized as acute and chronic health hazards (40 CFR 370.41).

313 Reportable Ingredients: This product contains a material (CAS #12427-38-2) listed in

Section 313 of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR Part 372. Twenty-five facilities, identified and evaluated within the project corridor for potential hazardous materials and petroleum involvement, are listed in Table 2. The physical locations are shown in Figure 1 in Section 2.1.

Table 2
POTENTIAL HAZARDOUS MATERIALS AND PETROLEUM SITES
US 98 Dade City Bypass Project Development and Environment Study

Site No.	Facility Name and Location Facility ID #	Haz or Pet.	Database	Activity or Concern	Tanks Y/N
3E	Central Florida Tractor & Equipment, Inc. 13630 US 98 Bypass Dade City, FL 352/567-6414	P		· petroleum products	N
5E	Bypass Auto Repair 13634 ½ US 98 Bypass (behind Swann's Fly Fishing Outfitters) Dade City, FL 352/567-5858	P		· petroleum products	N
6E	Jarrett-Skeen Ford-Lincoln-Mercury 13720 US Highway 98 Bypass Dade City, FL 33525 352/567-6711 FLD981857139	H	COMHAZ HWDMS RCRIS FINDS	· SQG, between 0.11-1.10 ton in a month · used oil	N
6AE	Vacant & Cleared Service Station (formerly Kash n' Karry Service Station) US 98 and CR 35A Dade City, FL 33525 518519671	P	TANKS PCTS	· 5/88 unknown fuel discharge · GW and MW contamination · 4/89 cleanup completed · 9/88 2 gasoline USTs removed · NFA status has been approved	2 USTs removed
20W	Big A Auto Parts/Reliance Auto Center 13847, 13849, 13851 US 98 Bypass Dade City, FL 352/567-7205	P		· petroleum products	
21W	Clothes Doctor 13915 US 98 Bypass Dade City, FL 33525 352/567-8433 519500681/519502401, FLD984169169	H	TANKS COMHAZ HWDMS RCRIS FINDS	· 8/95 1 AST containing TCE in service · SQG, between 0.11-1.10 ton in a month	1 AST
22AE	Intersection of Hwy 98 and CR 35A Dade City, FL NRC Report # 98283	P	ERNS	· 12/91 diesel spill, 70 gal · soil contamination	N
23W	Pat's Food Mart (a.k.a. United 500) 916 E Buford & 413 Lakeland Road Dade City, FL 33525 352/567-9366 518515086	P	TANKS PCTS	· retail fuel service station · 12/88 unleaded gas discharge · soil & MW contamination · EDI eligible cleanup program · application has been received · no task level data are available · discharge score of 10 · 7 fuel USTs in service	7 USTs
24W	Dade City Auto & Equipment Parts, Inc. 14051 US 98 Bypass Dade City, FL 352/567-1258	P		· petroleum products	
25W	Git In Go Food Store/Texaco (formerly Presto Food Mart) 14113 US 98 Bypass Dade City, FL 33525 352/567-9384 518515031	P	TANKS PCTS	· retail fuel service station · 9/88 gasoline discharge · GW and MW contamination · EDI eligible cleanup program · 3 unleaded gas USTs in service · site rehabilitation completion report has been approved	3 USTs
27W	Dade's Maid Coin Laundry 14131 US Hwy 98 Bypass Dade City, FL 33525 352/567-7636 519500751 FL0002444966, FLR000041749	H	TANKS COMHAZ RCRIS FINDS	· SQG, between 0.11-1.10 ton in a month · 8/95 1 AST containing TCE in service	1 AST

Table 2 (Continued)

Site No.	Facility Name and Location Facility ID #	Haz or Pet.	Database	Activity or Concern	Tanks Y/N
30W	J.H. Williams Oil Company, Inc. 810 E Meridian Avenue Dade City, FL 37365 352/567-2000 (Lewis Abraham - Realtor) 518515084	P	TANKS PCTS	<ul style="list-style-type: none"> inland bulk petroleum storage 1/87 unknown discharge GW and MW contamination EDI eligible cleanup program remedial action cleanup activity in progress 8/90 6 fuel ASTs removed or CIP discharge score of 75 	6 ASTs removed or CIP
32W	TECO - Pasco County Operations Center 14520 US 98 Bypass Dade City, FL 888-228-1150 518515071, FLD982136558	P	TANKS COMHAZ HWDMS RCRIS FINDS	<ul style="list-style-type: none"> SQG, between 0.11-1.10 ton in a month 1 4,000 gallon gasoline UST removed 	1 UST removed
33E	Wilson's Trading Post 14624 US 98 Bypass	P		<ul style="list-style-type: none"> suspect petroleum 	
36E	La Pasa Dita (formerly Cracker Shack, a.k.a. United 500) 802 N Hwy 98 Bypass Dade City, FL 33525 518519729	P	TANKS PCTS	<ul style="list-style-type: none"> retail fuel service station 12/88 unknown fuel discharge soil contamination EDI eligible cleanup program site assessment cleanup activity in progress 5/98 4 gas USTs CIP discharge score of 80 	4 USTs closed CIP
39AW	The Beverage Chest (formerly Sandbar Groves, Inc.) 14734 7 th Street Dade City, FL 36326 352/567-6669 518840567	P	TANKS	<ul style="list-style-type: none"> 7/86 2 diesel ASTs in service 1 UST removed 5/90 	2 ASTs 1 UST removed
41E	Gibson's Body Shop 14820 US 98 Bypass Dade City, FL 352/567-6359	P		<ul style="list-style-type: none"> petroleum products 	
42E	Abandoned Building (formerly Big A Enterprises, Inc.) 14836 US Highway 98 Bypass Dade City, FL	P		<ul style="list-style-type: none"> suspect petroleum products (former used automobile sales) 	
43E	Daryl's Muffler Shop 14900 US 98 Bypass Dade City, FL 352/523-0562	P		<ul style="list-style-type: none"> petroleum products 	
44E	Coastal Mart & Convenience Store 14922 US Hwy 301 Dade City, FL 352/567-2620 518514936	P	TANKS PCTS	<ul style="list-style-type: none"> MW contamination pollutant unknown EDI eligible cleanup program discharge score of 50 no task level data are available 	6 USTs in service
45AE	Vitality Beverages, Inc. (formerly Lykes-Pasco Citrus Processing Plant) 15000 Hwy 301 North Dade City, FL 33525 352/567-5211 518514998 FLD004091278 NPDES No.: FL0000485	P	TANKS PCTS COMHAZ ERNS HWDMS RCRIS FINDS TRIS	<ul style="list-style-type: none"> cleanup not required 	6 ASTs removed 5 USTs removed or CIP 7 ASTs active

Table 2 (Continued)

Site No.	Facility Name and Location Facility ID #	Haz or Pet.	Database	Activity or Concern	Tanks Y/N
49W	Vacant Building (formerly <i>B&C of New Orleans - & Keith's Welding & Repair</i>) <i>14923 US Highway 301</i> Dade City, FL FLD037827672	H	COMHAZ HWDMS RCRIS FINDS	· SQG, between 0.11-1.10 ton in a month	
50W	Sumner's Radiator Shop 14915 US Hwy 301 Dade City, FL 352/567-2068	P		· petroleum products	
50AW	Vacant Lot West of US Highway 301 @ Gaddis Street	P		· suspect petroleum	
51W	All Pro Tires, Inc. 14853 US 98 Bypass Dade City, FL 352/567-1919	P		· petroleum products	
LEGEND Databases: TANKS - Storage Tank & Contamination Monitoring Database (FDEP) PCTS - Petroleum Contamination Tracking System (FDEP) COMHAZ - Hazardous Waste Compliance and Enforcement Tracking System (FDEP) ERNS - Emergency Response Notification System (EPA) – NRC - National Response Center HWDMS - Hazardous Waste Data Management System (EPA) RCRIS - Resource Conservation and Recovery Information System (EPA) FINDS - Facility Index Data System List (EPA) TRIS - Toxic Release Inventory System List (EPA) Other Terms: CIP - Closed in Place EDI - Early Detection Incentive SQG - Small Quantity Generator GW - Groundwater TCE - Tetrachloroethylene MW - Monitoring Well AST - Aboveground Storage Tank UST - Underground Storage Tank NFA - No Further Action					

6.0 ALTERNATIVES ANALYSIS

Various alternatives were considered for the US 98 Dade City Bypass project, including No-Build, Multimodal, Transportation Systems Management (TSM), and Construction alternatives.

No further study of multimodal transportation systems (which utilize public transportation or alternative modes to substitute for the public use of personal motor vehicles) will be evaluated in this study. These systems do not address the facility's capacity overload problems nor serve the public's local or regional transportation needs.

The TSM alternative involves minor intersection improvements, increased turn lane storage, improvement of existing lane configuration marking, and signalization sequencing. The TSM alternative does not provide for additional travel lanes and therefore, under this alternative, the US 98 Dade City Bypass is expected to operate at an unacceptable level of service (LOS) in design year 2025. The TSM alternative has been eliminated as a viable alternative.

6.1 No-Build Alternative (Alternative No. 1)

The No-Build Alternative examines the possibility of leaving the US 98 Dade City Bypass in its current condition while allowing for routine maintenance. The No-Build Alternative will remain viable through-out the study process until after the Public Hearing, when the final recommendation

will be made.

6.2 Construction Alternatives

The right-of-way and alignment alternatives considered for this project were based on the avoidance strategy (left, right and center analysis) described in the Corridor Analysis Technical Memorandum prepared for this study. Three Build alternatives (left, right and center) are being considered for the length of the project. They would all incorporate a four-lane divided urban typical section. The proposed four-lane typical section is shown in Figure 2 in Section 2.3.

The contamination potential for each alternative was evaluated for this study. The number of potentially affected sites is shown in Table 3.

Table 3
ALTERNATIVE COMPARISON
US 98 Dade City Bypass Project Development and Environment Study

Risk	Alternative 2 (left)	Alternative 3 (right)	Alternative 4 (center)
High	2	2	2
Medium	1	2	2
Low	5	6	7
No	0	1	1

7.0 PROJECT IMPACTS

Twenty-five sites located along the project corridor have been identified as having the potential for hazardous materials or petroleum contamination as defined by regulatory agencies. Of the 13 sites on the west side of the project corridor, 10 have the potential for petroleum contamination and three have the potential for hazardous materials contamination. Of the 12 sites on the east side of the project corridor, 11 have the potential for petroleum contamination and one has the potential for hazardous materials contamination.

7.1 Petroleum Sites

Five of the petroleum sites are known to have had their tanks either removed or closed-in-place, including:

1. Site No. 6AE - Vacant and Cleared Service Station (formerly Kash n' Karry Service Station)
2. Site No. 30W - J.H. Williams Oil Company, Inc.
3. Site No. 32W - TECO - Pasco County Operations Center
4. Site No. 36E - La Pasa Dita (formerly Cracker Shack , a.k.a. United 500)
5. Site No. 45AE - Vitality Beverages, Inc. (formerly Lykes-Pasco Citrus Processing Plant (2 ASTs are still active))

Table 4 lists the petroleum sites (two hazardous materials sites with aboveground storage tanks are also included) that have aboveground and underground storage tanks. This table also provides facility detail information, incorporating available data from the FDEP and the EPA.

Table 4
PETROLEUM SITES WITH ABOVEGROUND AND UNDERGROUND STORAGE TANKS
 US 98 Dade City Bypass Project Development and Environment Study

Site #	Facility/ID #	Facility Type	Tank #	Under/ Above	Date Inst.	Tank Size (gal)	Conte nt	Tank Const.	Piping System	Monitor System	Tank Statu s	Cont. Reported	EDI Appr .
6AE	Vacant & Cleared Service Station (formerly Kash n' Karry Service Station) US 98 & CR 35A 518519671	former fuel user/retail	1 2	UST UST	4/72 4/72	10,000 10,000	A C	C C	C C	Y Y	B	yes	yes
21W	Clothes Doctor ¹ 13915 US 98 Bypass 519500681/519502401	drycleaner	1	AST	?	1	Tetrachlo roethylen e	?	?	?	U	no	no
23W	Pat's Food Mart (a.k.a. United 500) 916 E Buford & 413 Lakeland Road 518515086	retail station	1 2 3 4 5 6 7	UST UST UST UST UST UST UST	7/69 7/69 7/69 7/69 7/69 7/69 7/69	4,000 4,000 4,000 4,000 4,000 4,000 4,000	B B B B B K D	BM BM BM BM BM BM BM	EJ EJ EJ EJ EJ EJ EJ	8HM 8HM 8HM 8HM 8HM 8HM 8HM	U U U U U U U	yes	yes
25W	Git In Go Food Store/Texaco (formerly Presto Food Mart) 14113 US 98 Bypass 518515031	retail station	1 2 3	UST UST UST	7/76 7/76 7/76	10,000 10,000 10,000	B B B	BCMNOH BCMNOH BCMNOH	BEI BEI BEI	8 8 8	U U U	yes	yes
27W	Dade's Maid Coin ¹ Laundry 14131 US Hwy 98 Bypass 519500751	drycleaner	1	AST	?	?	Tetrachlo roethylen e	?	?	?	U	no	no
30W	J.H. Williams Oil Co. 810 E Meridian Avenue 518515084	bulk product	1 2 3 4 5 6	AST AST AST AST AST AST	? ? ? ? ? 1/89	18,245 18,245 18,245 8,449 8,449 550	A B D B Z K	CS CS CS CS CS W	BI BI BI BI BI A	8 8 8 8 8 8	A B A B B B	yes	yes
32W	TECO - Pasco Operations Center 14520 US 98 Bypass 518515071	fuel user/non-re tail	1	UST	7/74	4,000	A	C	B	Y	B	no	no
36E	La Pasa Dita (formerly Cracker Shack, a.k.a. United 500) 802 N Hwy 98 Bypass 518519729	retail station	1 2 3 4	UST UST UST UST	7/64 7/64 7/64 7/64	4,000 4,000 4,000 4,000	B B B B	BCM BCM BCM BCM	BEI BEI BEI BEI	8M 8M 8M 8M	A A A A	yes	yes
39AW	The Beverage Chest (formerly Sandbar Groves) 14734 7 th Street 518840567	agricultural	1 2 3	UST AST AST	? 7/86 7/82	1,000 1,000 500	Y G D	D C D	Y A A	Y 7 I	B U U	no	no
44E	Coastal Mart & Convenience Store 14922 US Hwy 301 518514936	retail station	1 2 3 4 5 6	UST UST UST UST UST UST	8/77 8/77 8/77 8/77 8/77 8/77	8,000 8,000 8,000 4,000 4,000 4,000	B B B D D D	ABM ABM ABM ABM ABM ABM	FJ FJ FJ FJ FJ FJ	8HM 8HM 8HM 8HM 8HM 8HM	U U U U U U	yes	yes

Table 4 (Continued)

Site #	Facility/ID #	Facility Type	Tank #	Under/Above	Date Inst.	Tank Size (gal)	Content	Tank Const.	Piping System	Monitor System	Tank Status	Cont. Reported	EDI Appr.
45AE	Vitality Beverages, Inc. (formerly Lykes-Pasco Citrus Processing Plant) 1100 Hwy 301 North 518514998	industrial plant	1	UST	1/70	10,000	D	CO	BJ	8G	A	none found	no
			2	UST	1/70	10,000	D	CO	BJ	8G	A		
			3	UST	1/70	6,000	B	CO	BJ	8G	A		
			4	UST	1/70	6,000	B	CO	BJ	8G	A		
			5	UST	1/75	3,000	A	CO	BI	8	B		
			6	AST	?	200,000	Z	CKS	B	I	U		
			7	AST	10/87	13,000	L	CKS	B	I	U		
			8	AST	9/88	1,000	O	CKR	A	I	B		
			9	AST	9/88	1,000	O	CKR	A	I	B		
			10	AST	9/88	1,000	O	CKR	A	I	U		
			11	AST	7/77	1,500	mineral acid	FKRW	A	I	B		
			12	AST	7/77	1,500	mineral acid	KPRY	A	I	B		
			13	AST	8/92	20,000	O	CILMOP	ABDIK	FGIJL	U		
			14	AST	2/93	1,000	O	CKT	ABJ	IM	B		
			15	AST	6/93	1,000	haz sub	KY	AG	I	B		
			16	AST	1/77	6,900	haz sub	CS	BAD	IM	U		
			17	AST	1/77	6,900	haz sub	CS	BDA	IM	U		
			18	AST	1/80	5,000	haz sub	CS	BDA	IM	U		
			19	AST	1/90	2,642	haz sub	CS	BDA	IM	U		

Note: ¹Hazardous Materials Site - included to show tank contents and status.

The Early Detection Incentive (EDI) program was established by the Florida Legislature under the State Underground Petroleum Environmental Response Act of 1986. In general, EDI was designed to encourage early detection, reporting and cleanup of contamination resulting from leaking underground storage tanks. Under the EDI program, a State contractor completes all cleanup tasks; the facility is in the reimbursement program if the responsible party wishes to receive reimbursement for monies expended. The Bureau of Waste Cleanup is required to score all facilities that have been found eligible for funding assistance through EDI. The score is higher for facilities at which contamination is more dangerous to the environment. The facility with the highest score is ranked 1. Six of the 21 petroleum sites, identified along the US 98 Dade City Bypass project corridor, are included in the EDI program and are listed in Table 5.

Table 5
EARLY DETECTION INCENTIVE PROGRAM SITES
 US 98 Dade City Bypass Project Development and Environment Study

Site No.	Facility Name	Facility ID No.	Contaminated Media	Score	Rank Date Ranked
6AE	Vacant & Cleared Service Station (formerly Kash n' Karry Service Sta.)	518519671	groundwater/monitor well	10	0 of 13058 on 8-3-99
23W	Pat's Food Mart (a.k.a. United 500)	518515086	soil/monitor well	10	9008 of 13058 on 8-3-99
25W	<i>Git In Go Food Store/Texaco</i> (formerly Presto Food Mart)	518515031	groundwater/monitor well	76	0 of 13058 on 8-3-99
30W	J.H. Williams Oil Co., Inc.	518515084	groundwater/monitor well	75	914 of 13058 on 8-3-99
36E	La Pasa Dita (formerly Cracker Shack, a.k.a. United 500)	518519729	soil	80	500 of 13058 on 8-3-99
44E	Coastal Mart & Convenience Store	518514936	monitor well	50	3257 of 13058 on 8-3-99

The 21 petroleum sites identified along the right-of-way of the proposed roadway alignment have been assigned a hazardous materials potential rating. The FDOT's hazardous materials rating system was used in this report. The ratings include (1) NO, (2) LOW, (3) MEDIUM, and (4) HIGH. The ratings are generally defined as follows:

NO. After a review of available information, there is nothing to indicate contamination would be a problem. It is possible that contaminants could have been handled on the property. However, all available information (FDEP reports, monitoring wells, water and soil samples, etc.) indicate problems should not be expected. Examples: a gasoline station that has been closed and has a closure assessment or contamination assessment documenting that there is no contamination remaining, or a wholesale or retail outlet that handles hazardous materials in sealed containers which are never opened while at this facility, such as spray cans of paint at a drug store.

LOW. The former or current operation has a hazardous waste generator identification number, or deals with hazardous materials. However, based on all available information, there is no reason to believe there would be any involvement with contamination. This is the lowest rating a gasoline station operating within current regulations could receive. This could also be applied to a retail hardware store which blends paint.

MEDIUM. After a review of all available information, indications are found (reports, Notice of Violation, consent orders, etc.) that identify known soil and/or water contamination and that the problem does not need remediation, is being remediated (i.e., air stripping of the groundwater, etc.), or that continued monitoring is required.

HIGH. After a review of all available information, there is a potential for contamination problems. Further assessment will be required after alignment selection to determine the actual presence and/or levels of contamination and the need for remedial action.

Table 6 provides an assessment of potential contamination risk for each of the petroleum sites based on procedures found in the FDOT's PD&E Manual. This was a subjective categorization and includes an evaluation of the proximity to the right-of-way; physical land use history; current on-site conditions; storage of hazardous materials, hazardous wastes and/or pollutants; and violation records.

Table 6
PETROLEUM SITES RISK RATING
US 98 Dade City Bypass Project Development and Environment Study

Site No.	Facility Name	Risk Rating
3E	Central Florida Tractor & Equipment, Inc.	LOW
5E	Bypass Auto Repair	LOW
6AE	Vacant & Cleared Service Station (formerly Kash n' Karry Service Station)	LOW
20W	Big A Auto Parts/Reliance Auto Center	LOW
22AE	Intersection of US Highway 98 and CR 35A	LOW
23W	Pat's Food Mart (a.k.a. United 500)	HIGH
24W	Dade City Auto & Equipment Parts, Inc.	LOW
25W	Git In Go Food Store/Texaco (formerly Presto Food Mart)	MEDIUM
30W	J.H. Williams Oil Company, Inc.	HIGH
32W	TECO - Pasco County Operation Center	LOW
33E	Wilson's Trading Post	NO
36E	La Pasa Dita (formerly Cracker Shack, a.k.a. United 500)	MEDIUM
39AW	The Beverage Chest (formerly Sandbar Groves, Inc.)	LOW
41E	Gibson's Body Shop	LOW
42E	Abandoned Building (formerly Big A Enterprises, Inc.)	LOW
43E	Daryl's Muffler Shop	LOW
44E	Coastal Mart & Convenience Store	LOW
45AE	Vitality Beverages, Inc. (formerly Lykes-Pasco Citrus Processing Plant)	LOW
50W	Sumner's Radiator Shop	LOW
50AW	Vacant Lot	NO
51W	All Pro Tires, Inc.	LOW

Terms applicable to the review process include:

Aboveground Storage Tank (AST)

Underground Storage Tank (UST)

Contamination Assessment Report (CAR) - Summarizes all tasks which were implemented pursuant to the contamination assessment.

No Further Action (NFA) - No further action status has been approved.

Not Required (NREQ) - Cleanup is not required by Chapter 17-770 rules.

Remedial Action Plan (RAP) - A plan which details a means by which contamination may be cleaned up.

Remedial Action (RA) - Remedial action cleanup activity in progress.

Site Assessment (SA) - Site assessment cleanup activity in progress.

Site Rehabilitation Complete Report (SRCR) - A report which describes that cleanup goals have been met.

The 21 petroleum sites identified are described below.

**Site No. 3E - Central Florida Tractor & Equipment, Inc.
13630 US 98 Bypass**

This facility is a retail equipment sales and service center for riding lawn mowers. The facility is located on the east side of the US 98 Dade City Bypass about 900 feet east of US 301. According to historical aerial photography, this structure did not exist in 1974. According to city directories, this site has a physical land use history of providing tractor sales and services since at least 1991. Maintenance for this facility is done in the rear of the store. Riding lawn mowers and all terrain vehicles are stored out back on asphalt. There are no known incidents of hazardous materials or petroleum contamination. Based on surface topography, it is assumed that groundwater flow is away from the US 98 Dade City Bypass project. It is anticipated that no right-of-way would be required from this site with a left alignment. A right alignment would require about 50 feet of right-of-way, resulting in a business relocation at this site. About 22 feet of right-of-way would be required with a centered alignment. If right-of-way is needed, it would be acquired along the US 98 Dade City Bypass frontage, which is away from the expected direction of groundwater flow and away from the area of maintenance activity. Based on this information, this site was given a rating of LOW.

Site No. 5E - Bypass Auto Repair (behind Swann's Fly Fishing Outfitters)
13634 ½ US 98 Bypass

This facility is an automobile repair and service center located on the east side of the US 98 Dade City Bypass (behind Swann's Fly Fishing Outfitters), about 800 feet north of Poinsettia Drive. According to historical aerial photography, this structure did not exist in 1974. According to city directories, this site has a physical land use history of providing automobile and equipment repair services since at least 1995. Batteries and drums are kept outside on asphalt. Automobiles are kept out back on the grass. The store front is about 80 feet east of the edge of pavement. There are no known incidents of hazardous materials or petroleum contamination. Based on surface topography, it is assumed that groundwater flow is away from the US 98 Dade City Bypass project. It is anticipated that no right-of-way would be required from this site with a left alignment. A right alignment would require about 50 feet of right-of-way, resulting in a business relocation at this site. About 22 feet of right-of-way would be required with a centered alignment. Based on this information, this site was given a rating of LOW.

Site No. 6AE - Vacant & Cleared Service Station (formerly Kash n' Karry Service Station)
US 98 & CR 35A
Facility ID Number: 518519671

This area is a cleared service station located on the east side of the US 98 Dade City Bypass in the triangle formed by CR 35A, Connector Road and the US 98 Dade City Bypass. According to the PCTS Report, the facility type was once a fuel user/non-retail. Historical aerial photography indicates that a building existed at this location in 1974 and that a concrete pad existed in 1995. According to city directories, this site has a physical land use history of being a gasoline station in 1979. Two steel USTs (installed in April 1972) containing leaded gas and gasohol were removed from this site in September 1988. The piping type for these tanks were fiberglass; the leak monitoring system is unknown. Concrete patches from the former fuel island exist. The concrete is within 100 feet of the edge of pavement. There is minor pavement staining. Three monitoring wells were observed at this site; one monitoring well is within about 30 feet of the existing right-of-way. One incident of groundwater/monitor well contamination (pollutant is unknown) was reported for this site in May 1988. This facility was found eligible for the FDEP EDI program on April 17, 1989. According to the PCTS Report and the TANKS List, all related discharge cleanup activities for this site are completed. Some may have never required cleanup, per Chapter 170-770 rules or contamination was not found by inspection. An NFA status was approved by the Bureau of Waste Cleanup in May 1993. Based on surface topography, it is assumed that groundwater flow is away from the US 98 Dade City Bypass project. In the area of the former fuel island, it is anticipated that no right-of-way would be required from this site with a left alignment. About 30 feet of right-of-way would be required from this site with a right alignment and about 15 feet of right-of-way would be required from this site with a centered alignment in the area of the former fuel island. If right-of-way is needed, it would be acquired along the US 98 Dade City Bypass frontage. Based on this information, this site was given a rating of LOW.

**Site No. 20W - Big A Auto Parts/Reliance Auto Center
13847, 13849 and 13851 US 98 Bypass**

This facility is an automobile repair and service center located on the west side of the US 98 Dade City Bypass about 300 feet south of the US 98 Dade City Bypass and CR 35A intersection. According to historical aerial photography, this structure did not exist in 1974. According to city directories, this site has a physical land use history of providing automobile repair services since at least 1991. Service bays are within 200 feet of the edge of pavement. Drums and tires are located in the rear. There are no known incidents of hazardous materials or petroleum contamination. Based on surface topography, it is assumed that water drains east, towards the US 98 Dade City Bypass. It is anticipated that from 1 to 10 feet of right-of-way would be required from this site with a left alignment. No right-of-way would be required from this site with a right or centered alignment. If right-of-way is needed, it would be acquired along the US 98 Dade City Bypass frontage. Based on this information, this site was given a rating of LOW.

**Site No. 22AE - Intersection of Highway 98 and CR 35A
National Response Center Report #98283**

This site was included in the ERNS List. On December 3, 1991, the National Response Center received a report that 70 gallons of diesel had spilled from a fuel tank on a truck onto the highway as the result of an accident. Soil contamination resulted and the highway was washed. This incident occurred within the existing right-of-way of the US 98 Dade City Bypass. It is anticipated that no groundwater contamination resulted from this incident. Based on this information, this site was given a rating of LOW.

**Site No. 23W - Pat's Food Mart (a.k.a. United 500)
916 East Buford & 413 Lakeland Road
Facility ID Number: 518515086**

This facility is a retail gasoline service station and convenience store located on the west side of the US 98 Dade City Bypass at the intersection of the US 98 Dade City Bypass and Buford Avenue. According to historical aerial photography, this structure did not exist in 1966. According to city directories, this site has a physical land use history of being a gasoline station since at least 1979. Four monitoring wells were observed at this site; two monitoring wells are within about 10 feet of the existing right-of-way. Seven 4,000 gallon active USTs (installed in July 1969) contain unleaded gas, vehicular diesel and kerosene. They are located south of the convenience store. The fuel islands are within 20 feet of the edge of pavement. Pavement staining is noticeable. Two incidents of contamination were reported for this site. One incident of contamination (in the monitor well - pollutant is unknown) was reported in December 1988. This facility was found eligible for the FDEP EDI program on June 22, 1990. The second incident of contamination (media unknown - pollutant was unleaded gas) was reported in December 1993. According to the PCTS Report, new cleanup is required for both incidents of contamination. No task level data are available. Based on surface topography, it is assumed that the groundwater flows towards the US 98 Dade City Bypass project. It is anticipated that from 22 to 90 feet of right-of-way would be required for all alignment alternatives, resulting in a business relocation. The right-of-way would be acquired along the US 98 Dade City Bypass frontage. Based on this information, this site was given a rating of HIGH.

A photograph of Site No. 23W is included in Appendix B.

Site No. 24W - Dade City Auto & Equipment Parts, Inc.
14051 US 98 Bypass

This facility is a retail auto and equipment parts store located on the west side of the US 98 Dade City Bypass north of Buford Avenue and south of Church Avenue. Historical aerial photography indicates that this facility is new since 1974. There are no known incidents of hazardous materials or petroleum contamination. Based on surface topography, it is assumed that water drains east, towards the US 98 Dade City Bypass. It is anticipated that from 30 to 40 feet of right-of-way would be required from this site with all alignment alternatives. The right-of-way would be acquired along the US 98 Dade City Bypass frontage. Based on this information, this site was given a rating of LOW.

Site No. 25W - Git In Go Food Store/Texaco (formerly Presto Food Mart)
14113 US 98 Bypass
Facility ID Number: 518515031

This facility is a retail gasoline service station and convenience store located on the west side of the US 98 Dade City Bypass at the intersection of the US 98 Dade City Bypass and Church Avenue. Historical aerial photography indicates that this facility is new since 1974. Three 10,000 gallon active steel USTs (installed in July 1976) contain unleaded gasoline. They are located about 60 feet west of the edge of pavement. The fuel islands are within 20 feet from the edge of pavement. Pavement staining is noticeable. Eleven monitoring wells were observed at this site; two monitoring wells are within about 10 feet of the existing right-of-way. One incident of groundwater/monitor well contamination (pollutant was generic gasoline) was reported in September 1988. This facility was found eligible for the FDEP EDI program on June 11, 1991. According to the PCTS Report, a SRCR was approved by the Bureau of Waste Cleanup in April 1993. Based on surface topography, it is assumed that the groundwater flows towards the US 98 Dade City Bypass project. It is anticipated that from 50 to 75 feet of right-of-way would be required with all alignment alternatives, resulting in a business relocation. Based on this information, this site was given a rating of MEDIUM.

A photograph of Site No. 25W is included in Appendix B.

Site No. 30W - J.H. Williams Oil Company, Inc.
810 East Meridian Avenue
Facility ID Number: 518515084

This site was formerly a bulk fuel facility. It is located on the west side of the US 98 Dade City Bypass at the intersection of the US 98 Dade City Bypass and Meridian Avenue. Historical aerial photography indicates that this facility was active in 1966. Specific site documentation (included in Appendix B) indicates that a total of 16 groundwater monitoring wells were utilized throughout the Contamination Assessment; two monitoring wells are within about 40 feet of the existing right-of-way. According to site drawings taken from the CAR, below ground GTE lines are within the property boundaries along the east and north side of this site. At the time of operation, six ASTs containing kerosene, other, unleaded gas, vehicular diesel and leaded gas were active. Three of the ASTs were removed in August 1990, two were closed in place in November 1990 and one was removed in March 1993. A fill station and containment area is located on site. Drums are located near the containment area. The grass is overgrown. The construction type for the 550 gallon kerosene tank was built on supports and the piping type was aboveground - no contact with soil.

The construction type for the five remaining tanks (8,449 other and unleaded gasoline and 18,245 gallon vehicular diesel, unleaded gasoline and leaded gasoline) was steel and other FDEP approved section containment systems. At least one incident of groundwater/monitor well contamination (pollutant is unknown) was reported in January 1987. This facility was found eligible for the FDEP EDI program on December 24, 1990. According to the PCTS Report, the facility cleanup status is ongoing. The RA is in progress.

A CAR was prepared for this facility by MGM Petro Equipment & Environmental Services in September 1992. The CAR Addendum I, June 1993, responded to comments provided by the FDEP.

“As a result of all findings, an appropriate RAP is being devised and is forthcoming pending approval of this Contamination Assessment Report. Initial Remedial Action procedures were not performed at this site. Free product has never been encountered in any monitoring well installed to date (September 10, 1992). Contaminated soil has not been detected at this facility.”

Based on surface aquifer water table elevation and flow direction shown in the CAR, it is noted that the contamination plume is in the western portion of the property and groundwater flows away from the US 98 Dade City Bypass project. It is anticipated that from 50 to 70 feet of right-of-way would be required for all alignment alternatives. The right-of-way would be acquired along the US 98 Dade City Bypass frontage and not infringe on the area of contamination shown in the CAR. Based on this information, this site was given a rating of HIGH.

Facility documentation and a photograph of Site No. 30W are included in Appendix B.

Site No. 32W - TECO - Pasco County Operations Center
14520 US 98 Bypass
Facility ID Number: 518515071, FLD982136558

This facility is a maintenance and supply yard located on the west side of the US 98 Dade City Bypass at the intersection of the US 98 Dade City Bypass and 5th Street. According to the TANKS List, the facility type was once a fuel user/non-retail. Entrance to the facility is on 5th Street. Historical aerial photography shows that the building existed in 1974. This site was identified in the EPA RCRIS list as being a SQG, generating between 0.11-1.10 ton during any month. This site has notified the FDEP of their activities relative to the handling of hazardous wastes. Chemicals are stored in covered bays. One 4,000 gallon steel UST containing leaded gasoline was removed. The piping type was steel or galvanized metal. There are no known incidents of hazardous materials or petroleum contamination. Based on surface topography, it is assumed that the groundwater flows towards the US 98 Dade City Bypass project. It is anticipated that from 40 to 70 feet of right-of-way would be required from this site with a left alignment, from 1 to 30 feet of right-of-way would be required with a right alignment and from 12 to 60 feet of right-of-way would be required with a centered alignment. The right-of-way would be acquired along the US 98 Dade City Bypass frontage. Based on this information, this site was given a rating of LOW.

Site No. 33E - Wilson's Trading Post
14624 US 98 Bypass

This facility sells general merchandise and is located on the east side of the US 98 Dade City Bypass, about 600 feet south of River Road. According to city directories, this site has a physical land use history of general merchandise dating back to at least 1991. Historical aerial photography shows that the building existed in 1974. There are no known incidents of hazardous materials or petroleum contamination. There is no indication of former hazardous materials or petroleum involvement. It is anticipated that no right-of-way would be required from this site with a left alignment. About 25 feet of right-of-way would be required from this site with a right alignment and about 7 feet of right-of-way would be required with a centered alignment. Based on this information, this site was given a rating of NO.

Site No. 36E - La Pasa Dita (formerly Cracker Shack, a.k.a. United 500)
802 North Highway 98 Bypass
Facility ID Number: 518519729

This facility is currently a restaurant (La Pasa Dita). It is located on the east side of the US 98 Dade City Bypass, about 100 feet south of Meredith Street. Historical aerial photography indicates that the site appeared to be a gasoline station in 1966. This site was formerly United 500 #598, a retail gasoline station. Eleven monitoring wells were observed at this site; two monitoring wells are within about 5 feet of the existing right-of-way. Four 4,000 gallon USTs (installed in July 1964) were closed in place in May 1998. The tanks had contained unleaded gasoline. The leak monitoring system used was manual tank gauging. One incident of soil contamination (pollutant unknown) was reported in December 1988. This facility was found eligible for the FDEP EDI program on May 4, 1990. According to the PCTS Report, new cleanup is required. A site assessment cleanup activity is in progress. Based on surface topography, it is assumed that the groundwater flows toward the US 98 Dade City Bypass project. It is anticipated that a corner clip of right-of-way at Meredith Street would be required from this site with a left alignment. This site would become a business relocation with a right alignment. About 12 feet of right-of-way would be required with a centered alignment.

Based on this information, this site was given a rating of MEDIUM.

A photograph of Site No 36E is included in Appendix B.

Site No. 39AW - The Beverage Chest (formerly Sandbar Groves, Inc.)
14734 7th Street
Facility ID Number: 518840567 (listed under Sandbar Groves, Inc.)

This facility is a drive-through convenience store and was confirmed during a field reconnaissance conducted in August-September 1999. The facility is located on the west side of the US 98 Dade City Bypass at Meredith Street. According to the TANKS List, the facility type is agricultural. One 1,000 gallon UST was removed in May 1990 (tank contents are unknown). The TANKS List indicates that one 1,000 gallon steel AST (installed in July 1986) and one 500 gallon AST (installed in July 1982) containing diesel is in service. During the field reconnaissance, it was confirmed that no ASTs exist on this site. There are no known incidents of hazardous materials or petroleum contamination. Based on surface topography, it is assumed that the groundwater flows away from the US 98 Dade City Bypass project. It is anticipated that from 30 to 90 feet of right-of-way would be required from this site with a left alignment, a corner clip of right-of-way would be required with a right alignment and from 1 to 60 feet of right-of-way would be required with a centered alignment. The right-of-way would be acquired along the US 98 Dade City Bypass frontage. Based on this information, this site was given a rating of LOW.

Site No. 41E - Gibson's Body Shop
14820 US 98 Bypass

This facility is an auto body repair shop located on the east side of the US 98 Dade City Bypass, about 300 feet north of Meredith Street. There are no known incidents of hazardous materials or petroleum contamination. Based on surface topography, it is assumed that the groundwater flows towards the US 98 Dade City Bypass project. It is anticipated that no right-of-way would be required from this site with a left, right or centered alignment. Based on this information, this site was given a rating of LOW.

Site No. 42E - Abandoned Building (formerly Big A Enterprises, Inc.)
14836 US 98 Bypass

This facility is an abandoned building located on the east side of the US 98 Dade City Bypass at the US 98 Dade City Bypass/7th Street (US 301) intersection. According to city directories, this site has a physical land use history of selling used cars dating back to at least 1979. There is potential that petroleum based products were once used on this property. Historical aerial photography indicates that the structure was not there in 1966. There are no known incidents of hazardous materials or petroleum contamination. Based on surface topography, it is assumed that the groundwater flows away from the US 98 Dade City Bypass project. It is anticipated that this site would become a business relocation with a left, right or centered alignment. Based on this information, this site was given a rating of LOW.

Site No. 43E - Daryl's Muffler Shop
14900 US 98 Bypass

This facility is an automobile repair and service center located on the east side of the US 98 Dade City Bypass at the intersection of the US 98 Dade City Bypass and Gaddis Street. According to city directories, this site was a former auto detailing shop. There are no known incidents of hazardous materials or petroleum contamination. Based on surface topography, it is assumed that the groundwater flows away from the US 98 Dade City Bypass project. It is anticipated that no right-of-way would be required from this site with a left alignment. From 5 to 30 feet of right-of-way would be required from this site with a right alignment and from 1 to 12 feet of right-of-way would be required with a centered alignment. Based on this information, this site was given a rating of LOW.

Site No. 44E - Coastal Mart & Convenience Store
14922 US Hwy 301 (1002 North 7th Street)
Facility ID Number: 518514936

This facility is a retail gasoline station and convenience store located on the east side of the US 98 Dade City Bypass, about 400 feet south of Lock Street. According to city directories, this site has been a gasoline station dating back to at least 1977. Six 4,000 gallon USTs containing vehicular diesel and three 8,000 gallon containing unleaded gasoline are located within 50 feet of the edge of pavement. The six tanks were installed in August 1977. The fuel island is within 15 feet of the edge of pavement. Pavement staining is noticeable near the fuel island.

Monitoring wells were observed at this site to the rear of the pump islands; the monitoring wells are within about 60 feet of the existing right-of-way. The construction type for the tanks is ball check valve, internal lining with spill containment buckets. One incident of contamination (in the monitor well - pollutant is unknown) was reported in November 1988. This facility was found eligible for the FDEP EDI program on April 23, 1990. According to the PCTS Report, new cleanup is required. No task level data are available. Based on surface topography, it is assumed that the groundwater flows away from the US 98 Dade City Bypass project. This site falls outside of the expected limits of construction. It is anticipated that no right-of-way would be required from this site with a left, right or centered alignment. Based on this information, this site was given a rating of LOW.

Site No. 45AE - Vitality Beverages, Inc. (formerly Lykes-Pasco Citrus Processing Plant)
15000 Highway 301 North
Facility ID Number: 518514998
EPA ID #FLD004091278
NPDES No.: FL0000485

This facility is an industrial plant located on the west side of the US 98 Dade City Bypass at the intersection of US Highway 301 and Lock Street. This site was identified in the EPA RCRIS list as being a SQG, generating between 0.11-1.10 ton during any month. This site has notified the FDEP of their activities relative to the handling of hazardous wastes. According to the ERNS List (a compilation of information on the notification of oil discharges and hazardous substances releases from 1987 to current), four incidents of hazardous substances releases have been received at the National Response Center:

NRC Report #	Spill Date	Material/ Quantity Spilled	Media Affected	Description	Response
09681	6/17/89	ammonia 100 lbs	water (Larkin Canal)	heat exchanger/leaking tube	a few dead fish, pumping clean water behind the spill to dilute the material
100424	12/20/91	ethylene glycol 1lb	air	defrosting cycle on a coolant system/release is incident to normal operation of the system	planning to convert to an alternate method of cooling
102309	1/10/92	chlorine 6 lbs	air	chlorine gas cylinder on potable water system/leak from pressure relief valve	cylinder removed & placed in waste treatment pond in order to neutralize remaining product
241800	5/31/94	ammonia, anhydrous unknown	air	refrigeration system/leaking valve	secured discharge

The Vitality Beverages, Inc. (formerly Lykes-Pasco Citrus Processing Plant) was included on the EPA TRIS list. This list identifies those facilities that are required to submit annual reports relative to the estimated release of toxic chemicals to the environment, as stipulated under Section 313 of the EPCRA. Facilities subject to these provisions must report the quantities of both routine and accidental releases of listed toxic chemicals. The appearance of a facility on this list does not necessarily indicate environmental degradation on the site, but rather that listed toxic chemicals are in use and released from the site.

Six ASTs containing new/lube oil, hazardous substances and mineral acid have been removed. Five USTs containing leaded gasoline, unleaded gasoline and vehicular diesel have been removed or are closed-in-place. Seven ASTs containing waste oil; grades 5& 6, bunker CR; hazardous substances, vehicular diesel; and new/lube oil are currently in service. The leak monitoring systems are either not required or are manual tank gauging. Two incidents of soil and monitor well contamination (pollutant unleaded gasoline) were reported on November 4, 1990 and September 29, 1992. According to the PCTS Report, "All related discharges either did not require cleanup per Chapter 17-770 rules or contamination was found by inspection." Based on surface topography, it is assumed that the groundwater flows away from the US 98 Dade City Bypass project. It is anticipated that no right-of-way would be required from this site with a left, right or centered alignment. This site is outside of the expected limits of construction. Based on this information, this site was given a rating of LOW.

**Site No. 50W - Sumner's Radiator Shop
14915 US Highway 301**

This facility is an automobile radiator shop located on the west side of the US 98 Dade City Bypass, about 200 feet north of Gaddis Street. According to city directories, this site has been Sumner's Radiator shop since at least 1979. The repair bays are about 60 feet east of the edge of pavement. There are no known incidents of hazardous materials or petroleum contamination. Based on surface topography, it is assumed that the groundwater flows away from the US 98 Dade City Bypass project. It is anticipated that no right-of-way would be required from this site with a left, right or centered alignment. Based on this information, this site was given a rating of LOW.

**Site No. 50AW - Vacant Lot
West of US Highway 301 @ Gaddis Street**

This fenced vacant lot is located on the west side of US Highway 301, about 100 feet north of Gaddis Street. It is bordered to the north by Sumner's Radiator Shop (Site No. 50W) and to the south by All-Pro Tires, Inc. (Site No. 51W). This site can also be accessed from Gaddis Street. According to 1966 historical aerial photography, this site was once a commercial establishment. This site was viewed from the road during a field reconnaissance in August-September 1999. There is no indication of former hazardous materials or petroleum involvement and there are no known incidents of hazardous materials or petroleum contamination. It is anticipated that no right-of-way would be required from this site with a left, right or centered alignment. Based on this information, this site was given a rating of NO.

**Site No. 51W - All Pro Tires, Inc.
14853 US 98 Bypass**

This facility is a retail tire center located on the west side of the US 98 Dade City Bypass at the intersection of the US 98 Dade City Bypass and Gaddis Street. There are no known incidents of hazardous materials or petroleum contamination. Based on surface topography, it is assumed that the groundwater flows away from the US 98 Dade City Bypass project. It is anticipated that no right-of-way would be required from this site with a left, right or centered alignment. Based on this information, this site was given a rating of LOW.

7.2 Hazardous Materials Sites

The four sites identified as having the potential for hazardous materials involvement are described below.

Site No. 6E - Jarrett-Skeen Ford-Lincoln-Mercury

13720 US Highway 98 Bypass

Facility ID Number: FLD981857139

This facility is a new car dealership and service center located on the east side of the US 98 Dade City Bypass, just south of Coleman Avenue. According to historical aerial photography, this structure did not exist in 1966. According to city directories, this site has a physical land use history of being a new car dealership since at least 1979. The service area is about 250 feet from the edge of the pavement. This site was identified in the EPA RCRIS list as being a SQG, generating between 0.11-1.10 ton during any month. This site has notified the FDEP of their activities relative to the handling of hazardous wastes. There are no known incidents of hazardous materials or petroleum contamination. Based on surface topography, it is assumed that groundwater flow is away from the US 98 Dade City Bypass project. It is anticipated that no right-of-way would be required from this site with a left alignment. From 30 to 60 feet of right-of-way would be required from this site with a right alignment and from 1 to 40 feet of right-of-way would be required from this site with a centered alignment. The right-of-way would be acquired along the US 98 Dade City Bypass frontage.

Based on this information, this site was given a rating of LOW.

Site No. 21W - Clothes Doctor

13915 US 98 Bypass

Facility ID Numbers: 519500681, 519502401, FLD984169169

This facility is a dry cleaning/laundry store located on the west side of the US 98 Dade City Bypass about 150 feet south of the US 98 Dade City Bypass and 35A intersection. The dry cleaning is done on site near the south end of the building. According to city directories, this site has a physical land use history of providing dry cleaning services dating back to at least 1979. Historical aerial photography shows that the building is new since 1974. This site was identified in the EPA RCRIS list as being a SQG, generating between 0.11-1.10 ton during any month. This site has notified the FDEP of their activities relative to the handling of hazardous wastes. One AST containing tetrachloroethylene is currently in service. There are no known incidents of hazardous materials or petroleum contamination. Based on surface topography, it is assumed that groundwater flow is towards the US 98 Dade City Bypass project. It is anticipated that from 10 to 75 feet of right-of-way would be required from this site with a left alignment. No right-of-way would be required from this site with a right alignment. From 1 to 50 feet of right-of-way would be required with a centered alignment. The right-of-way would be acquired along the US 98 Dade City Bypass frontage. Based on this information, this site was given a rating of LOW.

Site No. 27W - Dade's Maid Coin Laundry

14131 US Highway 98 Bypass

Facility ID Number: 519500751, FL0002444966, FLR000041749

This facility is a dry cleaning/laundry store located on the west side of the US 98 Dade City Bypass at the intersection of the US 98 Dade City Bypass and Pasco Avenue. According to city directories, this site has a physical land use history of providing dry cleaning services dating back to at least 1992.

This site was identified in the EPA RCRIS list as being a SQG, generating between 0.11-1.10 ton during any month. This site has notified the FDEP of their activities relative to the handling of hazardous wastes. One AST containing tetrachloroethylene is currently in service. There are no known incidents of hazardous materials or petroleum contamination. Based on surface topography, it is assumed that groundwater flow is towards the US 98 Dade City Bypass project. It is anticipated that about 50 feet of right-of-way would be required from this site with all alignments. The right-of-way would be acquired along the US 98 Dade City Bypass frontage. Based on this information, this site was given a rating of LOW.

Site No. 49W - Vacant Building (formerly B&C of New Orleans, formerly Keith's Welding & Repair) - 14923 US Hwy 301

Facility ID Number: FLD037827672

This facility is a vacant building located on the west of US Highway 301 about 425 feet south of Lock Street. This site was identified in the EPA RCRIS list as being a SQG, generating between 0.11-1.10 ton during any month. This site has notified the FDEP of their activities relative to the handling of hazardous wastes. There are no known incidents of hazardous materials or petroleum contamination.

Based on surface topography, it is assumed that the groundwater flows away from the US 98 Dade City Bypass project. It is anticipated that no right-of-way would be required from this site with a left, right or centered alignment. Based on this information, this site was given a rating of LOW.

8.0 REGULATORY STATUS OF SITES

Activities where a regulatory agency is, has, or may take action on any property that could have an affect on the proposed project are discussed below.

Site No. 6AE - Vacant & Cleared Service Station (formerly Kash n' Karry Service Station) -

One incident of groundwater/monitor well contamination was reported for this site in May 1988. This facility was found eligible for the FDEP EDI program on April 17, 1989. According to the PCTS Report and the TANKS List, all related discharge cleanup activities for this site are completed.

An NFA status was approved by the Bureau of Waste Cleanup in May 1993.

Site No. 23W - Pat's Food Mart (a.k.a. United 500) - Two incidents of contamination were reported for this site. One incident of contamination (in the monitor well - pollutant is unknown) was reported in December 1988. This facility was found eligible for the FDEP EDI program on June 22, 1990. The second incident of contamination (media unknown - pollutant was unleaded gas) was reported in December 1993. According to the PCTS Report, new cleanup is required for both incidents of contamination. No task level data are available.

Site No. 25W - Git In Go Food Store/Texaco (formerly Presto Food Mart) - One incident of groundwater/monitor well contamination (pollutant was generic gasoline) was reported in September 1988. This facility was found eligible for the FDEP EDI program on June 11, 1991. According to the PCTS Report, a SRCR was approved by the Bureau of Waste Cleanup in April 1993.

Site No. 30W - J.H. Williams Oil Company, Inc. - At least one incident of groundwater/monitor well contamination (pollutant is unknown) was reported in January 1987. This facility was found eligible for the FDEP EDI program on December 24, 1990. According to the PCTS Report, the facility cleanup status is ongoing. The RA is in progress.

A CAR was prepared for this facility by MGM Petro Equipment & Environmental Services in September 1992. The CAR Addendum I, June 1993, responded to comments provided by the FDEP. "As a result of all findings, an appropriate RAP is being devised and is forthcoming pending approval of this Contamination Assessment Report. Initial Remedial Action procedures were not performed at this site. Free product has never been encountered in any monitoring well installed to date (September 10, 1992). Contaminated soil has not been detected at this facility."

Site No. 36E - La Pasa Dita (formerly Cracker Shack, a.k.a. United 500) - One incident of soil contamination (pollutant unknown) was reported in December 1988. This facility was found eligible for the FDEP EDI program on May 4, 1990. According to the PCTS Report, new cleanup is required. A site assessment cleanup activity is in progress.

Site No. 44E - Coastal Mart & Convenience Store - One incident of contamination (in the monitor well - pollutant is unknown) was reported in November 1988. This facility was found eligible for the FDEP EDI program on April 23, 1990. According to the PCTS Report, new cleanup is required. No task level data are available.

9.0 RECOMMENDATIONS

The potential for contamination associated with the various alternatives are shown below:

	Alternative	Alternative	
	2	3	Alternative
Risk	(left)	(right)	4 (center)
High	2	2	2
Medium	1	2	2
Low	5	6	7
No	0	1	1

Based on the risk rating assigned to each potential contamination site, it is

anticipated that Alternative 2 would minimize the contamination concerns.

It is recommended that the following four sites, rated as having a MEDIUM or HIGH potential for contamination, be further analyzed through a Level 2 Contamination Assessment prior to the design phase of this project to verify or refute the potential contamination concerns:

1. HIGH - Site No. 23W - Pat's Food Mart (a.k.a United 500)
2. MEDIUM - Site No. 25W - Git In Go Food Store/Texaco (formerly Presto Food Mart)
3. HIGH - Site No. 30W - J.H. Williams Oil Company, Inc.
4. MEDIUM - Site No. 36E - La Pasa Dita (formerly Cracker Shack, a.k.a. United 500)

The Level 2 Contamination Assessment should include field screening with an organic vapor analyzer (OVA) and the collection of soil and groundwater samples for laboratory analysis. If the results of the testing indicate no evidence of soil or groundwater contamination, the rating of the site could be revised downward. Typically, the rating of field tested sites with no evidence of contamination would be revised to LOW. Because of the nature of the businesses conducted (e.g. gasoline service stations), some sites could remain rated as having a MEDIUM potential even if field testing did not reveal the presence of contamination.

10.0 SOURCES

- United States Department of Agriculture, Soil Conservation Service (now Natural Resource Conservation Service), Soil Survey of Pasco County, Florida, June 1982.
- United States Geological Survey Quadrangle Maps, Scale 1:24,000: Dade City, FLA, 1960.
- Southwest Florida Water Management District, Aerial Photography With Contours, Scale 1:2000 (1"=200') 1-foot contour interval, December 1977.
- Historical Pasco County Aerial Photography, Scale 1:2000 (1"=200'), years 1966, 1974, 1982 and 1995.
- Dade City Comprehensive Plan, Tampa Bay Regional Planning Council, June 1989.
- Dade City Storm Water Master Plan, Michaels Engineering, Inc., 1965.
- Pasco County Comprehensive Plan, July 3, 1989, Revised April 5, 1995.
- Straight Line Diagram for US 98, FDOT District Seven, Planning and Statistics Office, January 29, 1999.
- FDOT Construction Plans for US 98: State Project Numbers 14130-3501 July 24, 1979; 14130-3502 January 8, 1985; 14130-3503 June 8, 1988; 14130-3504 March 26, 1987, 14130-3505 October 16, 1992.
- FDOT Construction Plans for US 301: State Project Numbers 14050-3530, March 6, 1985; and 14050-3550, November 19, 1998.
- FDOT Drainage Manual, Volume 2a, Chapter 3, March 1, 1987.
- 1988 Dade City and 1989 Pasco County Existing Land Use Maps.
- 1988 Dade City and 2010 Pasco County Future Land Use Maps.
- United States Environmental Protection Agency.
- Florida Department of Environmental Protection, Agricultural Source and Water Well Management Bureau of Drinking Water and Groundwater Resources.
- Florida Department of Environmental Protection, Bureau of Waste Management.
- Florida Department of Transportation's Project Development and Environment Manual, Part 2, Chapter 22, February 8, 1994.
- Preliminary Geotechnical Report, March 2000.
- Dade City Directories, years 1979, 1991, 1992, 1995, 1996 and 1997.
- Tampa Bay Local Emergency Planning Committee, District 8.
- Interviews, correspondence and site investigations.

- Environmental Data Management, Inc. provided the following:
 - ✓ Standard Radius Report, January 15, 1999
 - ✓ Stationary Tanks Inventory System List, January 15, 1999
 - ✓ Petroleum Contamination Tracking System Report, January 15, 1999
 - ✓ Florida State Funded Action Sites List, January 15, 1999
 - ✓ Florida Sites List, January 15, 1999
 - ✓ Solid Waste Facilities List, January 15, 1999
 - ✓ Hazardous Waste Compliance & Enforcement Tracking System Report, November 3, 1998
 - ✓ National Priorities List, January 15, 1999
 - ✓ Comprehensive Environmental Response, Compensation and Liability Information System List, January 15, 1999
 - ✓ No Further Remedial Action Planned List, January 15, 1999
 - ✓ Emergency Response Notification System List, January 15, 1999
 - ✓ RCRIS Handlers With Corrective Action, January 15, 1999
 - ✓ Resource Conservation and Recovery Information System, January 15, 1999
 - ✓ Hazardous Waste Data Management System List, February 1, 1991
 - ✓ Facility Index Data System List, January 15, 1999
 - ✓ Toxic Release Inventory System List, January 15, 1999