

**Federal Highway Administration
Region Four**

**ADMINISTRATIVE ACTION
ENVIRONMENTAL ASSESSMENT**

**U.S. Department of Transportation
Federal Highway Administration**

and

Florida Department of Transportation

In Cooperation with

City of Tampa

**State Project Number: 10007-1550
Federal Project Number: XU-1917-(1)
Work Program Number: 7123608**

**40th Street/McKinley Drive from Hillsborough Avenue (S.R. 600/U.S.92)
to Fowler Avenue (S.R. 582) in Hillsborough County, Florida**

**This project evaluates improvement alternatives and alignment locations
associated with multi-laning 40th Street/McKinley Drive from a two lane
rural section to an urban four lane divided section. The approximate length
of the project is 6.6 km (4.1 miles).**

Submitted pursuant to 42 U.S.C. 4332 (2) (c).

Approved for Public Availability

Date

**Division Administrator
Federal Highway Administration**

TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
	TABLE OF CONTENTS	i
	LIST OF TABLES	iv
	LIST OF FIGURES	v
1.0	DESCRIPTION OF THE PROPOSED ACTION	1-1
	1.1 Introduction	1-1
	1.2 Proposed Action	1-2
	1.3 References	1-3
2.0	NEED	2-1
	2.1 Planning Basis for the Proposed Action	2-1
	2.2 System Linkage	2-1
	2.3 Existing Corridor Capacity	2-2
	2.4 Transportation Demand	2-5
	2.5 Federal, State and Local Governmental Authority	2-15
	2.6 Social Demands and Economic Development	2-15
	2.7 Modal Interrelationships	2-18
	2.7.1 Transit	2-18
	2.7.2 School Buses	2-19
	2.7.3 Commuter Rail	2-19
	2.7.4 Rail	2-19
	2.7.5 Aviation	2-20
	2.7.6 Port of Tampa	2-20
	2.8 Traffic Safety	2-21
	2.9 Bridge/Navigation	2-26
	2.10 References	2-26
3.0	ALTERNATIVES CONSIDERED	3-1
	3.1 No-Action Alternative	3-1
	3.2 Alternatives Considered and Rejected	3-3
	3.3 Transportation Systems Management Alternatives	3-4
	3.4 Multi-Modal Alternatives	3-5
	3.5 Construction Alternatives	3-6
	3.5.1 Roadway Design Criteria	3-6
	3.5.2 Preliminary Alternative Alignments	3-7
	3.5.3 Reasonable and Feasible Alternative Alignments	3-20
	3.5.4 Segment A	3-21

TABLE OF CONTENTS (continued)

<u>Section</u>	<u>Title</u>	<u>Page</u>
	3.5.5 Segment B	3-23
	3.5.6 Segment C	3-28
	3.5.7 Segment D	3-31
3.6	Design Year Traffic Operations	3-33
3.7	Preferred Alternative Refinement	3-34
3.8	Summary of Alternatives Analysis	3-35
3.9	Description of Alternatives Summary	3-35
3.10	References	3-38
4.0	IMPACTS	4-1
4.1	Social and Economic Impacts	4-1
	4.1.1 Community Cohesion	4-1
	4.1.2 Community Services	4-2
	4.1.3 Land Uses	4-4
	4.1.4 Relocations	4-6
	4.1.5 Utilities and Railroads	4-9
4.2	Cultural and Historic Resources	4-9
	4.2.1 Archaeological and Historical	4-9
	4.2.2 Recreational/Parkland	4-10
4.3	Natural and Physical Impacts	4-10
	4.3.1 Pedestrian/Bicycle Facilities	4-10
	4.3.2 Visual/Aesthetics	4-11
	4.3.3 Contamination	4-11
	4.3.4 Air	4-19
	4.3.5 Noise	4-19
	4.3.6 Wetlands	4-22
	4.3.7 Water Quality	4-23
	4.3.8 Floodplains	4-24
	4.3.9 Coastal Zone Consistency	4-25
	4.3.10 Wildlife and Habitat	4-25
	4.3.11 Construction	4-26
4.4	References	4-28
5	COMMENTS AND COORDINATION	5-1
5.1	Introduction	5-1
5.2	Advance Notification	5-1
	5.2.1 Agencies On The Mailing List	5-2
	5.2.2 Summary of Agency Responses	5-3
5.3	Coordination and Consultation	5-6

TABLE OF CONTENTS (continued)

<u>Section</u>	<u>Title</u>	<u>Page</u>
5.3.1	Community Coordination/Public Involvement	5-6
5.3.2	Public Meetings	5-8
5.3.3	Summary of Public Meetings	5-8
5.3.4	Utility Coordination	5-12
5.3.5	Public Hearing	
5.4	References	5-12

APPENDICES

Appendix A - Correspondence

Appendix B - Preferred Alternative

Appendix C - Water Quality Impact Evaluation

LIST OF TABLES

<u>Section and Number</u>	<u>Title</u>	<u>Page</u>
2-1	Existing (1995) Level of Service for Signalized Intersections	2-4
2-2	Existing (1995) Directional Level of Service for Arterial Segment	2-4
2-3	Model Volume to Design Hour Volume Conversion Factors	2-6
2-4	Design Hour (2020) Level of Service for Signalized Intersections	2-9
2-5	Design Hour (2020) Directional Segment Level of Service	2-11
2-6	Crash Summary at Intersections	2-22
2-7	Crash Summary for Roadway Segments	2-23
2-8	Type of Crash for Roadway Intersections	2-24
2-9	Type of Crash for Roadway Segments	2-24
3-1	Evaluation Matrix - Alternative 1: East Alignment Four Lane Divided Roadway	3-11
3-2	Evaluation Matrix - Alternative 1B: East Alignment Four Lane Divided Roadway with New Bridge Alignment	3-12
3-3	Evaluation Matrix - Alternative 2: West Alignment Four Lane Divided Roadway	3-13
3-4	Evaluation Matrix - Alternative 3: Center Alignment Four Lane Divided Roadway	3-14
3-5	Evaluation Matrix - Alternative 4: Center Alignment Five Lane Roadway	3-15
3-6	Evaluation Matrix - Alternative 5: Center Alignment Enhanced Four Lane Divided Roadway	3-16
3-7	Evaluation Matrix - Segment A	3-22
3-8	Evaluation Matrix - Segment B	3-24
3-9	Evaluation Matrix - Segment C	3-29
3-10	Evaluation Matrix - Segment D	3-32
3-11	Evaluation Matrix - Preferred Alignment Four Lane Divided Roadway	3-36
3-12	Comparative Alternatives Evaluation Matrix	3-37
4-1	Potentially Contaminated Sites	4-13

LIST OF FIGURES

Section and Figure Number	Title	Follows Page
1-1	Project Location Map	1-1
1-2A	Study Area Map	1-1
1-2B	Study Area Map	1-1
2-1A	Existing AM (PM) Peak Hour Turning Movement Counts	2-2
2-1B	Existing AM (PM) Peak Hour Turning Movement Counts	2-2
2-2	1995 Annual Average Daily Traffic Volumes	2-3
2-3	Projected 2020 Annual Average Daily Traffic Volumes	2-6
2-4A	Design Hour (2020) Turning Movement Volumes	2-8
2-4B	Design Hour (2020) Turning Movement Volumes	2-8
2-5	Roundabout Location Map	2-13
2-6A	Proposed Lane Geometry At Signalized Intersections/ Roundabout Locations	2-14
2-6B	Proposed Lane Geometry At Signalized Intersections/ Roundabout Locations	2-14
2-7	Three Year Accident Data Summary (Reported For Years 1992, 1993 & 1994)	2-24
3-1	Typical Section 1	3-7
3-2	Typical Section 2	3-7
3-3	Typical Section 3	3-7
3-4	Typical Section 4	3-7
3-5	Typical Section 5	3-7
3-6	Typical Section 6	3-7
3-7	Typical Section 7	3-7
3-8	Typical Section 8	3-7
3-9	Typical Section 9	3-7
3-10	Proposed Roadway Typical Section	3-34
3-11	Proposed Bridge Typical Section	3-34
4-1A	Location of Potential Contamination Sites	4-12
4-1B	Location of Potential Contamination Sites	4-12
4-2	Potential Noise Barrier Location	4-21
4-3	Potential Noise Barrier Location	4-21
4-4	Potential Noise Barrier Location	4-21

SECTION 1

DESCRIPTION OF THE PROPOSED ACTION

1.1 INTRODUCTION

The City of Tampa (City) and the Hillsborough County Metropolitan Planning Organization (MPO) in cooperation with the Florida Department of Transportation (FDOT) have identified the need to improve 40th Street/McKinley Drive in Tampa, and Hillsborough County, Florida. Based on this need the City is conducting the necessary preliminary engineering and environmental evaluations to identify the need, type, design, and location of multi-lane improvements to the corridor and major intersections.

The project limits extend from Hillsborough Avenue (S.R. 600/U.S. 92) to Fowler Avenue (S.R. 582), a distance of approximately 6.6 km (4.1 miles). Figure 1-1 illustrates the limits of the study area in relation to the highway system. Figure 1-2 (A and B) presents a more detailed map identifying project study segments and key roadways, both of which will be referenced throughout this report. Project segments were developed to effectively assess and compare the impacts of each alternative in different geographical areas within the project corridor. Based on existing variable right-of-way (ROW) widths, existing land use patterns, and the locations of crossover streets, the project was divided into four study segments as follows:

Segment A - Hillsborough Avenue to Fern Street

Segment B - Fern Street to Riverhills Drive

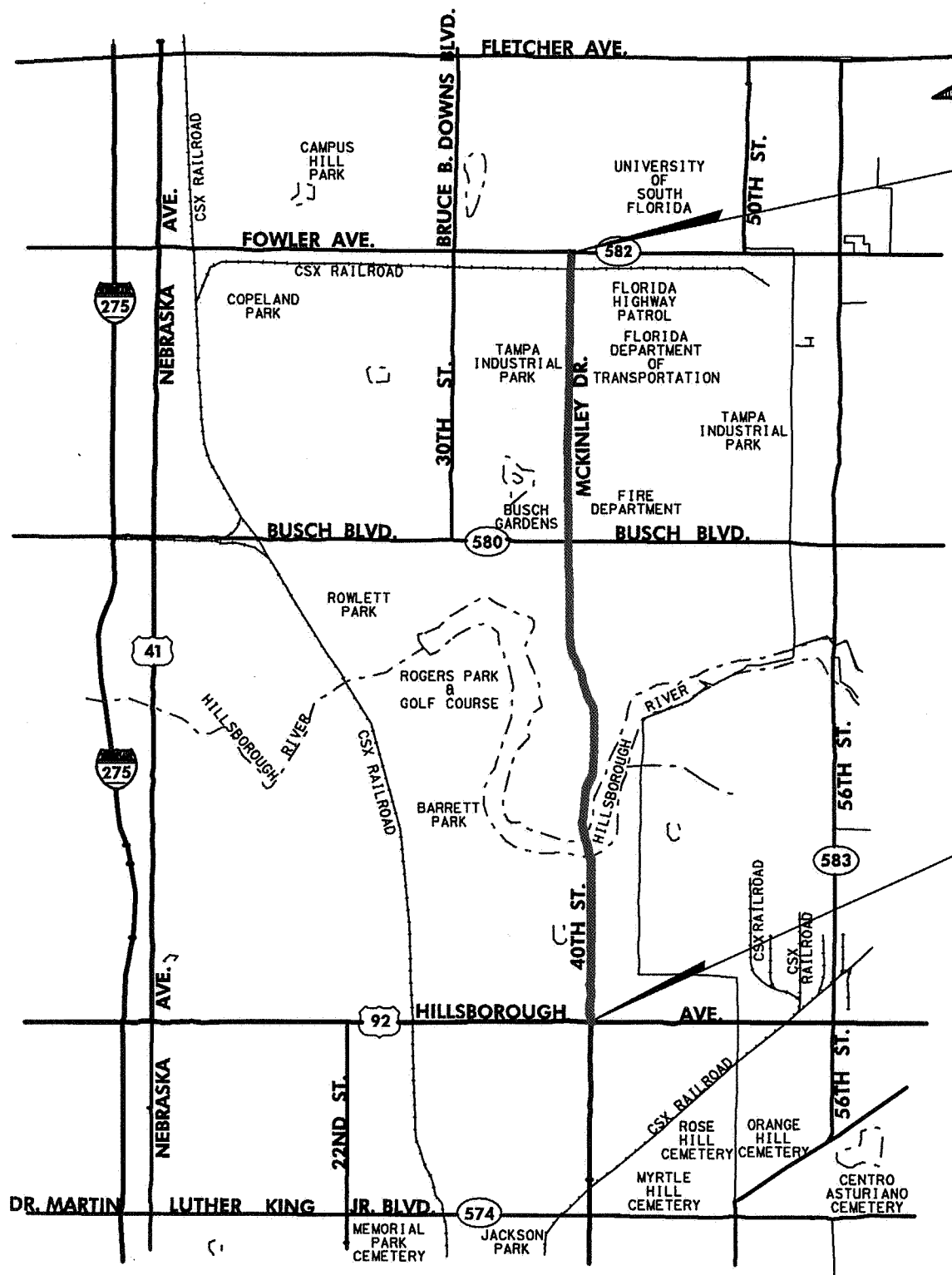
Segment C - Riverhills Drive to Busch Boulevard

Segment D - Busch Boulevard to Fowler Avenue









END PROJECT

BEGIN PROJECT



LEGEND

-  Project Limits
-  River / Water
-  Railroad
-  Interstate
-  US Route
-  State Road

Refer To: Sulphur Springs and Tampa Quadrangle Maps

40TH STREET/MCKINLEY DRIVE PD&E STUDY
HILLSBOROUGH AVENUE (SR 600 & US 92)
TO FOWLER AVENUE (SR 582)
HILLSBOROUGH COUNTY, FLORIDA

**CITY OF TAMPA
AND
FLORIDA DEPARTMENT OF TRANSPORTATION**

PROJECT LOCATION MAP

SPN: 10007-1550 WPI: 7123608 **FIGURE 1-1**

21-NOV-1996 13:33
F:\projects\pde\40th\plmpr\d01.dgn

LEGEND



RIVER /WATER



RAILROAD



US ROUTE



STATE ROAD



① NORTHSIDE MB CHURCH



② FORTIETH STREET BAPTIST CHURCH



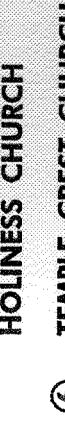
③ CHURCH OF GOD



④ APOSTOLIC ROCK CHURCH



⑤ THE GLORIOUS COMMUNITY HOLINESS CHURCH



⑥ TEMPLE CREST CHURCH OF CHRIST



⑦ TEMPLE BAPTIST CHURCH



⑧ WORD OF LIFE FOURSQUARE GOSPEL CHURCH

40TH STREET/MCKINLEY DRIVE PD&E STUDY
HILLSBOROUGH AVENUE
(SR 600 & US 92)
TO FOWLER AVENUE (SR 582)
HILLSBOROUGH COUNTY, FLORIDA

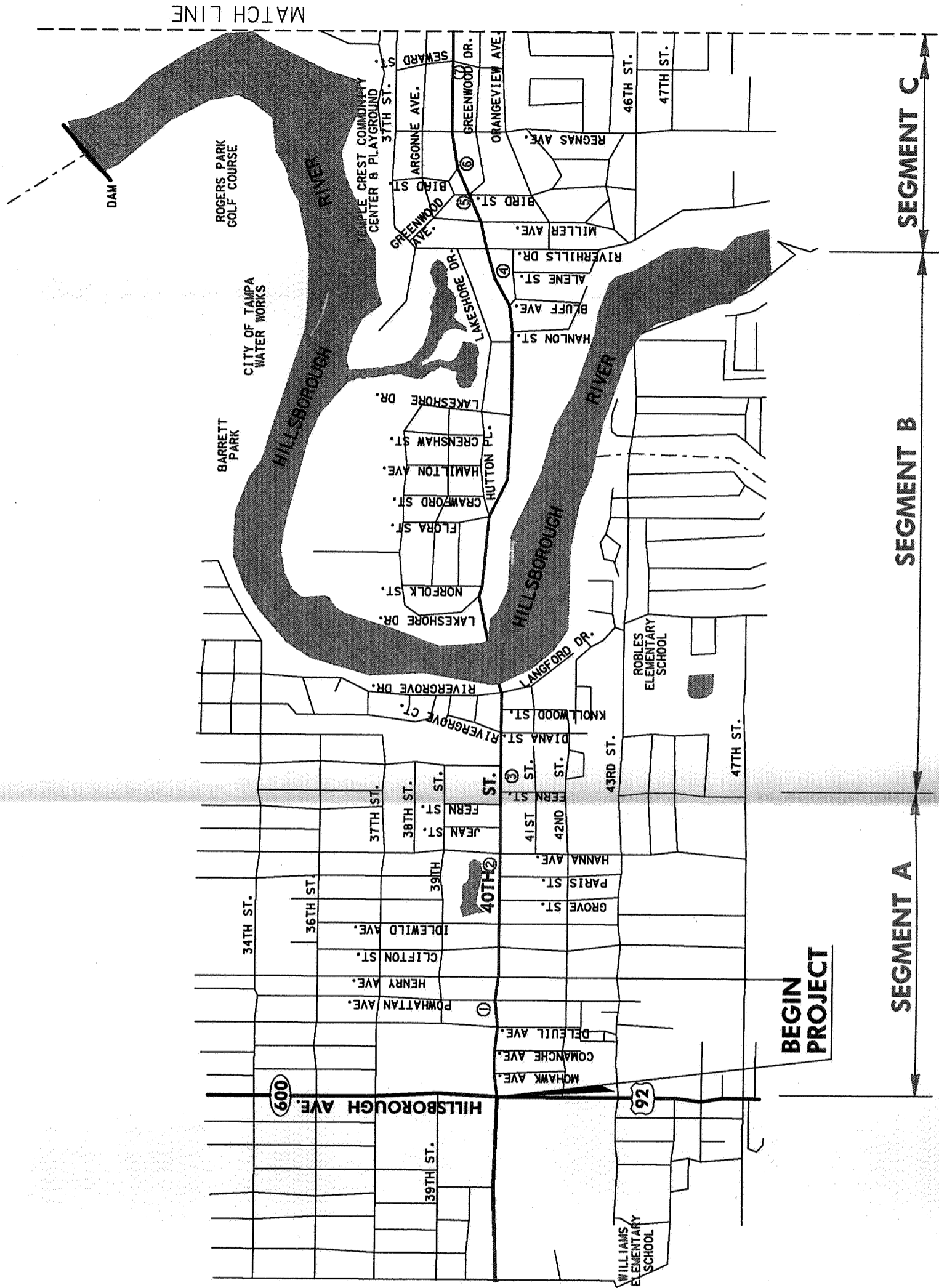
CITY OF TAMPA
AND
FLORIDA DEPARTMENT OF
TRANSPORTATION

STUDY AREA MAP

SPN: 10007-1550
WPI: 7123608

FIGURE 1-2A

21-NOV-1996 13:36
r:\projects\pde\40th\stmp\01.dgn



SEGMENT A

SEGMENT B

SEGMENT C

BEGIN PROJECT

MATCH LINE

DAM

ROGERS PARK GOLF COURSE

CITY OF TAMPA WATER WORKS

BARRETT PARK

HILLSBOROUGH RIVER

HILLSBOROUGH RIVER

HILLSBOROUGH RIVER

HILLSBOROUGH RIVER

HILLSBOROUGH RIVER

HILLSBOROUGH RIVER

HILLSBOROUGH RIVER

HILLSBOROUGH RIVER

HILLSBOROUGH RIVER

HILLSBOROUGH RIVER

HILLSBOROUGH RIVER

HILLSBOROUGH RIVER

TEMPLE CREST COMMUNITY CENTER & PLAYGROUND

WILLIAMS ELEMENTARY SCHOOL

ROBLES ELEMENTARY SCHOOL

37TH ST.

38TH ST.

39TH ST.

40TH ST.

41ST ST.

42ND ST.

43RD ST.

44TH ST.

45TH ST.

46TH ST.

47TH ST.

48TH ST.

49TH ST.

50TH ST.

51ST ST.

52ND ST.

53RD ST.

54TH ST.

55TH ST.

56TH ST.

57TH ST.

58TH ST.

59TH ST.

60TH ST.

61ST ST.

62ND ST.

63RD ST.

64TH ST.

65TH ST.

66TH ST.

67TH ST.

68TH ST.

69TH ST.

70TH ST.

71ST ST.

72ND ST.

73RD ST.

74TH ST.

75TH ST.

76TH ST.

77TH ST.

78TH ST.

79TH ST.

80TH ST.

81ST ST.

82ND ST.

83RD ST.

84TH ST.

85TH ST.

86TH ST.

87TH ST.

88TH ST.

89TH ST.

90TH ST.

91ST ST.

92ND ST.

93RD ST.

94TH ST.

95TH ST.

96TH ST.

97TH ST.

98TH ST.

99TH ST.

100TH ST.

101ST ST.

102ND ST.

103RD ST.

104TH ST.

105TH ST.

106TH ST.

107TH ST.

108TH ST.

109TH ST.

110TH ST.

111TH ST.

112ND ST.

113RD ST.

114TH ST.

115TH ST.

116TH ST.

117TH ST.

118TH ST.

119TH ST.

120TH ST.

121ST ST.

122ND ST.

123RD ST.

124TH ST.

125TH ST.

126TH ST.

127TH ST.

128TH ST.

129TH ST.

130TH ST.

131ST ST.

132ND ST.

133RD ST.

134TH ST.

135TH ST.

136TH ST.

137TH ST.

138TH ST.

139TH ST.

140TH ST.

141ST ST.

142ND ST.

143RD ST.

144TH ST.

145TH ST.

146TH ST.

147TH ST.

148TH ST.

149TH ST.

150TH ST.

151ST ST.

152ND ST.

153RD ST.

154TH ST.

155TH ST.

156TH ST.

157TH ST.

158TH ST.

159TH ST.

160TH ST.

161ST ST.

162ND ST.

163RD ST.

164TH ST.

165TH ST.

166TH ST.

167TH ST.

168TH ST.

169TH ST.

170TH ST.

171ST ST.

172ND ST.

173RD ST.

174TH ST.

175TH ST.

176TH ST.

177TH ST.

178TH ST.

179TH ST.

180TH ST.

181ST ST.

182ND ST.

183RD ST.

184TH ST.

185TH ST.

186TH ST.

187TH ST.

188TH ST.

189TH ST.

190TH ST.

191ST ST.

192ND ST.

193RD ST.

194TH ST.

195TH ST.

196TH ST.

197TH ST.

198TH ST.

199TH ST.

200TH ST.

201ST ST.

202ND ST.

203RD ST.

204TH ST.

205TH ST.

206TH ST.

207TH ST.

208TH ST.

209TH ST.

210TH ST.

211ST ST.

212ND ST.

213RD ST.

214TH ST.

215TH ST.

216TH ST.

217TH ST.

218TH ST.

219TH ST.

220TH ST.

221ST ST.

222ND ST.

223RD ST.

224TH ST.

225TH ST.

226TH ST.

227TH ST.

228TH ST.

229TH ST.

230TH ST.

231ST ST.

232ND ST.

233RD ST.

234TH ST.

235TH ST.

236TH ST.

237TH ST.

238TH ST.

239TH ST.

240TH ST.

241ST ST.

242ND ST.

243RD ST.

244TH ST.

245TH ST.

246TH ST.

247TH ST.

248TH ST.

249TH ST.

250TH ST.

251ST ST.

252ND ST.

253RD ST.

254TH ST.

255TH ST.

256TH ST.

257TH ST.

258TH ST.

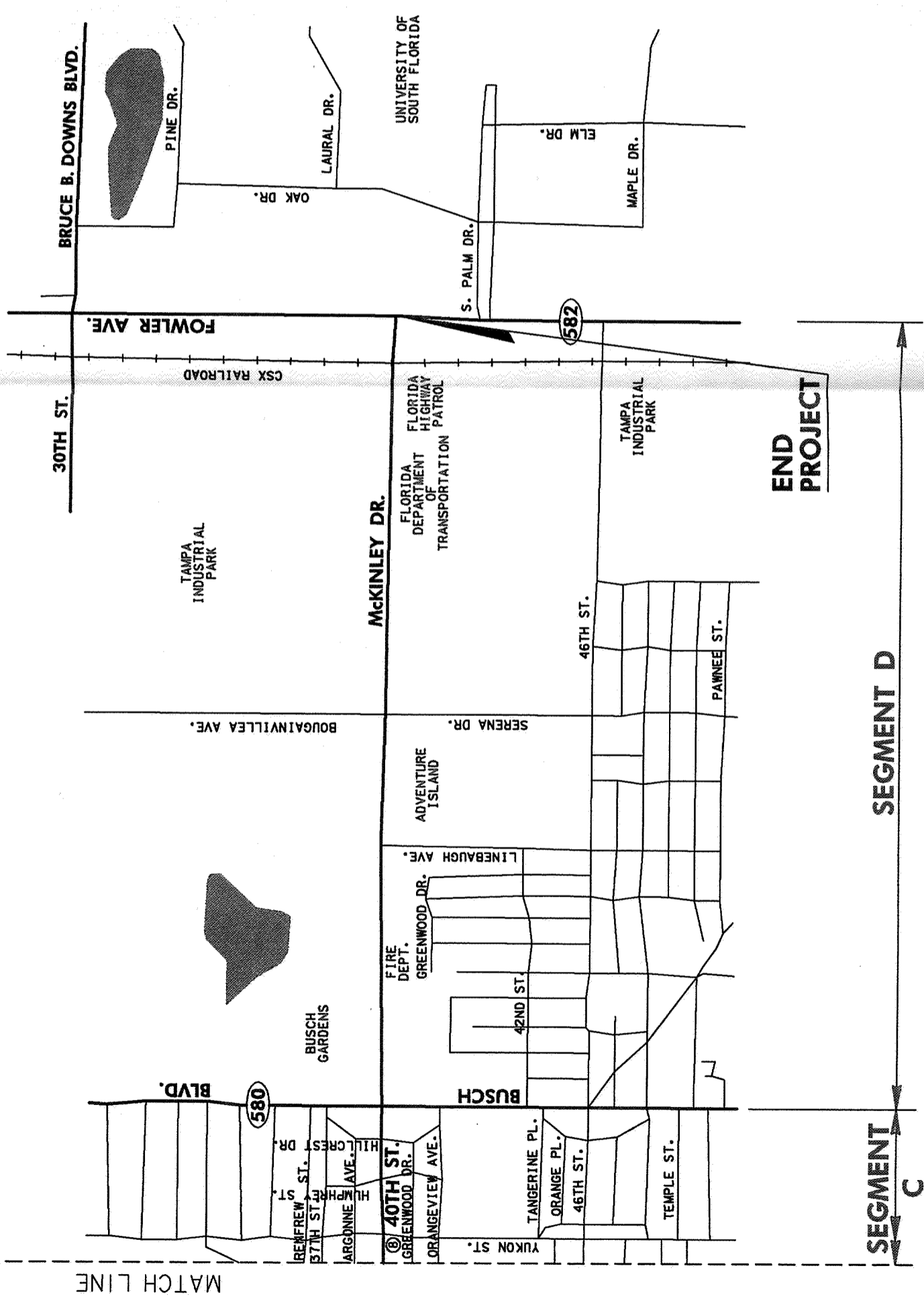
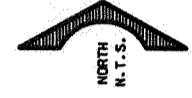
259TH ST.

260TH ST.

261ST ST.

262ND ST.

263RD ST.



LEGEND

- RIVER /WATER
- RAILROAD
- US ROUTE
- STATE ROAD
- ① NORTHSIDE MB CHURCH
- ② FORTIETH STREET BAPTIST CHURCH
- ③ CHURCH OF GOD
- ④ APOSTOLIC ROCK CHURCH
- ⑤ THE GLORIEST COMMUNITY HOLINESS CHURCH
- ⑥ TEMPLE CREST CHURCH OF CHRIST
- ⑦ TEMPLE CREST BAPTIST CHURCH
- ⑧ WORD OF LIFE FOURSQUARE GOSPEL CHURCH

40TH STREET/MCKINLEY DRIVE PD&E STUDY
 HILLSBOROUGH AVENUE
 (SR 600 & US 92)
 TO FOWLER AVENUE (SR 582)
 HILLSBOROUGH COUNTY, FLORIDA

CITY OF TAMPA
 AND
 FLORIDA DEPARTMENT OF
 TRANSPORTATION

STUDY AREA MAP

1.2 PROPOSED ACTION

The 40th Street/McKinley Drive corridor is currently a rural two-lane (open drainage), county-maintained (off-state system) roadway from Hillsborough Avenue north to Fowler Avenue where 40th Street/McKinley Drive terminates. A two lane low level fixed span structure, constructed in 1955, crosses the Hillsborough River and is located between River Grove Drive and Lakeshore Drive. South of Hillsborough Avenue, 40th Street is a six-lane divided urban facility, and carries the U.S. 41(S.R. 599) designation which connects with Interstate 4 (S.R. 400) and the Leroy Selmon Expressway (S.R. 618/Crosstown Expressway).

This roadway provides access along its length to businesses, multi-family units, residential subdivisions and community facilities. Major traffic generators located along the northern portion of the project corridor include Busch Gardens, Adventure Island and the University of South Florida. The existing posted speed limit along the 40th Street/McKinley Drive corridor from Hillsborough Avenue to Busch Boulevard is 35 mph and from Busch Boulevard to Fowler Avenue is 45 mph.

The existing 40th Street/McKinley Drive corridor is functionally classified as a minor arterial. The project corridor provides intermittently for pedestrian facilities, but not for bicycle facilities. Existing ROW widths along the project corridor vary. Between Hillsborough Avenue to Busch Boulevard ROW widths range from 15.240 m (50 ft) to 21.336 m (70 ft). From Busch Boulevard north to Fowler Avenue 45.720 m (150 ft) of ROW is provided. In addition, the 40th Street/McKinley Drive corridor is designated as Hillsborough Area Regional Transit (HARTline) Route #5 and is a transit emphasis corridor. A transit emphasis corridor is designed to give public transit an advantage over the single occupant vehicle, as stated in the City of Tampa Comprehensive Plan Transportation, Mass Transit and Traffic Circulation Elements ¹.

The anticipated growth for this area of Tampa will increase the traffic demand along the 40th Street/McKinley Drive project corridor. As the traffic volumes continue to increase on this roadway facility, the LOS will decrease and the number of crashes can be expected to increase. Proposed improvements include widening the existing roadway from a two-lane rural type section to an urban four-lane divided section, adding a median, providing sidewalks and bike lanes, improving intersections, providing roundabouts at selected locations, and adjusting the curvature of the roadway for the proposed design speed. Additionally, the existing low level two-lane bridge over the Hillsborough River will be replaced to provide for a low level four-lane structure which meets current design standards. The current low level two-lane bridge is in fair structural condition with a sufficiency rating of 68.4 but is "functionally obsolete" since it does not meet current design standards due to the lack of shoulders.

These improvements will improve the LOS and enhance the corridor's safety and reduce the potential for crashes. The specific typical sections for the proposed action are discussed in detail in Section 3 of this report. Impacts associated with the proposed improvements are discussed in Section 4 and summarized in Table 3-11, Evaluation Matrix, Recommended Alternative.

1.3 REFERENCES

1. City of Tampa Comprehensive Plans Transportation, Mass Transit and Traffic Circulation Elements; City of Tampa Planning Department; Tampa, Florida; October 1993.

SECTION 2

NEED

This section documents the need for the proposed action on 40th Street/McKinley Drive. The need is established through documentation of the planning basis for improvement as well as an evaluation of the current and projected travel demand and available capacity in the project corridor.

2.1 PLANNING BASIS FOR THE PROPOSED ACTION

The City of Tampa Comprehensive Plan Transportation, Mass Transit and Traffic Circulation Elements¹ and the Hillsborough County Metropolitan Planning Organization Adopted 2015 Long Range Transportation Plan² and Transportation Improvement Program³ designates 40th Street/McKinley Drive, as a minor arterial, and as a future four-lane facility from Hillsborough Avenue to Fowler Avenue. The alternatives under consideration for the 40th Street/McKinley Drive project corridor are consistent with these plans.

2.2 SYSTEM LINKAGE

Hillsborough County and the City of Tampa is serviced by major interstate facilities consisting of I-75, I-275 and I-4. I-75 and I-275 provide major north/south travel along the central and west coast of Florida, while I-4 provides major east/west travel between the City of Tampa, Orlando and the east coast of Florida.

The project area is bounded to the south by U.S. 41 (40th Street) at U.S. 92 (Hillsborough Avenue), I-4 and the Leroy Selmon Expressway, a local east/west toll facility which connects the Brandon community with downtown Tampa and Gandy Boulevard (U.S. 92) to the west side of Tampa. I-275 and U.S. 41 (Nebraska Avenue) border the project area to the west. To the east the project area is bounded by 56th Street (S.R. 583), U.S. 301 and

I-75. The northern terminus of 40th Street/McKinley Drive is at Fowler Avenue (S.R. 582) a major east/west arterial.





2.3 EXISTING CORRIDOR CAPACITY

The ability of a facility to operate safely and efficiently is a function of the projected travel demand and the available roadway capacity. Level of service (LOS) is a concept which assigns a letter grade (A, B, C, D, E or F) to a roadway facility as a gauge of the facilities' ability to provide traffic operations safely and efficiently. LOS A represents optimum free-flow traffic conditions while LOS F represents overcrowded conditions which exceed the safe capacity of the facility. LOS D is often considered to be the minimum desirable LOS; the City of Tampa requires that all **non-constrained** intersections and roadway segments operate at LOS D or better. An evaluation of the existing and projected traffic conditions in the corridor has been conducted. The Traffic Technical Memorandum⁴, published separately, documents these evaluations. The following briefly summarizes the existing and projected conditions.

Traffic counts taken by the City between 1992 and 1995 included non-classified 24-hour, one-day approach counts; 24-hour, one-day mid-block counts; 24-hour, seven-day intersection approach counts; and 24-hour seven-day mid-block counts. In addition, the City provided AM and PM peak turning movement counts which are shown in Figure 2-1 (A and B). Review of the traffic count data revealed that the peak hours of operation begin between 7:00 a.m. to 7:15 a.m. and between 4:45 p.m. and 5:00 p.m. Morning peak hours of operation near the entrance to Busch Gardens occur later than the rest of the facility. The peak hour of traffic operations at Busch Gardens corresponds with the normal opening hour of the amusement park, which occurs at 9:00 a.m., a later time than the peak hour of the rest of the roadway facility.

The 24-hour counts provided by the City were used as the basis for developing 1995 Average Annual Daily Traffic (AADT) volumes along 40th Street/McKinley Drive. By

LEGEND

-  RIVER / WATER
-  RAILROAD
-  US ROUTE
-  STATE ROAD

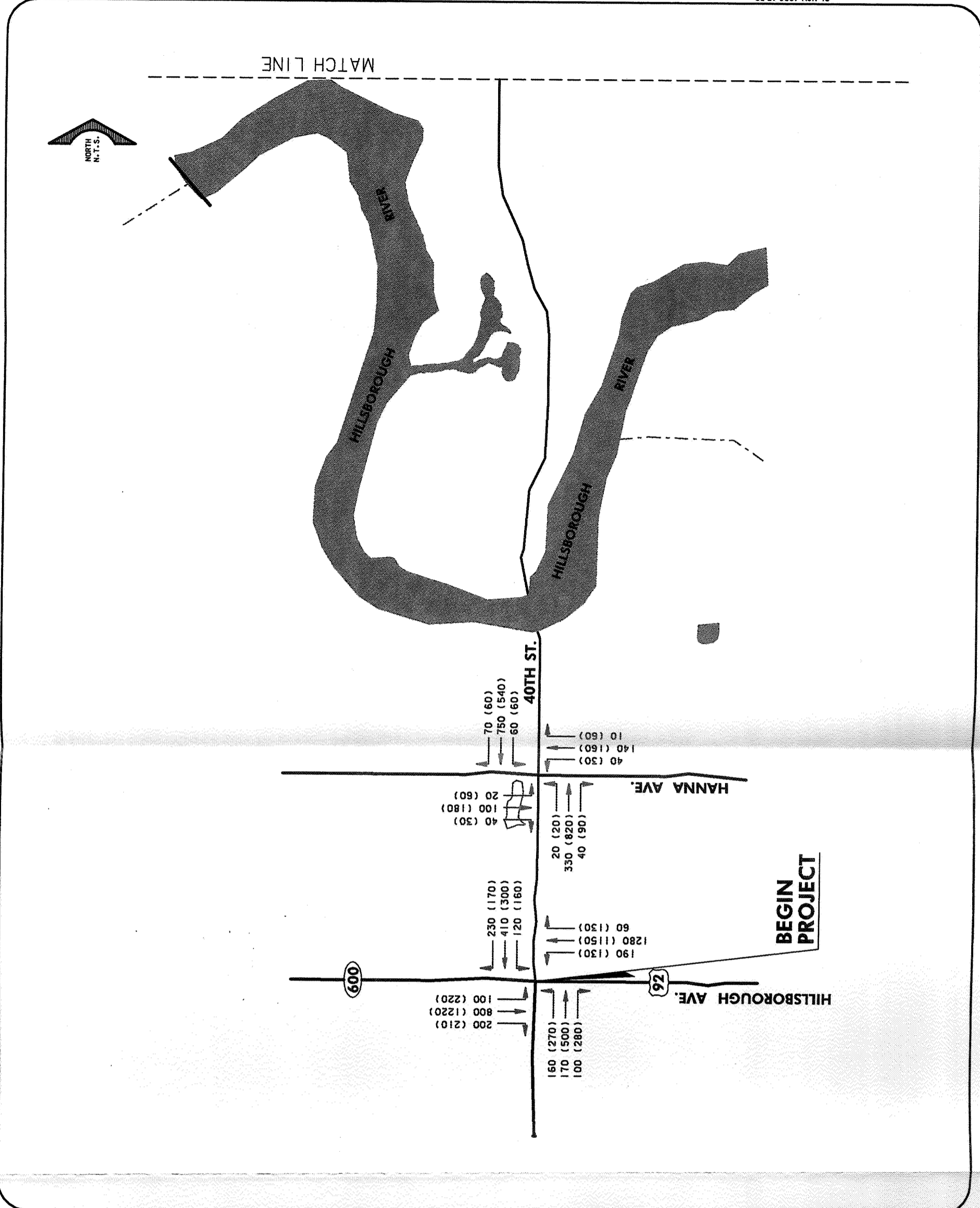
40TH STREET/MCKINLEY DRIVE PD&E STUDY
 HILLSBOROUGH AVENUE
 (SR 600 & US 92)
 TO FOWLER AVENUE (SR 582)
 HILLSBOROUGH COUNTY, FLORIDA

CITY OF TAMPA
 AND
 FLORIDA DEPARTMENT OF
 TRANSPORTATION





EXISTING AM (PM) PEAK HOUR
 TURNING MOVEMENT COUNTS

SPN: 10007-1550
 WPI: 7123608

FIGURE 2-1A



LEGEND

-  RIVER / WATER
-  RAILROAD
-  US ROUTE
-  STATE ROAD

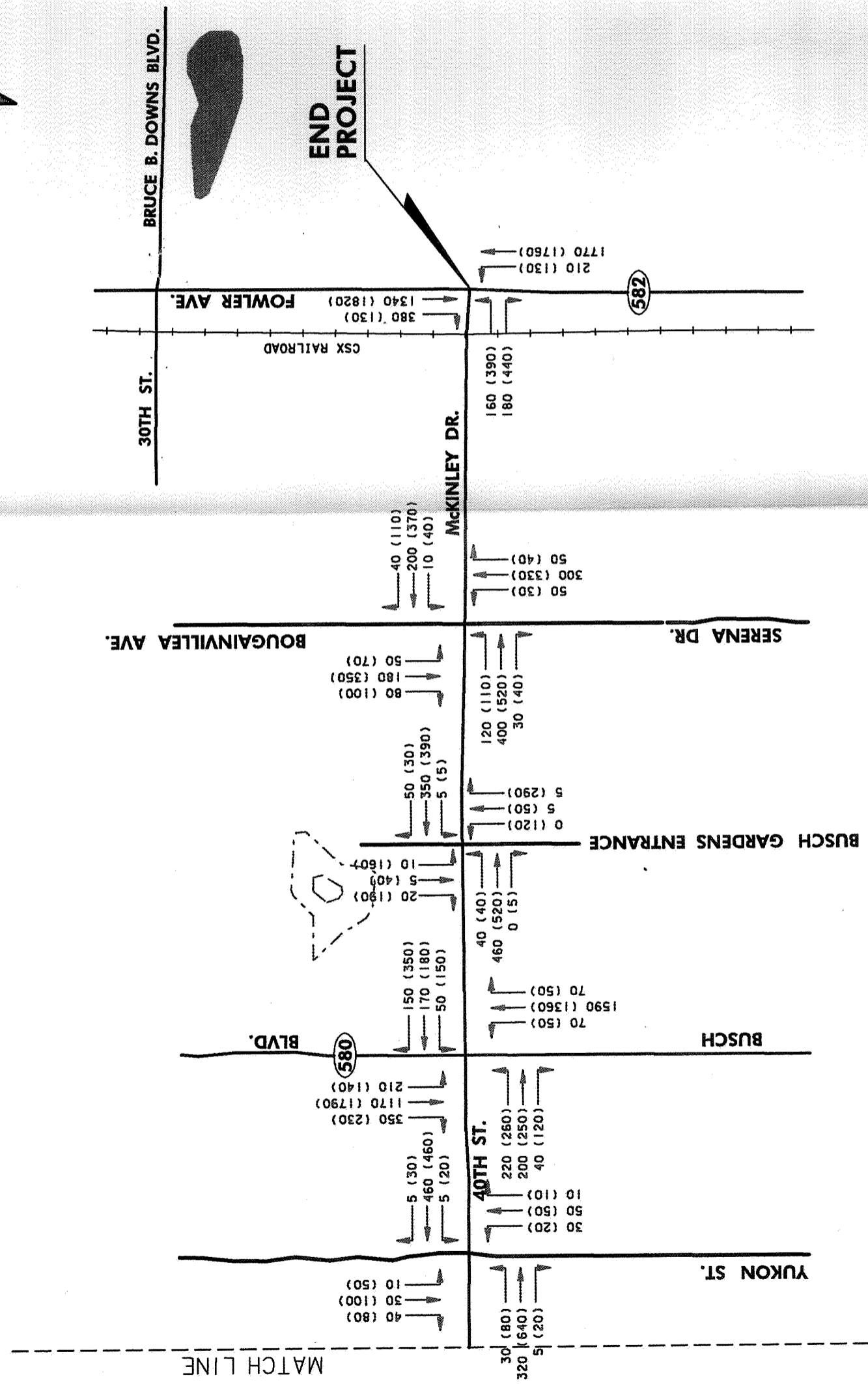
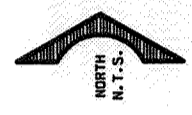
40TH STREET/McKINLEY DRIVE PD&E STUDY
 HILLSBOROUGH AVENUE
 (SR 600 & US 92)
 TO FOWLER AVENUE (SR 582)
 HILLSBOROUGH COUNTY, FLORIDA

**CITY OF TAMPA
 AND
 FLORIDA DEPARTMENT OF
 TRANSPORTATION**

**EXISTING AM (PM) PEAK HOUR
 TURNING MOVEMENT COUNTS**

SPN: 10007-1550
 WPI: 7123608

FIGURE 2-1B



END PROJECT

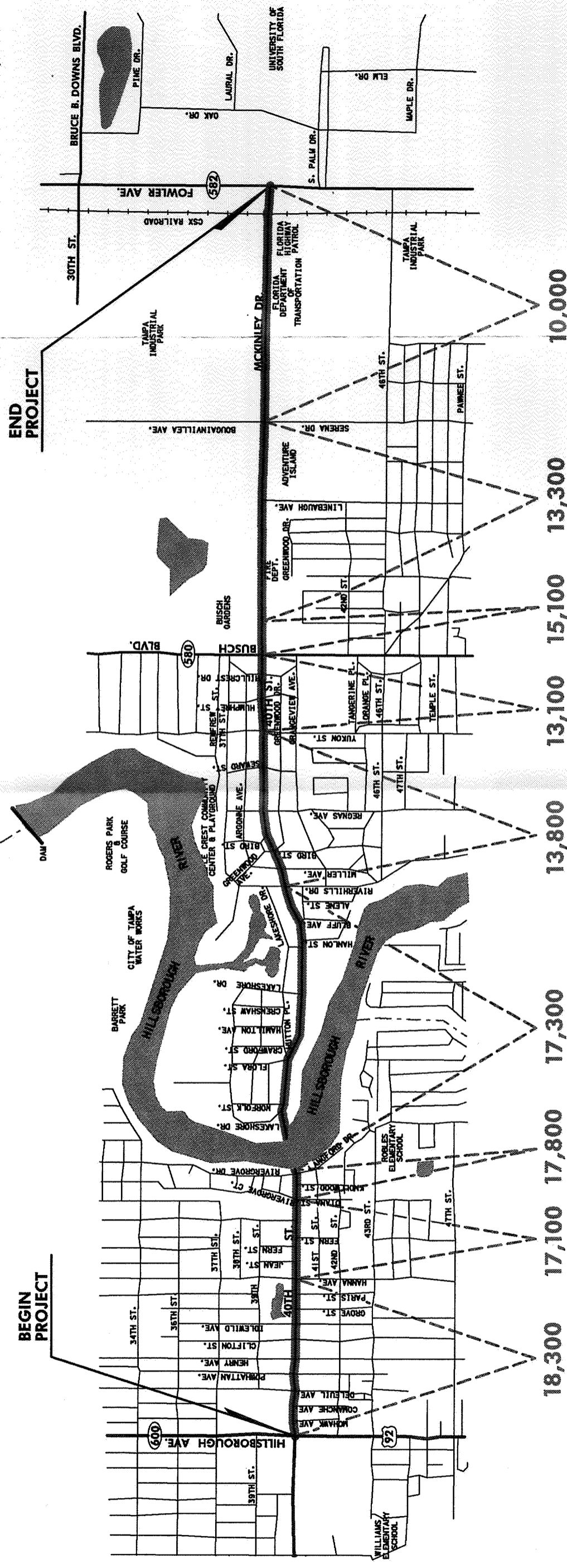
MATCH LINE

applying seasonal adjustment and axle adjustment factors to the traffic counts, AADT volumes were determined. Most of the traffic counts were conducted in years other than 1995. For these cases, the volumes were adjusted to AADT volumes for the count year using the appropriate factors provided by FDOT District Seven. The resulting AADT volumes were then adjusted using a yearly growth rate of 1.5% that is based on population data obtained from the Florida Statistical Abstract ⁵ for the years 1992, 1993 and 1994. The adjusted 1995 AADT volumes are provided in Figure 2-2.

The 1995 AADT volumes on 40th Street/McKinley Drive range from 10,000 vehicles per day (vpd) between Bougainvillea Avenue and Fowler Avenue to 18,300 vpd between Hillsborough Avenue and Hanna Avenue. In general, the northern segments of the corridor have lower AADT volumes than the southern segments. The AADT volumes at Busch Gardens range from 15,100 vpd south of the entrance and 13,300 vpd north of the entrance.

The Highway Capacity Software ⁶ (HCS) was used to evaluate the quality of traffic flow or LOS currently experienced in the study area. The HCS is based on analysis procedure defined in the Highway Capacity Manual, Special Report 209⁷. The morning and evening peak hour LOS were determined for seven signalized intersections and six directional arterial segments. Table 2-1 summarizes the LOS for AM and PM peak hours at signalized intersections. Table 2-2 summarizes the LOS for AM and PM peak hours for directional arterial segments. It is noted that the City of Tampa Comprehensive Plan requires that all non-constrained intersections and roadway segments operate at LOS D or better.

The LOS analysis for existing (1995) conditions, shown in Table 2-1, reveals that several signalized intersections are operating below the acceptable LOS standard (LOS D) during the AM and PM peak hour.



**40TH STREET/MCKINLEY DRIVE PD&E STUDY
HILLSBOROUGH AVENUE (SR 600 & US 92)
TO FOWLER AVENUE (SR 582)
HILLSBOROUGH COUNTY, FLORIDA**

1995 ANNUAL AVERAGE
DAILY TRAFFIC VOLUMES

**CITY OF TAMPA
AND
FLORIDA DEPARTMENT
OF
TRANSPORTATION**

LEGEND

- RIVER /WATER
- RAILROAD
- US ROUTE
- STATE ROAD

SPN: 10007-1550
WPI: 7123608

FIGURE 2-2

Table 2-1
Existing (1995) Level of Service for Signalized Intersections

Intersection Location	AM Peak Hour LOS	PM Peak Hour LOS
Hillsborough Avenue and 40th Street/McKinley Drive	C	F
Hanna Avenue and 40th Street/McKinley Drive	E	F
Yukon Street and 40th Street/McKinley Drive	B	F
Busch Boulevard and 40th Street/McKinley Drive	D	D
Busch Gardens Entrance and 40th Street/McKinley Drive	C	C
Bougainvillea Avenue and 40th Street/McKinley Drive	B	B
Fowler Avenue and 40th Street/McKinley Drive	B	C

The arterial LOS analysis summarized in Table 2-2 reveals that during the AM and PM peak hours several arterial segments are operating below the acceptable standard of LOS D.

Table 2-2
Existing (1995) Directional Level of Service for Arterial Segment

Location	AM Peak Hour LOS Northbound	PM Peak Hour LOS Northbound	AM Peak Hour LOS Southbound	PM Peak Hour LOS Southbound
Between Hillsborough Avenue and Hanna Avenue	B	E	D	D
Between Hanna Avenue and Yukon Street	B	D	C	E
Between Yukon Street and Busch Boulevard	E	F	C	C
Between Busch Boulevard and Busch Gardens Entrance	E	F	F	F
Between Busch Gardens Entrance and Bougainvillea Avenue	B	B	C	B
Between Bougainvillea Avenue and Fowler Avenue	C	C	B	B

2.4 TRANSPORTATION DEMAND

Future traffic projections were derived in cooperation with the MPO. Early coordination with MPO staff was initiated in December 1994 and resulted in determining the study limits and the use of the Tampa Bay Regional Planning Model (TBRPM) - Alternative "J2" transportation network model (Alternative "J2" model). The Alternative "J2" model was recommended by the MPO staff to be used as this was the model which would be used to form the basis for developing its future Year 2015 Cost Feasible Plan that was adopted by the MPO in December 1995. The use of this earlier Alternative "J2" model and subsequent refinements by the MPO resulted in final development of the model which ultimately identified the transportation network and associated roadway improvements shown in the MPO's adopted Year 2015 Cost Feasible Plan. Within the project study there were no significant differences in out-put between the Alternative "J2" model and its successor.

The study limits for modeling refinements included Fowler Avenue to the north, M.L. King Boulevard (S.R. 574) to the south, 50th Street (S.R. 583) to the west and 22nd Street to the east. The Alternative "J2" model was used, as recommended by the MPO staff, in projecting Year 2020 traffic volumes for this study. The Alternative "J2" model consists of the Year 2010 Adopted Cost Feasible Plan⁸ for Hillsborough County, as well as the existing plus committed (E + C) Transit network. This model 40th Street/McKinley Drive, between Hillsborough Avenue and Fowler Avenue, is coded as a four-lane facility in the transportation model. The model output for traffic projections is in the form of Peak Season Average Weekday Traffic (PSWAT). However, Design Hour Volumes (DHV) are ultimately required for use in planning and engineering the anticipated roadway improvements. Several factors were applied to convert PSWAT to DHV's as shown in Table 2-3.

**Table 2-3
Model Volume to Design Hour Volume Conversion Factors**

Factor Type	Value	Source
AADT to PSAWT, Hillsborough County (P)	1.124	FDOT
PSAWT to AADT, Hillsborough County	0.890	FDOT
Design Hour Factor (K)	0.090	City of Tampa
Directional Traffic Split (D)	0.570	City of Tampa

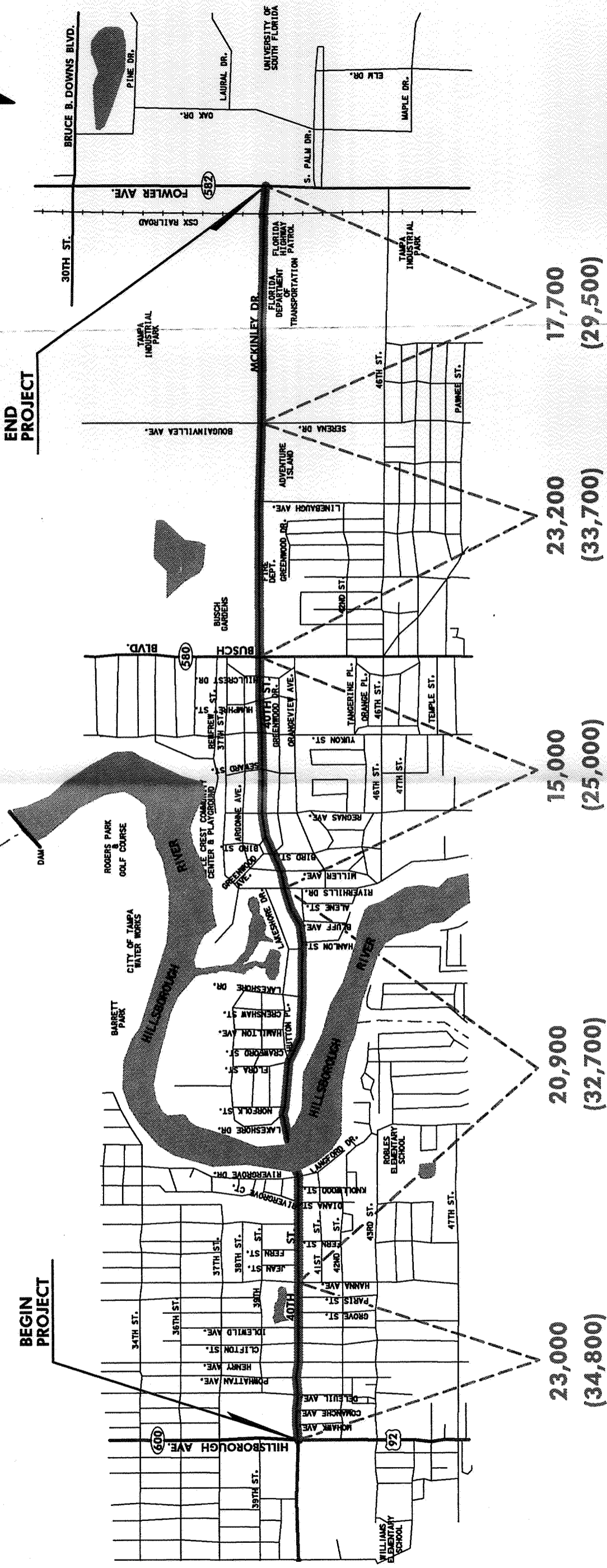
The 40th Street/McKinley Drive PD&E Study methodology used to develop 2020 DHV's involves:

- Describing the demographic characteristics of the study area,
- Validating the performance of the 1990 model in forecasting travel for the 40th Street/McKinley Drive corridor,
- Checking future year demographic data for reasonableness,
- Forecasting 2020 Peak Season Average Weekday Traffic (PSAWT),
- Smoothing Traffic Forecast based on methodology provided in the National Cooperative Highway Research Program Report 255 - Highway Traffic Data for Urbanized Area Project Planning and Design (NCHRP 255), and
- Converting PSAWT to Design Hour Volumes.

The results in applying the above listed methodology for modeling purposes is shown in Figure 2-3 which displays the projected 2020 daily traffic volumes generated by the 2020 TBRPM-Alternative "J2" for the following scenarios:

- 1) No-Project
- 2) Build (Widen 40th Street/McKinley Drive from Hillsborough Avenue to Fowler Avenue to four-lane divided roadway)

As shown in Figure 2-3, the projected design year traffic (2020) AADT volumes along the study corridor are expected to range between 15,000 vpd to 23,000 vpd with the existing two-lane roadway. The 2020 AADT volumes are expected to increase by improving 40th



LEGEND

- RIVER / WATER
- RAILROAD
- US ROUTE
- STATE ROAD
- XXX NO-PROJECT AADT
- (XXX) BUILD AADT

**CITY OF TAMPA
AND
FLORIDA DEPARTMENT
OF
TRANSPORTATION**

**40TH STREET/MCKINLEY DRIVE PD&E STUDY
HILLSBOROUGH AVENUE (SR 600 & US 92)
TO FOWLER AVENUE (SR 582)
HILLSBOROUGH COUNTY, FLORIDA
PROJECTED 2020 ANNUAL AVERAGE
DAILY TRAFFIC VOLUMES**

SPN: 10007-1550
WPI: 7123608

FIGURE 2-3

Street/McKinley Drive to a four-lane divided roadway within the study corridor. The projected AADT volumes with the four-lane divided roadway improvements are expected to range between 25,000 vpd to 34,800 vpd, as shown in Figure 2-3.

Existing K, D and T factors along 40th Street/McKinley Drive describe the characteristics of traffic flow along the corridor for the PM peak hour. Currently, the average peak hour volumes on 40th Street/McKinley Drive are approximately 9.3% of the roadway's AADT volumes (K-factor). During the peak hour, 51% to 68% of the volume flows in the peak direction, which is northbound for the evening period (the D-factor for the roadway). The City of Tampa provided a truck factor of 4.5%. This factor (the T-factor) was used for all approaches along the entire length of the corridor.

The projected design year (2020) AADT volumes were converted to directional design hour volumes by using the K and D factors provided in Table 2-3. The PM peak hour was selected to evaluate the projected design hour traffic conditions. The PM peak hour was selected since the existing traffic volumes revealed that this peak hour reflected worse case conditions. The peak direction for the PM peak hour is northbound/eastbound based on existing conditions.

The design hour non-directional volumes were determined by multiplying the design year AADT by the K-factor 0.09. To determine the peak directional design hour volumes (northbound and eastbound) the non-directional design hour volumes were multiplied by the D-factor 0.57. The southbound and westbound directional volumes were obtained by multiplying the non-directional design hour volumes by the D-factor 0.43.

The directional design hour volumes were converted to turning movement volumes by using a method documented in the National Cooperative Highway Research Program Report 255 - Highway Traffic Data for Urbanized Area Project Planning and Design (NCHRP 255)⁹. This method uses existing turning movement counts and future approach volumes to project

future turning movement volumes. The design hour turning movement volumes for No-Action and Build scenarios are provided in Figures 2-4 (A and B)







The HCS was used to examine the projected design hour (2020) operating conditions for both signalized intersections and roadway segments. The design hour turning movement volumes discussed previously were used to complete the LOS analyses. The LOS analyses were completed for the No-Action and Build scenarios.

As earlier mentioned, the City of Tampa requires that all **non-constrained** intersections and roadway segments operate at LOS D or better. Both Hanna Avenue and Fowler Avenue are identified as constrained facilities in the 2015 Cost Feasible Long Range Transportation Plan⁷. A roadway facility that is designated constrained indicates that the MPO has made a policy decision to accept the congestion on the roadway. The LOS D standard is not required to be maintained since these roadways are identified as constrained roadway facilities.

The results of the signalized intersection analyses are summarized in Table 2-4. Review of the results reveals that with the No-Action scenario all signalized intersections are expected to operate below LOS D.

Review of the projected signalized intersection LOS for the Build scenario reveals that all intersections are expected to operate at LOS D or better except for the 40th Street/McKinley Drive intersection and with Fowler Avenue. For comparison purposes, the intersection LOS was analyzed for a Build (divided six-lane) scenario to determine if the LOS would improve for this deficient intersection. As shown Table 2-4, this intersection is expected to operate at LOS F in 2020 even with reasonable lane configuration improvements and signal timing optimization. This intersection does not operate under the 2020 Build scenario due to the amount of traffic at all approaches. For this intersection to operate at an acceptable LOS, it is expected that a grade separation would be needed at the 40th Street/McKinley Drive intersection with Fowler Avenue.

LEGEND

-  RIVER / WATER
-  RAILROAD
-  US ROUTE
-  STATE ROAD
-  NO-PROJECT
-  BUILD

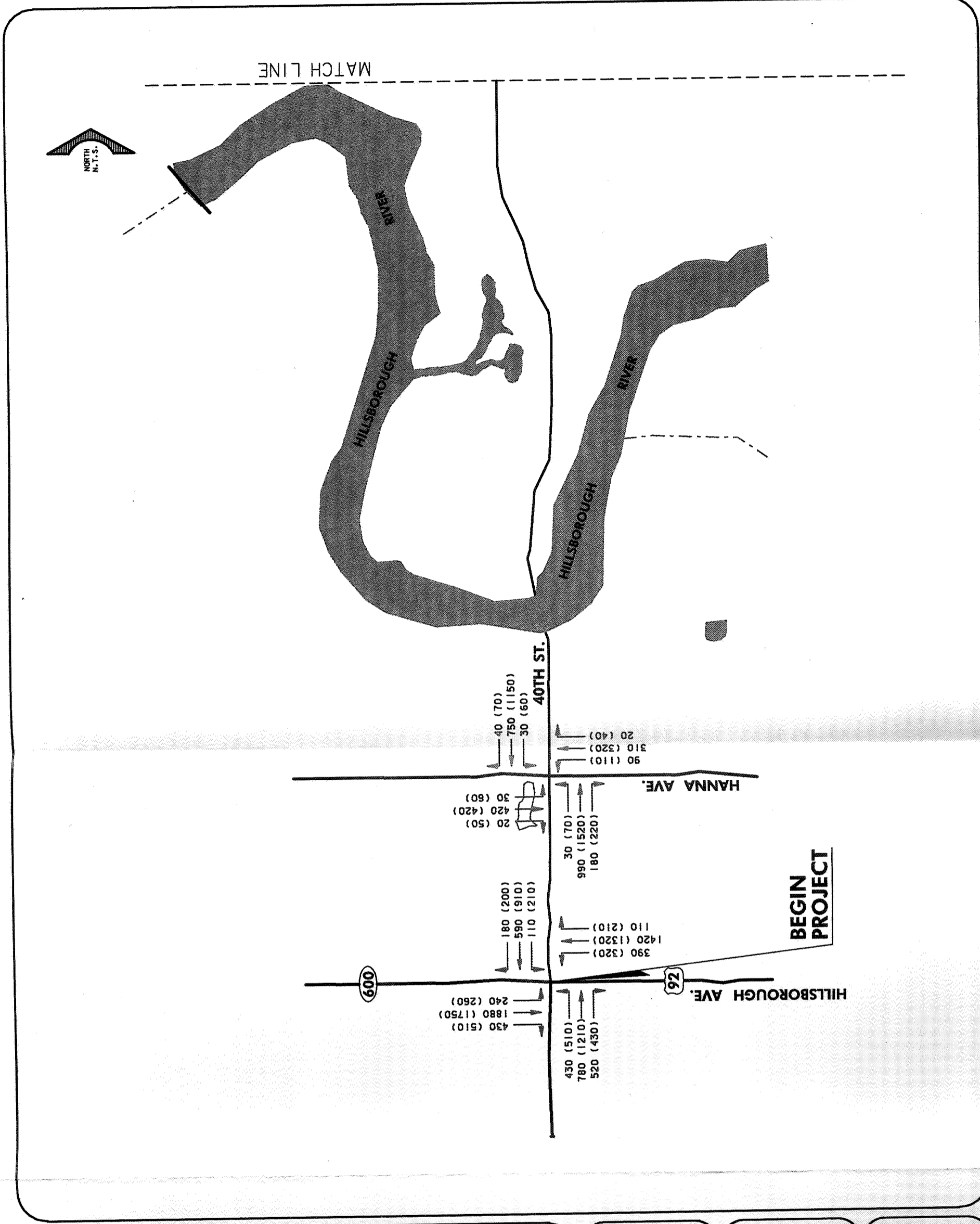
40TH STREET/MCKINLEY DRIVE PD&E STUDY
 HILLSBOROUGH AVENUE
 (SR 600 & US 92)
 TO FOWLER AVENUE (SR 582)
 HILLSBOROUGH COUNTY, FLORIDA

CITY OF TAMPA
 AND
 FLORIDA DEPARTMENT OF
 TRANSPORTATION







DESIGN HOUR (2020)
 TURNING MOVEMENT VOLUMES

SPN: 10007-1550
 WPI: 7123608

FIGURE 2-4A



LEGEND

-  RIVER / WATER
-  RAILROAD
-  US ROUTE
-  STATE ROAD
-  NO-PROJECT
-  BUILD

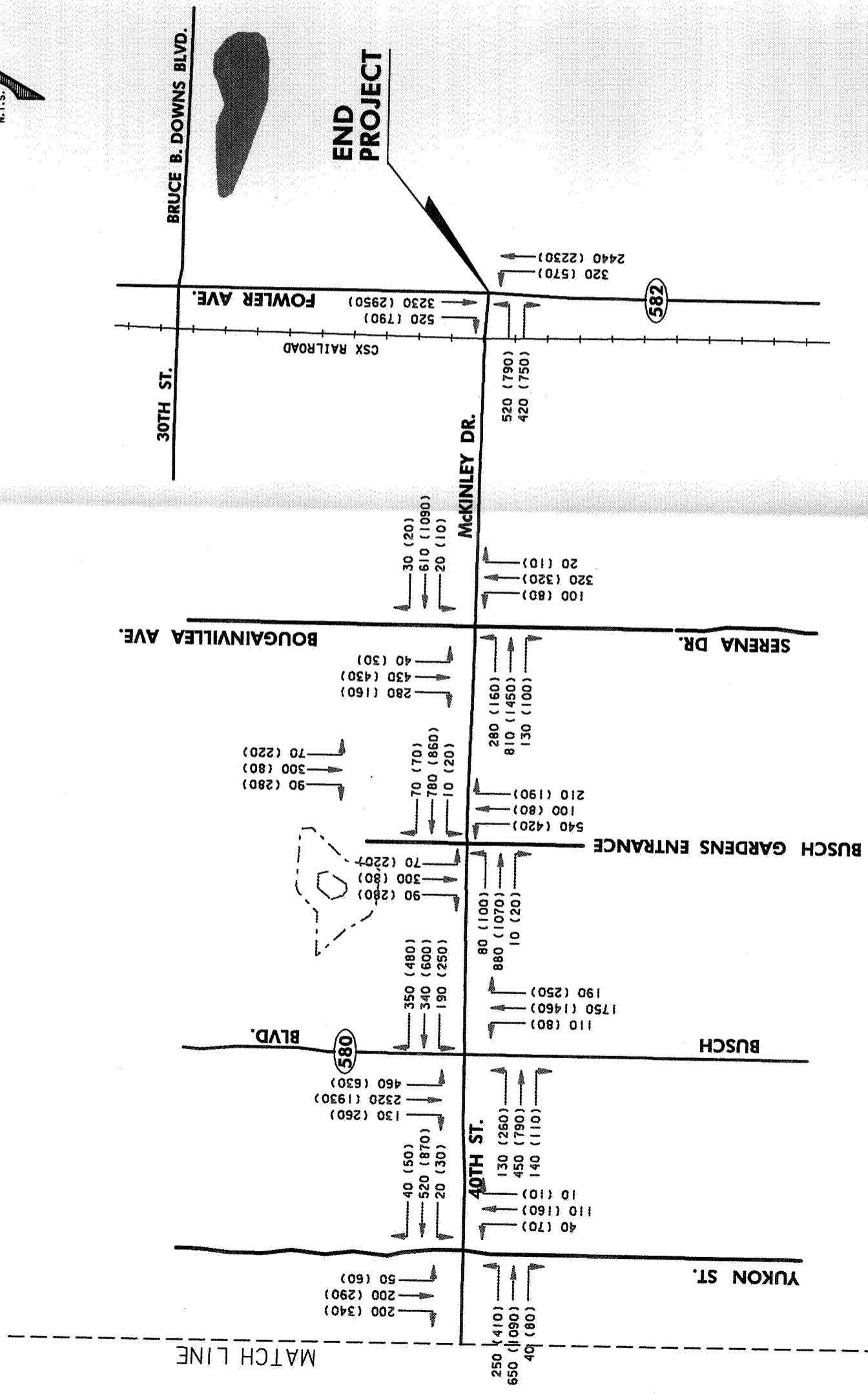
40TH STREET/MCKINLEY DRIVE PD&E STUDY
 HILLSBOROUGH AVENUE
 (SR 600 & US 92)
 TO FOWLER AVENUE (SR 582)
 HILLSBOROUGH COUNTY, FLORIDA

CITY OF TAMPA
 AND
 FLORIDA DEPARTMENT OF
 TRANSPORTATION

DESIGN HOUR (2020)
 TURNING MOVEMENT VOLUMES

SPN: 10007-1550
 WPI: 7123608

FIGURE 2-4B



**Table 2-4
Design Hour (2020) Level of Service for Signalized Intersections**

Intersection Location	2020 Level of Service (LOS)		
	No-Action (Two-Lane)	Build (Divided Four-Lane)	Build (Divided Six-Lane) (1)
Hillsborough Avenue and 40th Street/McKinley Drive	F	D	D
Hanna Avenue and 40th Street/McKinley Drive	F	D	C
Yukon Street and 40th Street/McKinley Drive	F	D	D
Busch Boulevard and 40th Street/McKinley Drive	E	D	D
Busch Gardens Entrance and 40th Street/McKinley Drive	F	D	D
Bougainvillea Avenue and 40th Street/McKinley Drive	F	D	C
Fowler Avenue and 40th Street/McKinley Drive	F	F	F

Note: (1) The 2020 design hour traffic volumes developed from the TBRPM-Alternative "J2" model (with 40th Street coded as a four-lane roadway) were used for the undivided six lane capacity analysis.

The HCS was used to conduct an arterial analysis for the 40th Street/McKinley Drive corridor for projected traffic conditions. The arterial analyses were conducted for the No-Action, Build (divided four-lane), and Build (divided six-lane) scenarios. Both northbound and southbound directions were evaluated for each scenario. The Build (divided six-lane) scenario was added as part of this analysis since the HCS analysis revealed that a few segments would operate below LOS D under the Build (divided four-lane) scenario. The results of the arterial analyses are summarized in Table 2-5.

The results of the analysis reveal that under the No-Action scenario all 40th Street/McKinley Drive northbound segments are expected to operate below LOS D except the segments between Hanna Avenue and Yukon Avenue, and Busch Gardens Entrance and Fowler Avenue. Also, under the No-Action scenario all southbound segments are expected to operate below LOS D except the segments between Hillsborough Avenue and Hanna Avenue, Yukon Street and Busch Boulevard, and Busch Gardens Entrance and Fowler Avenue.

Improving 40th Street/McKinley Drive to a four-lane divided highway increases the LOS to LOS D or better for the majority of the study corridor roadway segments. There are a few segments expected to operate below LOS D in the design year (2020). These include the northbound and southbound segments between Busch Boulevard and Busch Gardens Entrance which are expected to operate at LOS F. In addition, the northbound segment between Yukon Street and Busch Boulevard is expected to operate at LOS F and the southbound segment is expected to operate at LOS E.

As mentioned earlier, the Build (divided six-lane) scenario was added as part of this analysis since the HCS analysis revealed that a few segments are expected to operate below LOS D under the Build (divided four-lane) scenario. As Table 2-5 illustrates the segments that are expected to operate below LOS D with the divided four-lane roadway facility experience little or no improvement in LOS with the six-lane improvement. There are a few segments expected to experience an increase in LOS with the six-lane divided improvement compared

**Table 2-5
Design Hour (2020) Directional Segment Level of Service**

40th Street/McKinley Drive Segment	2020 Level of Service (LOS)					
	No-Action (Two-Lane)		Build (Divided Four-Lane)		Build (Divided Six-Lane) (1)	
	North-bound	South-bound	North-bound	South-bound	North-bound	South-bound
Hillsborough Avenue to Hanna Avenue	E	C	D	D	B	D
Hanna Avenue to Yukon Street	C	F	A	A	A	A
Yukon Street to Busch Boulevard	F	C	F	E	F	E
Busch Boulevard to Busch Gardens Entrance	F	F	F	F	F	F
Busch Gardens Entrance to Bougainvillea Avenue	D	D	B	C	B	C
Bougainvillea Avenue to Fowler Avenue	D	D	C	C	C	B

Note: (1) The 2020 design hour traffic volumes developed from the TBRPM-Alternative "J2" model (with 40th Street coded as a four-lane roadway) were used for the undivided six lane capacity analysis.

with the four-lane divided improvement. The northbound segment between Hillsborough Avenue and Hanna Avenue is expected to improve from a LOS D to LOS B. The southbound segment between Fowler Avenue and Bougainvillea Avenue is expected to improve from LOS C to LOS B.

As shown in Table 2-5, the LOS for a few segments is not expected to improve under the Build (divided six-lane) scenario. The northbound segment between Yukon Street and Busch Boulevard is still expected to operate at LOS F and the southbound direction is expected to operate at LOS E. The northbound and southbound segments between Busch Gardens Entrance and Busch Boulevard is also expected to operate at LOS F. Based on the comparison of the LOS for the Build scenarios (divided four-lane versus divided six-lane) it appears that the distances between the signalized intersections impact the LOS along a couple of the segments. The distance between Yukon Street and Busch Boulevard is approximately 405 m (1,328 ft) and between Busch Boulevard and the Busch Gardens Entrance is approximately 150 m (492 ft). The distance between the signalized intersections does not allow adequate platooning to occur with the expected increase in traffic volumes in the design year (2020). Since these segments are expected to operate below LOS D conditions even with a divided six-lane improvement it appears to be reasonable to consider the divided four-lane improvement for the corridor and possibly consider transportation demand management strategies for this area.

In addition, review of Table 2-5 reveals that LOS decreases for a couple segments under the Build scenario compared to the No-Action scenario. The segments include southbound 40th Street/McKinley Avenue between Hillsborough Avenue and Hanna Avenue; and Yukon Street and Busch Boulevard. This is primarily due to the increase in traffic along 40th Street/McKinley Avenue that is expected to occur with the improvement. The projected 2020 AADT volume for 40th Street/McKinley Drive between Hillsborough Avenue and Hanna Avenue is expected to increase by approximately 51 percent with the divided four-lane versus the two-lane roadway. The 40th Street/McKinley Drive 2020 AADT between

Yukon Street and Busch Boulevard is expected to increase by approximately 67 percent with the divided four-lane versus the two-lane roadway.

An analysis was conducted to determine the feasibility of implementing roundabouts along the 40th Street/McKinley Avenue study corridor. A roundabout justification study based on the Florida Roundabout Guide¹⁰ (the Guide) was prepared to document the analysis. This study is incorporated in the Technical Traffic Memorandum⁴. As shown in Figure 2-5, roundabouts were considered at four locations along the study corridor. These locations include the intersections of 40th Street/McKinley Drive with Hanna Avenue, Riverhills Drive, Yukon Street and Bougainvillea Avenue.

The Guide provides a procedure to evaluate the feasibility of implementing a roundabout at an intersection. There are seven roundabout justification categories listed in the Guide. Four of the seven justifications were used to evaluate the three proposed roundabouts. The four justification categories include Traffic Calming, Community Enhancement, Safety, and Medium Volume Signal Alternative. However, it was not possible to perform a detailed analysis of the impacts of the Safety justification category due to lack of relevant data anywhere in the United States for multi-lane roundabouts. The three remaining justification categories: All-Way Stop Alternative, Low Volume Signal Alternative, and Special Conditions, were not applicable to this study.

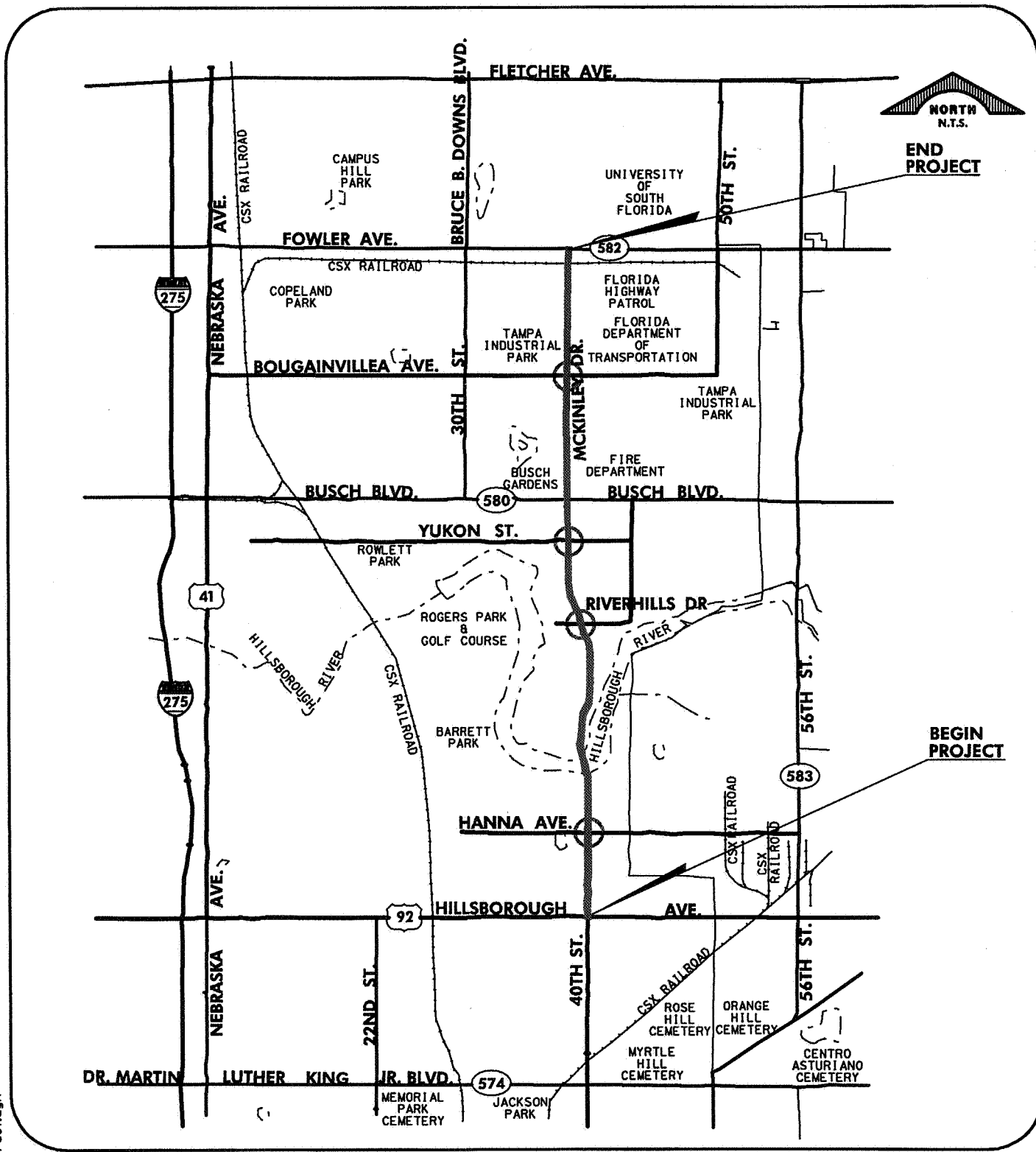
In addition to analyses of the roundabouts' projected performance relative to the aforementioned justification categories, an examination of "Contraindicating Factors" and an "Operational Analysis" was also completed. The operational analysis found that the roundabouts studied at Hanna Avenue, Riverhills Drive, Yukon Street and Bougainvillea Avenue would provide for greater operational efficiencies than signalized intersections at these same locations. Consequently, application of the roundabout concept is recommended for implementation at the above mentioned locations.

Based on the traffic analysis discussed in this section, the following recommendations are being made for the 40th Street/McKinley Avenue study corridor. The recommended lane geometry, and roundabout plan views at each location are shown in Figure 2-6 (A and B).

- The traffic analysis reveals, based upon projected traffic volumes and LOS, the need to widen 40th Street/McKinley Drive from Hillsborough Avenue to Fowler Avenue from two-lane to a divided four-lane roadway by the Year 2020.
- All the signalized intersections along 40th Street/McKinley Drive are expected to require improvement by 2020.
- The roundabout analysis revealed that a roundabout was justified at the 40th Street/McKinley Drive and Riverhills Drive intersection, however if the roundabout is not implemented it was determined that a signal is needed at this intersection in the future.
- The roundabout analysis revealed that roundabouts are justified at the intersections of 40th Street/McKinley Drive with Hanna Avenue, Yukon Street and Bougainvillea Avenue. The roundabout locations are also shown in Figure 2-6 (A and B).

Public involvement with the affected residential and business community along the project corridor regarding the roundabout concepts has been positive. Traffic calming and community enhancement opportunities along the corridor were earlier identified by the public as a desired outcome of the proposed project. Additionally, while a detailed analysis of safety impacts was not able to be performed, the literature which addresses safety has compared crash data for roundabouts installed at previously signalized intersections. The results of such comparative analysis based on actual data has found that the number of crashes and severity of crashes have been greatly reduced when the roundabout was

30-DEC-1996 13:56
 F:\Projects\pde\40th\rdabr-d01.dgn



LEGEND

- Project Limits
- River / Water
- Railroad
- Interstate
- US Route
- State Road
- Roundabout Location

40TH STREET/McKINLEY DRIVE PD&E STUDY
 HILLSBOROUGH AVENUE (SR 600 & US 92)
 TO FOWLER AVENUE (SR 582)
 HILLSBOROUGH COUNTY, FLORIDA

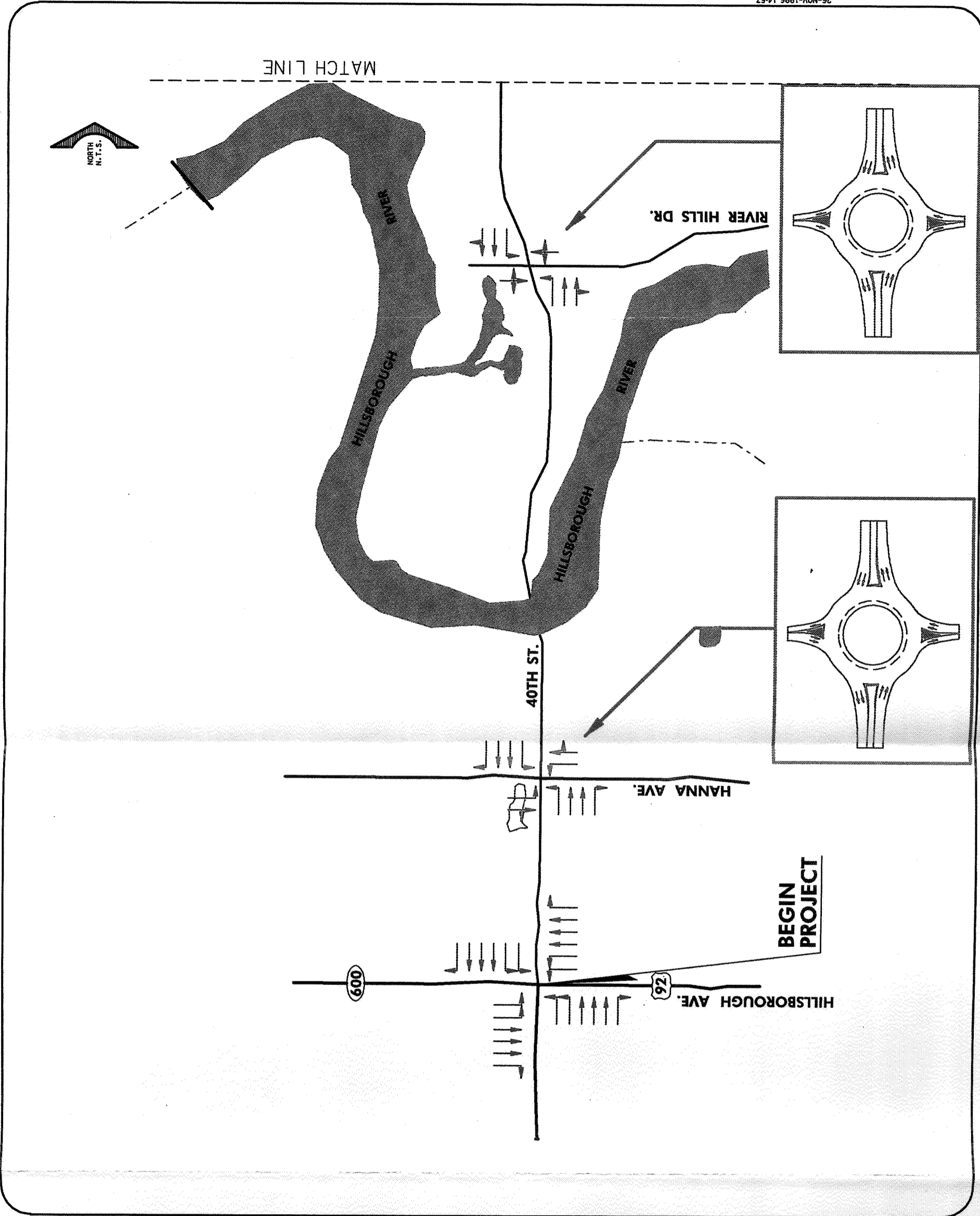
**CITY OF TAMPA
 AND
 FLORIDA DEPARTMENT OF TRANSPORTATION**

ROUNDABOUT LOCATION MAP





SPN: 10007-1550

WPI: 7123608

FIGURE 2-5



LEGEND

-  RIVER /WATER
-  RAILROAD
-  US ROUTE
-  STATE ROAD


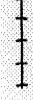


40TH STREET/MCKINLEY DRIVE PD&E STUDY
 HILLSBOROUGH AVENUE
 (SR 600 & US 92)
 TO FOWLER AVENUE (SR 582)
 HILLSBOROUGH COUNTY, FLORIDA

CITY OF TAMPA
 AND
 FLORIDA DEPARTMENT OF
 TRANSPORTATION

PROPOSED LANE GEOMETRY
 AT SIGNALIZED INTERSECTIONS/
 ROUNDABOUT LOCATIONS

SPN: 10007-1550
 WPI: 7123608
 FIGURE 2-6A

LEGEND

-  RIVER / WATER
-  RAILROAD
-  US ROUTE
-  STATE ROAD

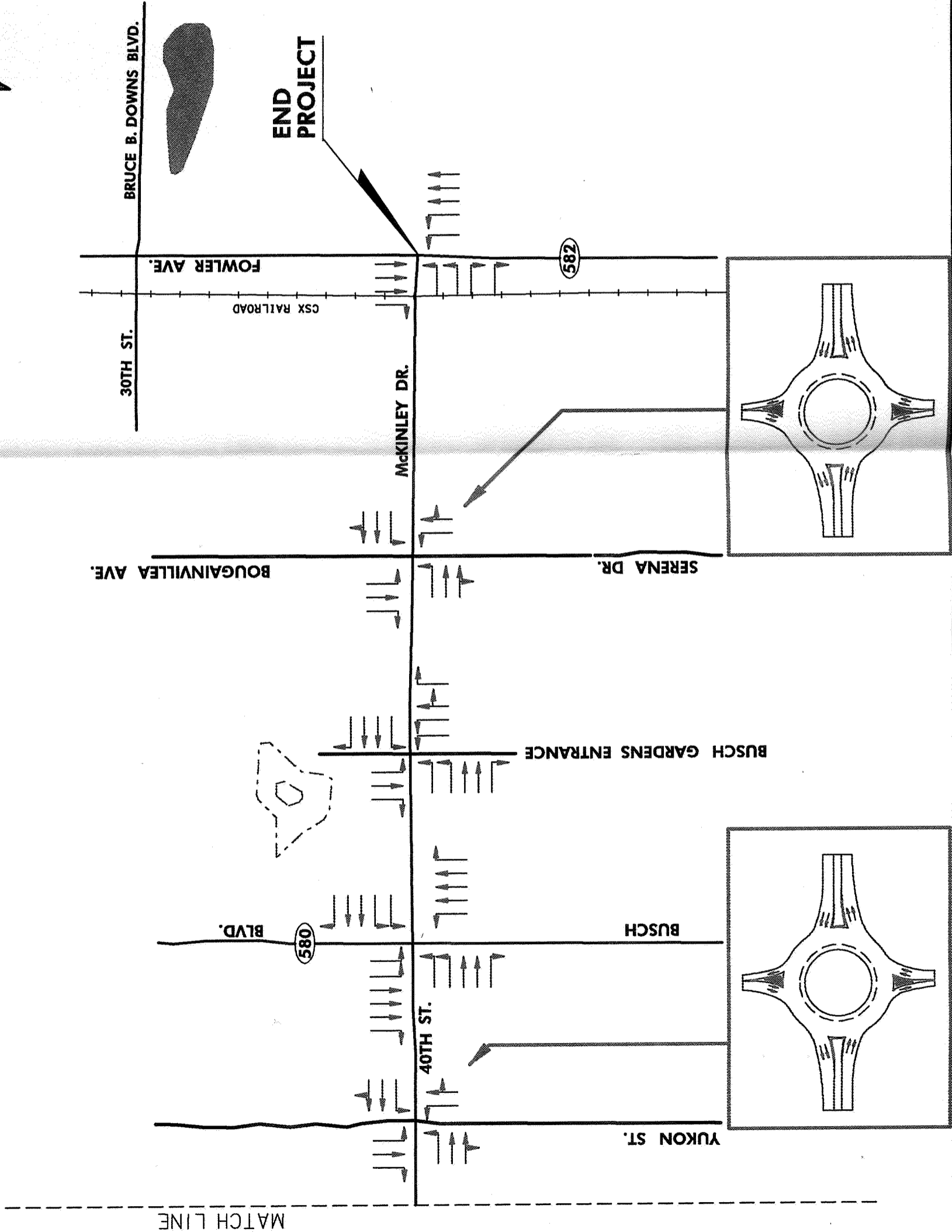
40TH STREET/MCKINLEY DRIVE PD&E STUDY
 HILLSBOROUGH AVENUE
 (SR 600 & US 92)
 TO FOWLER AVENUE (SR 582)
 HILLSBOROUGH COUNTY, FLORIDA

CITY OF TAMPA
 AND
 FLORIDA DEPARTMENT OF
 TRANSPORTATION

PROPOSED LANE GEOMETRY
 AT SIGNALIZED INTERSECTIONS/
 ROUNDABOUT LOCATIONS

SPN: 10007-1550
 WPI: 7123608

FIGURE 2-6B



installed. Such outcomes, as provided by the roundabouts, coupled with roundabout operational efficiencies being greater than signalized intersections at the recommended locations, support implementation of the roundabout concept.

2.5 FEDERAL, STATE, LOCAL GOVERNMENT AUTHORITY

The FDOT, City of Tampa and the Hillsborough County MPO have identified the need to improve 40th Street/McKinley Drive. The proposed improvements discussed in this document are consistent with the City of Tampa Comprehensive Plan Transportation, Mass Transit and Traffic Circulation Elements and the Hillsborough County Metropolitan Planning Organization Adopted 2015 Long Range Transportation Plan and Transportation Improvement Program.

An Advance Notification Package was sent by the FDOT to federal, state and local agencies having permitting, environmental or other interests in the 40th Street/McKinley Drive project. A copy of the package and a list of those agencies which responded is contained in Appendix A. The responses received from the agencies have been incorporated into the project planning process and are addressed in Section 5, Comments and Coordination. Based, upon the responses, the project is consistent with both state and local government comprehensive plans, or in compliance with, the goals and objectives of those agencies responding.

2.6 SOCIAL DEMANDS AND ECONOMIC DEVELOPMENT

The 40th Street/McKinley Drive corridor traverses both commercial and residential areas. Commercial and residential intensity varies within the project corridor. From Hillsborough Avenue south to Busch Boulevard the roadway provides access to numerous small businesses, services, homes and schools. The northern portion of the roadway from Busch Boulevard to Fowler Avenue provides access to major employment centers and attractions such as Busch Gardens, Adventure Island, the University of South Florida, the FDOT,

General Technologies and Reynolds Aluminum. Emergency services are located along the northern segment and include the Florida Highway Patrol and a City of Tampa Fire Station.

The City of Tampa has targeted the area from Hillsborough Avenue to Busch Boulevard for redevelopment and revitalization of the residential and business community located within this segment of the project corridor. This redevelopment and revitalization goal is identified within the City of Tampa Comprehensive Plan. The proposed roadway improvement to 40th Street/McKinley Drive has been incorporated into the City's redevelopment and revitalization plan. The roadway improvements are considered to be an integral part of, and essential, to achieving this goal and are reflected in the analysis of the social and economic data and relevant field observations.

Analysis of the social and economic data along the corridor shows three distinct and different characteristics, and are identified as follows:

The neighborhoods within the 40th Street/McKinley Drive corridor from Hillsborough Avenue to the north side of the Hillsborough River are located within census tracts 10 and 105. The Tampa Comprehensive Plan's Future Land Use Element Background Report has targeted these neighborhoods for redevelopment and revitalization. In the report, neighborhoods were typed and ranked from the worst to the best, with number one being the worst, based on the following indicators:

- Median Income
- Percent Substandard Units
- Median Home Value
- Percent Owner Occupied
- Morbidity
- Female-Headed Households
- Residential Mobility
- Personal Crime Rate
- Family Crime Rate
- Percent Black

Census tracts 10 and 105 ranked 22nd and 14th, respectively, out of the City of Tampa's 78 census tracts. Selected indicators taken from census tracts 10 and 105 shows that 61 percent of the neighborhoods' populations are black, 29 percent of the households are at or below poverty level, and that 43 percent of all families are female-headed households with children. Additionally, field surveys have found that many of the residential units are substandard and in disrepair. Examples of such conditions along the 40th Street McKinley Drive corridor include condemnation and subsequent razing of an apartment complex once located in the southwest quadrant of the approaches to the 40th Street bridge, vacant and boarded up apartments located immediately south of Fern Street and a vacant collapsing residential structure at the corner of Deleuil Avenue.

From the north side of the Hillsborough River to Busch Boulevard, the neighborhoods are located within census tracts 8 and 9. Census tracts 8 and 9 ranked 40th and 37th, respectively, in the City's study. Selected census tract data show that 17 percent of the neighborhoods' populations are black, 25 percent of the households are at or below poverty level, and 21 percent of all families are female-headed households with children. Low to middle income residential structures are moderately maintained.

During the course of this study and as part of development of the draft Conceptual Stage Relocation Plan¹¹ it appeared that the various types of businesses identified and mapped at the beginning of this study (December 1994) were no longer in business. Consequently an analysis was performed to determine the percent change in businesses that may have occurred between December 1994 and October 1996. This analysis found that 46% of all businesses earlier identified between Hillsborough Avenue and Busch Boulevard were no longer in operation, reflecting the transitional nature of small businesses within the project corridor.

From Busch Boulevard to Fowler Avenue, 40th Street/McKinley Drive is dominated by corporate and institutional complexes and is a major employment area. The businesses in

this area have long been established and are considered stable. Additionally, no residential neighborhoods are located proximate to this area.

2.7 MODAL INTERRELATIONSHIPS

A review of the City of Tampa Comprehensive Plan Transportation, Mass Transit and Traffic Circulation Elements was undertaken to determine the effect of local transit, commuter rail, rail service, aviation and port on the 40th Street/McKinley Drive corridor study. A summary of the findings follows:

2.7.1 Transit

The project corridor is identified by the Hillsborough Area Regional Transit Authority (HARTline) and the City of Tampa Comprehensive Plan Transportation, Mass Transit and Traffic Circulation Elements as a transit emphasis corridor. Local bus service includes a 40th Street/McKinley Drive, Route 5 which is serviced by HARTline. This route provides service between downtown Tampa, the University Square Mall, and the University of South Florida campus. Regular passenger fare for the local bus is one dollar and fifteen cents (\$1.15) in 1996.

Route 5 traverses all of 40th Street/McKinley Drive between Hillsborough Avenue and Fowler Avenue. Sheltered and unsheltered bus stops are located along the project corridor. Twenty-seven (27) bus stops are located along the northbound leg, and twenty-two (22) along the southbound leg. There is a 30-minute headway between buses along Route 5 during peak-period operation, and 60-minutes during off-peak and weekend operations. There are currently no "park and ride" facilities along or in the immediate vicinity of the corridor.

The current HARTline service meets the goal of the City of Tampa to provide for the needs of the service area residents within the framework of available funding. HARTline does not

foresee a need for dedicated bus lanes, but has evaluated the existing and proposed transit facilities for the need for new bus stop locations and bus turnouts along the 40th Street/McKinley Drive corridor. The need to accommodate bus traffic along this corridor is referenced in a letter provided by HARTline dated February 2, 1996. This letter is provided in Appendix A.

2.7.2 School Buses

Data on school vehicle operation was provided by the Hillsborough County School Board. Approximately 50 school vehicles use 40th Street/McKinley Drive twice a day. The vehicles utilize the road between the hours of 6:00 a.m. and 8:30 a.m., and between 2:15 p.m. and 5:00 p.m.

2.7.3 Commuter Rail

The adopted Hillsborough County MPO 2015 Long Range Transportation Plan includes studies of the highway, rail transit and bus systems to accommodate a future commuter rail system. The current adopted plan precludes the use of the 40th Street/McKinley Drive corridor as part of the commuter rail corridor envisioned to serve Hillsborough County. However, the plan identifies a part of the future rail corridor located west of 40th Street/McKinley Drive along an existing CSX rail line (see Figure 1-1). HARTline is currently managing a Major Investment Study in cooperation with the FDOT and the MPO. This study may better identify the need and feasibility of a commuter rail system.

2.7.4 Rail

The railroad grade crossing located approximately 210 meters (m) [689 feet (ft)] south of Fowler Avenue is owned by CSX Transportation Systems Inc. Railroad (CSX). Service provided through these crossings is limited to the transportation of freight, with no provisions of passenger service.

Through coordination with the FDOT, District Seven Rail Coordinator, it was determined that the railroad crossing is not part of the rail's main line and is presently listed by CSX as "inactive". Current CSX plans call for removing the cross bucks, removing or covering the signals and barricading the rail line at the crossing. Following this activity the City of Tampa will be installing signs informing buses and trucks that they are exempt from having to stop at this crossing. Should the rail line be activated appropriate safeguards will be erected to accommodate a future four lane urban roadway section.

There are currently no plans to add new rail service along or across the 40th Street/McKinley Drive corridor, but despite the low usage of this railway facility, there are no definite plans to abandon the track.

2.7.5 Aviation

The Hillsborough County Aviation Authority's Master Plan includes a number of recommendations concerning long range transportation improvements. However, the 40th Street/McKinley Drive project corridor is not located in the vicinity of Tampa International or Vandenberg airports nor does it provide direct access to either airport. Therefore the proposed airport improvements do not have a bearing on the 40th Street/McKinley Drive project.

2.7.6 Port of Tampa

Activity at the Port of Tampa represents the single most important contributor to the economy of west central Florida's five-county region. An estimated 93,000 jobs in Hillsborough, Pinellas, Pasco, Polk and Hernando counties are directly attributed to Port related business as reported in Economic Impacts of the Port of Tampa, Fiscal Year 1994-1995¹². Roadways are an important landside component of the Port's interface between land and water transportation. Trucks need safe and efficient roads to haul goods and materials

to and from the Port, and nearly all of the Port's large work force travels to and from work via the regional roadway networks serving the Port.

Realizing the need for an efficient surface transportation system, the Tampa Port Authority commissioned a surface transportation plan to meet Port needs through the year 2010. The 40th Street/McKinley Drive terminates at East 7th Avenue, north of the Crosstown Expressway and does not directly connect to the Port. Consequently, the Port's plan did not identify improvements needed to or associated with the 40th Street/McKinley Drive corridor.

2.8 TRAFFIC SAFETY

To evaluate the safety of traffic operations in the study area, crash accident records for the three year period from 1992 through 1994 were obtained from the City of Tampa. Tables 2-6 through 2-9 present the characteristics of the crashes that occurred during the three year period within the study area. Figure 2-7 shows the three year accident data summary for the reported years of 1992, 1993 and 1994. As shown, the most common type of crashes along 40th Street/McKinley Drive were rear-end collisions, followed by angle collisions. Most crashes along the corridor were caused by careless driving, followed by failure to yield the ROW. Since initiation of this study, two fatalities along the project corridor have been recorded.

The first fatality involved a pedestrian being struck by an automobile in the vicinity of Riverhills Drive where the existing sub-standard curves are located. The second fatality was associated with a head-on collision south of the existing bridge in the vicinity of the approaches to the existing vertical and horizontal curves.

Table 2-6
Crash Summary at Intersections

Accident Characteristics	Hillsborough Avenue at 40th Street			Hanna Avenue at 40th Street			Linton Street at 40th Street			Busch Boulevard at McKinley Drive			Boulevard at McKinley Drive			Fowler Avenue at McKinley Drive		
	1992	1993	1994	1992	1993	1994	1992	1993	1994	1992	1993	1994	1992	1993	1994	1992	1993	1994
Pavement Conditions																		
Dry	39	57	79	7	5	2	5	7	5	27	70	49	1	3	9	11	17	17
Wet	4	11	10		2	2		1	2	8	7	14	2	4	3	2	8	4
Slippery										4	1	2		2	2		1	
Light Conditions																		
Day	26	38	55	4	5	6	2	7	6	20	51	50	3	8	9	7	20	13
Night	14	22	31	1	1	1	3		1	16	22	15	1	1	3	5	6	8
Dawn		1	2							1	2							
Dusk	3	7	2	1		1		1		2	3			1	2			
Not Available				1	1													
Time of Day																		
7:00 - 9:00 a.m.	3	1	7		1	2	1	2	1	7	3	8		1	1	1		1
4:00 - 6:00 p.m.	8	14	10		1	3	4	2	2	11	11	7		3	3	1	2	4
Other	32	53	73	7	5	3	4	6	4	32	64	50	2	5	10	11	24	16
Severity of Accident																		
Injury	28	17	20	4	2		1	3	1	11	12	4	2	3	2	5	3	5
Fatality																		
Property Damage Only	15	51	70	3	5	8	4	5	6	28	66	60	2	6	12	7	23	15
Cause of Accident																		
Improper Lane change	7	5	1							4	10	7		7	1	1	1	1
Careless Driving	16	34	43	1	4	1	4	4	3	10	51	37	3	7	7	9	16	14
Disregard Traffic Signal	1	4	7	1	1	1	4	1	1	6	4	6		1	2	1	1	
Failed to Yield ROW	10	13	19	3	2	6		1	2	11	2	8	1	1	2	1	1	
Drove Left of Center																		
Improper Passing	3	1	4					1	1	2	3	4		1	1	5	1	1
Followed too Closely	1	1	4							4	3	2						
Improper Turn	1	1	4	2			1	2	1	2	5	1		1	2	2	2	6
Other	5	7	12															
Miscellaneous																		
Hit and Run	5	6	12	2	2		3	1		11	11	1		1	1	1	3	1
Alcohol and/or Drugs	1	1	2							1	1							
Hit Bicyclist																		
Hit Pedestrian	2	1																
Single	3	2	3					1		6	6	2		1	1	3	2	
Multiple	40	66	87	7	7	8	5	7	7	39	72	63	4	8	13	10	24	21
Total	43	68	90	7	7	8	5	8	7	39	78	65	4	9	14	13	26	21
Safety Ratio	1.93	3.02	3.94	0.35	0.34	0.85	0.33	0.52	0.45	1.70	3.35	2.76	0.22	0.50	0.76	0.64	1.26	1.01
Property Damage	\$132,645	\$125,305	\$215,500	\$18,100	\$7,720	\$12,810	\$10,300	\$18,850	\$33,225	\$83,100	\$91,975	\$118,330	\$7,130	\$14,825	\$31,000	\$52,600	\$67,110	\$81,700
Average Cost/Accident	\$3,085	\$1,843	\$2,394	\$2,586	\$1,103	\$1,601	\$2,060	\$2,356	\$4,746	\$2,131	\$1,179	\$1,820	\$1,783	\$1,647	\$2,214	\$4,046	\$2,581	\$3,890

Table 2-7
Crash Summary for Roadway Segments

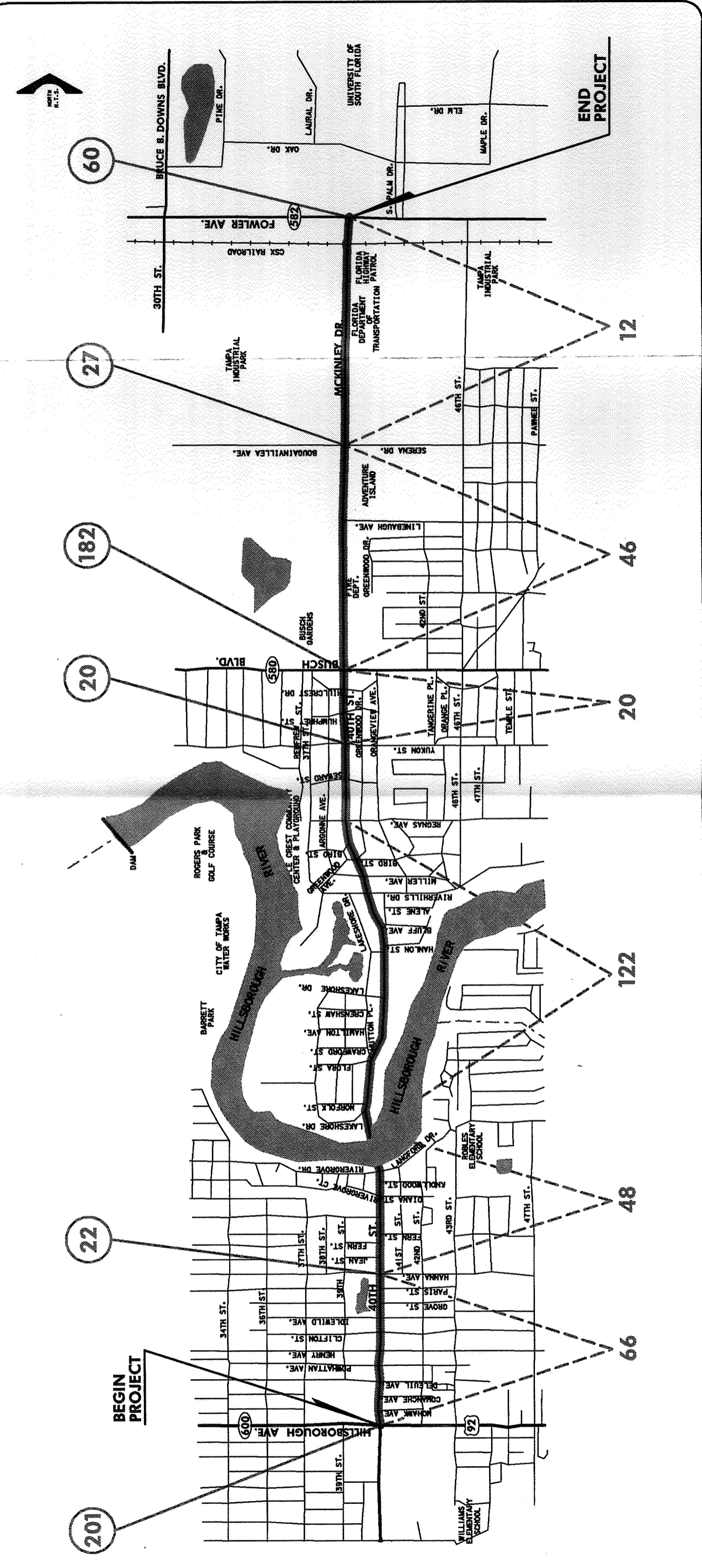
Accident Characteristics	Hillsborough Avenue to Hanna Avenue Hanna Avenue			Hanna Avenue to Hillsborough River Hillsborough River			Hillsborough River to Yukon Street Street			Yukon Street to Busch Boulevard Boulevard			Busch Boulevard to Bougainvillea Avenue Bougainvillea Avenue			Bougainvillea Avenue to Fowler Avenue Fowler Avenue		
	1992	1993	1994	1992	1993	1994	1992	1993	1994	1992	1993	1994	1992	1993	1994	1992	1993	1994
Pavement Conditions																		
Dry	10	26	22	8	19	18	20	31	29	2	10	6	3	9	12	1	2	3
Wet	2	2	3	3	3		9	6	22			2	4	11	5	1	1	3
Slippery			1					2	3					1	1			1
Light Conditions																		
Day	6	22	19	7	18	10	17	26	40	1	4	7	4	18	14	1	3	5
Night	4	4	5		3	7	11	12	10	1	5	1	3	3	4			1
Dawn					1		1	1	2									
Dusk	2	2	2	1		1		1	2		1							1
Time of Day																		
7:00 - 9:00 a.m.		3	3		4	3	4	1	4			1		1	3			2
4:00 - 6:00 p.m.	3	9	8	2	2	3	6	5	14		1	1	3	7	2	1	1	1
Other	9	16	15	6	16	12	19	33	36	2	9	6	4	13	13	1		4
Severity of Accident																		
Injury	8	9	5	3	4	7	13	12	20	1	4	2	2	6	1	2		3
Fatality					1	1	1											
Property Damage Only	4	19	21	5	17	10	15	27	34	1	6	6	5	15	15	3		4
Cause of Accident																		
Improper Lane change	3	2	15	6	13	12	18	14	37	1	5	3		2	1	1		1
Careless Driving	4	5	5		1	2	3	11	8		1	2	2	6	4		1	4
Disregard Traffic Signal	1				2	2		2	1				1		1		1	1
Failed to Yield ROW	1	2	1		2	1		2	1			1			1		1	1
Drove Left of Center			1		3	1		2	1		2	1			2		1	1
Improper Passing		4	1		3	1		1	1		1	1			2		1	1
Followed too Closely		4	4	2	3	1	7	7	6				2	2	2			
Improper Turn	3	4	4		3	1												
Other																		
Miscellaneous																		
Hit and Run	3	4	4	2	1		5	6	6	1	2		1		3			
Alcohol and/or Drugs	1	2						1	2		1		2					
Hit Bicyclist													1					
Hit Pedestrian	2			1	1		1		1									
Single	2	3	2	1	3	1	7	7	8			1	1	1	6			7
Multiple	10	25	24	7	19	17	22	32	46	2	10	7	6	20	12	2	3	7
Total	12	28	26	8	22	18	29	39	54	2	10	8	7	21	18	2	3	7
Safety Ratio	0.72	1.66	1.52	0.60	1.63	1.31	0.89	1.19	1.61	0.25	1.26	0.99	0.39	1.17	0.99	0.14	0.28	0.48
Property Damage	\$27,400	\$40,060	\$56,240	\$12,400	\$26,683	\$75,800	\$96,490	\$82,595	\$142,245	\$2,850	\$3,530	\$18,450	\$26,950	\$58,300	\$49,510	\$3,750	\$10,750	\$33,800
Average Cost/Accident	\$2,283	\$1,431	\$2,163	\$1,550	\$1,213	\$4,211	\$3,327	\$2,118	\$2,634	\$1,425	\$353	\$2,306	\$3,850	\$2,776	\$2,751	\$1,875	\$3,583	\$4,829

**Table 2-8
Type of Crash for Roadway Intersections**

Accident Characteristics	Hillsborough Avenue at 40th Street		Hanna Avenue at 40th Street		Yukon Street at 40th Street		Busch Boulevard at McKinley Drive		Bougainvillea Avenue at McKinley Drive		Fowler Avenue at McKinley Drive	
	1992	1993	1994	1992	1993	1994	1992	1993	1994	1992	1993	1994
Type of Accident												
Rear End	19	29	42	1	4	1	7	38	3	6	10	22
Left Turn	10	12	17	2	1	5	6	6	2			2
Right Turn	1	4	4	3		2	3	13			3	2
Angle	8	18	24	3	3	2	19	6		1	1	1
Sideswipe	5	6	3	1	1		2	2		2		1
Head On							4	4		1	2	2
Other	4	7	4									

**Table 2-9
Type of Crash for Roadway Segments**

Accident Characteristics	Hillsborough Avenue to Hanna Avenue		Hanna Avenue to Hillsborough River		Hillsborough River to Yukon Street		Yukon Street to Busch Boulevard		Busch Boulevard to Bougainvillea Avenue		Bougainvillea Avenue to Fowler Avenue	
	1992	1993	1994	1992	1993	1994	1992	1993	1994	1992	1993	1994
Type of Accident												
Rear End	4	10	13	6	10	25	1	5	5	1	4	4
Left Turn	1	3	1	1	4	4	1	1	1	2	2	2
Right Turn		3	10	1	1	8		2	3	1	1	1
Angle	5	5	10	1	6	2		1	1	1	1	1
Sideswipe		2	1	2	1	2		1	2	1	2	2
Head On	1	1	1	1	5	5		1	1	1	1	1
Other	2	4	2	1	7	12		1	1	3	7	7



LEGEND

- RIVER /WATER
- RAILROAD
- US ROUTE
- STATE ROAD
- SIGNALIZED INTERSECTION
- MID-BLOCK

**CITY OF TAMPA
 AND
 FLORIDA DEPARTMENT
 OF
 TRANSPORTATION**

**40TH STREET/MCKINLEY DRIVE PD&E STUDY
 HILLSBOROUGH AVENUE (SR 600 & US 92)
 TO FOWLER AVENUE (SR 582)
 HILLSBOROUGH COUNTY, FLORIDA
 THREE YEAR ACCIDENT DATA SUMMARY
 (REPORTED FOR YEARS 1992, 1993 & 1994)**

SPN: 10007-1550
 WPI: 7123608

FIGURE 2-7

The safety ratios were also calculated for intersections and segments located along the study corridor. The safety ratio calculations are based on the methodology outlined in the Highway Safety Improvement Program Guideline¹³ prepared by the FDOT. Safety ratios above 1.000 indicate that the specific segment or intersection experiences vehicle collisions above average and, therefore, traffic safety at these locations may need to be improved. The safety ratios for each intersection and segment are provided in Tables 2-7 and 2-8, respectively. The following summarizes the intersections and segments with a safety ratio greater than 1.0 for at least one year.

Intersections with Safety Ratios Greater than 1.0

- Hillsborough Avenue (Years 1992, 1993 and 1994)
- Busch Boulevard (Years 1992, 1993 and 1994)
- Fowler Avenue (Years 1993 and 1994)

Segments with Safety Ratios Greater than 1.0

- Hillsborough Avenue to Hanna Avenue (Years 1993 and 1994)
- Hanna Avenue to Hillsborough River (Years 1993 and 1994)
- Hillsborough River to Yukon Street (Years 1993 and 1994)
- Yukon Street to Busch Boulevard (Year 1993)
- Busch Boulevard to Bougainvillea Avenue (Year 1993)

Five out of six of the roadway segments and half of the signalized intersections analyzed have safety ratios of greater than 1.0. These unsatisfactory ratios can be attributed to high traffic volumes traveling along a roadway which has numerous driveways, intersecting streets and sub-standard geometrics. Such conditions are not only reflected in the safety ratios but are also identified in the crash summary data shown in Tables 2-6 and 2-7. Such data support the need for safety and/or roadway improvements along the project corridor.

2.9 BRIDGE/NAVIGATION

The existing low level two-lane bridge over the Hillsborough River is in fair structural condition with a sufficiency rating of 68.4 but is “functionally obsolete” since it does not meet current design standards due to geometrics and the lack of shoulders. The existing bridge will be replaced to provide for a low level four-lane structure which meets current design standards. Traffic will be maintained during construction by utilizing the existing bridge.

The 40th Street/McKinley Drive bridge is located upstream of the Hillsborough River Dam, which is operated by the City of Tampa for reservoir purposes. No locks are provided at this structure, therefore, navigation is constrained and tidal influence occurs downstream of the dam. Additionally, the recreational boating use downstream of the bridge and upstream of the dam is restricted by the existing vertical clearance of 1.5 m (5 ft). This condition prohibits large recreational vessels from passing under the bridge. Therefore, special ship impact design criteria are not necessary.

A United States Coast Guard permit will not be required per Title 23 Code of Federal Regulations (23 CFR) since the replacement bridge is “over waters which are not used or are not susceptible to use in their natural condition, or be a reasonable improvement as a means to transport interstate or foreign commerce and which are not tidal.”

2.10 REFERENCES

1. City of Tampa Comprehensive Plan Transportation, Mass Transit and Traffic Circulation Elements; City of Tampa Planning Department; Tampa, Florida; October 1993.
2. 2015 Cost Feasible Long Range Transportation Plan; Hillsborough County Metropolitan Planning Organization; Tampa, Florida; December 18, 1995.

3. Transportation Improvement Program; Hillsborough County Metropolitan Planning Organization; Tampa, Florida; 1995.
4. Technical Traffic Memorandum; Gannett Fleming Engineers and Planners; Tampa, Florida; Draft Date January 1996.
5. Florida Statistical Abstract; Bureau of Economic and Business Research, College of Business Administration, University of Florida; Gainesville, Florida; 1992-1995.
6. Highway Capacity Software, Version 2.4; McTrans Center, University of Florida; Gainesville, FL; 1995.
7. Highway Capacity Manual, Special Report 209; Transportation Research Board; Washington, D.C.; 1994.
8. Year 2010 Adopted Highway Cost Feasible Plan; Hillsborough County Metropolitan Planning Organization; Tampa, Florida.
9. National Cooperative Highway Research Program Report 255 - Highway Traffic Data for Urbanized Area Project Planning and Design; Transportation Research Board; Washington, D.C.; 1982.
10. Florida Roundabout Guide; Florida Department of Transportation; Tallahassee, Florida; March 1996.
11. Conceptual Stage Relocation Plan; Post, Buckley, Schuh and Jernigan; Tampa, Florida; September 1996.

12. The Economic Impacts of the Port of Tampa, Fiscal Year 1994-1995; Dr. Joseph Desalo, Department of Economics, University of South Florida.

13. Highway Safety Improvement Program Guideline , Topic No. 500-000-100-c; Florida Department of Transportation, Safety Office, Tallahassee, Florida; Effective Date: November 4, 1991.

SECTION 3

ALTERNATIVES CONSIDERED

In an effort to identify potential alternate corridors which could serve the future travel demand of the 40th Street/McKinley Drive corridor, the following options were considered:

- No-Action Alternative
- Improvement to another north-to-south roadway within the region.
- Enhancement of transit service within the existing 40th Street/McKinley Drive corridor.
- Roadway improvements for the existing 40th Street/McKinley Drive corridor.

3.1 NO-ACTION ALTERNATIVE

The No-Action Alternative serves as the baseline condition and reflects a situation where design year traffic volumes are loaded on the planned roadway system without improvements to 40th Street/McKinley Drive. It should be noted that the No-Action Alternative is not consistent with the MPO's 2015 Long Range Transportation Plan. As discussed in Section 2.3., maintaining the existing two-lane facility would only increase congestion allowing the facility to operate at a more undesirable LOS.

Under the No-Action Alternative various adverse impacts will result as the traffic capacity, over time, continues to deteriorate. Such impacts include :

- Postponement of the project may jeopardize the City of Tampa's community revitalization and redevelopment goals targeted for the project area.
- Unacceptable levels of service on the existing roadway network, e.g., deteriorated capacity of local and collector streets.

- Increased traffic congestion causing increased road user cost due to travel delay.
- Disruption of adjacent residential neighborhoods resulting from an increase in cut-through traffic.
- Deterioration of air quality caused by traffic congestion and delays.
- Deterioration of the existing safety deficiencies due to the traffic increases.
- Deterioration in the emergency service response time.
- Increased roadway maintenance costs.
- No improved stormwater management via stormwater attenuation and treatment.
- Delayed cleanup of contaminated soils/sites which cannot be avoided by the project.
- Postponement of the project may jeopardize its future economic feasibility due to the current escalation of construction and ROW costs.

Substantial improvements are required along the corridor to provide acceptable operating conditions. Given the conditions identified in Section 2.3, the No-Action Alternative does not serve the travel demand safely and efficiently and is inconsistent with the adopted local government plan. However, the No-Action Alternative will remain a viable alternative up to and until after the public hearing.

Benefits associated with the No-Action Alternative include:

- No new construction costs.
- No disruption to the existing land uses due to construction activities.
- No disruption to traffic due to construction activities.
- No ROW acquisitions or relocations.
- No environmental degradation or disruption of natural resources.

3.2 ALTERNATIVES CONSIDERED AND REJECTED

A review of the existing roadway network in the immediate vicinity of 40th Street/McKinley Drive reveals the presence of two north-south collector or arterial roadways: 30th Street west of 40th Street/McKinley Drive and 56th Street east of 40th Street/McKinley Drive.

30th Street is currently a two-lane collector between Hillsborough Avenue and Sligh Avenue and between East Yukon Street and Fowler Avenue (see Figure 1-1). Currently there is no 30th Street segment between Sligh Avenue and East Yukon Street. The extension of 30th Street between Sligh Avenue and East Yukon Street would impact the City of Tampa's Rogers Park and an associated golf course, as well as the Hillsborough River. In addition, improvement of this roadway will not address the projected traffic demand along 40th Street/McKinley Drive. Therefore, improvement of 30th Street, in lieu of improving 40th Street/McKinley Drive is not considered viable.

56th Street is currently a four lane divided arterial with commercial property bordering the existing ROW between Hillsborough Avenue and Fowler Avenue. 56th Street is also currently outside of the city limits. In addition, improvement of this roadway will not address the projected traffic demand, which the Hillsborough County MPO's traffic model (Alternative "J2" RTA FSUTMS) indicates will travel along 40th Street/McKinley Drive. Therefore, improvement of 56th Street, in lieu of improving 40th Street/McKinley Drive is not considered viable.

In addition, improvement of any of these roadways, in lieu of improvements to the existing 40th Street/McKinley Drive corridor, is inconsistent with City of Tampa Comprehensive Plan Transportation, Mass Transit and Traffic Circulation Elements¹ and the Hillsborough County Metropolitan Planning Organizations Adopted 2015 Long Range Transportation Plan².

3.3 TRANSPORTATION SYSTEMS MANAGEMENT ALTERNATIVES

The Transportation System Management (TSM) alternative, which consists of low cost capital improvements that maximize the efficiency of the present system, was also considered for this project. TSM amenities for the proposed project include improved geometrics at intersections, sidewalks, bicycle facilities, signal timing, transit improvements, bus turnouts and improved access.

TSM activities currently in place within the Tampa Bay Area which may reduce single occupancy vehicular trips and improve operational efficiencies within the project corridor include the following:

- A computerized traffic signal system within the City of Tampa, which includes all traffic signals within the project corridor.
- Development of a budgeted “Neighborhood Sidewalk Program” by the City of Tampa.
- Active “Transportation Management Associations” within the City of Tampa which provide car pooling, van sharing, mass transit incentives and flex-time support services to businesses and the general public.
- Frequent bus service within the corridor, which is in compliance with the “Americans with Disability Act”. Additionally the transit system has

implemented various improvements and or incentives to increase ridership. Such measures include express service, bicycle carrying racks for the buses, a bus shelter program, bus turnouts, and reduced fares for students and the elderly.

However, in order to accommodate future travel demand along the 40th Street/McKinley Drive corridor, TSM activities alone are not considered a viable alternative to roadway improvements.

3.4 MULTI-MODAL ALTERNATIVES

Multi-modal alternatives for commuter rail and/or dedicated bus lane were considered by the City of Tampa as an element of an “ Arterial Investment Study” (AIS)³ conducted by the City. The results of this study were incorporated into this PD&E Study and were previously discussed in Sections 2.7.1 and 2.7.3.

The Hillsborough County MPO, based upon the AIS and other planning considerations, determined that the existing CSX rail corridor which is located west of 30th Street be identified as part of the commuter rail plan. This plan was subsequently adopted in the MPO’s 2015 Long Range Transportation Plan, therefore eliminating commuter rail considerations along the 40th Street/McKinley Drive corridor. Additionally, a Major Investment Study (MIS) Alternatives for Mobility Enhancement has been initiated and will examine in detail rail corridors. The MIS is being conducted, in cooperation with the FDOT, by the MPO, HARTline and the City of Tampa.

The HARTline provides local bus service (Route 5) along the 40th Street/McKinley Drive, a transit emphasis corridor. This route has one of the highest passenger ridership routes in the HARTline system. Because of the high passenger ridership, consideration was given to providing dedicated bus lanes as part of the proposed improvements and coordination with HARTline was instituted. As a result of this coordination effort HARTline did not foresee

the need for dedicated bus lanes, but did identify amenities such as bus bays to be incorporated into the design concepts. Continuing cooperative efforts with HARTline have resulted in identifying the location of the desired bus bays, bus shelters and new bus stop locations associated with the recommended Build alternative.

Pedestrian facilities are intermittent and bicycle lanes are absent along the existing corridor. Given the urban/commercial setting of the project area, local plans and community desires, sidewalks and bicycle lanes were incorporated into all alternatives considered.

3.5 CONSTRUCTION ALTERNATIVES

The travel demand in the 40th Street/McKinley Drive corridor is projected to increase substantially over the next 20 years. The No-Action Alternative will not accommodate the projected increased demand at LOS D. To provide an acceptable LOS in the corridor several construction alternatives have been evaluated and are discussed in this section.

3.5.1 Roadway Design Criteria

In order for the proposed roadway improvements to fulfill their objective of accommodating motorized vehicles, pedestrians, and bicyclists in a safe and efficient manner, they must adhere to specific design standards. The Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways for the State of Florida⁴ (the Florida Green Book), 1989 edition, and the FDOT's Plans Preparation Manual⁵, where Florida Green Book does not address this issue, were consulted in developing the design criteria for this project. All of the criteria used for the conceptual design of this study utilized desirable standards as identified in the manuals when this PD&E study originated. Since the initiation of this project, the Florida Green Book has been revised to reflect only the minimum standards required.

3.5.2 Preliminary Alternative Alignments

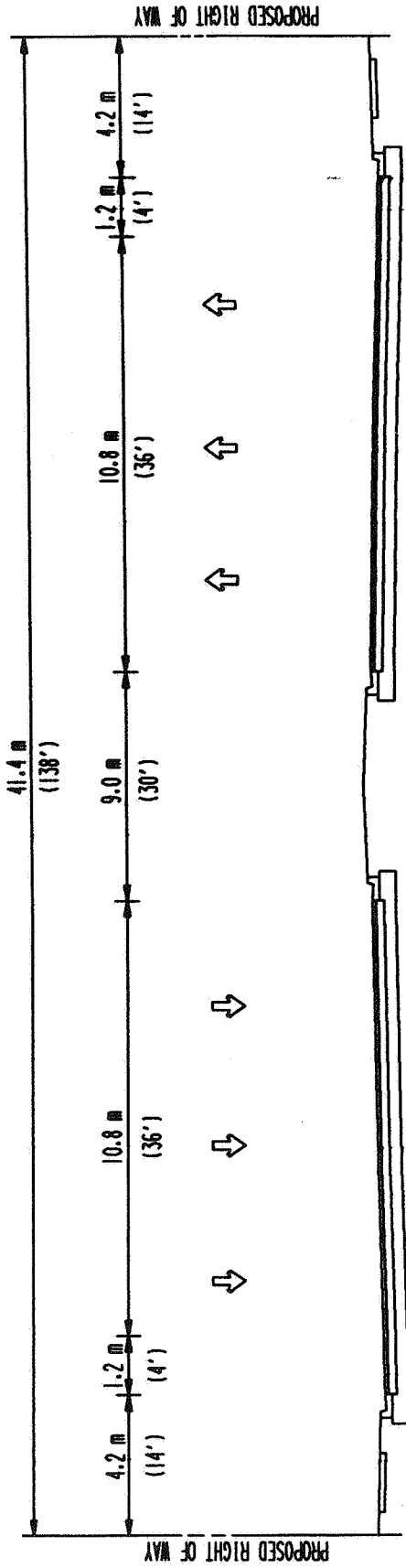
This section describes the methodology and analysis utilized for development of each preliminary alternative alignment.

To effectively develop and evaluate all viable improvement alternatives for the project, the following three step process was applied:

- In Step One, as described in section 1.1, the project was divided into four study segments based on the existing land use patterns, location of crossover streets, and available ROW width.
- In Step Two, alternative typical cross sections were generated based on roadway design findings of the traffic analyses. Selection of the type and dimensions of the typical section for each segment also considered socioeconomic and environmental impacts.
- In Step Three, alternative improvement alignments were generated for each segment based on the typical cross sections (developed in Step Two) and the assumption that the additional ROW can be acquired on the west side, east side, or from both sides of the existing facility.

3.5.2.1 Typical Section Analysis

Nine alternative typical sections were initially developed for this study and are shown on Figures 3-1 through 3-9. Due to the type and density of the adjacent land use, urban-type typical roadway and bridge sections were considered to provide for four and six travel lanes, with varying transit and landscaping options.



**70 km/h DESIGN SPEED
(45 MPH)**

6 - LANE URBAN TYPICAL SECTION

40TH STREET/MCKINLEY DRIVE PD&E STUDY
 Hillsborough Avenue (SR 92) To Fowler Avenue (CR 582)
 HILLSBOROUGH COUNTY, FLORIDA

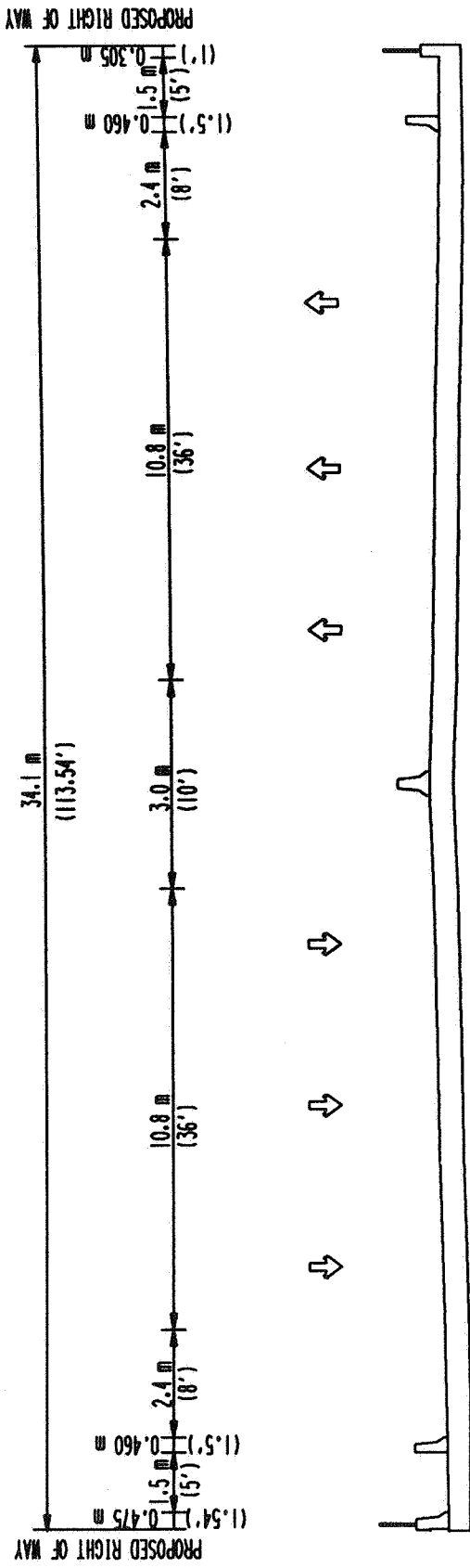
**CITY OF TAMPA
 AND
 FLORIDA DEPARTMENT OF TRANSPORTATION**

TYPICAL SECTION 1

SPN:10007-1550

WPI:7123608

FIGURE 3-1



70 km/h DESIGN SPEED
(45 MPH)

40TH STREET/MCKINLEY DRIVE PD&E STUDY
 Hillsborough Avenue (SR 92) To Fowler Avenue (CR 582)
 HILLSBOROUGH COUNTY, FLORIDA

CITY OF TAMPA
 AND
 FLORIDA DEPARTMENT OF TRANSPORTATION

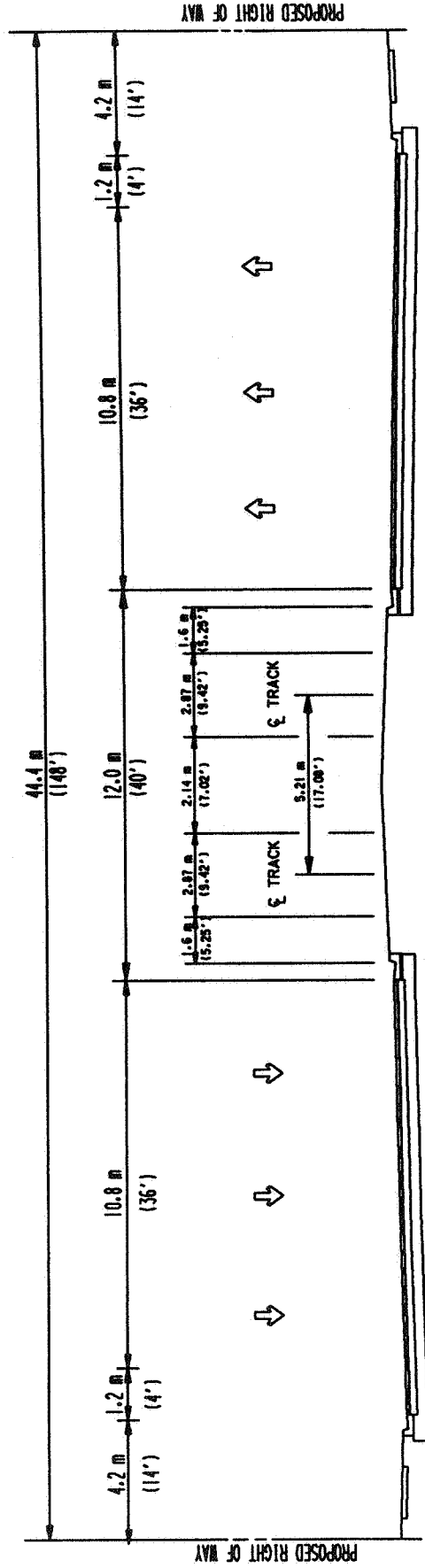
TYPICAL SECTION 2

SPN:10007-1550

WPI:7123608

FIGURE 3-2

6 - LANE BRIDGE TYPICAL SECTION



**70 km/h DESIGN SPEED
(45 MPH)**

**6 - LANE URBAN TYPICAL SECTION
WITH LIGHT RAIL**

40TH STREET/MCKINLEY DRIVE PD&E STUDY
 Hillsborough Avenue (SR 92) To Fowler Avenue (CR 582)
 HILLSBOROUGH COUNTY, FLORIDA

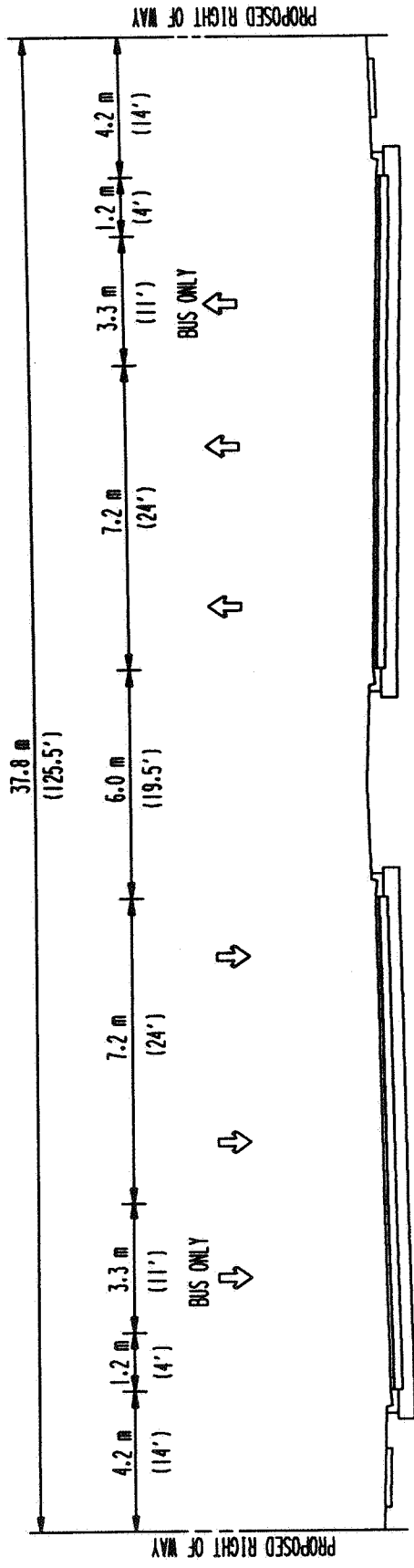
**CITY OF TAMPA
AND
FLORIDA DEPARTMENT OF TRANSPORTATION**

TYPICAL SECTION 3

SPN:10007-1550

WPI:7123608

FIGURE 3-3



**70 km/h DESIGN SPEED
(45 MPH)**

**6 - LANE URBAN OUTSIDE (BUSWAY)
TYPICAL SECTION**

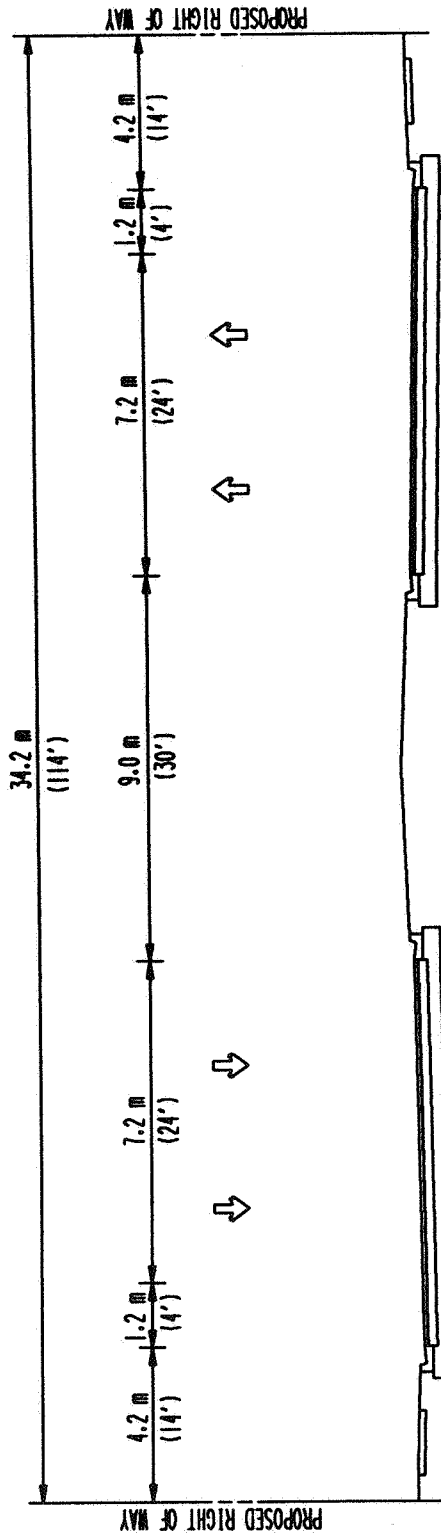
40TH STREET/MCKINLEY DRIVE PD&E STUDY
 Hillsborough Avenue (SR 92) To Fowler Avenue (CR 582)
 HILLSBOROUGH COUNTY, FLORIDA

**CITY OF TAMPA
AND
FLORIDA DEPARTMENT OF TRANSPORTATION**

TYPICAL SECTION 4

SPN:10007-1550

WPI:7123608
FIGURE 3-4



**70 km/h DESIGN SPEED
(45 MPH)**

4 - LANE URBAN TYPICAL SECTION

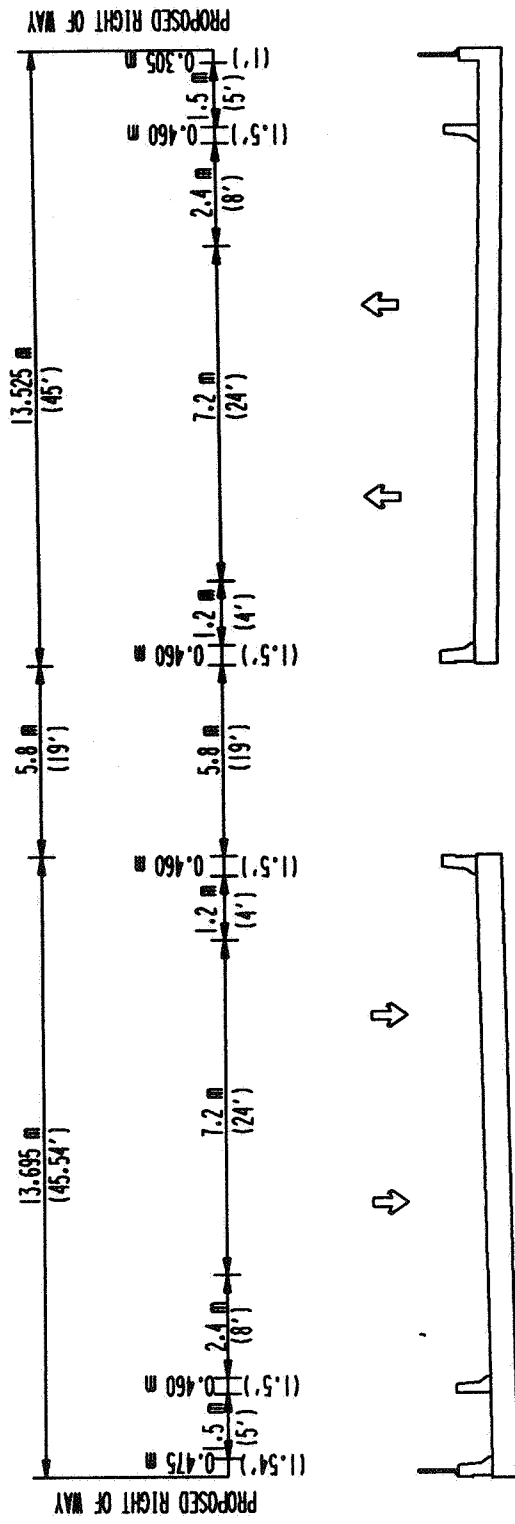
40TH STREET/MCKINLEY DRIVE PD&E STUDY
 Hillsborough Avenue (SR 92) To Fowler Avenue (CR 582)
 HILLSBOROUGH COUNTY, FLORIDA

**CITY OF TAMPA
 AND
 FLORIDA DEPARTMENT OF TRANSPORTATION**

TYPICAL SECTION 5

SPN:10007-1550

WPI:7123608
 FIGURE 3-5



**70 km/h DESIGN SPEED
(45 MPH)**

**TWO 2-LANE BRIDGE
TYPICAL SECTION**

40TH STREET/MCKINLEY DRIVE PD&E STUDY
 Hillsborough Avenue (SR 92) To Fowler Avenue (CR 582)
 HILLSBOROUGH COUNTY, FLORIDA

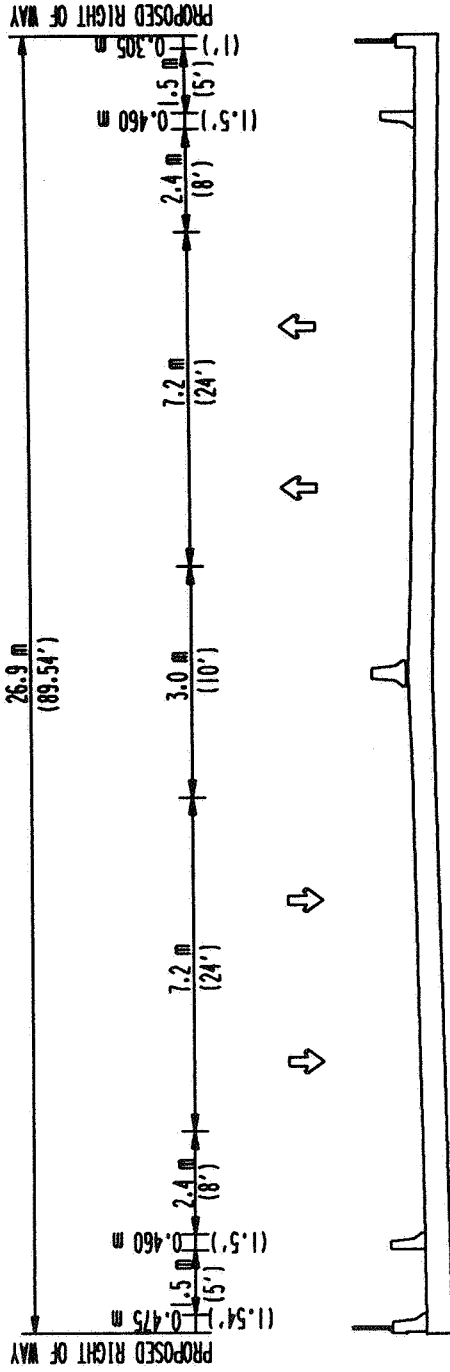
**CITY OF TAMPA
AND
FLORIDA DEPARTMENT OF TRANSPORTATION**

TYPICAL SECTION 6

SPN:10007-1550

WPI:7123608

FIGURE 3-6



**70 km/h DESIGN SPEED
(45 MPH)**

4 - LANE BRIDGE TYPICAL SECTION

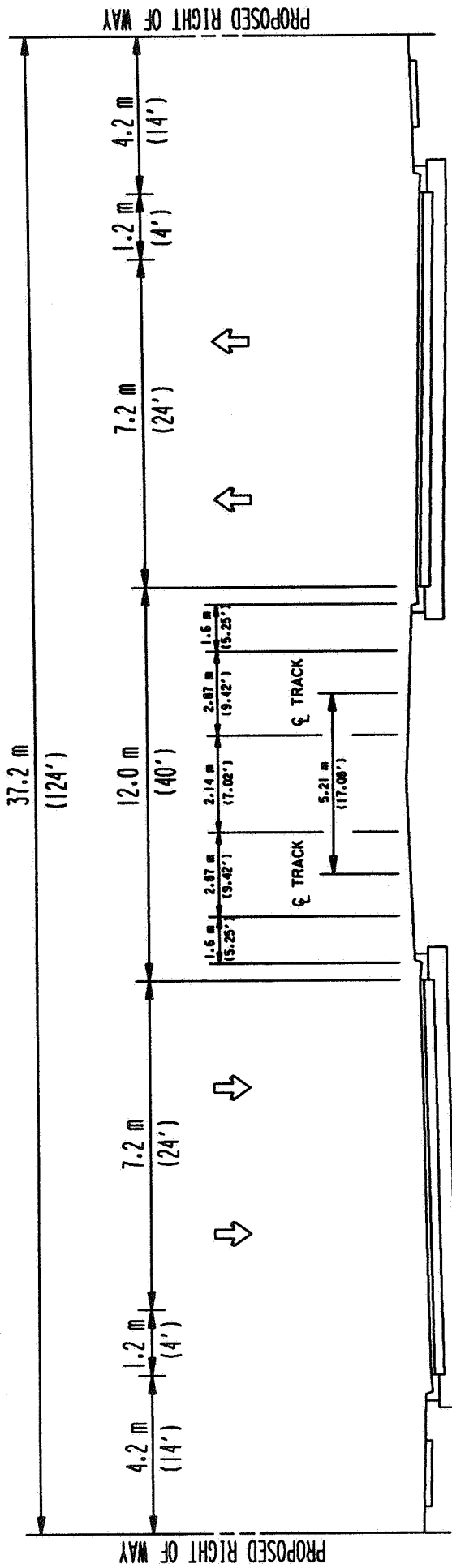
40TH STREET/MCKINLEY DRIVE PD&E STUDY
 Hillsborough Avenue (SR 92) To Fowler Avenue (CR 582)
 HILLSBOROUGH COUNTY, FLORIDA

**CITY OF TAMPA
 AND
 FLORIDA DEPARTMENT OF TRANSPORTATION**

TYPICAL SECTION 7

SPN:10007-1550

WPI:7123608
 FIGURE 3-7



**70 km/h DESIGN SPEED
(45 MPH)**

**4 - LANE URBAN TYPICAL SECTION
WITH LIGHT RAIL**

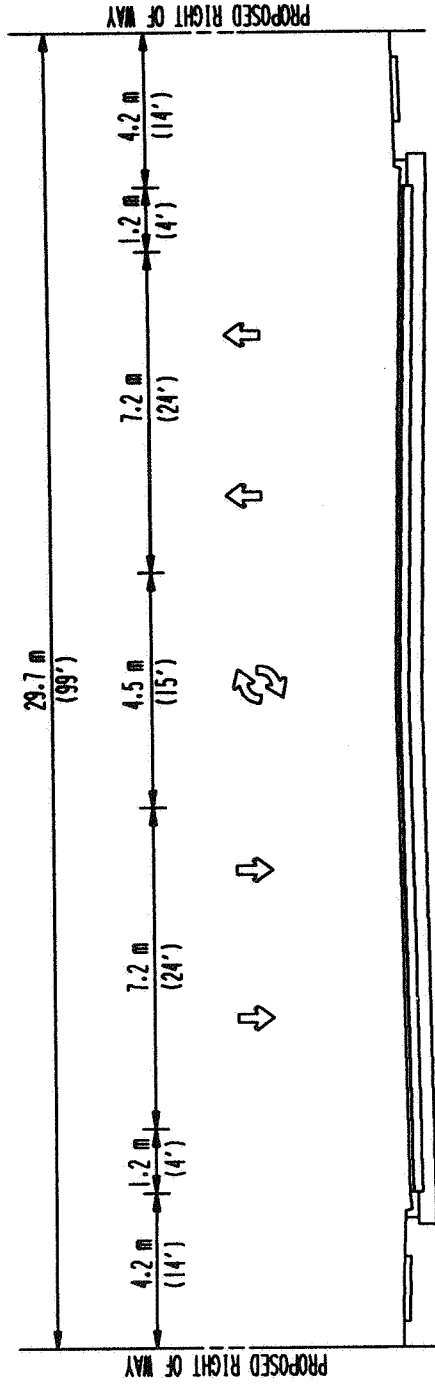
40TH STREET/MCKINLEY DRIVE PD&E STUDY
 Hillsborough Avenue (SR 92) To Fowler Avenue (CR 582)
 HILLSBOROUGH COUNTY, FLORIDA

**CITY OF TAMPA
AND
FLORIDA DEPARTMENT OF TRANSPORTATION**

TYPICAL SECTION 8

SPN:10007-1550

WPI:7123608
FIGURE 3-8



**60 km/h DESIGN SPEED
(40 MPH)**

5 - LANE URBAN TYPICAL SECTION

40TH STREET/MCKINLEY DRIVE PD&E STUDY
 Hillsborough Avenue (SR 92) To Fowler Avenue (CR 582)
 HILLSBOROUGH COUNTY, FLORIDA

**CITY OF TAMPA
 AND
 FLORIDA DEPARTMENT OF TRANSPORTATION**

TYPICAL SECTION 9

SPN:10007-1550

WPI:7123608

FIGURE 3-9

Of the nine (9) typical sections developed for the 40th Street/McKinley Street corridor, four typical sections (5, 6, 7, and 9) were identified to be carried forward for further study with the various alternative alignments. The following sections discuss the reasons for the elimination of typical sections 1, 2, 3, 4, and 8.

Typical sections 1, 2 and 3 are 6-lane typical roadway and bridge sections which were eliminated from further study due to the Technical Traffic Memorandum⁶ demonstrating that in the Year 2020 a four-lane divided facility will provide an acceptable LOS D or better for the majority of the study corridor roadway segments. A LOS D is sufficient for an urban facility per the Hillsborough County Metropolitan Planning Organization Adopted 2015 Long Range Transportation Plan.

There are a few segments expected to operate below LOS D in the design year (2020). These include the northbound segments between Yukon Street and Busch Boulevard, and Bougainvillea Avenue and Fowler Avenue. These segments are both expected to operate at LOS F. In addition, the southbound segments between Yukon Street and Busch Boulevard, and Busch Boulevard and the Busch Gardens Entrance are both expected to operate at LOS E. As referenced in Section 2.4, these segments will fail due to the delay associated with the signalized intersections, and the distance between signalized intersections which does not allow for adequate platooning to occur. Providing a six-lane roadway does not improve the LOS for these segments.

Typical Section 4 was eliminated from further study since HARTline also does not foresee a need for dedicated bus lanes along this transit emphasis corridor as "corridor density would not warrant the costs" (see Appendix A, letter dated February 2, 1996). HARTline requested the study focus on the connection between pedestrian movement, bus stop locations and neighborhood features. As a part of this PD&E study the HARTline staff has evaluated the existing and proposed transit facilities and recommended the need for bus turnouts along the 40th Street/McKinley Drive corridor.

Typical Section 8 was eliminated from further study with the adoption of the Hillsborough County Metropolitan Planning Organization's 2015 Long Range Transportation Plan. The adopted 2015 Long Range Transportation Plan includes improvements to the highway, rail transit and bus systems over the next 20 years. This plan identifies a parallel corridor, west of 40th Street/McKinley Drive, 30th Street, as a future rail corridor in lieu of 40th Street/McKinley Drive.

In conclusion, it was determined that the remaining Typical Sections 5, 6, 7 and 9 would be utilized for developing alternative alignments to analyze environmental and land use impacts.

3.5.2.2 Alternative Analysis

Western, eastern, and centered alignments were developed individually for Segments A, B, C and D using the recommended typical sections discussed in the previous sections. Using a variety of combinations of typical sections and alignments, six viable alternative alignments were developed using the recommended typical sections. A brief description of the viable alternative alignments follows.

- Alternative 1: proposes the widening of 40th Street/McKinley Drive to the east with ROW acquisitions primarily to the east. This alternative utilizes the four-lane divided typical section (Figure 3-5) for the roadway and the dual 2-lane bridge typical section (Figure 3-6) for the bridge.
- Alternative 1B: proposes the widening of 40th Street/McKinley Drive to the east, and a new bridge alignment, with ROW acquisitions primarily to the east. This alternative utilizes the four-lane divided typical section (Figure 3-5) for the roadway and the dual 2-lane bridge typical section (Figure 3-6) for the bridge.

- Alternative 2: proposes the widening of 40th Street/McKinley Drive to the west, with ROW acquisitions primarily to the west. This alternative utilizes the four-lane divided typical section (Figure 3-5) for the roadway and the dual 2-lane bridge typical section (Figure 3-6) for the bridge.
- Alternative 3: proposes the widening of 40th Street/McKinley Drive to the center with ROW acquisitions on both sides of the roadway. This alternative utilizes the four-lane divided typical section (Figure 3-5) for the roadway and the dual 2-lane bridge typical section (Figure 3-6) for the bridge.
- Alternative 4: proposes the widening of 40th Street/McKinley Drive to the center with ROW acquisitions on both sides of the roadway. This alternative utilizes the five-lane typical section (Figure 3-9) for the roadway and the four-lane bridge typical section (Figure 3-7) for the bridge.
- Alternative 5: proposes the widening of 40th Street/McKinley Drive to the center with ROW acquisitions on both sides of the roadway. This alternative utilizes the four-lane divided typical section (Figure 3-5) for the roadway with the multi-use pathway on the east side of the roadway and the dual 2-lane bridge typical section (Figure 3-6) for the bridge.

In order to evaluate the study alternatives, an evaluation matrix (for each alternative) shown in Tables 3-1 through 3-6 was prepared using quantifiable criteria from a multitude of categories including, socio-economic, environmental, cultural, hazardous material/petroleum contamination, and costs (engineering, ROW, and construction). The matrices data was developed utilizing raster-based aerial photography depicting the proposed ROW needs for each alternative. A brief description of these quantifiable evaluation criteria follows the tables.

Table 3-1
Evaluation Matrix
Alternative 1: East Alignment
Four Lane Divided Roadway

EVALUATION FACTORS	SEGMENTS				
	A	B	C	D	TOTAL
BUSINESS IMPACTS					
Number of businesses expected to be relocated	8	12	22	0	42
RESIDENTIAL IMPACTS					
Number of residences expected to be relocated	4	28	14	0	46
RIGHT OF WAY IMPACTS					
Number of adjacent parcels	54	74	87	4	219
Area of ROW to be acquired in hectares (acres)	1.61 (3.98)	2.76 (6.82)	2.59 (6.40)	0.24 (0.59)	7.2 (17.79)
COMMUNITY IMPACTS (within proposed ROW)					
Number of churches to be impacted	1	1	5	0	7
Number of schools to be impacted	0	0	0	0	0
Number of child care facilities to be impacted	1	1	2	0	4
Number of nursing homes to be impacted	0	0	0	0	0
Number of hospitals to be impacted	0	0	0	0	0
Number of cemeteries to be impacted	0	0	0	0	0
Number of other public services (fire stations, etc.) to be impacted	0	0	0	0	0
Number of noise sensitive sites impacted	65	122	64	0	251
IMPACTS ON CULTURAL/HISTORIC RESOURCES AND PUBLIC PARKS					
Number of historic sites/structures within or adjacent to ROW	0	0	0	0	0
Number of public parks within or adjacent to ROW	0	0	0	0	0
NATURAL ENVIRONMENTAL IMPACTS					
Total wetland impacts area in hectares (acres)	0	0.051 (0.13)	0	0	0.051 (0.13)
FLOODPLAIN AND FLOODWAY ENCROACHMENT					
Area of base floodplain encroachment in hectares (acres)	0	0.04 (0.1)	0	0	0.04 (0.1)
Area of base floodway encroachment in hectares (acres)	0	0	0	0	0
POTENTIAL PETROLEUM POLLUTANT AND HAZARDOUS MATERIAL CONTAMINATED SITES					
Number of potential petroleum pollutant contaminated sites	3	3	5	0	11
Number of potential hazardous material contaminated sites	5	4	2	0	11
ESTIMATED PROJECT COSTS (Present value in million \$)					
ROW acquisition cost (millions)	\$8.60	\$10.41	\$12.74	\$1.37	\$33.12
Engineering cost (millions) 10%	\$0.19	\$0.44	\$0.27	\$0.36	\$1.26
Construction cost (millions)	\$1.91	\$4.36	\$2.68	\$3.63	\$12.58
Construction engineering and inspection (millions) 10%	\$0.19	\$0.44	\$0.27	\$0.36	\$1.26
TOTAL COST	\$10.89	\$15.65	\$15.96	\$5.72	\$48.22

Table 3-2
Evaluation Matrix
Alternative 1B: East Alignment
Four Lane Divided Roadway with New Bridge Alignment

EVALUATION FACTORS	SEGMENTS				
	A	B	C	D	TOTAL
BUSINESS IMPACTS					
Number of businesses expected to be relocated	8	12	22	0	42
RESIDENTIAL IMPACTS					
Number of residences expected to be relocated	4	10	14	0	28
RIGHT OF WAY IMPACTS					
Number of adjacent parcels	54	54	87	4	199
Area of ROW to be acquired in hectares (acres)	1.61 (3.98)	4.31 (10.65)	2.59 (6.40)	0.24 (0.59)	8.75 (21.62)
COMMUNITY IMPACTS (within proposed ROW)					
Number of churches to be impacted	1	1	5	0	7
Number of schools to be impacted	0	0	0	0	0
Number of child care facilities to be impacted	1	1	2	0	4
Number of nursing homes to be impacted	0	0	0	0	0
Number of hospitals to be impacted	0	0	0	0	0
Number of cemeteries to be impacted	0	0	0	0	0
Number of other public services (fire stations, etc.) to be impacted	0	0	0	0	0
Number of noise sensitive sites impacted	65	103	64	0	232
IMPACTS ON CULTURAL/HISTORIC RESOURCES AND PUBLIC PARKS					
Number of historic sites/structures within or adjacent to ROW	0	0	0	0	0
Number of public parks within or adjacent to ROW	0	0	0	0	0
NATURAL ENVIRONMENTAL IMPACTS					
Total wetland impacts area in hectares (acres)	0	0.02 (0.05)	0	0	0.02 (0.05)
FLOODPLAIN AND FLOODWAY ENCROACHMENT					
Area of base floodplain encroachment in hectares (acres)	0	0.04 (0.10)	0	0	0.04 (0.1)
Area of base floodway encroachment in hectares (acres)	0	0	0	0	0
POTENTIAL PETROLEUM POLLUTANT AND HAZARDOUS MATERIAL CONTAMINATED SITES					
Number of potential petroleum pollutant contaminated sites	3	3	5	0	11
Number of potential hazardous material contaminated sites	5	4	2	0	11
ESTIMATED PROJECT COSTS (Present value in million \$)					
ROW acquisition cost (millions)	\$8.60	\$9.67	\$12.74	\$1.37	\$32.38
Engineering cost (millions) 10%	\$0.20	\$0.93	\$0.29	\$0.39	\$1.81
Construction cost (millions)	\$2.03	\$9.32	\$2.86	\$3.91	\$18.12
Construction engineering and inspection (millions) 10%	\$0.20	\$0.93	\$0.29	\$0.39	\$1.81
TOTAL COST	\$11.03	\$20.85	\$16.18	\$6.06	\$54.12

**Table 3-3
Evaluation Matrix
Alternative 2: West Alignment
Four Lane Divided Roadway**

EVALUATION FACTORS	SEGMENTS				
	A	B	C	D	TOTAL
BUSINESS IMPACTS					
Number of businesses expected to be relocated	15	19	26	0	60
RESIDENTIAL IMPACTS					
Number of residences expected to be relocated	10	19	25	0	54
RIGHT OF WAY IMPACTS					
Number of adjacent parcels	54	74	87	4	219
Area of ROW to be acquired in hectares (acres)	1.67 (4.13)	2.66 (6.57)	2.68 (6.62)	0.41 (1.01)	7.42 (18.33)
COMMUNITY IMPACTS (within proposed ROW)					
Number of churches to be impacted	2	1	4	0	7
Number of schools to be impacted	0	0	0	0	0
Number of child care facilities to be impacted	1	1	2	0	4
Number of nursing homes to be impacted	0	0	0	0	0
Number of hospitals to be impacted	0	0	0	0	0
Number of cemeteries to be impacted	0	0	0	0	0
Number of other public services (fire stations, etc.) to be impacted	0	0	0	0	0
Number of noise sensitive sites impacted	54	127	59	0	240
IMPACTS ON CULTURAL/HISTORIC RESOURCES AND PUBLIC PARKS					
Number of historic sites/structures within or adjacent to ROW	0	0	0	0	0
Number of public parks within or adjacent to ROW	0	0	0	0	0
NATURAL ENVIRONMENTAL IMPACTS					
Total wetland impacts area in hectares (acres)	0	0.06 (0.15)	0	0	0.06 (0.15)
FLOODPLAIN AND FLOODWAY ENCROACHMENT					
Area of base floodplain encroachment in hectares (acres)	0	0.04 (0.10)	0	0	0.04 (0.1)
Area of base floodway encroachment in hectares (acres)	0	0	0	0	0
POTENTIAL PETROLEUM POLLUTANT AND HAZARDOUS MATERIAL CONTAMINATED SITES					
Number of potential petroleum pollutant contaminated sites	3	5	4	0	12
Number of potential hazardous material contaminated sites	5	2	3	0	10
ESTIMATED PROJECT COSTS (Present value in million \$)					
ROW acquisition cost (millions)	\$11.68	\$13.07	\$14.78	\$1.56	\$41.09
Engineering cost (millions) 10%	\$0.19	\$0.44	\$0.27	\$0.36	\$1.26
Construction cost (millions)	\$1.90	\$4.35	\$2.66	\$3.62	\$12.53
Construction engineering and inspection (millions) 10%	\$0.19	\$0.44	\$0.27	\$0.36	\$1.26
TOTAL COST	\$13.96	\$18.30	\$17.98	\$5.90	\$56.14

Table 3-4
Evaluation Matrix
Alternative 3: Center Alignment
Four Lane Divided Roadway

EVALUATION FACTORS	SEGMENTS				
	A	B	C	D	TOTAL
BUSINESS IMPACTS					
Number of businesses expected to be relocated	8	16	17	0	41
RESIDENTIAL IMPACTS					
Number of residences expected to be relocated	4	30	24	0	58
RIGHT OF WAY IMPACTS					
Number of parcels impacted	54	74	87	4	219
Area of ROW to be acquired in hectares (acres)	1.43 (3.53)	3.38 (8.35)	2.29 (5.66)	0.24 (0.59)	7.34 (18.13)
COMMUNITY IMPACTS (within proposed ROW)					
Number of churches to be impacted	2	1	5	0	8
Number of schools to be impacted	0	0	0	0	0
Number of child care facilities to be impacted	1	1	2	0	4
Number of nursing homes to be impacted	0	0	0	0	0
Number of hospitals to be impacted	0	0	0	0	0
Number of cemeteries to be impacted	0	0	0	0	0
Number of other public services (fire stations, etc.) to be impacted	0	0	0	0	0
Number of noise sensitive sites impacted	50	135	65	0	250
IMPACTS ON CULTURAL/HISTORIC RESOURCES AND PUBLIC PARKS					
Number of historic sites/structures within or adjacent to ROW	0	0	0	0	0
Number of public parks within or adjacent to ROW	0	0	0	0	0
NATURAL ENVIRONMENTAL IMPACTS					
Total wetland impacts area in hectares (acres)	0	0.051 (0.13)	0	0	0.051 (0.13)
FLOODPLAIN AND FLOODWAY ENCROACHMENT					
Area of base floodplain encroachment in hectares (acres)	0	0.04 (0.10)	0	0	0.04 (0.1)
Area of base floodway encroachment in hectares (acres)	0	0	0	0	0
POTENTIAL PETROLEUM POLLUTANT AND HAZARDOUS MATERIAL CONTAMINATED SITES					
Number of potential petroleum pollutant contaminated sites	3	4	4	0	11
Number of potential hazardous material contaminated sites	5	4	3	0	12
ESTIMATED PROJECT COSTS (Present value in million \$)					
ROW acquisition cost (millions)	\$10.76	\$11.61	\$14.88	\$1.31	\$38.56
Engineering cost (millions) 10%	\$0.19	\$0.47	\$0.27	\$0.37	\$1.30
Construction cost (millions)	\$1.92	\$4.73	\$2.69	\$3.65	\$12.99
Construction engineering and inspection (millions) 10%	\$0.19	\$0.47	\$0.27	\$0.37	\$1.30
TOTAL COST	\$13.06	\$17.28	\$18.11	\$5.70	\$54.15

**Table 3-5
Evaluation Matrix
Alternative 4: Center Alignment
Five Lane Roadway**

EVALUATION FACTORS	SEGMENTS				
	A	B	C	D	TOTAL
BUSINESS IMPACTS					
Number of businesses expected to be relocated	8	5	17	0	30
RESIDENTIAL IMPACTS					
Number of residences expected to be relocated	4	26	20	0	50
RIGHT OF WAY IMPACTS					
Number of parcels impacted	54	74	87	4	219
Area of ROW to be acquired in hectares (acres)	1.52 (3.76)	2.34 (5.78)	1.84 (4.55)	0.24 (0.59)	5.94 (14.68)
COMMUNITY IMPACTS (within proposed ROW)					
Number of churches to be impacted	2	1	5	0	8
Number of schools to be impacted	0	0	0	0	0
Number of child care facilities to be impacted	1	1	2	0	4
Number of nursing homes to be impacted	0	0	0	0	0
Number of hospitals to be impacted	0	0	0	0	0
Number of cemeteries to be impacted	0	0	0	0	0
Number of other public services (fire stations, etc.) to be impacted	0	0	0	0	0
Number of noise sensitive sites impacted	49	131	62	0	242
IMPACTS ON CULTURAL/HISTORIC RESOURCES AND PUBLIC PARKS					
Number of historic sites/structures within or adjacent to ROW	0	0	0	0	0
Number of public parks within or adjacent to ROW	0	0	0	0	0
NATURAL ENVIRONMENTAL IMPACTS					
Total wetland impacts area in hectares (acres)	0	0.06 (0.15)	0	0	0.06 (0.15)
FLOODPLAIN AND FLOODWAY ENCROACHMENT					
Area of base floodplain encroachment in hectares (acres)	0	0.04 (0.10)	0	0	0.04 (0.1)
Area of base floodway encroachment in hectares (acres)	0	0	0	0	0
POTENTIAL PETROLEUM POLLUTANT AND HAZARDOUS MATERIAL CONTAMINATED SITES					
Number of potential petroleum pollutant contaminated sites	3	5	4	0	12
Number of potential hazardous material contaminated sites	5	4	3	0	12
ESTIMATED PROJECT COSTS (Present value in million \$)					
ROW acquisition cost (millions)	\$9.54	\$10.59	\$12.82	\$1.31	\$34.26
Engineering cost (millions) 10%	\$0.19	\$0.38	\$0.26	\$0.35	\$1.18
Construction cost (millions)	\$1.87	\$3.81	\$2.61	\$3.54	\$11.83
Construction engineering and inspection (millions) 10%	\$0.19	\$0.38	\$0.26	\$0.35	\$1.18
TOTAL COST	\$11.79	\$15.16	\$15.95	\$5.55	\$48.45

Table 3-6
Evaluation Matrix
Alternative 5: Center Alignment
Enhanced* Four Lane Divided Roadway

EVALUATION FACTORS	SEGMENTS				
	A	B	C	D	TOTAL
BUSINESS IMPACTS					
Number of businesses expected to be relocated	8	13	18	0	39
RESIDENTIAL IMPACTS					
Number of residences expected to be relocated	4	26	21	0	51
RIGHT OF WAY IMPACTS					
Number of parcels impacted	54	74	87	4	219
Area of ROW to be acquired in hectares (acres)	1.65 (4.08)	3.27 (8.08)	2.75 (6.80)	0.25 (0.61)	7.92 (19.57)
COMMUNITY IMPACTS (within proposed ROW)					
Number of churches to be impacted	2	1	4	0	7
Number of schools to be impacted	0	0	0	0	0
Number of child care facilities to be impacted	1	1	2	0	4
Number of nursing homes to be impacted	0	0	0	0	0
Number of hospitals to be impacted	0	0	0	0	0
Number of cemeteries to be impacted	0	0	0	0	0
Number of other public services (fire stations, etc.) to be impacted	0	0	0	0	0
Number of noise sensitive sites impacted	51	134	64	0	249
IMPACTS ON CULTURAL/HISTORIC RESOURCES AND PUBLIC PARKS					
Number of historic sites/structures within or adjacent to ROW	0	0	0	0	0
Number of public parks within or adjacent to ROW	0	0	0	0	0
NATURAL ENVIRONMENTAL IMPACTS					
Total wetland impacts area in hectares (acres)	0	0.06 (0.15)	0	0	0.06 (0.15)
FLOODPLAIN AND FLOODWAY ENCROACHMENT					
Area of base floodplain encroachment in hectares (acres)	0	0.04 (0.10)	0	0	0 (0.1)
Area of base floodway encroachment in hectares (acres)	0	0	0	0	0
POTENTIAL PETROLEUM POLLUTANT AND HAZARDOUS MATERIAL CONTAMINATED SITES					
Number of potential petroleum pollutant contaminated sites impacted	3	6	4	0	13
Number of potential hazardous material contaminated sites impacted	5	3	3	0	11
ESTIMATED PROJECT COSTS (Present value in million \$)					
ROW acquisition cost (millions)	\$11.03	\$11.80	\$15.55	\$1.31	\$39.69
Engineering cost (millions) 10%	\$0.19	\$0.40	\$0.27	\$0.36	\$1.22
Construction cost (millions)	\$1.91	\$4.00	\$2.71	\$3.62	\$12.24
Construction engineering and inspection (millions) 10%	\$0.19	\$0.40	\$0.27	\$0.36	\$1.22
TOTAL COST	\$13.32	\$16.60	\$18.80	\$5.65	\$54.37

*Included Multiple Use Pathway

- **Business Impacts**

The number of businesses expected to be seriously impacted by the Build Alternative so as to require relocation was identified using raster based aerial photography and field verification. Other business impacts expected to be sustained by businesses which will not need to be relocated, such as parking loss, etc., were considered in the ROW acquisition cost estimates.

- **Residential Impacts**

The impacts on existing residences along the project were assessed by determining the number of residences that exist within the proposed ROW and which may have to be acquired/relocated if the Build Alternative is implemented.

- **ROW Impacts**

Private property impacts were quantified with two measures: number of parcels being impacted and acreage of private property to be purchased. The number of parcels impacted is directly related to the administrative effort and cost that is required to obtain the needed land. The acreage of private property to be taken and the number of parcels to be impacted affect the ROW acquisition costs shown later.

- **Community Facility Impacts**

The project impacts on existing community facilities such as churches, schools, hospitals, fire stations, etc., were assessed. Similar to the residential impacts, the number of the community facilities requiring acquisition/relocation within the proposed ROW were counted.

- Noise Impacts

Noise sensitive sites are defined by FHWA as residences, schools, churches, hospitals, nursing homes, libraries, public assembly halls, lodgings and parks. The number of the existing noise sensitive sites that are impacted by the Build Alternative was determined using the FHWA's STAMINA computer model.

- Impacts on Cultural/Historic Resources and Public Parks

As presented in Section 4.2, a thorough investigation was undertaken to identify the number of potential historically and archaeologically significant sites and structures along the project corridor. Similarly, the location of existing and proposed public parks was determined.

- Natural Environment Impacts

Impacts of the proposed ROW on the natural environment include impacts on wetlands, floodplains and floodways.

- Potential Hazardous Material and Petroleum Pollutant Contaminated Sites

As presented in Section 4.3, several potential hazardous material and/or petroleum contaminated sites exist along the project. The number of potentially contaminated sites within or adjacent to the proposed ROW were grouped into two categories: hazardous material sites and petroleum contaminated sites.

- Estimated Project Costs

Preliminary cost estimates were prepared for the Build Alternative, including separate estimates of the ROW acquisition, engineering/design, construction, and construction engineering and inspection costs (CEI).

The ROW acquisition cost includes the cost of business and residence relocations, private property purchase, and reimbursement cost for miscellaneous business damages. The construction cost of the Build Alternative was calculated using the FDOT's Long-Range Estimates (LRE) computer program, and includes stormwater management systems, signing and marking, signalization adjustments, improvements at one railroad grade crossing, lighting and landscaping, and excludes utility adjustments and wetland mitigation. Due to the location of the existing 40th Street/McKinley Drive pavement relative to the proposed median, these costs also assume the existing pavement, including base, will not be utilized.

The engineering (final design) cost was estimated based on current per-mile costs of designing other similar roadway facilities. The construction engineering and inspection costs were calculated as a percentage (10.0 percent) of the construction cost.

Subsequent to the preparation of the evaluation matrix, the process to compare and identify a preferred alternative was initiated using a computer based program, "Decision Pad". Decision Pad is a software designed to help make decisions among competing alternatives. It considers the criteria and rates it, evaluates the data and weights it, and scores the alternatives from best to worst, highest to lowest, least expensive to most expensive, etc. The decision processing of the program allows the user to separate both opinions and hard facts into a logical foundation for making decisions.

The first step in establishing the Decision Pad model was to enter the criteria, in other words, the needs and goals for this decision. For this PD&E Study, these criteria are the environmental, socioeconomic and cost variables that will be impacted by roadway construction. Some examples of these criteria are residential land use impacts, wetland impacts and contamination impacts.

The next step in the evaluation process was the consideration of factors which are qualitative, non-quantifiable, such as consistency with local transportation plans, level of service during the design year, user benefits, safety, neighborhood enhancement, and access. Non-quantifiable factors assign a value to a variety of factors instead of a numerical count.

The following non-quantifiable factors were identified in evaluating each alternative:

- Improve the geometry of the existing roadway, i.e., horizontal alignment in Segments B and C and the vertical alignment at the south end of the bridge and approach in Segment B.
- Avoid or minimize impacts to **established** land uses, such as, churches, community facilities and the River Pines Retirement Apartments. Established land uses were identified by the City of Tampa's Planning Department.
- Protect and maintain the residential integrity of the community, with a special focus on the unique area in Segment B along the rivers edge.

3.5.3 Reasonable and Feasible Alternative Alignments

The recommendation of the preferred alternative was based on the use of the impact evaluation matrix and consideration of the non-quantifiable factors. The following sections explain the rationale behind the selection of the preferred alternative in each segment.

3.5.4 Segment A

Segment A travels from Hillsborough Avenue to Fern Street. East, West and Centered alignments were developed for Segment A. Table 3-7 identifies the quantifiable impacts for each alternative analyzed for Segment A. The following sections identify the quantifiable and non-quantifiable factors used in selecting a preferred alternative for this segment. Based on analysis of these factors, Alternative 1 (East alignment) was selected as the preferred alternative for Segment A as shown in Appendix B.

3.5.4.1 Quantifiable Factors in Segment A

- Alternative 2 (West alignment) has the greatest number of business relocations (15), all other alternatives have eight (8) relocations.
- Alternative 2 (West alignment) has the greatest number of residential relocations (10), all other alternatives have four (4) residential relocations.
- Alternatives 1 and 1B (East alignments) have the least number of church impacts (1), all other alternatives have two (2) church impacts.
- Alternatives 1 and 1B (East alignments) have the least ROW acquisition cost \$8.60 million versus \$11.68 million for Alternative 2 (West alignment) which has the greatest cost.
- Alternative 1B (East alignment) has the greatest construction cost \$2.03 million versus \$1.87 million for Alternative 4 (Center alignment) which has the least cost. All of the other alternatives construction costs fall between these values.

**Table 3-7
Evaluation Matrix
Segment A**

EVALUATION FACTORS	ALTERNATIVE					
	1	1B	2	3	4	5
BUSINESS IMPACTS						
Number of businesses expected to be relocated	8	8	15	8	8	8
RESIDENTIAL IMPACTS						
Number of residences expected to be relocated	4	4	10	4	4	4
RIGHT OF WAY IMPACTS						
Number of adjacent parcels	54	54	54	54	54	54
Area of ROW to be acquired in hectares (acres)	1.61 (3.98)	1.61 (3.98)	1.67 (4.13)	1.43 (3.53)	1.52 (3.76)	1.65 (4.08)
COMMUNITY IMPACTS (within proposed ROW)						
Number of churches to be impacted	1	1	2	2	2	2
Number of schools to be impacted	0	0	0	0	0	0
Number of child care facilities to be impacted	1	1	1	1	1	1
Number of nursing homes to be impacted	0	0	0	0	0	0
Number of hospitals to be impacted	0	0	0	0	0	0
Number of cemeteries to be impacted	0	0	0	0	0	0
Number of other public services (fire stations, etc.) to be impacted	0	0	0	0	0	0
Number of noise sensitive sites impacted	65	65	54	50	49	51
IMPACTS ON CULTURAL/HISTORIC RESOURCES AND PUBLIC PARKS						
Number of historic sites/structures within or adjacent to ROW	0	0	0	0	0	0
Number of public parks within or adjacent to ROW	0	0	0	0	0	0
NATURAL ENVIRONMENTAL IMPACTS						
Total wetland impacts area in hectares (acres)	0	0	0	0	0	0
FLOODPLAIN AND FLOODWAY ENCROACHMENT						
Area of base floodplain encroachment in hectares (acres)	0	0	0	0	0	0
Area of base floodway encroachment in hectares (acres)	0	0	0	0	0	0
POTENTIAL PETROLEUM POLLUTANT AND HAZARDOUS MATERIAL CONTAMINATED SITES						
Number of potential petroleum pollutant contaminated sites	3	3	3	3	3	3
Number of potential hazardous material contaminated sites	5	5	5	5	5	5
ESTIMATED PROJECT COSTS (Present value in million \$)						
ROW acquisition cost (millions)	\$8.60	\$8.60	\$11.68	\$10.76	\$9.54	\$11.03
Engineering cost (millions) 10%	\$0.19	\$0.20	\$0.19	\$0.19	\$0.19	\$0.19
Construction cost (millions)	\$1.91	\$2.03	\$1.90	\$1.92	\$1.87	\$1.91
Construction engineering and inspection (millions) 10%	\$0.19	\$0.20	\$0.19	\$0.19	\$0.19	\$0.19
TOTAL COST	\$10.89	\$11.03	\$13.96	\$13.06	\$11.79	\$13.32

- The Decision Pad analysis ranked Alternative 1 (East alignment) as the preferred alternative for Segment A.

3.5.4.2 Non-Quantifiable Factors for Segment A

- The four-lane divided urban roadway (Alternatives 1, 1B, 2, 3 and 5) maintains compatibility and driver expectancy with the section of 40th Street/McKinley Drive south of Hillsborough Avenue. Alternative 4 provides for a five-lane undivided roadway.
- Alternative 1 and 1B (East alignment) minimize established land use impacts as identified by the City of Tampa, i.e., The Northside M.B. Church, 40th Street Baptist Church, The Thrift Store, Tampa Coin Laundry, Soulful Rhythm, and High Fashion Esquire which are all located on the west side of the roadway.

3.5.5 Segment B

Segment B extends from Fern Street to River Hills Drive and is a predominantly residential area. East, West and Centered alignments were developed for Segment B. Table 3-8 identifies the quantifiable impacts for each alternative analyzed for Segment B. Based on analysis of quantifiable and non-quantifiable factors Alternative 2 (West alignment) was selected as the preferred alternative for Segment B as shown in Appendix B. Selection of Alternative 2 was based primarily on non-quantifiable criteria associated with recognized residential and community values which could not be quantified or weighted within the "Decision Pad" model.

Non-quantifiable criteria which resulted in selection of Alternative 2 over Alternatives 1 and 1B (East alignments) included avoidance of impacts to the River Pines Apartment complex, maintaining community integrity west of the alignment and along the river's edge and

**Table 3-8
Evaluation Matrix
Segment B**

EVALUATION FACTORS	ALTERNATIVE					
	1	1B	2	3	4	5
BUSINESS IMPACTS						
Number of businesses expected to be relocated	12	12	19	16	5	13
RESIDENTIAL IMPACTS						
Number of residences expected to be relocated	28	10	19	30	26	26
RIGHT OF WAY IMPACTS						
Number of adjacent parcels	74	54	74	74	74	74
Area of ROW to be acquired in hectares (acres)	2.76 (6.82)	4.31 (10.7)	2.66 (6.57)	3.38 (8.35)	2.34 (5.78)	3.27 (8.08)
COMMUNITY IMPACTS (within proposed ROW)						
Number of churches to be impacted	1	1	1	1	1	1
Number of schools to be impacted	0	0	0	0	0	0
Number of child care facilities to be impacted	1	1	1	1	1	1
Number of nursing homes to be impacted	0	0	0	0	0	0
Number of hospitals to be impacted	0	0	0	0	0	0
Number of cemeteries to be impacted	0	0	0	0	0	0
Number of other public services (fire stations, etc.) to be impacted	0	0	0	0	0	0
Number of noise sensitive sites impacted	122	103	127	135	131	134
IMPACTS ON CULTURAL/HISTORIC RESOURCES AND PUBLIC PARKS						
Number of historic sites/structures within or adjacent to ROW	0	0	0	0	0	0
Number of public parks within or adjacent to ROW	0	0	0	0	0	0
NATURAL ENVIRONMENTAL IMPACTS						
Total wetland impacts area in hectares (acres)	0.051 (0.13)	0.02 (0.05)	0.06 (0.15)	0.051 (0.13)	0.06 (0.15)	0.06 (0.15)
FLOODPLAIN AND FLOODWAY ENCROACHMENT						
Area of base floodplain encroachment in hectares (acres)	0.04 (0.1)	0.04 (0.10)	0.04 (0.10)	0.04 (0.10)	0.04 (0.10)	0.04 (0.10)
Area of base floodway encroachment in hectares (acres)	0	0	0	0	0	0
POTENTIAL PETROLEUM POLLUTANT AND HAZARDOUS MATERIAL CONTAMINATED SITES						
Number of potential petroleum pollutant contaminated sites	3	3	5	4	5	6
Number of potential hazardous material contaminated sites	4	4	2	4	4	3
ESTIMATED PROJECT COSTS (Present value in million \$)						
ROW acquisition cost (millions)	\$10.40	\$9.67	\$13.07	\$11.61	\$10.59	\$11.80
Engineering cost (millions) 10%	\$0.44	\$0.93	\$0.44	\$0.47	\$0.38	\$0.40
Construction cost (millions)	\$4.36	\$9.32	\$4.35	\$4.73	\$3.81	\$4.00
Construction engineering and inspection (millions) 10%	\$0.44	\$0.93	\$0.44	\$0.47	\$0.38	\$0.40
TOTAL COST	\$15.64	\$20.85	\$18.30	\$17.28	\$15.16	\$16.60

minimizing impacts to existing residential land uses. The effects of the alignments associated with Alternatives 1 and 1B along Segment B are as follows:

Immediately south of the bridge from Lake Shore Drive to Hanlon Street Alternative 1 required significant amounts of ROW from twenty-five river front parcels and the River Pines Apartment complex. Alternative 1B realigned the bridge crossing along a north/south axis to Crawford Street. This bridge would pass over a wider expanse of the Hillsborough River, crossing in front of five river front parcels, and would require ROW from twenty river front parcels as well as the River Pines Apartment complex.

The River Pines complex is a subsidized retirement community for the elderly. The value of minimizing impacts to this complex was strongly voiced by the community at small group meetings, a public informational meeting and a public workshop. Community input suggested and strongly supported the need for providing sidewalks, locating busbays and providing for a signalized pedestrian crossing to better assist and support the residents within this retirement community. The citizens concerns regarding this facility and its importance to the neighborhood resulted in placing a high value on this complex.

Alternative 2 reduced the number of residential relocations by 9, but increased the number of business relocations by 7. Community sentiment, from both residents and business owners, however, placed a higher value on minimizing residential relocations and maintaining residential integrity at the expense of businesses which could relocate within the project corridor. In support of this sentiment the City has committed to assist relocating business within the project corridor and has provided loan and economic information and the name and telephone numbers of staff of the Tampa-Bay Economic Development Corporation to the business community. Additionally, the community characterized some of the businesses as eye-sores that detracted from the residential character, such as Deals Used Appliances. This particular business refurbishes and sells used appliances and has a large open area cluttered with scores of refrigerators, ovens, washers and dryers.

Alternative 1 was rejected by the community because it: (1) required substantial ROW from residential river front properties which impacted the residential character that the community wished to preserve and, (2) affected the River Pines Apartment complex.

Although Alternative 1B had ten fewer residential relocations than Alternative 2, Alternative 1B was rejected by the community because it disrupted neighborhood integrity by: (1) altering existing access of the residential community between Lake Shore Drive and Crawford Street, i.e., isolating the residential community from its traditional access to and from 40th Street, (2) impacting the River Pines Apartment complex, (3) creating a visual obstruction to the existing river vista and, (4) disrupting existing residential river front use and interfering with or prohibiting access to or from the river.

The following sections discuss the quantifiable and non-quantifiable factors used in evaluating a preferred alternative for this segment.

3.5.5.1 Quantifiable Factors for Segment B

- Alternative 2 (West alignment) has the greatest number of business relocations (19) versus Alternative 4 (Center alignment) which has only five (5) business relocations.
- Alternative 3 (Center alignment) has the greatest number of residential relocations (30) versus Alternative 1B (East alignment - re-alignment of 40th Street Bridge) which has only ten (10) residential relocations.
- Alternative 1B (East alignment) has the least wetland impacts (0.02 hectares), all other alternatives have 0.051 to 0.06 hectares of wetland impacts.

- Alternatives 1, 1B (East alignments), and 2 (West alignment) have the least number of impacts to petroleum pollutant and hazardous material contaminated sites (7), all other alternatives have one (1) to two (2) more additional sites.
- Alternative 1B (East alignment) has the least ROW acquisition cost, \$9.67 million, versus \$13.07 million for Alternative 2 (West alignment) which has the greatest.
- Alternative 1B (East alignment) has the greatest construction cost, \$9.32 million, versus \$3.81 million for Alternative 4 (Center alignment) which has the least cost. All of the other alternatives construction costs are similar to the Alternative 4 construction cost.
- Decision Pad analysis ranked the Alternative 1B (Re-alignment of the Bridge to the East) as the preferred alternative for Segment B.

3.5.5.2 Non-Quantifiable Factors for Segment B

- Alternative 2 (West alignment) avoids impacts to the River Pines Retirement Apartments which is a significant established land use identified by the City of Tampa. **Additionally, public input received at the public workshop and small group meetings found that the local community objected to any alternatives which would impact this complex. All other alternatives impact this established land use.**
- **Alternative 2 (West alignment) protects and maintains the community integrity and the residential character along the Hillsborough River. The importance of protecting the residential characteristics along this portion of the project was identified by the affected community at the public workshop and small group meetings. Alternatives which**

impacted residential characteristics or affected community integrity were therefore rejected by the public. All other alternatives impact the residential community along the Hillsborough River.

- Along Segment B the affected community placed low values on small marginal businesses which detracted from the residential character. Additional businesses, such as a mower service, print shop, barber shop, used auto sales lot and small roofing company, have received the City's commitment to assist in relocating businesses within the project corridor. Therefore, the community placed greater value on Alternative 2 which minimized residential land use impacts and preserved the integrity of the residential community.
- This segment is predominately residential and, the four-lane divided urban roadway (Alternatives 1, 1B, 2, 3 and 5) offers the pedestrian safety area of refuge in the median. Alternative 4 is a five-lane undivided roadway and provides no safety area for pedestrians.

The alternative evaluation process for Segment B resulted in non-qualitative factors being the primary criteria in determining alternative selection. Due to the predominantly residential character of this segment, Alternative 2 was considered the preferred alternative since it would have the fewest effects on the existing residential neighborhood. Community interests and values strongly supported the selection of Alternative 2.

3.5.6 Segment C

Segment C runs from River Hills Drive to Busch Boulevard. East, West and Centered alignments were developed for Segment C. Table 3-9 identifies the quantifiable impacts for each alternative analyzed for Segment C. Based on analysis of quantifiable and non-quantifiable factors it was concluded that a modified centerline alternative consisting of a

**Table 3-9
Evaluation Matrix
Segment C**

EVALUATION FACTORS	ALTERNATIVE					
	1	1B	2	3	4	5
BUSINESS IMPACTS						
Number of businesses expected to be relocated	22	22	26	17	17	18
RESIDENTIAL IMPACTS						
Number of residences expected to be relocated	14	14	25	24	20	21
RIGHT OF WAY IMPACTS						
Number of adjacent parcels	87	87	87	87	87	87
Area of ROW to be acquired in hectares (acres)	2.59 (6.40)	2.59 (6.40)	2.68 (6.62)	2.29 (5.66)	1.84 (4.55)	2.75 (6.80)
COMMUNITY IMPACTS (within proposed ROW)						
Number of churches to be impacted	5	5	4	5	5	4
Number of schools to be impacted	0	0	0	0	0	0
Number of child care facilities to be impacted	2	2	2	2	2	2
Number of nursing homes to be impacted	0	0	0	0	0	0
Number of hospitals to be impacted	0	0	0	0	0	0
Number of cemeteries to be impacted	0	0	0	0	0	0
Number of other public services (fire stations, etc.) to be impacted	0	0	0	0	0	0
Number of noise sensitive sites impacted	64	64	59	65	62	64
IMPACTS ON CULTURAL/HISTORIC RESOURCES AND PUBLIC PARKS						
Number of historic sites/structures within or adjacent to ROW	0	0	0	0	0	0
Number of public parks within or adjacent to ROW	0	0	0	0	0	0
NATURAL ENVIRONMENTAL IMPACTS						
Total wetland impacts area in hectares (acres)	0	0	0	0	0	0
FLOODPLAIN AND FLOODWAY ENCROACHMENT						
Area of base floodplain encroachment in hectares (acres)	0	0	0	0	0	0
Area of base floodway encroachment in hectares (acres)	0	0	0	0	0	0
POTENTIAL PETROLEUM POLLUTANT AND HAZARDOUS MATERIAL CONTAMINATED SITES						
Number of potential petroleum pollutant contaminated sites	5	5	4	4	4	4
Number of potential hazardous material contaminated sites	2	2	3	3	3	3
ESTIMATED PROJECT COSTS (Present value in million \$)						
ROW acquisition cost (millions)	\$12.70	\$12.74	\$14.78	\$14.88	\$12.82	\$15.55
Engineering cost (millions) 10%	\$0.27	\$0.29	\$0.27	\$0.27	\$0.26	\$0.27
Construction cost (millions)	\$2.68	\$2.86	\$2.66	\$2.69	\$2.61	\$2.71
Construction engineering and inspection (millions) 10%	\$0.27	\$0.29	\$0.27	\$0.27	\$0.26	\$0.27
TOTAL COST	\$15.92	\$16.18	\$17.98	\$18.11	\$15.95	\$18.80

combination of geometrics from the various centerline alternatives (Alternatives 3, 4 and 5) be incorporated into a preferred centerline alternative which further minimized impacts. Therefore, this modified centerline alternative was selected as the preferred alternative for Segment C, as shown in Appendix B.

The selection analysis determined that the center alignment could be modified to avoid churches, a major factor in retaining the community's integrity. The modification to this alignment reduced the number of church impacts to three (3) and also reduced the number of impacts to potential petroleum pollutant and hazardous material contaminated sites to five (5) from seven (7). Therefore, in Segment C, a modified center alignment and a four-lane divided urban facility was selected as the preferred alternative.

The following sections identify the quantifiable and non-quantifiable factors used in selecting a preferred alternative for this segment.

3.5.6.1 Quantifiable Factors for Segment C

- Alternatives 3 and 4 (Center alignment) have the least number of business relocations (17) while Alternative 2 (West alignment) has the greatest number of business relocations (26).
- Alternatives 1 and 1B (East alignment) have the least number of residential impacts (14), all of the other alternatives range from twenty (20) to twenty-five (25) residential relocations.
- Alternatives 2 (West alignment) and 5 (Center alignment) have the least number of church impacts (4), all other alternatives have five (5) church impacts.

- Alternative 5 (Center alignment) has the greatest ROW acquisition cost \$15.55 million versus \$12.74 million for Alternatives 1 and 1B (East alignment) which has the least cost.
- Alternative 4 (Center alignment) has the least construction cost \$2.61 million versus \$2.86 million for Alternative 1B (East alignment) which has the greatest. All of the other alternatives construction costs fall between these values.
- Decision Pad analysis equally ranked Alternatives 1, 1B (East alignments), and 4 (Center alignment) as the preferred alternative for Segment C.

3.5.6.2 Non-Quantifiable Factors for Segment C

- Alternatives 1 and 1B (East alignment) impact two (2) to three (3) fewer established land use sites than Alternatives 3, 4 and 5 as identified by the City of Tampa's Planning Department.
- Alternatives 3, 4 and 5 (center alignments) improve the geometry of the existing roadway; i.e., the horizontal alignment by minimizing ROW impacts to Segment D.

3.5.7 Segment D

Segment D travels from Busch Boulevard to Fowler Avenue. East, West and Centered alignments were developed for Segment D. Alternative 3 (center alignment) was also selected as the preferred alternative for this segment (as shown in Appendix B). Table 3-10 identifies for the quantifiable impacts for each alternative analyzed for Segment D. The preferred alternative was determined based primarily on existing ROW characteristics and cost, and construction cost; all other factors analyzed for each alternative were similar.

**Table 3-10
Evaluation Matrix
Segment D**

EVALUATION FACTORS	ALTERNATIVE					
	1	1B	2	3	4	5
BUSINESS IMPACTS						
Number of businesses expected to be relocated	0	0	0	0	0	0
RESIDENTIAL IMPACTS						
Number of residences expected to be relocated	0	0	0	0	0	0
RIGHT OF WAY IMPACTS						
Number of adjacent parcels	4	4	4	4	4	4
Area of ROW to be acquired in hectares (acres)	0.24 (0.59)	0.24 (0.59)	0.41 (1.01)	0.24 (0.59)	0.24 (0.59)	0.25 (0.61)
COMMUNITY IMPACTS (within proposed ROW)						
Number of churches to be impacted	0	0	0	0	0	0
Number of schools to be impacted	0	0	0	0	0	0
Number of child care facilities to be impacted	0	0	0	0	0	0
Number of nursing homes to be impacted	0	0	0	0	0	0
Number of hospitals to be impacted	0	0	0	0	0	0
Number of cemeteries to be impacted	0	0	0	0	0	0
Number of other public services (fire stations, etc.) to be impacted	0	0	0	0	0	0
Number of noise sensitive sites impacted	0	0	0	0	0	0
IMPACTS ON CULTURAL/HISTORIC RESOURCES AND PUBLIC PARKS						
Number of historic sites/structures within or adjacent to ROW	0	0	0	0	0	0
Number of public parks within or adjacent to ROW	0	0	0	0	0	0
NATURAL ENVIRONMENTAL IMPACTS						
Total wetland impacts area in hectares (acres)	0	0	0	0	0	0
FLOODPLAIN AND FLOODWAY ENCROACHMENT						
Area of base floodplain encroachment in hectares (acres)	0	0	0	0	0	0
Area of base floodway encroachment in hectares (acres)	0	0	0	0	0	0
POTENTIAL PETROLEUM POLLUTANT AND HAZARDOUS MATERIAL CONTAMINATED SITES						
Number of potential petroleum pollutant contaminated sites	0	0	0	0	0	0
Number of potential hazardous material contaminated sites	0	0	0	0	0	0
ESTIMATED PROJECT COSTS (Present value in million \$)						
ROW acquisition cost (millions)	\$1.37	\$1.37	\$1.56	\$1.31	\$1.31	\$1.31
Engineering cost (millions) 10%	\$0.36	\$0.39	\$0.36	\$0.37	\$0.35	\$0.36
Construction cost (millions)	\$3.63	\$3.91	\$3.62	\$3.65	\$3.54	\$3.62
Construction engineering and inspection (millions) 10%	\$0.36	\$0.39	\$0.36	\$0.37	\$0.35	\$0.36
TOTAL COST	\$5.72	\$6.06	\$5.90	\$5.70	\$5.55	\$5.65

The following sections identify the quantifiable and non-quantifiable factors used in selecting a preferred alternative for this segment.

3.5.7.1 Quantifiable Factors for Segment D

- Alternative 2 (West alignment) has the greatest area of ROW to be acquired (0.41 hectares), all other alternatives have either 0.24 or 0.25 hectares of ROW to be acquired.
- Alternatives 3, 4 and 5 (Center alignment) have the least ROW acquisition cost \$1.31 million versus \$1.56 million for Alternative 2 (West alignment) which has the greatest cost.
- Alternative 4 (Center alignment) has the least construction cost \$ 3.54 million versus \$3.91 million for Alternative 1B (East alignment). All of the other alternatives construction costs fall between these values.
- The Decision Pad analysis ranked Alternatives 1, 3, 4 and 5 equal to each other as the preferred alignment for Segment D.

3.5.7.2 Non-Quantifiable Factors for Segment D

- Alternatives 3, 4 and 5 allow for a future six-lane facility with minimal future ROW impacts, all other alternatives would require substantial ROW acquisition from the Busch Gardens Theme Park.

3.6 DESIGN YEAR TRAFFIC OPERATIONS

Intersection capacity and arterial analysis were performed for the alternatives. Traffic projections and analysis are discussed in Section 2.4 of this report. From a traffic operations

perspective, improving 40th Street/McKinley Drive to a four-lane divided roadway increases the LOS to D or better for the majority of all study segments in the project corridor; and therefore, meets the LOS standards outlined in the City of Tampa Comprehensive Plan Transportation, Mass Transit and Circulation Elements.

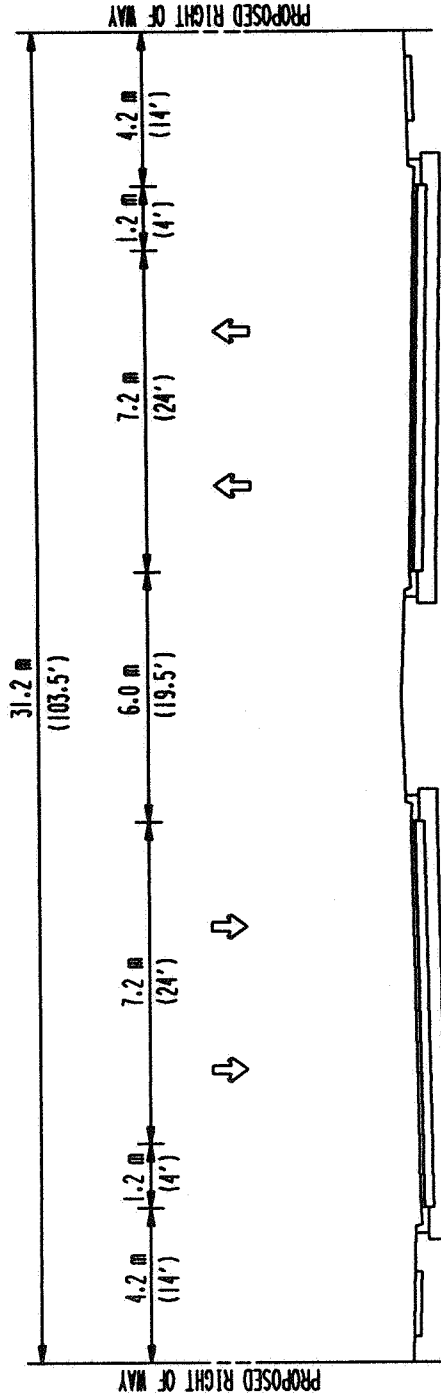
3.7 PREFERRED ALTERNATIVE REFINEMENT

Subsequent to the evaluation process and at the public meetings, community concerns regarding ROW impacts and project costs were expressed and noted. Additionally, the Florida Green Book was revised to reflect that only the minimum standards are required. Based on these community concerns, and the revisions to the Florida Green Book, an additional roadway and bridge typical section were developed to reflect the minimum standards now required. An additional roundabout was included and roundabout design concepts were further refined as well as the bridge approach sections. These revisions and refinements resulted in reducing median dimensions which in turn altered ROW impacts and project cost. They are discussed below.

Typical Section 10 is a four-lane urban facility with a minimum median width 6.0 m (19.5 ft), a desirable border width of 4.2 m (14 ft), a 3.6 m (12 ft) lane width, and a 1.2 m (4 ft) bike lane width. The proposed design speed for this typical section is 70 km/h (45 mph). This typical section will require approximately 31.2 m (103.5 ft) of ROW (See Figure 3-10).

Typical Section 11 is a four-lane bridge section with a 6.0 m (19.5 ft) separation between travel lanes with a raised median down the center, a 2.4 m (8 ft) outside shoulder width, a 3.6 m (12 ft) lane width, and a 1.5 m (5 ft) sidewalk. The proposed design speed for this typical section is 70 km/h (45 mph). This typical section will require approximately 29.73 m (98.5 ft) of ROW (See Figure 3-11).

Due to revisions and refinements an impact analysis was performed for the preferred alternative segments and the transition areas. The analysis included business and residential



**70 km/h DESIGN SPEED
(45 MPH)**

**RECOMMENDED ALTERNATIVE
4 - LANE URBAN TYPICAL SECTION**

40TH STREET/MCKINLEY DRIVE PD&E STUDY
 Hillsborough Avenue (SR 92) To Fowler Avenue (CR 582)
 HILLSBOROUGH COUNTY, FLORIDA

**CITY OF TAMPA
AND**

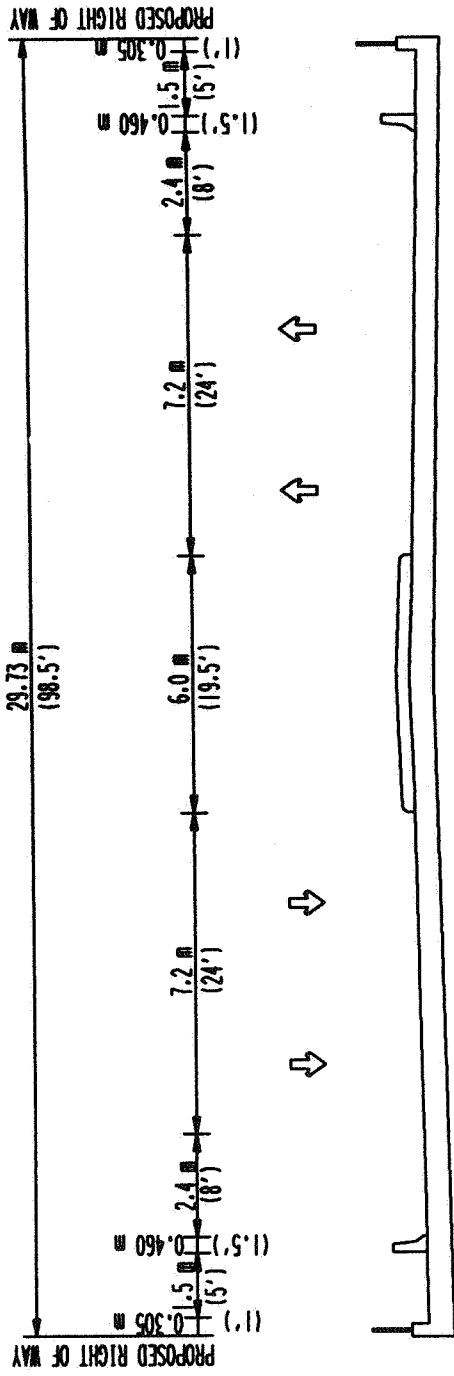
FLORIDA DEPARTMENT OF TRANSPORTATION

PROPOSED ROADWAY TYPICAL SECTION

SPN:10007-1550

WPI:7123608

FIGURE 3-10



**70 km/h DESIGN SPEED
(45 MPH)**

**RECOMMENDED ALTERNATIVE
4 - LANE BRIDGE TYPICAL SECTION**

40TH STREET/MCKINLEY DRIVE PD&E STUDY
 Hillsborough Avenue (SR 92) To Fowler Avenue (CR 582)
 HILLSBOROUGH COUNTY, FLORIDA

**CITY OF TAMPA
AND
FLORIDA DEPARTMENT OF TRANSPORTATION**

PROPOSED BRIDGE TYPICAL SECTION

SPN:10007-1550

WPI:7123608

FIGURE 3-11

relocations, ROW costs, noise impacts and wetland impacts using the revised typical sections. See Table 3-11 for impacts associated with the preferred alternative.

As evidenced by the evaluation matrix Table 3-12 the modifications to the preferred alternative, as compared to Alternatives 1 through 5, minimizes ROW costs, relocations, wetland impacts, etc. Therefore, a recommendation of a modified preferred alternative with the 31.2 m (103.5 foot) typical section for the entire length of the project is recommended to be presented to the public at the public hearing and is shown in Appendix B.

3.8 SUMMARY OF ALTERNATIVES ANALYSIS

The analysis and selection of the preferred alignment, based on both quantifiable and non-quantifiable data, for each study segment were then combined for the purpose of identifying the preferred alternative for the project corridor. Combining the alignment selected for each segment resulted in a preferred alternative consisting of a eastern alignment within Segment A, a western alignment within Segment B, a modified center alignment within Segment C and a center alignment within Segment D. Thus development of and subsequent refinements to the preferred alternative resulted in selection of an alternative which was sensitive to community values and minimized impacts (see Evaluation Matrix, Table 3-11).

3.9 DESCRIPTION OF ALTERNATIVES SUMMARY

The following summary discussion compares the reduced impacts, of quantifiable and non-quantifiable data, of the preferred alternative relative to the other alternatives considered:

The No-Action Alternative indicates that the 2020 design year traffic demand without the improvements to 40th Street/McKinley Drive will cause excessive congestion in the corridor which will not be relieved by improvements to other parallel facilities. Evaluation of the Transportation Systems Management and Multi-Modal Alternatives indicate that these alternatives can not meet the design year traffic demand.

**Table 3-11
Evaluation Matrix
Preferred Alignment*
Four Lane Divided Roadway**

EVALUATION FACTORS	SEGMENTS				
	A	B	C	D	TOTAL
BUSINESS IMPACTS					
Number of businesses expected to be relocated	8	26	23	0	57
RESIDENTIAL IMPACTS					
Number of residences expected to be relocated	5	29	20	0	54
RIGHT OF WAY IMPACTS					
Number of parcels impacted	38	43	72	2	155
Area of ROW to be acquired in hectares (acres)	1.42 (3.51)	2.78 (6.87)	2.43 (6.00)	.35 (.85)	6.98 (17.23)
COMMUNITY IMPACTS (within proposed ROW)					
Number of churches to be impacted	1	1	3	0	5
Number of schools to be impacted	0	0	0	0	0
Number of child care facilities to be impacted	1	1	1	0	3
Number of nursing homes to be impacted	0	0	0	0	0
Number of hospitals to be impacted	0	0	0	0	0
Number of cemeteries to be impacted	0	0	0	0	0
Number of other public services (fire stations, etc.) to be impacted	0	0	0	0	0
Number of noise sensitive sites impacted	52	114	52	0	218
IMPACTS ON CULTURAL/HISTORIC RESOURCES AND PUBLIC PARKS					
Number of historic sites/structures within or adjacent to ROW	0	0	0	0	0
Number of public parks within or adjacent to ROW	0	0	0	0	0
NATURAL ENVIRONMENTAL IMPACTS					
Total wetland impacts area in hectares (acres)	0	0.06 (0.15)	0	0	0.06 (0.15)
FLOODPLAIN AND FLOODWAY ENCROACHMENT					
Area of base floodplain encroachment in hectares (acres)	0	0.04 (0.10)	0	0	0 (0.1)
Area of base floodway encroachment in hectares (acres)	0	0	0	0	0
POTENTIAL PETROLEUM POLLUTANT AND HAZARDOUS MATERIAL CONTAMINATED SITES					
Number of potential petroleum pollutant contaminated sites impacted	3	4	4	0	11
Number of potential hazardous material contaminated sites impacted	5	3	1	0	9
ESTIMATED PROJECT COSTS (Present value in million \$)					
ROW acquisition cost (millions)	\$8.38	\$12.08	\$14.36	\$1.41	\$36.23
Engineering cost (millions) 10%	\$0.20	\$0.46	\$0.29	\$0.37	\$1.32
Construction cost (millions)	\$2.02	\$4.58	\$2.85	\$3.74	\$13.19
Construction engineering and inspection (millions) 10%	\$0.20	\$0.46	\$0.29	\$0.37	\$1.32
TOTAL COST	\$10.80	\$17.58	\$17.79	\$5.89	\$52.06

* Relocations reflect latest analysis which reflect bridge approaches, roundabouts and other refinements, see 3/17/97 addendum to Draft Conceptual Stage Relocation Plan.

**Table 3-12
Comparative Alternatives Evaluation Matrix**

EVALUATION FACTORS	Alternatives						5	Pref.
	1	1-B	2	3	4	5		
BUSINESS IMPACTS								
Number of businesses expected to be relocated	42	42	60	41	30	39	57	
RESIDENTIAL IMPACTS								
Number of residences expected to be relocated	46	28	54	58	50	51	54	
RIGHT OF WAY IMPACTS								
Number of parcels impacted	219	199	219	219	219	219	155	
Area of ROW to be acquired in hectares (acres)	7.2 (17.8)	8.75 (21.6)	7.42 (18.3)	.35 (.85)	5.94 (14.7)	7.92 (19.6)	6.98 (17.2)	
COMMUNITY IMPACTS (within proposed ROW)								
Number of churches to be impacted	7	7	7	8	8	7	5	
Number of schools to be impacted	0	0	0	0	0	0	0	
Number of child care facilities to be impacted	4	4	4	4	4	4	3	
Number of nursing homes to be impacted	0	0	0	0	0	0	0	
Number of hospitals to be impacted	0	0	0	0	0	0	0	
Number of cemeteries to be impacted	0	0	0	0	0	0	0	
Number of other public services (fire stations, etc.) to be impacted	0	0	0	0	0	0	0	
Number of noise sensitive sites impacted	251	232	240	250	242	249	218	
IMPACTS ON CULTURAL/HISTORIC RESOURCES AND PUBLIC PARKS								
Number of historic sites/structures within or adjacent to ROW	0	0	0	0	0	0	0	
Number of public parks within or adjacent to ROW	0	0	0	0	0	0	0	
NATURAL ENVIRONMENTAL IMPACTS								
Total wetland impacts area in hectares (acres)	0.051 (0.13)	0.02 (0.05)	0.06 (0.15)	0.051 (0.13)	0.182 (0.46)	0.06 (0.15)	0.06 (0.15)	
FLOODPLAIN AND FLOODWAY ENCROACHMENT								
Area of base floodplain encroachment in hectares (acres)	0.04 (0.1)	0.04 (0.10)	0.04 (0.1)	0.04 (0.1)	0.04 (0.4)	0.04 (0.1)	0.04 (0.1)	
Area of base floodway encroachment in hectares (acres)	0	0	0	0	0	0	0	
POTENTIAL PETROLEUM POLLUTANT AND HAZARDOUS MATERIAL CONTAMINATED SITES								
Number of potential petroleum pollutant contaminated sites impacted	11	11	12	11	12	13	11	
Number of potential hazardous material contaminated sites impacted	11	11	10	12	12	11	9	
ESTIMATED PROJECT COSTS (Present value in million \$)								
ROW acquisition cost (millions)	\$33.12	\$32.38	\$41.09	\$38.56	\$34.26	\$39.69	\$36.23	
Engineering cost (millions) 10%	\$1.26	\$1.81	\$1.26	\$1.30	\$1.18	\$1.22	\$1.32	
Construction cost (millions)	\$12.58	\$18.12	\$12.53	\$12.99	\$11.83	\$12.24	\$13.19	
Construction engineering and inspection (millions) 10%	\$1.26	\$1.81	\$1.26	\$1.30	\$1.18	\$1.22	\$1.32	
TOTAL COST	\$48.22	\$54.12	\$56.14	\$54.15	\$48.45	\$54.37	\$52.06	

Environmental and traffic service impacts are similar for all alternatives analyzed. However, the preferred alternative reduced the number of residential sites affected by noise impacts, minimized the number of parcels impacted and reduced the number of involvements with potentially contaminated sites (see Table 3-12).

Most of the alternatives reflect community desires; however, design elements and alignments associated with the preferred alternative more closely reflect and/or greatly enhance community desires and values. Such design elements include roundabouts, a reduced typical section and alignment shifts. The inclusion of roundabouts versus signalized intersections at selected locations will provide traffic calming affects, increased aesthetic values and better access opportunities while reducing the number of affected parcels. Reduction in the width of the median or typical section lessened ROW needs, relocation impacts and project cost. Alignment selection avoided to the maximum extent possible, disruption to community services and values by minimizing impacts to churches and day care facilities. Alignment adjustments combined with the preferred typical section also minimized impacts to residential units located behind the commercially zoned parcels and preserved the residential character of river front property located north of the bridge and east of the roadway.

3.10 REFERENCES

1. City of Tampa Comprehensive Plan Transportation, Mass Transit and Traffic Circulation Elements; City of Tampa Planning Department; Tampa, Florida; October 1993.
2. 2015 Cost Feasible Long Range Transportation Plan; Hillsborough County Metropolitan Planning Organization; Tampa, Florida; December 18, 1995.
3. 40th Street Preliminary Corridor Study, Community Coordination Report; City of Tampa, Florida; January 1996.

4. Manual of Uniform Minimum Standards for Design, Construction, and Maintenance for Streets and Highways for the State of Florida; Florida Department of Transportation; Tallahassee, Florida; September 1989.
5. Florida Department of Transportation's Plans Preparation Manual; Florida Department of Transportation, Tallahassee, Florida; 1993.
6. Technical Traffic Memorandum; Gannett Fleming Engineers and Planners; Tampa, Florida; Draft Date January 1996.

SECTION 4

IMPACTS

4.1 SOCIAL AND ECONOMIC IMPACTS

This section of the report addresses the probable effects, both positive and negative, of the preferred alternative on the social, economic, cultural, physical and natural environment within the study area. Impacts associated with the preferred alternative were evaluated on both quantifiable and non-quantifiable data as presented earlier in Section 3 of this report. Additionally, this evaluation has incorporated, where applicable, comments received from the public and agency coordination process in order to minimize impacts. Therefore, the project is in compliance with Executive Order 12898, Environmental Justice, issued on February 11, 1994.

4.1.1 Community Cohesion

The preferred alternative concept will not adversely affect community cohesion. Since the project proposes improvements to an existing roadway which acts as a boundary for the residential areas along the project limits, no splitting or isolation of neighborhoods will occur. The project is anticipated to enhance modal and economic opportunities for elderly persons, handicapped individuals, non-drivers and transit-dependent individuals, economic disadvantaged or minorities. The quality of life in the community will be improved with the added safety features, bicycle lanes and sidewalks, landscaping amenities and the inclusion of bus bays at selected locations.

Additionally, the City of Tampa's revitalization and economic initiative along the corridor will progress in concert with the proposed roadway improvements. The City's initiative, which is strongly supported by the affected businesses and neighborhoods, will enhance community values and increase economic opportunities along the corridor.

A positive outcome of community cohesiveness has resulted from the City's neighborhood grass roots philosophy to actively involve the affected community in the economic and revitalization initiative, and proposed transportation improvements along the 40th Street /McKinley Drive corridor. Implementation of this grass roots philosophy has substantially improved community cohesiveness.

As discussed in Section 5 of this report the project has been developed with substantive community involvement and support. To the extent possible design concepts and project amenities desired by the affected businesses and residents have been incorporated into the project. The project improvements are therefore not expected to substantially impact community cohesiveness.

4.1.2 Community Services

Fire and law enforcement facilities are located along the northern segment (Segment D). However, churches make up the major portion of the community service facilities along the project corridor and are all located between Hillsborough Avenue and Yukon Street (Segments A, B and C). There are no schools or public parks located immediately adjacent to or proximate to the roadway. However, school bus stops are located along this busy two-lane roadway.

Ten churches, consisting of both long established churches and transitional store front churches, are located immediately adjacent to the existing roadway. Minimal impacts to the services provided by these churches is expected. However, five churches will be displaced as a result of implementing the preferred alternative.

Three of the churches, the Church of God, Jesus New Covenant Deliverance Fellowship and Glorious Community Holiness Church are located in small strip centers or share commercial structures with other businesses and as a result of the proposed project will be relocated.

The remaining churches are located in their own free standing buildings or complexes. These churches include the Northside M.B. Church, Fortieth Street Baptist Church, Temple Crest Church of Christ, Apostolic Rock Church, Ambassadors of Christ Temple of Prayer, Temple Crest Baptist Church, and the Word of Life Foursquare Gospel Church. Of the free standing churches, only one, the Apostolic Rock Church will be displaced by construction of the preferred alternative.

The Harvest Time Ministries, which is a church affiliated organization, is also adjacent to the existing roadway and will be displaced as a result of the proposed project.

Church displacements are unavoidable, however the number of displacements have been minimized to the maximum extent possible. It is anticipated that the affected churches will be able to be relocated within the community they serve. It is also expected that displacement of the churches will not occur at the same, but will occur over time as ROW and construction phases are advanced to the years in which funding is available. Therefore, impacts to the churches and the community they serve are expected to be as least disruptive as possible.

Fire and police protection are afforded by the City of Tampa. No City police precincts or substations are located along the project corridor. However, the Florida Highway Patrol Station is located on McKinley Drive south of Fowler Avenue, this facility will not be affected by the proposed improvements. The City of Tampa Fire Station #13 is located on McKinley Drive across from Busch Gardens. Based on coordination with the City Fire Department, the preferred alternative will not affect the City Fire Station.

Section 2.7.2 of this report identified that approximately 50 school vehicles utilized the project corridor twice a day during scheduled school year. Vehicle operations occur from 6:00 a.m. to 8:30 a.m. and from 2:15 p.m. to 5:00 p.m.. A review of accident reports for the period from 1992 through 1994 revealed that 5 school vehicles were involved in accidents along the project corridor. Additionally, during this same time period (1993) one student

fatality was recorded. The student was struck by an automobile while attempting to cross 40th Street to gain access to the school bus stop located south of the Hillsborough River bridge. It is expected that the proposed improvements such as providing sidewalks and street lights, and improving roadway geometrics will provide a safer roadway. Consequently, no adverse impacts to school bus operations or student pedestrian activities are expected as a result of the project.

Other public facilities within the study area, but not adjacent to or proximate to the proposed roadway are Barrett Park, City of Tampa Water Works and the Temple Crest Community Center and Playground. These facilities are located to the west side of 40th Street/McKinley Drive along the Hillsborough River and will not be affected by the proposed improvements.

Other community services located along the project corridor include the Family Enrichment Center a for profit adoption business and several day care businesses. Three day care centers and the Enrichment Center will be displaced by the preferred alternative. Again it is anticipated that these businesses will be relocated within the project corridor and minimal disruption of services to the community clientele is expected.

4.1.3 Land Uses

Generally, the existing land uses adjacent to the 40th Street/McKinley Drive corridor consist of residential, commercial and industrial uses. Future land uses, as depicted in the City's 2015 Land Use Plan Map do not identify any substantial changes in land use. Therefore, it is expected that the proposed project will only minimally affect existing or future land uses.

The southern section, between Hillsborough Avenue and Busch Boulevard, is divided into two subsections due to the natural geographic boundary provided by the Hillsborough River. The land uses between Hillsborough Avenue and the Hillsborough River are primarily commercial with residential land uses located behind the commercial frontage. Community service facilities located within this subsection presently includes three churches. Land uses

between the Hillsborough River and Busch Boulevard are similar but more residential uses front the roadway, however, commercial uses are still prevalent. Several community facilities, primarily churches and a subsidized housing project for the elderly are located along this section. A well established residential area is located behind the commercial frontage.

Specific land use designations along this southern section of the project corridor for the areas adjacent to the roadway are Community Mixed Use (CMU-35), which allows land uses ranging from residential to neighborhood and general commercial. This land use classification has been determined to be appropriate for designated areas due to existing development patterns, the availability of public facilities, and market demands. Areas behind the CMU land use designation adjacent to the project study area will continue to be residential in use and may range from low density single family residential to medium density single and multi-family residential uses.

The northern section of the project area, from Busch Boulevard to Fowler Avenue, is entirely commercial, industrial and offices. Two major tourist attractions, operated by Anheuser Busch, Inc., include Busch Gardens and Adventure Island both of which are located along this section. Besides Anheuser Busch, Inc. other major employers located along this section include General Technologies, Reynolds Aluminum, the FDOT and the USF. Future land use designations along this segment are Urban Mixed Use, Hi-Heavy Industrial, and Heavy Commercial. These designations will allow for the continuation of the commercial, industrial and office uses that are presently existing in this section of the project corridor. No business displacements will occur along this segment of the project. Therefore no impacts to these major employment complexes are expected.

The City of Tampa has developed the 2015 Land Use Plan Map to provide guidance for future planning. The designated land uses on the 2015 Land Use Plan Map for the 40th Street/McKinley Drive project corridor indicate that future land uses will follow the established trends of the existing land uses. However, as a result of this PD&E study the

City of Tampa, as a separate initiative, is considering land use changes and economic development initiatives along the corridor. Such changes, if implemented, would reflect the communities desires and would be consistent with the economic revitalization initiative to improve community values. Such land use changes would be instituted as an amendment to the City of Tampa Comprehensive Plan³, and would be regarded as a positive outcome.

4.1.4 Relocations

A draft Conceptual Stage Relocation Plan⁴ (September 1996) has been prepared for the 40th Street/McKinley Drive PD&E Study in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.

The existing ROW for 40th Street/McKinley Drive from Hillsborough Avenue to Fowler Avenue ranges from 15.240 m (50 ft) to 45.720 m (150 ft). The existing ROW along 40th Street/McKinley Drive from Hillsborough Avenue to Busch Boulevard is insufficient to accommodate a four-lane arterial facility without purchasing additional ROW.

It is estimated that construction of the preferred alternative may cause the relocation of approximately 54 residential units and 57 businesses (see Figure 3-11). As a result of field investigations and evaluations, it was determined that the resource needs of the potential relocations are available within a 3.2 km (2 miles) radius of the study area. The preferred alternative maps located in Appendix B identifies vacant parcels and structures located immediately adjacent to the project corridor. The latest field inventory conducted on November 15, 1996 identified 42 vacant parcels and 22 vacant/commercial space or structures along the project corridor between Hillsborough Avenue and Busch Boulevard. The draft Conceptual Stage Relocation Plan identifies sufficient properties and adequate housing to accommodate business and residential relocatees within the project study area.

The City in cooperation with The Tampa Economic Development Corporation which administers various loan programs will provide, in cooperation with the City of Tampa, low interest loan opportunities for affected businesses during the construction phase.

In order to minimize the unavoidable effects of ROW acquisition and displacement of people, the City, in cooperation with the FDOT, will carry out a ROW and relocation program in accordance with Florida Statute 339.09 and the Uniform Relocation Assistance and Real Property Acquisition Act of 1970 (Public Law 91-646 as amended by Public Law 100-17).

The City, in cooperation with the FDOT, provides advance notification of impending ROW acquisition. Before acquiring ROW, all properties are appraised on the basis of comparable sells and land use values in the area. Owners of property to be acquired will be offered and paid fair market value for their property rights.

No person lawfully occupying real property will be required to move without at least 90 days written notice of the intended vacation date and no occupant of a residential property will be required to move until decent, safe, and sanitary replacement housing is made available. "Made available" means that the affected person has either by himself obtained and has the right of possession of replacement housing, or that the City has offered the relocatee decent, safe, and sanitary housing which is within his financial means and available for immediate occupancy.

At least one relocation specialist is assigned to each highway project to carry out the relocation assistance and payments program. A relocation specialist will contact each person to be relocated to determine individual needs and desires, and to provide information, answer questions, and to give help in finding replacement property. Relocation services and payments are provided without regard to race, color, religion, sex, or national origin.

All tenants and owner-occupant displacees will receive an explanation regarding all options available to them, such as (1) varying methods of claiming reimbursement for moving expenses; (2) rental of replacement housing, either private or publicly subsidized; (3) purchase of replacement housing; (4) moving owner - occupied housing to another location.

Financial assistance is available to the eligible relocatee to:

1. Reimburse the relocatee for the actual reasonable costs of moving from homes, businesses, and farm operations acquired for a highway project;
2. Make up the difference, if any, between the amount paid for the acquired dwelling and the cost of comparable decent, safe, and sanitary dwelling available on the private market;
3. Provide reimbursement of expenses, incidental to the purchase of a replacement dwelling;
4. Make payment for eligible increased interest cost resulting from having to get a mortgage at a higher interest rate. Replacement housing payments, increased interest payments, and closing costs are limited to \$22,500 combined total.

A displaced tenant may be eligible to receive payment, not to exceed \$5,250, to rent a replacement dwelling or room, or to use as down payment, including closing costs, on the purchase of a replacement dwelling. The brochures which describe in detail the City's/ FDOT's relocation assistance program and ROW acquisition program are: "Your Relocation: Residential", "Your Relocation: Businesses, Farms and Nonprofit Organizations", "Your Relocation: Signs" and "The Real Estate Acquisition Process". All of these brochures are distributed at all public hearings and made available upon request to any interested persons.

The proposed project is not expected to impact any distinct minority, ethnic, elderly, or disabled group. This project is being developed in accordance with the Civil Rights Act of 1964, as amended by the Civil Rights Act of 1968.

4.1.5 Utilities and Railroads

Several utility distribution lines are located within the existing 40th Street/McKinley Drive ROW, including aerial and buried power lines, aerial and buried telephone cables, aerial cable television lines, potable water mains, force mains, and gas mains. Depending on their location and depth, implementation of the recommended improvements for the project may require adjustment of some of these facilities. A set of plans identifying the recommended preferred alternative has been sent to the utility companies to provide utility relocation costs.

A CSX Transportation System railroad grade crossing is located approximately 210 m (689 ft) south of Fowler Avenue. Coordination with the railroad has been initiated and minor adjustments needed to accommodate the expanded roadway have been identified for the proposed improvements. Such adjustments include relocating the rail crossing signals and providing the necessary surface treatment needed for the improved roadway. Consequently, no impacts to the motoring public or the rail user is anticipated as a result of the project.

4.2 CULTURAL AND HISTORIC RESOURCES

4.2.1 Archaeological and Historical

A Cultural Resource Assessment, including background research and a field survey coordinated with the State Historic Preservation Officer (SHPO), was performed for the project. No archaeological or historic sites or properties were identified, nor are any expected to be encountered during subsequent project development. The Federal Highway Administration, after consultation with the SHPO, has determined that no resources listed

or eligible for listing on the National Register of Historic Places would be impacted. The SHPO coordination letter dated March 3, 1997 is shown in Appendix A.

4.2.2 Recreational/Parkland

No public recreational facilities are located immediately adjacent to the project corridor. Public recreational land uses located within the study area include Barrett Park and the Temple Crest Community Center and Playground. However, they are not adjacent to the proposed roadway improvements and are located along the Hillsborough River several blocks west of 40th Street/McKinley Drive. No Section 4(f) resources are located within or immediately adjacent to the proposed project. Therefore, this project does not involve nor will it affect any Section 4(f) properties.

4.3 NATURAL AND PHYSICAL IMPACTS

4.3.1 Pedestrian/Bicycle Facilities

Existing sidewalks along the 40th Street/McKinley Drive project corridor are intermittent and limited with pedestrian signal heads provided at only two locations.

There are currently no designated bicycle facilities along 40th Street/McKinley Drive between Hillsborough Avenue and Fowler Avenue. Paved shoulders are provided intermittently along the corridor which could be used by bicyclists. However, most of the shoulders are not delineated, continuous or uniform in width.

The City of Tampa Comprehensive Plan incorporates the Hillsborough County Metropolitan Planning Organization's, Comprehensive Bicycle Plan⁷ (1993) which includes all roadway segments in the Long Range Plan as bicycle facilities based on facility need, funding, supply and demand, with the exception of limited access expressways. Consequently, sidewalks, pedestrian crossings and bicycle lanes have been incorporated into the design elements of

the proposed project. Addition of pedestrian and bicycle amenities throughout the length of and along both sides of the proposed project will result in a safer facility for such users and is considered an enhancement to community cohesion and values. Therefore, the inclusion of these facilities is regarded as having positive community impacts.

4.3.2 Visual/Aesthetics

Community involvement activities identified the need to provide landscaping enhancements and street lighting throughout the project corridor. Ideas and suggestions, such as providing vegetative buffers, landscaping within the medians and at roundabouts, received at public meetings and workshops have been coordinated with the City of Tampa, Parks Department and Planning Division. The street lighting is regarded as a safety improvement for pedestrians and vehicles, and is perceived as a deterrent to criminal activities. Therefore, visual and aesthetic elements have been incorporated into the proposed improvements and will be included in the design phase of the project. Incorporation of these project elements are considered beneficial to community values.

There are several instances where the alignment of the preferred alternative will place the back yard of existing second row residents adjacent to or in close proximity to the proposed roadway (see Appendix B). As a result, several mitigating measures, such as barrier walls, vegetated berms and vegetated buffer zones, have been proposed to minimize such impacts. Implementation of the type and extent of such mitigative measures will continue to be coordinated by the City with the affected residents at the public hearing and during the design and ROW acquisition phases of the project.






4.3.3 Contamination

A draft Contamination Screening Evaluation Report⁸ was prepared for this PD&E study. A summary of the findings contained in that report is presented in this section.

Given the commercial history of the project corridor many small businesses such as gas stations, auto repair shops, dry cleaning establishments and pest control services have or now continue to be located along the corridor. As a result of this type of land use, thirty potentially contaminated sites, shown on Figure 4-1 (A & B) and listed in Table 4-1 , were identified and classified into one of three types of contamination potential: hazardous waste contamination only, petroleum products contamination only, and combined contamination by hazardous waste and petroleum products. Eleven of the 30 sites are potentially contaminated by hazardous wastes and 4 of the sites are potentially contaminated by hazardous waste and petroleum products. The remaining 15 sites are potentially contaminated by petroleum products only. The preferred alternative will affect 20 of the above noted sites. Additional assessments will be performed during the design phase to determine remediation efforts which may be required at the affected sites prior to or during construction. It should be noted that the conceptual design for each alternative including the preferred alternative was performed without the benefit of vertical control data. Consequently, engineering detail associated with final design may result in avoiding some of the contaminated sites.

To minimize or avoid contamination impacts, each alternative alignment was analyzed to determine the number of contaminated sites affected by that particular alignment. During this analysis it was found that 27 of the 30 sites were located between Hillsborough Avenue and Busch Boulevard and that each identified site abutted the existing ROW. Along this portion of the project corridor the existing ROW width ranges from approximately 15 m (50 ft) to 21 m (70 ft). With typical section ROW requirements ranging from 44.4 m (148 ft) to 31.2 m (103.5 ft) the possibility of avoiding the majority of these sites was remote. The number of contamination site impacts by Alternatives 1 through 5 ranged from 22 to 24 and are shown in Tables 3-1 through 3-6. The recommended alternative, Alternative 6, affects 20 of the 30 identified sites (see Table 3-11).

LEGEND

-  RIVER /WATER
-  RAILROAD
-  US ROUTE
-  STATE ROAD
-  CONTAMINATION SITE NUMBER

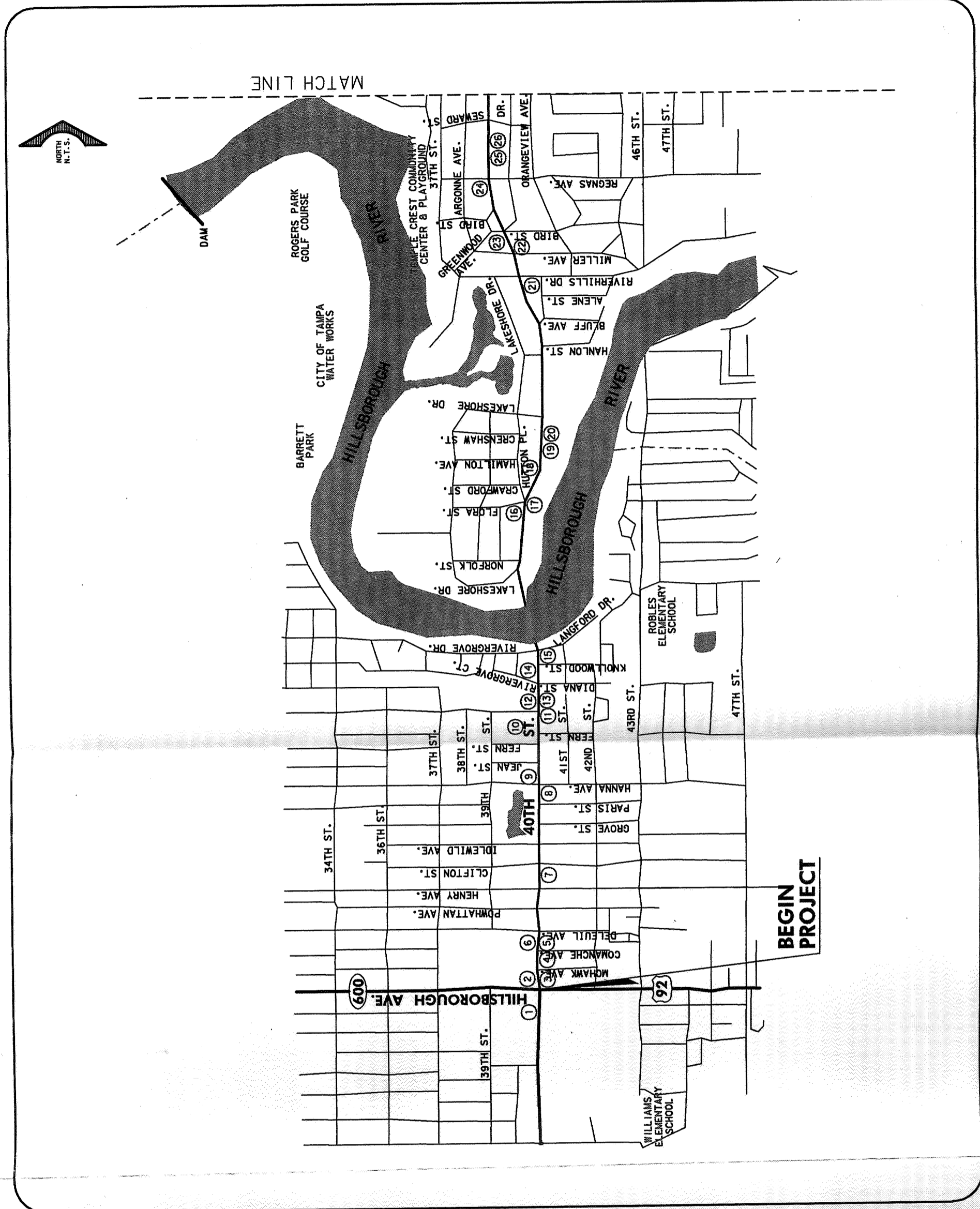
40TH STREET/MCKINLEY DRIVE PD&E STUDY
 HILLSBOROUGH AVENUE
 (SR 600 & US 92)
 TO FOWLER AVENUE (SR 582)
 HILLSBOROUGH COUNTY, FLORIDA

CITY OF TAMPA
 AND
 FLORIDA DEPARTMENT OF
 TRANSPORTATION

LOCATION OF POTENTIAL
 CONTAMINATION SITES

SPN: 10007-1550
 WPI: 7123608

FIGURE 4-1A



21-NOV-1996 14:16
 R:\projects\pde\40th\c\msh\01.dgn



LEGEND

- RIVER /WATER
- RAILROAD
- US ROUTE
- STATE ROAD
- CONTAMINATION SITE NUMBER

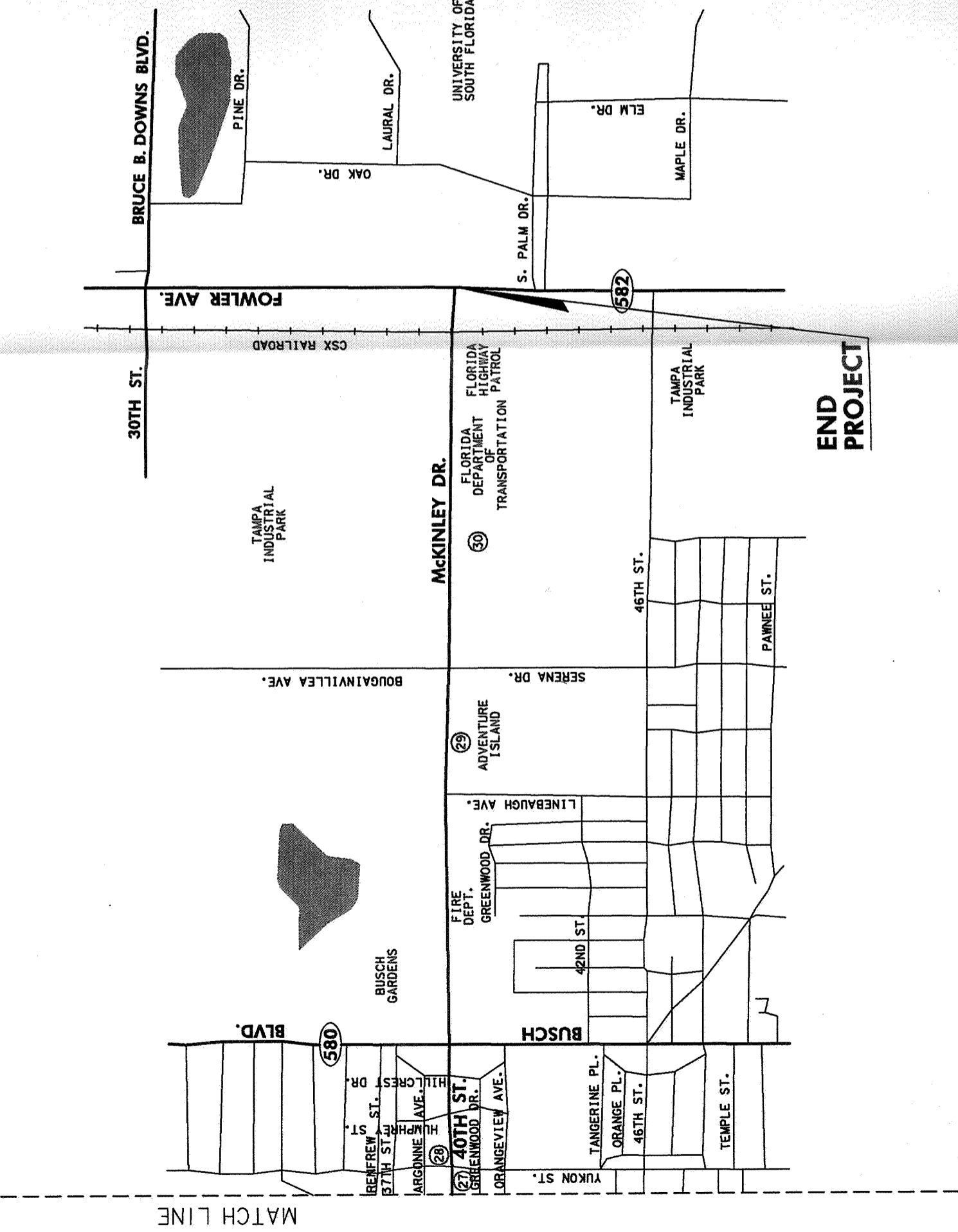
40TH STREET/MCKINLEY DRIVE PD&E STUDY
 HILLSBOROUGH AVENUE
 (SR 600 & US 92)
 TO FOWLER AVENUE (SR 582)
 HILLSBOROUGH COUNTY, FLORIDA

CITY OF TAMPA
 AND
 FLORIDA DEPARTMENT OF
 TRANSPORTATION

LOCATION OF POTENTIAL
 CONTAMINATION SITES

SPN: 10007-1550
 WPI: 7123608

FIGURE 4-1B



END PROJECT

**Table 4-1
Potentially Contaminated Sites**

Site #	Name	Street Address	Description	Type of Contamination	Risk Evaluation
1	BP Gas Station and 40th Street Truck Stop	3923 East Hillsborough Avenue	BP Gas Station and 40th Street Truck Stop, an active retail food store, gasoline and diesel dispensing, and truck repair facility. The facility is listed with the Florida Department of Environmental Protection (FDEP) (Facility No. 298625345) and is in the Early Detection Incentive program (EDI).	Petroleum	High
2	Kirkland Auto Sales, formerly Terry Cramer & Sons	3924 East Hillsborough Avenue	Kirkland Auto Sales, formerly Terry Cramer & Sons, an active used automobile retail facility. The facility is listed with the FDEP (Facility No. 298943021) and is in the EDI program.	Petroleum	High
3	Aaron Rents, formerly Hillsborough Auto Parts	5401 North 40th Street	Aaron Rents, an active home furnishing and appliance rental facility. Previously, Hillsborough Auto Parts a retail automobile part operation was located at this address. Hillsborough Auto Parts was listed with the FDEP (Facility No. FLD981029564) as a small quantity generator of hazardous waste.	Hazardous Material	Medium
4	Cross Pest Control	5511 North 40th Street	Cross Pest Control is an active pest control operation. The facility is listed with the FDEP (Facility No. FLD981469638) as a non-handler of hazardous waste.	Hazardous Material	Medium

**Table 4-1 (cont.)
Potentially Contaminated Sites**

Site #	Name	Street Address	Description	Type of Contamination	Risk Evaluation
5	Texaco Service Center	5601 North 40th Street	Texaco Service Center, an active gasoline dispensing facility. The facility is listed with the FDEP (Facility No. 298508976) and is in the EDI program.	Petroleum	High
6	Suncoast Trucking	5604 North 40th Street	Suncoast Trucking is an active heavy duty truck repair facility. The facility is not listed with the FDEP.	Hazardous Material and Petroleum	High
7	Will's Volkswagen Repair	5807 North 40th Street	Will's Volkswagen Repair, an active Volkswagen repair facility. The facility is listed with the FDEP (Facility No. FLD047552518) as a small quantity generator of hazardous waste. However, the FDEP has no record of UST's on the property.	Hazardous Material and Petroleum	High
8	Cothron's Automotive	6105 North 40th Street	Cothron's Automotive is an active automobile repair facility. The facility is not listed with the FDEP.	Hazardous Material and Petroleum	High
9	Star Service Station	6202 North 40th Street	Star Service and Petroleum is an active retail food store and gasoline dispensing facility. The facility is listed with the FDEP (Facility No. 298625649). The facility is not listed in the EDI program.	Petroleum	High

Table 4-1 (cont.)
Potentially Contaminated Sites

Site #	Name	Street Address	Description	Type of Contamination	Risk Evaluation
10	Vacant Commercial Property, former Gasoline Station	6410 North 40th Street	A vacant commercial property containing what appears to be a former gasoline station. The site is listed with the FDEP (Facility No. 299101814) and is in the EDI program.	Petroleum	High
11	All State Pest Service	6411 North 40th Street	All State Pest Service, an active pest control operation is located in a strip mall. The facility is listed as Cross Pest Control with the FDEP (Facility No. FLD084181114) as out-of-business.	Hazardous Material	Medium
12	Wheeler's Auto Repair	6424 North 40th Street	Wheeler's Auto Repair, an active automobile repair facility. The facility is listed with the FDEP as a Spur Station (Facility No. 299201861) and is in the EDI program.	Petroleum	Medium
13	Spanish American Garage	6501 North 40th Street	Spanish American Garage is an active automobile repair facility. The facility is not listed with the FDEP.	Petroleum	Medium
14	Lock-Jaw Records, formerly Circle K	6514 North 40th Street	Lock-Jaw records is an active music retail facility. Previously at this address was Circle K Store No. 4409. Circle K was listed with the FDEP (Facility No. 298625317) and is not in the EDI program.	Petroleum	Medium
15	Car Wash	6601 North 40th Street	An active car wash and wax operation. The facility is not listed with the FDEP.	Petroleum	High

Table 4-1 (cont.)
Potentially Contaminated Sites

Site #	Name	Street Address	Description	Type of Contamination	Risk Evaluation
16	King Tire	7026 North 40th Street	King Tire is an active automotive tire retail and light repair facility. The facility is not listed with the FDEP.	Hazardous Material and Petroleum	Medium
17	Vacant Commercial Property, former H&G Fuel Oil	7101 North 40th Street	A vacant commercial property, containing the former H&G Fuel Oil facility. The site is listed with the FDEP (Facility No. 2986627974) and is not in the EDI program.	Petroleum	High
18	Temple Crest Radiator Shop	7102 North 40th Street	Temple Crest Radiator shop, an active automobile repair facility. The facility is listed with the FDEP (Facility No. 299200079) and is in the EDI program.	Hazardous Material and Petroleum	High
19	THL Enterprises	7213 North 40th Street	THL Enterprises is an active roofing operation. Is not listed with the FDEP.	Hazardous Material	Medium
20	CJ's Paint and Body Shop	7217 North 40th Street	CJ's Paint and Body Shop is an active automobile paint and body facility. The facility is not listed with the FDEP.	Hazardous Material	Medium
21	V.F.W. Post 10140, Possible former Gasoline Station	8001 North 40th Street	The Veterans of Foreign Wars Post 10140, an active meeting and social hall. The facility is not listed with the FDEP.	Petroleum	Medium
22	Pick N Pay	8103 North 40th Street	Pick n Pay is an active retail food store and gasoline dispensing facility. The facility is listed with the FDEP as United 500 Store No. 540 (Facility No. 298626336) and is ineligible for the EDI program.	Petroleum	High

Table 4-1 (cont.)
Potentially Contaminated Sites

Site #	Name	Street Address	Description	Type of Contamination	Risk Evaluation
23	40th Street Used Furniture, former Gasoline Station		Historical	Petroleum	
24	Barry's Auto Service	8312 North 40th Street	Barry's Auto Service, an active automobile repair facility and junk yard. The facility is not listed with the FDEP.	Hazardous Material and Petroleum	High
25	ALX Automotive	8407 North 40th Street	ALX automotive is an active automobile repair facility. The facility is not listed with the FDEP.	Hazardous Material and Petroleum	Medium
26	Automobile Junk Yard/Residence	8409 North 40th Street	An active automobile junk yard which may possibly serve as a residence. The facility is not listed with the FDEP.	Hazardous Material and Petroleum	Medium
27	Vacant Commercial Property, former Kwik Pep Station	8619 north 40th street	A vacant commercial property, the former Kwik Pep Station. The site is listed with the FDEP (Facility No. 299100289) and is not in the EDI program.	Petroleum	High
28	7-11 Store No. 10348	8702 North 40th Street	7-11 store number 10348, an active retail food store and gasoline dispensing facility. The facility is listed with the FDEP (Facility No. 298625530) and is in the EDI program.	Petroleum	High

**Table 4-1 (cont.)
Potentially Contaminated Sites**

Site #	Name	Street Address	Description	Type of Contamination	Risk Evaluation
29	Adventure Island	10001 Malcolm McKinley Drive	The Adventure Island amusement park is the site of a former City of Tampa landfill. Information from Hillsborough County Environmental Protection Commission (HCEPC) and State of Florida Department of Environmental Protection (FDEP) files indicate the site is still under investigation at this time. The landfill was permitted in 1975 for the disposal of trash only. During an investigation of the site in 1991 elevated levels of petroleum compounds were detected in the groundwater. The FDEP has requested additional investigation be carried out. The responsibility for site investigation has been accepted by the City of Tampa.	Hazardous Material and Petroleum	High
30	Group Technologies Corporation	10901 Malcolm McKinley Drive	Group Technologies Corporation (formally Honeywell Inc. Tampa Division) appears on the Comprehensive Environmental Response, Compensation and Liability Information System List (CERCLIS). This list is for sites that are under investigation by the USEPA and State environmental agencies. No file data was available during the field investigation. Based on the type of product that Honeywell was producing during the 1980's potential contamination may include petroleum compounds and solvents.	Hazardous Material	High

4.3.4 Air

In accordance with the Clean Air Act Amendments (CAAA) of 1990 and the FDOT Project Development and Environment (PD&E) Manual, an air quality impact analysis was conducted to determine the effect of the proposed improvements to 40th Street/McKinley Drive from Hillsborough Avenue to Fowler Avenue in the City of Tampa, Hillsborough County, Florida. The intersections at Fowler Avenue and at Busch Boulevard were selected for analysis based on the highest traffic volumes, lowest speeds and closest receptors. Based on the FDOT's air quality screening test (COSCREEN) which incorporates MOBILE5A emissions, the proposed project will not cause violations of the National Ambient Air Quality Standards (NAAQS) for carbon monoxide. Therefore, this project will not have a significant impact on air quality.

This project is in an area which has been redesignated as attainment/maintenance as of February 5, 1996, for the ozone standards of the Clean Air Act Amendments of 1990 (CAAA). This project is contained in both the Hillsborough County MPO's Year 2015 Long Range Transportation Plan and Transportation Improvement Program, which currently conforms to the ozone maintenance plan contained in the air quality State Implementation Plan.

4.3.5 Noise

The objective of the noise study is to identify noise sensitive sites adjacent to the project corridor, to compare and evaluate the significance of traffic noise impacts at these sites with and without the project, and to evaluate the need for and the effectiveness of noise abatement measures. Additional objectives include the evaluation of construction noise impacts and the prediction of future noise level isopleths adjacent to the corridor.

Noise level isopleths associated with the future Build scenario were determined using the FLAMOD contour computer program. The Noise Study Report includes the 65 dBA

isopleth in order to identify those receptors for which noise abatement considerations are warranted and the 67 dBA isopleth for use by local officials in planning noise-compatible future land uses adjacent to the proposed facility.

Nine noise sensitive areas, which included 227 individual sites, were computer modeled for Existing, and future No-Build and Build alternatives. All of the areas had some noise sensitive sites which did approach or exceed the FHWA Noise Abatement Criteria (NAC) for the Build alternative. The FHWA requires that when the noise levels of a proposed federally-aided roadway project approach or exceed NAC, noise abatement measures must be evaluated. As outlined in 23 CFR Part 772, these measures include traffic system management measures, alignment modifications, property acquisition, land use controls and noise barriers. Alignment alternatives to the east of, west of, and centering on the existing alignment were considered for each segment. Where possible, the alignment alternative with fewer noise impacts was selected. After review of each of the other measures, only noise barriers were considered to be feasible for further evaluation.

To determine if placement of noise barrier walls was feasible for these areas, field surveys were conducted and aerial photographs were reviewed. To be effective in reducing traffic noise impacts, a noise barrier must be relatively long (theoretically the length of the barrier should be approximately four times the distance from the receiver to the source), continuous (with no intermittent openings) and sufficiently high enough to provide the necessary reduction in noise levels. It was found that in many areas noise barriers would be ineffective due to intermittent openings for driveway access and/or minor road access, distance of receivers from the roadway, isolated locations of receivers, and clear sight distance requirements at intersections. However, noise barriers were modeled in three areas where these obstacles were not present. In order to analyze the effectiveness of noise barriers, the STAMINA companion computer program, OPTIMA, was utilized.

Based on the above analysis it was found that five noise barriers appear to be economically reasonable, their locations are shown on Figures 4-2, 4-3 and 4-4. Additional detail associated with each of the five barrier locations are as follows:

The first noise barrier is located on the west side of the proposed project between Norfolk Street and Flora Street. The most effective barrier modeled at this location would provide noise abatement for 11 single family residences(receivers). Nine of the 11 receivers would experience an insertion loss of 5 dBA or greater. This barrier would have an approximate length of 184.1 m (604 ft), a height of 4.3 m (14 ft), and an estimated cost of \$149,248.

The second noise barrier is located on the west side of the proposed project between Pine Tree Place and Hanlon Street. The most effective barrier modeled at this location would provide noise abatement for 10 receivers. Four of the 10 receivers would experience an insertion loss of 5 dBA or greater. The barrier would have an approximate length of 104.2 m (342 ft), a height of 4.3 m (14 ft), and an estimated cost of \$84,508.

The third noise barrier is located on the west side of the proposed project between Hanlon Street and Riverhills Drive. The most effective barrier modeled at this location would provide noise abatement for 10 receivers. All receivers would experience an insertion loss of 5 dBA. The barrier would have an approximate length of 245.1 m (804 ft), a height of 3.0 m (10 ft), and an estimated cost of \$141,906.

The fourth and fifth noise barriers are located on the east side of the proposed project at River Pines apartments and are placed north and south of the driveway entrance. The most effective barrier modeled south of the driveway would provide noise abatement for 11 first floor receivers. Four of the 11 receivers would experience an insertion loss of 5 dBA. This barrier would have an approximate length of 96 m (315 ft), a height of 4.3 m (14 ft), and an estimated cost of \$77,837. The most effective barrier modeled north of the driveway would provide noise abatement for 8 first floor receivers. Four of the eight receivers would

experience an insertion loss of 5 dBA. This barrier would have an approximate length of 103.9 m (341 ft), a height of 3.7 m (12 ft), and an estimated cost \$72,224.

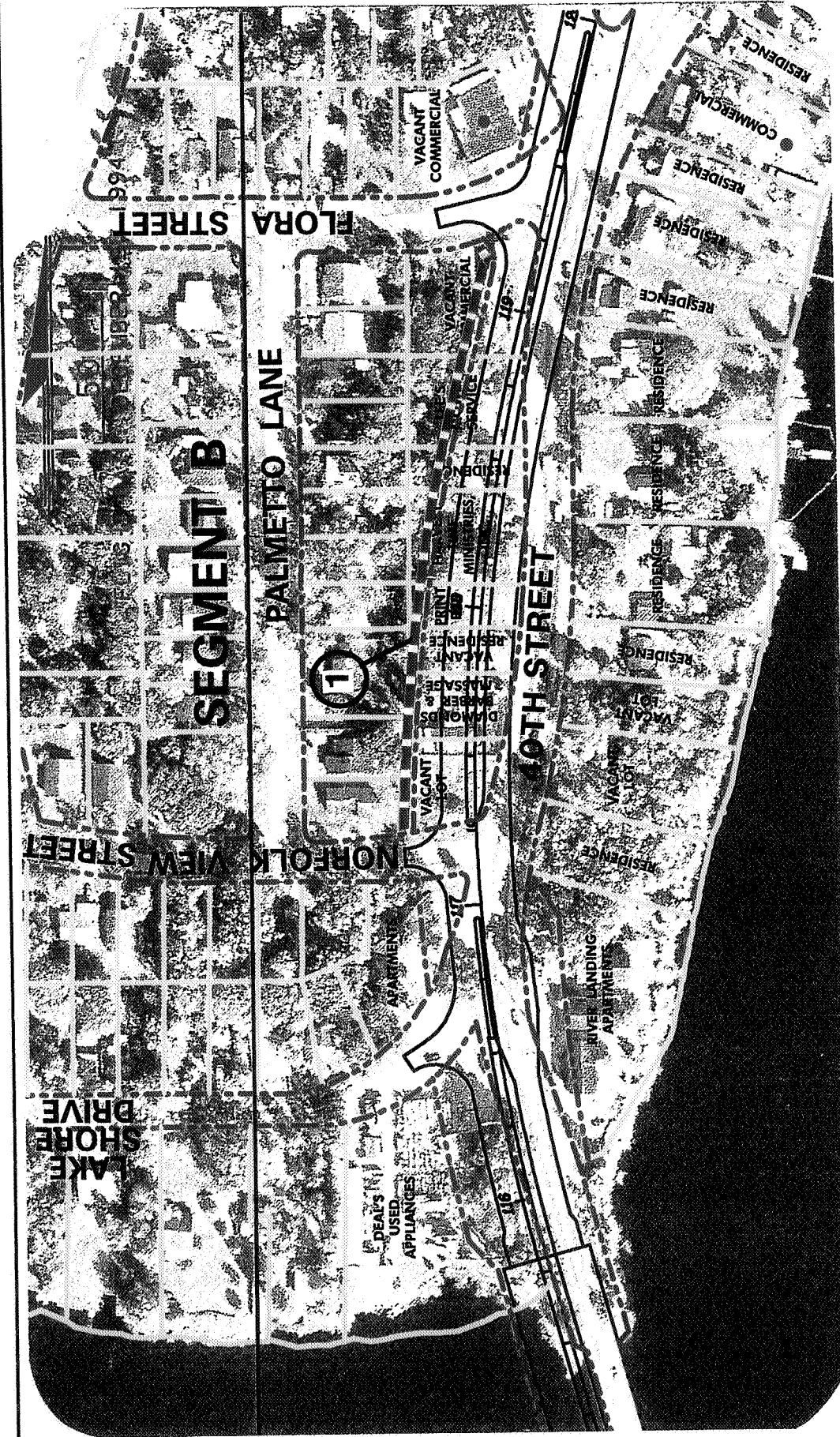
Although these walls meet the current cost criteria, other considerations including aesthetics, drainage, utilities, and community desires which will be examined during the design phase may affect the feasibility of the construction of noise walls in these locations. The details of the proposed walls are found in Section 3.6 of the draft Noise Study Report¹⁰. Based on the analyses performed to date, there appear to be no apparent solutions available to mitigate noise impacts at the remaining locations.

4.3.6 Wetlands

In accordance with Executive Order 11990, measures were taken to avoid wetlands or to minimize impacts where possible. Due to the minor nature of the impact to jurisdictional wetlands the Southwest Florida Water Management District (SWFWMD) has identified mitigation efforts to consist of removing obnoxious and/or non-native vegetation. (See Appendix A, letter dated October 17, 1996.)

The classification of wetlands is in accordance with the U.S. Fish and Wildlife Service publication, The Classification of Wetlands and Deepwater Habitats of the United States⁹, (1979). The U.S. Army Corps of Engineers Wetland Evaluation Technique (WET 2.1) was used to determine wetland functions and values.

Less than 0.020 ha (0.05 acres) of wetlands are within 60.960 m (200 ft) of the existing roadway centerline. All such wetlands are associated with the bridge crossing at the Hillsborough River and are classified as Lacustrine, lower perennial, unconsolidated bottom, permanently flooded and impounded (L1UBHh). The Wet 2.1 evaluation found that this lacustrine system, rated LOW or MODERATE for all functions or values except for the following: 1) HIGH ratings in terms of social significance for "Sediment/Toxicant Retention" and "Nutrient Removal/Transformation" functions. These high probabilities are



LEGEND:

④ — — — — POTENTIAL NOISE BARRIER LOCATION

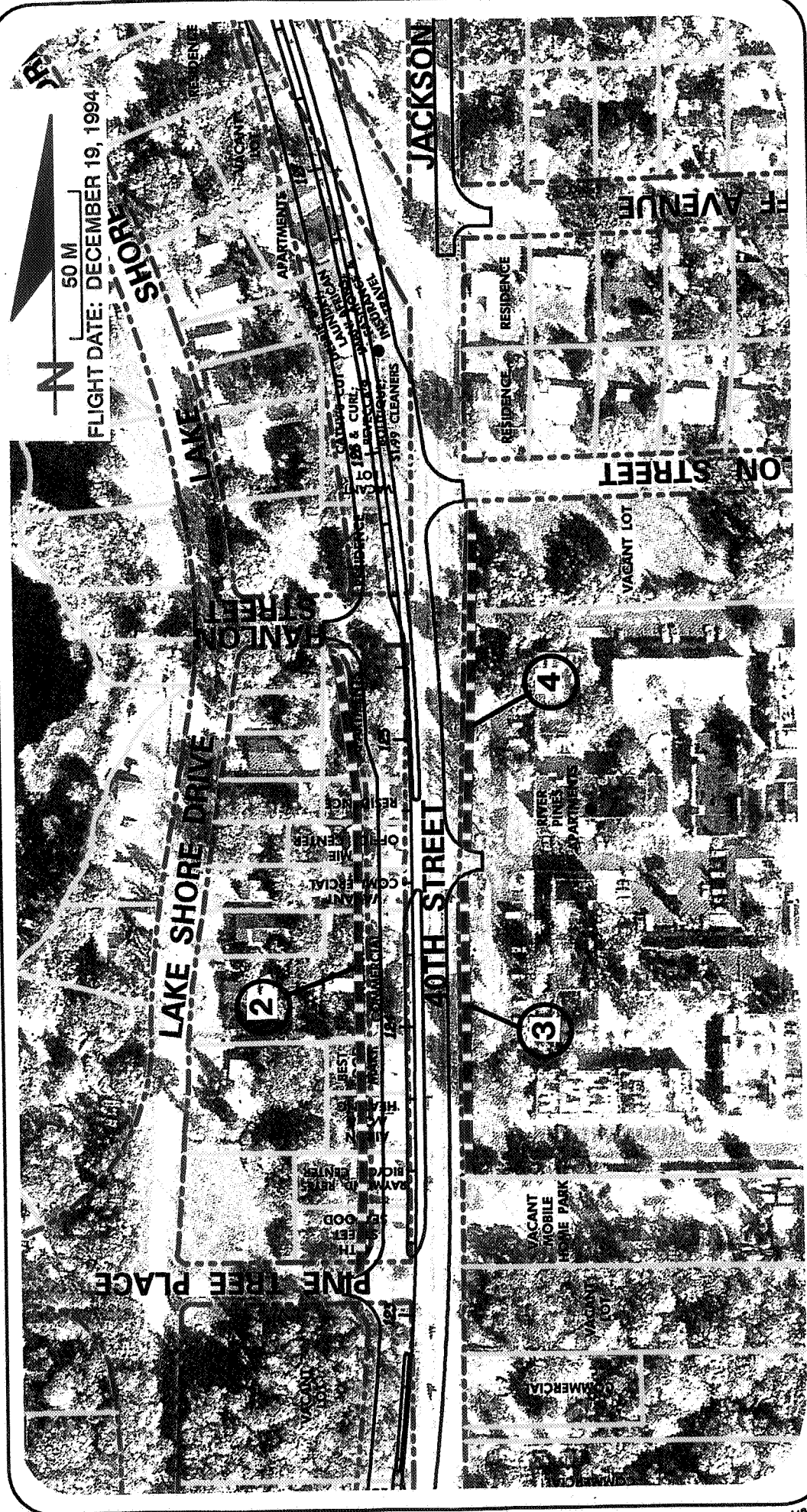
40TH STREET/MCKINLEY DRIVE PD&E STUDY
 Hillsborough Avenue (SR 92) To Fowler Avenue (CR 582)
 HILLSBOROUGH COUNTY, FLORIDA

**CITY OF TAMPA
 AND
 FLORIDA DEPARTMENT OF TRANSPORTATION**

POTENTIAL NOISE BARRIER LOCATION

SPN:10007-1550 WPI:7123608

13-AUG-1996 15:19
 r:\projects\pde\40th\typsr\d01.dgn



40TH STREET/MCKINLEY DRIVE PD&E STUDY
 Hillsborough Avenue (SR 92) To Fowler Avenue (CR 582)
 HILLSBOROUGH COUNTY, FLORIDA

**CITY OF TAMPA
 AND
 FLORIDA DEPARTMENT OF TRANSPORTATION**

POTENTIAL NOISE BARRIER LOCATION

LEGEND:

4 ——— POTENTIAL NOISE BARRIER LOCATION

SPN:10007-1550

WPI:7123608

FIGURE 4-3

expected for lacustrine systems encountered in central Florida. The amount and type of wetlands to be impacted are minimal. Therefore, only minimal wetland impacts are expected as a result of the project.

4.3.7 Water Quality

The 40th Street/McKinley Drive alignment crosses the Hillsborough River approximately 3.219 km (2.0 miles) upstream from the City of Tampa Water Treatment Plant Dam, located between Rogers Park and Barrett Park. This segment of the river is a part of the potable water source for the City of Tampa and has been designated as Class I (Potable Water Supplies) waters in accordance with the Florida Department of Environmental Protection Regulation 62-302.600. Water quality impacts associated with roadway stormwater pollutants have been addressed in accordance with the Water Quality Impact Evaluation (WQIE) Checklist, which is included in Appendix C.

The impact of the proposed project on the surface water quality of the site environs will essentially be limited to the adverse effects of erosion during construction. These impacts are considered temporary and will be minimized by strict adherence to the EPA "NPDES Permit" issued for project construction. Additionally, the City will adopt and ensure that the contractor will comply with temporary erosion control features as specified in the FDOT's Standard Specifications, Section 104, and if necessary employ extraordinary erosion control and debris safeguards to protect the surface waters of the potable water supply.

The proposed improvements to 40th Street/McKinley Drive will include the installation of a new storm sewer system and construction of several stormwater retention/detention ponds. The proposed stormwater facility design will include, at a minimum, the water quantity requirements for water quality impacts as required by the SWFWMD in Chapter 40D-4 and 40D-40 Rules and the FDOT Rule 18-86 F.A.C. Therefore, no further mitigation for water quality impacts will be needed. Please see the attached Water Quality Impact Evaluation (WQIE) Check List in Appendix C for additional information.

4.3.8 Floodplains

The floodplain limits associated with the project were derived from the Flood Insurance Rate Maps (FIRM), Community Panel Numbers 120114 0003C, 120114 0007C & 120114 for the City of Tampa dated September 30, 1982, as published by the Federal Emergency Management Agency (FEMA). The Hillsborough River is located within Flood Zone A1, which is classified as "areas of 100 year flood; base flood elevations and flood hazard factors determined." The intersection of Linebaugh Avenue and 40th Street/McKinley Drive and vicinity is within Zone A, which is classified as "areas of 100 year flood; base flood elevations and flood hazard factors not determined." The remainder of the corridor is within Flood Zone C, which is classified as areas of minimal flooding. The FIRM maps also indicate there are no regulatory floodways within this corridor.

The proposed replacement of the existing 40th Street bridge at the Hillsborough River and its associated floodplain constitutes a transverse encroachment; no longitudinal floodplain encroachments occur within the project area. This transverse encroachment is regarded as minimal impacting 0.06 ha (0.15 acres) of floodplain. Given the existing location of the corridor and crossing there are no practicable or economical alternatives to avoid this encroachment. This portion of the Hillsborough River is regulated by the Hillsborough River Dam, which is located downstream of the 40th Street bridge, and the Hillsborough River By-Pass Canal (a flood control facility) located north of the City of Temple Terrace in the vicinity of Cow House Creek. Urban development, from Temple Terrace south through the City of Tampa, has historically occupied the Hillsborough River floodplain. These environs have been protected from flooding by construction of the By-Pass Canal. Given the existing urban in-fill development located within the historic floodplain it is not expected that the replacement bridge at the 40th Street crossing will create any additional incompatible floodplain development.

Based upon the FDOT Drainage Manual¹¹, floodplain encroachment is classified as Category 5. Therefore, replacement drainage structures for this project are limited to

hydraulically equivalent structures. The limitations to the proposed hydraulic equivalency are due to restrictions imposed by the geometric of design, existing development, cost feasibility, or practicability. An alternative encroachment location is not considered in this category since it defeats the purpose or is not economically feasible. Flooding conditions in the project area are inherent due to topography or as a result of outside contributing sources; therefore, no practicable alternative would totally eradicate flood impacts or even reduce them to any significant amount. Existing flooding will continue, but it not expected to increase. As a result, the project will not affect existing flood heights or floodplain limits. This project will not result in any new or increased adverse environmental impacts. There will be no significant change in the potential for interruption or termination of emergency services or emergency evacuation routes. It has, therefore, been determined that this encroachment is not significant.

4.3.9 Coastal Zone Consistency

In accordance with the Coastal Zone Management Act of 1972 the proposed project has been subjected to consistency review through the Advanced Notification Process. Based on this process, the State of Florida Department of Community Affairs has determined that this project is consistent with the Florida Coastal Zone Management Plan. See Appendix A, letter dated June 28, 1995.

4.3.10 Wildlife and Habitat

This project has been evaluated for impacts to wildlife and habitat resources including protected species in accordance with 50 CFR Part 402 and the Endangered Species Act of 1973, as amended; utilizing pedestrian surveys and random transects in areas of suitable habitat, literature reviews and agency coordination through the U.S. Fish and Wildlife Service the Florida Game and Fresh Water Fish Commission, the Florida Natural Areas Inventory the FDOT SPECIES computer listing, the Hillsborough County Environmental

Protection Commission, and the Soil Conservation Society of America. No critical upland or wetland habitats were found within the urban setting of the project boundaries.

Based on the results of the literature review and site evaluation, there should be no impacts to listed species associated with this project. Coordination with the U.S. Fish and Wildlife Service (USFWS) and the Florida Game and Fresh Water Fish Commission (FGFWFC) will continue in an effort to keep the current protected species "target" list up to date.

The draft Wetlands Evaluation Report¹² (June 1996) has been submitted to wildlife agencies for their review and concurrence that the project will not involve any federally-listed species. As a result of this coordination effort the USFWS has determined "The proposed action is not likely to adversely affect resources protected by the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.). This finding fulfills the requirements of the Act." See Appendix A, letter dated October 31, 1996.

4.3.11 Construction

Construction activities for the proposed project will have minimal, temporary, yet unavoidable air, noise, water quality, traffic flow and visual impacts for those residents and travelers within the immediate vicinity of the project.

The air quality impacts will be minor and short-term in the form of dust from earthwork and unpaved roads. These impacts will be minimized or controlled by adherence to all state and local regulation, including the most current edition of the FDOT Standard Specifications for Road and Bridge Construction, and any special provisions in the construction contract.

Heavy equipment movement and construction activities may result in noise and vibration impacts. This will be minimized by adherence to noise control measures found in the most recent edition of the FDOT Standard Specifications for Road and Bridge Construction.

Water quality impacts resulting from erosion and sedimentation will be controlled in accordance to the most current edition of the FDOT Standard Specifications for Road and Bridge Construction, and through the use of Best Management Practices.

Maintenance of traffic (MOT) and sequence of construction will be planned and scheduled to minimize traffic delays. Access to all businesses and residences will be maintained to the extent practical through controlled construction scheduling. Signage will be used, as appropriate, to provide pertinent information to the traveling public. The local news media will be notified in advance of road closings and other construction related activities which could excessively inconvenience the community, so that motorists, residents, and business persons can plan travel routes accordingly. A detailed MOT plan will be developed during the design phase.

For the residents living along the project, some of the materials stored for the project may be displeasing visually, however, this would be a temporary condition and should pose no substantial problem.

Other construction mitigation efforts to be considered by the project engineer include the following measures:

1. The contractor will use static rollers for compaction of embankment, subgrade, base asphalt, etc.
2. Pile driving operations will be limited to the hours of 7:00 a.m. to 9:00 p.m. to avoid interfering with any adjacent noise sensitive land uses, or a different foundation design, i.e., drilled shafts will be considered.
3. Preformed pile holes will be required where they are in proximity to any noise sensitive land uses to minimize vibration transfer.

4. Backup alarm noise from heavy equipment will be minimized by requiring the contractor to operate in forward passes or a figure eight pattern when dumping or spreading, or compacting materials.
5. Restrictions of operating hours for lighting the construction areas will be determined and required of the contractor prior to beginning construction activities that require lighting.
6. Coordination with the local community and law enforcement agencies will be undertaken prior to commencement of any construction activities to ensure that construction-related impacts are minimized or adequately mitigated when work during non-daylight hours is required.

4.4 REFERENCES

1. 40th Street Preliminary Corridor Study, Community Coordination Report; City of Tampa, Florida; January 1996.
2. Transportation Improvement Program; Hillsborough County Metropolitan Planning Organization; Tampa, Florida; 1995
3. City of Tampa Comprehensive Plan Transportation, Mass Transit and Traffic Circulation Elements; City of Tampa Planning Department; Tampa, Florida; October 1993.
4. Conceptual Stage Relocation Plan; Post, Buckley, Schuh and Jernigan; Tampa, Florida; September 1996.
5. Cultural Resource Assessment Survey; Archaeological Consultants, Inc.; Sarasota, Florida; Draft submitted in February 1996.

6. Florida Site File - Florida Sites and Structures on the National Register of Historic Places; Florida Department of State Division of Historic Resources; Tallahassee, Florida.
7. Comprehensive Bicycle Plan; Hillsborough County Metropolitan Organization, Tampa, Florida; 1993.
8. Contamination Screening Evaluation Report; Post, Buckley, Schuh and Jernigan; Tampa, Florida.
9. The Classification of Wetlands and Deepwater Habitats of the United States; U.S. Fish and Wildlife; 1979.
10. Noise Study Report; Post, Buckley, Schuh and Jernigan; Tampa, Florida; Revised September 1996.
11. State of Florida Department of Transportation Drainage Manual (FDOT DM) Volume 1 - Standards; Office of Design, Drainage Section; Tallahassee, Florida; 1992.
12. Wetlands Evaluation Report and Permit Coordination Package, Post, Buckley Schuh and Jernigan; Tampa, Florida.

SECTION 5

COMMENTS AND COORDINATION

5.1 INTRODUCTION

Prior to initiation of the 40th Street/McKinley Drive Project Development and Environmental Study (PD&E) the City of Tampa in cooperation with the FDOT conducted an Arterial Investment Study (AIS) for the 40th Street/McKinley Drive corridor. The AIS documents the results of its public involvement element in the January, 1996 Community Coordination Report, "Priorities and Opportunities"¹; the results of this public involvement element were incorporated into this PD&E Study.

Upon completion of the AIS public involvement process the PD&E was initiated and an Advance Notification (AN) package was prepared and transmitted to the Governor's Office of Planning and Budgeting. The Public Involvement Plan for this project was then developed and approved by the City of Tampa and the FDOT. Based upon comments received from the AN package and approval of the Public Involvement Plan, coordination with the affected and interested agencies and public was initiated.

5.2 ADVANCE NOTIFICATION

A AN package was prepared in accordance with Part 1, Chapter 2 "Advance Notification" of the FDOT PD&E Manual. In March 1995, the AN package was transmitted to the State Clearinghouse in the Governor's Office of Planning and Budgeting where it was processed for distribution to listed agencies. Copies of the AN package and agency responses are contained in the Appendix A of this report. A list of the agencies notified and summaries of their responses are furnished in the following sections:

5.2.1 Agencies On The Mailing List

The following agencies received AN packages notifying them of the 40th Street/McKinley Drive PD&E Study:

- Federal Highway Administration
- Federal Emergency Management Agency
- Federal Railroad Administration
- Federal Transit Administration
- U.S. Department of Housing and Urban Development
- U.S. Department of the Interior-U.S. Geological Survey
- U.S. Environmental Protection Agency
- U.S. Department of the Interior-Fish and Wildlife Service-Field Office
- U.S. Army Corps of Engineers-Regulatory Branch, District Engineer
- Federal Aviation Administration
- U.S. Department of Health and Human Services-Centers for Environmental Health and Injury Control
- Florida Department of Environmental Protection
- Florida Game and Fresh Water Fish Commission
- Tampa Bay Regional Planning Council
- Southwest Florida Water Management District
- Hillsborough County Metropolitan Planning Organization
- Hillsborough County City-County Planning Commission
- Hillsborough County Planning Development Management
- Hillsborough County Public Utilities Department
- Hillsborough County School Board
- Hillsborough Area Regional Transit Authority
- Hillsborough County Environmental Protection Commission
- Hillsborough County Board of County Commissioners
- Greater Tampa Chamber of Commerce

- National Association for the Advancement of Colored People (NAACP)
- Historic Tampa/Hillsborough County Preservation Board
- Tampa City Council
- City of Tampa Land Development Coordination
- City of Tampa Public Works Department
- City of Tampa Recreation Department
- State Transportation Commission
- Federal-Aid Program Coordinator
- Manager, Environmental Management Office-Central Office

5.2.2 Summary of Agency Responses

Comments from agencies in reply to the AN are summarized below and followed by responses.

Hillsborough County Planning and Development Management

Comment: The widening of 40th Street/McKinley Drive from 2 lanes to 4 lanes is consistent with the Hillsborough County Comprehensive Plan and the 2010 Long Range Transportation Plan. The proposed 40th Street/McKinley Drive improvements also appear as two projects on the County's current list of Unfunded Infrastructure Needs; that list includes projects that are recognized as being needed now or in the near future to provide the level of service defined in the County Comprehensive Plan, but are not currently in the Capital Improvement Program.

Response: No response required.

Florida Department of State, State Historic Preservation Officer

Comment: Conditioned upon the FDOT conducting a cultural resource survey and appropriately avoiding or mitigating project impacts to any identified significant archaeological or historic sites, the proposed project will have no effect on historic properties listed, or eligible for listing, in the National Register of Historic Places, or otherwise of historical or architectural value. If these conditions are met, the project will be consistent with the historic preservation aspects of Florida's Coastal Management Program.

Response: Following distribution of the AN, a cultural resource assessment survey was conducted to evaluate the potential for impacts to any historical or archaeological resources within the project corridor. Background research and field surveys were coordinated with the State Historic Preservation Officer (SHPO). Results of the survey are presented in Section 4.2 of this report.

State of Florida, Department of Community Affairs

Comment: Based on the information in the notification of intent and the comments provided by our reviewing agencies, the state has determined that the proposed action is consistent with the Florida Coastal Management Program (FCMP) at this advanced notification stage. Subsequent environmental documents will be reviewed to determine continued consistency.

Response: No response required.

Comment: Based on the information contained in the application, the project is consistent with the applicable comprehensive plan.

Response: No response required.

Florida Department of Environmental Protection (FDEP), Office of Intergovernmental Programs and Water Management Environmental Supervisor, Tampa Office

Comment: Based upon the information provided, we find the funding request to be consistent with the Florida Coastal Management Program provided all necessary environmental permits are obtained.

Response: No response required.

Comment: The Hillsborough River provides habitat for manatees and special construction conditions will be required in order to protect this endangered species. Recommendations for reducing the expected impacts will be made during the permit coordination process. Based on information provided, the project does not appear to significantly impact sea turtles.

Response: The project is located upstream of the Hillsborough River dam. Therefore, access to the project area by sea turtles and manatees is prevented.

Comment: The Department of Transportation is responsible for providing accurate location information so that state-owned lands within the proposed project can be identified. If Trustee-owned lands are impacted, the City of Tampa will be required to obtain an authorization from the Board of Trustees.

Response: No response required.

5.3 COORDINATION AND CONSULTATION

Coordination and consultation have been accomplished through a series of meetings and extensive correspondence over the course of the study to ensure all appropriate parties are apprised of the project status and provided ample opportunity to submit comments.

Through the AIS and PD&E coordination process 28 governmental agencies and departments (local, state and federal) have been contacted through correspondence and/or meetings to solicit their comments regarding the proposed project. Additionally, coordination activities with non-profit organizations, utilities and rail has been conducted. To date, no adverse comments have been received from these entities regarding implementation of the proposed project.

5.3.1 Community Coordination/Public Involvement

The purpose of the project public involvement program is to establish coordination processes and maintain communication with property owners, elected and appointed officials, agencies, and other interested parties who are concerned with the proposed project and its potential impacts. This process helps to expedite the project development process, eliminate unnecessary work, and provide a substantial issue identification/problem solving effort. The City of Tampa and FDOT have conducted an extensive interagency coordination consultation effort, and public participation process. This section of the document summarizes the efforts to identify, address and resolve all project related issues identified through the public involvement program.

Unprecedented continuing support for this long promised project has been received from the affected residents, business owners and churches. This support has been demonstrated by citizens actively involved in the AIS and PD&E processes. As a result of these processes, citizens from both the residential and business community have solicited the Board of County Commissioners of Hillsborough County, the City of Tampa, the MPO and the

Citizens Advisory Committee for additional funds to ensure rapid completion of the project and to maintain the project's high priority within the MPO's Transportation Improvement Program². Additionally, the City of Tampa's economic development and land use initiative along the 40th Street/McKinley drive corridor has also received active community support to improve existing economic conditions and community values.

Over a 20 month period, the AIS and PD&E study process has included participation in 21 community, small group, neighborhood and business association meetings within the project area. In addition to these stakeholder meetings, three public meetings have been conducted. The first public meeting informed the public of the results of the AIS study and the procedures and schedule associated with the PD&E process which was just beginning. The second public meeting was an informational workshop conducted to update the public and receive comments on PD&E activities conducted up to that date. The last public meeting was an Alternatives Workshop which was conducted to receive public comments on six alternative alignments. Prior to the scheduled Alternative Public Workshop a project overview and schedule was presented by the City to the Hillsborough County MPO.

In addition to the meetings the City has provided newsletters to affected and interested parties as well as a telephone Hotline to answer project related questions or concerns.

The public involvement and coordination effort has developed active and meaningful project participation by the affected residential and business community. This process has resulted in community organizations which publicly support the proposed project. Community representatives have addressed the Hillsborough County Board of County Commissioners, Tampa City Council, Hillsborough County Metropolitan Planning Organization, Citizens Advisory Committee and the Pedestrian/Bicycle Committee for the purpose of maintaining, if not advancing, the project's current priority and to provide full funding so that this a long awaited and promised project may be completed in a timely fashion.

5.3.2 Public Meetings

In general, the majority of comments elicited through the public involvement program support the need for the selected project (four-lane urban divided concept). The consensus is that the improvements are not only needed, but long overdue. The attendees expressed concerns regarding the safety of the existing facility and felt that the proposed project would provide a safer facility. With few exceptions, most of the participants favored pedestrian and bicycle facilities, as well as the bus-bays and landscaping amenities associated with all alternatives. Mixed comments were received on the roundabouts but most attendees, with some reservations because of lack of familiarity, favored the roundabouts. Based on drainage and local flooding conversations, it was determined that the project would be beneficial and would eliminate existing drainage and local flooding problems presently experienced with the existing facility.

Compensation concerns have been expressed by property owners affected by roadway reservations (TIF Parcels) resulting from the Murphy Act as passed by the State of Florida in the late 1930's. The City of Tampa, through the public involvement program, has eased the initial fears of affected property owners by researching the statutes and policies. The City has also initiated a search among local law firms to provide "pro bono" services for affected property owners.

5.3.3 Summary of Public Meetings

Public involvement and coordination meetings with the interested public are as follows:

1. March 15, 1995 - Meeting conducted at 40th Street Seafood to inform the community of study process and to receive information regarding desired outcome for the transportation project and the surrounding neighborhoods.

2. March 20, 1995 - General Public Meeting conducted at Temple Crest Civic Association building to introduce and describe the PD&E Study and associated scope, process and schedule.
3. March 21, 1995 - Conduct meeting at Brenda Eighmey's home to present background of study, and provide an open dialogue between City, community and consultants. Describe the 30 month schedule.
4. March 28, 1995 - Conduct meeting with local ministers to present background of study, provide an open dialogue between City, community and consultants. Describe the 30 month schedule.
5. March 30, 1995 - Conduct meeting with business owners located along the southern end of the project corridor to present background of study and process to keep the public informed and exchange ideas.
6. April 5, 1995 - Meeting with the Temple Crest Civic Association Board to present background of study and study process and schedule. Study process intended to be sensitive to community needs and desires.
7. May 8, 1995 - General meeting with Temple Crest Civic Association to present history of project, overview work tasks. Present land-use scenarios and exchange ideas.
8. May 18, 1995 - Meeting with property owners to present history of project, overview work tasks and exchange ideas regarding community needs.
9. June 1995 - Meeting with Busch Gardens to brief governmental relations contact on project status, consider roadway concepts and exchange ideas.

10. July 11, 1995 - Public Workshop conducted at Robles Elementary School to present land use and transportation opportunities for future development of the corridor and to receive comments.
11. October 9, 1995 - Meeting with Terrace Park Association Board members to review issues and desired project outcomes as expressed by the community and present actions taken by the City to meet desired outcomes.
12. November 7, 1996 - Conducted Public Information Meeting at Robles Elementary School to review issues and desired project outcomes, receive comments and present actions taken by the City to meet desired outcomes.
13. November 13, 1995 - Study progress meeting with Temple Crest Civic Association reviewed outcome of Public Information Meeting held on November 7, 1995, received comments and answered questions.
14. March 5, 1996 - Presented status and schedule of project to the MPO and reviewed Alternatives Public Workshop task.
15. March 28, 1996 - Conducted Alternatives Public Workshop at Robles Elementary. Presented six project alternative concepts and associated amenities; received and responded to public comments and questions.
16. April 8, 1996 - Attended Temple Crest Civic Association Meeting to review outcome of Alternatives Public Workshop and respond to comments and questions.
17. May 2, 1996 - Conducted neighborhood meeting with business community and discussed future construction project schedules and priorities, land use, zoning and relocation impacts.

18. June 3, 1996 - Attended 40th Street Business Coalition meeting to identify agency and civic leader contacts, discussed ROW requirements and acquisition process, displacement, construction phasing, future zoning/ land use and Roadway Reservation issue.
19. July 3, 1996 - Meeting with Northside Baptist Church and 40th Street Baptist Church to solicit project comments and responses from churches, businesses and residents along Segment A of the project corridor. Note: Reverend Jordan of the of the Northside Baptist Church was absent from the meeting.
20. August 5, 1996 - Held small group meeting with members of the 40th Street Business Coalition to review recommended alignment, project amenities and future zoning/land use.
21. August 14, 1996 - Attended 40th Street Business Coalition Meeting at 40th Street Baptist Church to discuss Coalition viewpoints of key businesses, development options which may be offered by the City, update the members on the project, and field questions offered by the members.
22. September 2, 1996 - Busch Gardens meeting at City Hall Annex to provide project overview and update, and discuss Busch Gardens participation.
23. September 9, 1996 - City representatives attended Temple Crest Civic Association meeting to discuss project questions identified in the Temple Crest News. The recommended alternative and associated amenities as identified by the community were reviewed. Questions concerning planning and zoning, funds/grants for recreation/parks and river access, project construction phasing and funding, availability of economic resources (business loans), ROW requirements, acquisition process, roadway reservations (TIF parcels), roadway access and roundabout

applications were discussed and answered by Councilman Paine and City staff and consultant project manager.

5.3.4 Utility Coordination

All utility companies with facilities located within the project corridor were contacted. Information was requested regarding the location of existing facilities and the cost of relocating those facilities as a result of project construction. The following utility companies were contacted: Time Warner, Inc., GTE Florida, Inc., Peoples Gas System, Inc., Florida Gas Transmission, Tampa Electric Company, City of Tampa Water Department, and City of Tampa Department of Sanitary Sewers. To date relocation estimates received from the affected utilities range from \$ 4.2 million to \$2.4 million. The difference in costs is associated with GTE Florida, Inc. and Tampa Electric Companies estimate to maintain overhead lines versus the additional costs to place the lines underground. The information received from the utilities companies is detailed in the draft Utility Assessment Package, August 1996².

5.3.5 Public Hearing

The City, in cooperation with the FDOT, will not make a final decision on the proposed or any alternatives until a public hearing has been held on this project and all comments received have been taken into consideration. Therefore, a public hearing on the proposed project is to be scheduled and conducted in accordance with 23 U.S.C. 128, 40CFR 1500-1508 and F.S. 339.155.

5.4 REFERENCES

1. 40th Street Preliminary Corridor Study, Community Coordination Report; City of Tampa, Florida; January 1996.

2. Draft Utility Assessment Package; Post, Buckley, Schuh and Jernigan;
Tampa, Florida, August 1996.

APPENDICES

Appendix A - Correspondence

Appendix B - Preferred Alternative

Appendix C - Water Quality Impact Evaluation

Appendix A
Correspondence

DIVISIONS OF FLORIDA DEPARTMENT OF STATE
Office of the Secretary
Office of International Relations
Division of Administrative Services
Division of Corporations
Division of Cultural Affairs
Division of Elections
Division of Historical Resources
Division of Library and Information Services
Division of Licensing



MEMBER OF THE FLORIDA CABINET
Historic Florida Keys Preservation Board
Historic Palm Beach County Preservation Board
Historic Pensacola Preservation Board
Historic St. Augustine Preservation Board
Historic Tallahassee Preservation Board
Historic Tampa/Hillsborough County
Preservation Board
Ringling Museum of Art

FLORIDA DEPARTMENT OF STATE
Sandra B. Mortham
Secretary of State
DIVISION OF HISTORICAL RESOURCES

March 3, 1997

Mr. J. R. Skinner
Division of Administration
Federal Highway Administration
U.S. Department of Transportation
227 N. Bronough Street, Room 2015
Tallahassee, Florida 32301

In Reply Refer To:
Scott B. Edwards
Historic Sites Specialist
Project File No. 970460

RECEIVED
97 MAR -6 PM 3:06

RE: Cultural Resource Assessment Review Request
A Cultural Resource Assessment Survey of 40th Street PD&E Study from Hillsborough Avenue (S.R. 600 & U.S. 92) to Fowler Avenue (S.R. 582), Tampa, Hillsborough County, Florida By Archaeological Consultants, Inc., September 1996 (revised).
SPN: 10007-1550
WPN: 7123608
FPN: XU-1917-(1)

Dear Mr. Skinner:

In accordance with the procedures contained in 36 C.F.R., Part 800 ("Protection of Historic Properties"), as well as the provisions contained in Chapter 267.061, *Florida Statutes*, we have reviewed the results of the field survey of the referenced project performed by Archaeological Consultants, Inc., and find them to be complete and sufficient.

We note that twenty-nine previously unrecorded historic properties (8HI 5657 - 5685) and two previously unrecorded archaeological sites (8HI 5686 & 8HI 5687), were located during the course of this survey along with the revisiting of one previously recorded archaeological site (8HI 3456). Based on the results of the survey, the sites, as they exist in the project area, were determined to be ineligible for listing in the National Register of Historic Places, or otherwise of historical or archaeological value. We concur with this determination. Therefore, it is the opinion of this office that the proposed undertaking will have no effect on historic properties listed or eligible for listing in the National Register of Historic Places, or otherwise of historical or archaeological value.

DIRECTOR'S OFFICE

R.A. Gray Building • 500 South Bronough Street • Tallahassee, Florida 32399-0250 • (904) 488-1480
FAX: (904) 488-3353 • WWW Address <http://www.dos.state.fl.us>

ARCHAEOLOGICAL RESEARCH
(904) 487-2299 • FAX: 414-2207

HISTORIC PRESERVATION
(904) 487-2333 • FAX: 922-0496

HISTORICAL MUSEUMS
(904) 488-1484 • FAX: 921-2503

Mr. Skinner
March 3, 1997
Page 2

If you have any questions concerning our comments, please do not hesitate to contact us. Your interest in protecting Florida's archaeological and historic resources is appreciated.

Sincerely,



George W. Percy, Director
Division of Historical Resources
and
State Historic Preservation Officer

GWP/Ese

xc: C. L. Irwin, FDOT
Rick Adair, FDOT, District 7

November 5, 1996

4305 East 21st. Avenue, Tampa, Florida 33605-2300
Phone: (813) 623-5835 • Fax - (813) 664-1119

201 E. Kennedy Blvd., Suite 1600, Tampa, Florida 33602
(813) 623-5835 or (813) 223-6831 • Fax - (813) 223-7976

Mr. Ron Piscon
Project Manager
Post, Buckley, Shuh & Jernigan, Inc.
5300 West Cypress Street
Suite 300
Tampa, Florida 33607-1066

Re: 40th Street Corridor: Hillsborough Avenue to Fowler Avenue
Federal Aid Project XU-1917(1), FDOT #10007-1550
Hillsborough Area Regional Transit Review

REC
NOV 5 1996
PL
FILE

Dear Mr. Piscon:

Enclosed is a copy of the aerial project overviews with the transit requirements plotted for the 40th Street Corridor. The orange arrows indicate current stop locations which will be eliminated, green arrows indicate proposed new locations, with landing pads and benches at minimum, and the dots with green arrows indicate the areas for landing pads, shelters and bus bays. The bus bay locations were established as the result of our October 29, 1996 meeting with the Post, Buckley, Shuh & Jernigan engineering firm.

It is our understanding that we will need to further discuss the recommended alignment, incorporation of "roundabouts", proposed alternatives for construction and coordination for the public transit amenities once these locations have been analyzed.

We have held a meeting with our Operations Department to discuss the locations and to have concurrence of the proposed transit amenities locations.

BOARD OF DIRECTORS

Sharon Dent, *Executive Director*

CITY OF TAMPA

Mayor Dick Greco
Enrique Woodroffe, *Chairman*
Manuel Alvarez, Jr., *Vice Chairman*

HILLSBOROUGH COUNTY

Commissioner Sandra Wilson, *Secretary*
Commissioner Ed Turanchik
Maryanne Ladutko
James Lovell
Wallace Bowers

STATE OF FLORIDA

Linda Saul-Sena
David Mechanik

CITY OF TEMPLE TERRACE

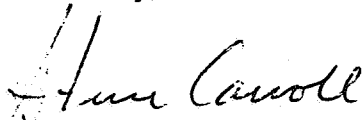
Councilman John M. King

40th Street Corridor: Hillsborough Avenue to Fowler Avenue
Federal Aid Project XU-1917(1), FDOT #10007-1550
Hillsborough Area Regional Transit Review
November 5, 1996

Page 2

If you have any further questions concerning these issues, please contact Les Weakland at (813) 623-5835, extension 105.

Sincerely,



Steve Carroll for
Diana Carsey
Director of Planning

Enclosures

LW/lw

xc: Mr. Robert Potts, General Manager of Operations
Mr. John Morais, Director of Transportation
Mr. Terry Yeager, Director of Maintenance
Mr. Les Weakland, Senior Planner
File 40STcor.006

FLORIDA

LAWTON CHILES
GOVERNOR



DEPARTMENT OF TRANSPORTATION

BEN G. WATTS



FWS Log No. 97-011A The proposed action is not likely to adversely affect resources protected by the Endangered Species Act of 1973, as amended (16 U.S.C 1531 et seq.). This finding fulfills the requirements of the Act.

Project Development & Environment
11201 N. Malcolm McKinley Drive, MS 7-500
Tampa, FL 33612-6403
October 3, 1996

U.S. Fish and Wildlife Service
6620 Southpoint Drive South, Suite 310
Jacksonville, FL 32216
(904) 232-2580 FAX (904) 232-2404

Michael M. Bentzien 10-31-96
Michael M. Bentzien Date
Assistant Field Supervisor

Mr. Don Palmer
U.S. Fish and Wildlife Service
6620 Southpoint Drive South, Suite 310
Jacksonville, FL 32216-0912

RE: Work Project Item No. 7123608
State Project No. 10007-1550
40th Street/McKinley Drive (CR 585A)
Hillsborough County

RECEIVED PDZ
96 NOV -4 AM 9:55

Dear Mr. Palmer:

The City of Tampa, in cooperation with the Florida Department of Transportation, is proposing improvements to approximately 6.6 kilometers (4.1 miles) of 40th Street (CR 585A) from Hillsborough Avenue (SR 600) to Fowler Avenue (SR582). The proposed improvements include widening the existing roadway from the current undivided two lane facility to a divided four lane facility. The study team analyzed alignment impacts to the east, center, west and combinations of the three in the existing corridor. A Wetland Evaluation Report / Biological Assessment has been prepared to address the biota within the proposed project corridor.

This proposed project has been evaluated for impacts on federally protected threatened and endangered species. Based on the results of the literature review and field surveys conducted, the Department has concluded that no federally listed threatened or endangered species will be affected by the proposed improvements. Furthermore, the proposed project is not located in an area designated as Critical Habitat by the U.S. Department of Interior. Therefore, the Department on behalf of the Federal Highway Administration has determined that the proposed actions will have "No Effect" on any federally protected threatened or endangered species.

If your office concurs with this determination, please respond to the Department in writing at your earliest convenience. If you or your staff would like a site review, please call me at (813) 975-6457.

Sincerely,

Todd Mecklenborg

Todd Mecklenborg
Environmental Specialist



Project Development & Environment, MS 7-500
11201 N. Malcolm McKinley Dr.
Tampa, FL 33612-6403
October 3, 1996

Mr. Alberto J. Martinez
Acting Environmental Manager
Southwest Florida Water Management District
7601 Highway 301 North
Tampa, FL 33637

RE: Work Project Item No. 7123608
State Project No. 10007-1550
40th Street/McKinley Drive (CR 585A)
Hillsborough County

Dear Mr. Martinez:

The City of Tampa, in cooperation with the Florida Department of Transportation (FDOT), is proposing improvements to approximately 6.6 kilometers (4.1 miles) of 40th Street (CR 585A) from Hillsborough Avenue (SR 600) to Fowler Avenue (SR582). The proposed improvements include widening the existing roadway from the current undivided two lane facility to a divided four lane facility. The study team analyzed alignment impacts to the east, center, west and combinations of the three in the existing corridor. A Wetland Evaluation Report/Biological Assessment has been prepared to address the biota within the proposed project corridor.

FDOT is requesting that all notified agencies or interested parties review this proposed project. Comments concerning, related permitting requirements and/or concerns should be submitted to the Department within 30 days after receiving this report.

Thank you for providing the Department comments on the proposed activities. If you have any questions or would require any additional information, please feel free to contact me at (813) 975-6457.

Sincerely,

Todd Mecklenborg
Environmental Specialist



An Equal Opportunity Employer

Southwest Florida Water Management District

RECEIVED PD 19

2379 Broad Street • Brooksville, Florida 34609-6899 • 1-800-423-1476 (Florida Only) or (352) 796-7211 • SUNCOM 628-4150 • T.D.D. Number Only (Florida Only): 1-800-231-6103

7601 Highway 301 North
Tampa, Florida 33637-6759
1-800-836-0797 or (813) 985-7481
SUNCOM 578-2070

170 Century Boulevard
Bartow, Florida 33830-7700
1-800-492-7862 or (941) 534-1448
SUNCOM 572-6200

115 Corporation Way
Venice, Florida 34292-3524
1-800-320-3503 or (941) 486-1212
SUNCOM 526-6900

2303 Highway 44 West
Inverness, Florida 34453-3809
(352) 637-1360

October 17, 1996

- Roy G. Harrell, Jr.
Chairman, St. Petersburg
- Joe L. Davis, Jr.
Vice Chairman, Wauchula
- Curtis L. Law
Secretary, Land O' Lakes
- Sally Thompson
Treasurer, Tampa
- James L. Allen
Bushnell
- Ramon F. Campo
Brandon
- James L. Cox
Lakeland
- Rebecca M. Eger
Sarasota
- John P. Harlee, IV
Bradenton
- James E. Martin
St. Petersburg
- Virginia S. Roo
Tampa

- Peter G. Hubbell
Executive Director
- Mark D. Farrell
Assistant Executive Director
- Edward B. Helvenston
General Counsel

Todd Mecklenborg
Environmental Specialist
Florida Department of Transportation
Project Development and Environment Section, MS 7-500
11201 N. McKinley Drive
Tampa, FL 33612-6403

Subject: 40th Street/McKinley Drive (CR 585A) Wetland Evaluation Report and Biological Evaluation
WPI No. 7123608
State Project No. 10007-1550
Hillsborough County

Dear Mr. Mecklenborg;

I have reviewed the above referenced report. It describes the wetlands found within 200' of the existing centerline of 40th Street from Hillsborough Avenue north to Fowler Avenue. The report states that the most wetland impact that would occur if any of the six alternative routes were constructed is 0.15 acre, with an additional, unidentified amount of shading impact over the river. The only wetlands within the study area are those associated with the Hillsborough River.

A recent field visit verified that the only wetlands within the study area are indeed those associated with the Hillsborough River. They appear to be very limited and comprised of mostly weedy vegetation. The wetland limits must be field verified by District prior to construction plan approval; please contact our office as soon as you are ready for a field appointment.

The report states that a Noticed General Permit is anticipated if wetland impacts are less than 0.25 acre. Please note that the NGP to which you apparently referred, 40D-400.447, does not cover bridge construction, so would not apply. NGP 40D-400.443, which does cover bridge construction, does not cover projects that add lanes. Therefore, it appears that none of the NGPs would apply to the project, and some sort of compensation would be required for the Standard General ERP. However, due to the poor quality of wetlands that would be impacted, enhancement of the surrounding wetlands by weed removal and/or desirable species planting would probably be sufficient compensation.

*Excellence
Through
Quality
Service*

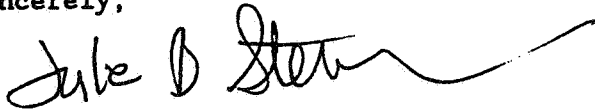
Todd Mecklenborg
Page two
October 17, 1996

The report did not address wetlands associated with proposed surface water management facilities. It thus appears that the wetland evaluation report for the entire project, in the form it must be constructed pursuant to ERP regulations, is incomplete. Prior to development of construction plans, it is advised that you contact District environmental staff to review any wetland limits adjacent to proposed pond sites, and to establish the seasonal high water levels of any water body to which ponds are proposed to discharge.

It was noted during my field visit that bridge construction and road widening to the east would probably be more desirable because the large oak trees now growing at the southwest quadrant of the river/road crossing would be spared. The large, vacant lot at the southeast appears to be a good candidate for a treatment pond and site as well.

Thank you for the opportunity to review this project at such an early stage, when incorporation of our recommendations and requirements is most possible. Call me at (813)985-7481, extension 2073 if you have questions regarding this letter.

Sincerely,



Julie B. Sternfels
Environmental Scientist
Tampa Regulation Department

JBS:dsw045

cc: preapplication file



Project Development & Environment, MS 7-500
11201 N. Malcolm McKinley Dr.
Tampa, FL 33612-6403
October 3, 1996

Mr. Bill Lofgren
Tampa Bay Regional Planning Council
9455 Koger Boulevard
St. Petersburg, FL 33702

**RE: Work Project Item No. 7123608
State Project No. 10007-1550
40th Street/McKinley Drive (CR 585A)
Hillsborough County**

Dear Mr. Lofgren:

The City of Tampa, in cooperation with the Florida Department of Transportation (FDOT), is proposing improvements to approximately 6.6 kilometers (4.1 miles) of 40th Street (CR 585A) from Hillsborough Avenue (SR 600) to Fowler Avenue (SR582). The proposed improvements include widening the existing roadway from the current undivided two lane facility to a divided four lane facility. The study team analyzed alignment impacts to the east, center, west and combinations of the three in the existing corridor. A Wetland Evaluation Report/Biological Assessment has been prepared to address the biota within the proposed project corridor.

FDOT is requesting that all notified agencies or interested parties review this proposed project. Comments concerning, related permitting requirements and/or concerns should be submitted to the Department within 30 days after receiving this report.

Thank you for providing the Department comments on the proposed activities. If you have any questions or would require any additional information, please feel free to contact me at (813) 975-6457.

Sincerely,

Todd Mecklenborg
Environmental Specialist



9455 Koger Boulevard
St. Petersburg, FL 33702-2491
(813) 577-5151/Tampa 224-9380
Suncom 586-3217

Officers

Chairman
Commissioner
John Gause

Vice-Chairman
Councilman
Armand "Sandy" Burke

Secretary/Treasurer
Commissioner
Steven M. Seibert

Executive Director
Julia E. Greene

October 11, 1996

RECEIVED PD&E
96 OCT 14 AM 10:40

Mr. Todd Mecklenborg, Environmental Specialist
Project Development & Environment
Florida Department of Transportation
District Seven
11201 North McKinley Drive, MS 7-500
Tampa, Florida 336126403

Subject: IC&R #422-96, 40th Street Wetland Evaluation Report, WPI
#7123608, Hillsborough County

Dear Mr. Mecklenborg:

This letter constitutes acknowledgement and preliminary assessment of an application for the aforementioned project submitted under the provisions of Florida's Intergovernmental Coordination and Review (IC&R) process.

While we *do* find the proposal to be regionally significant, initial in-house review does not indicate the necessity for action by the Council. All member local governments will be notified of your application for any comments concerning local significance. You will be contacted if any local concerns are identified.

In accordance with staff findings, and subject to concurrence of the Tampa Bay Regional Planning Council's (TBRPC) Clearinghouse Review Committee and TBRPC's full policy board, this project is considered to have met the requirement of Florida's IC&R process and no further review will be required by our Agency. This letter constitutes compliance with IC&R only and does not preclude the applicant from complying with *other* applicable review/permit requirements or regulations.

If you have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "John M. Meyer", is written over a large, stylized, circular scribble or flourish.

John M. Meyer, Principal Planner
Intergovernmental Coordination & Review

JMM/bj



Project Development & Environment, MS 7-500
11201 N. Malcolm McKinley Dr.
Tampa, FL 33612-6403
October 3, 1996

Mr. Joseph R. Bacheler
U.S. Army Corps of Engineers
Tampa Area Office
P.O. Box 19247
Tampa, FL 33686

**RE: Work Project Item No. 7123608
State Project No. 10007-1550
40th Street/McKinley Drive (CR 585A)
Hillsborough County**

Dear Mr. Bacheler:

The City of Tampa, in cooperation with the Florida Department of Transportation (FDOT), is proposing improvements to approximately 6.6 kilometers (4.1 miles) of 40th Street (CR 585A) from Hillsborough Avenue (SR 600) to Fowler Avenue (SR582). The proposed improvements include widening the existing roadway from the current undivided two lane facility to a divided four lane facility. The study team analyzed alignment impacts to the east, center, west and combinations of the three in the existing corridor. A Wetland Evaluation Report/Biological Assessment has been prepared to address the biota within the proposed project corridor.

FDOT is requesting that all notified agencies or interested parties review this proposed project. Comments concerning, related permitting requirements and/or concerns should be submitted to the Department within 30 days after receiving this report.

Thank you for providing the Department comments on the proposed activities. If you have any questions or would require any additional information, please feel free to contact me at (813) 975-6457.

Sincerely,

Todd Mecklenborg
Environmental Specialist





Project Development & Environment, MS 7-500
11201 N. Malcolm McKinley Dr.
Tampa, FL 33612-6403
October 3, 1996

Mr. George Craciun
Florida Department of Environmental Protection
Southwest District
3804 Coconut Palm Dr.
Tampa, FL 33619

RE: Work Project Item No. 7123608
State Project No. 10007-1550
40th Street/McKinley Drive (CR 585A)
Hillsborough County

Dear Mr. Craciun:

The City of Tampa, in cooperation with the Florida Department of Transportation (FDOT), is proposing improvements to approximately 6.6 kilometers (4.1 miles) of 40th Street (CR 585A) from Hillsborough Avenue (SR 600) to Fowler Avenue (SR582). The proposed improvements include widening the existing roadway from the current undivided two lane facility to a divided four lane facility. The study team analyzed alignment impacts to the east, center, west and combinations of the three in the existing corridor. A Wetland Evaluation Report/Biological Assessment has been prepared to address the biota within the proposed project corridor.

FDOT is requesting that all notified agencies or interested parties review this proposed project. Comments concerning, related permitting requirements and/or concerns should be submitted to the Department within 30 days after receiving this report.

Thank you for providing the Department comments on the proposed activities. If you have any questions or would require any additional information, please feel free to contact me at (813) 975-6457.

Sincerely,

Todd Mecklenborg
Environmental Specialist





Project Development & Environment, MS 7-500
11201 N. Malcolm McKinley Dr.
Tampa, FL 33612-6403
October 3, 1996

Mr. James W. Beever III
Florida Game & Fresh Water Fish Commission
Office Of Environmental Services
29200 Tuckers Grade
Punta Gorda, FL 33955

RE: Work Project Item No. 7123608
State Project No. 10007-1550
40th Street/McKinley Drive (CR 585A)
Hillsborough County

Dear Mr. Beever:

The City of Tampa, in cooperation with the Florida Department of Transportation (FDOT), is proposing improvements to approximately 6.6 kilometers (4.1 miles) of 40th Street (CR 585A) from Hillsborough Avenue (SR 600) to Fowler Avenue (SR582). The proposed improvements include widening the existing roadway from the current undivided two lane facility to a divided four lane facility. The study team analyzed alignment impacts to the east, center, west and combinations of the three in the existing corridor. A Wetland Evaluation Report/Biological Assessment has been prepared to address the biota within the proposed project corridor.

FDOT is requesting that all notified agencies or interested parties review this proposed project. Comments concerning, related permitting requirements and/or concerns should be submitted to the Department within 30 days after receiving this report.

Thank you for providing the Department comments on the proposed activities. If you have any questions or would require any additional information, please feel free to contact me at (813) 975-6457.

Sincerely,

Todd Mecklenborg
Environmental Specialist



Project Development & Environment, MS 7-500
11201 N. Malcolm McKinley Dr.
Tampa, FL 33612-6403
October 3, 1996

Mr. Mark A. Howard
Environmental Protection Commission of Hillsborough County
Wetlands Management Division
1410 North 21st Street
Tampa, FL 33605

**RE: Work Project Item No. 7123608
State Project No. 10007-1550
40th Street/McKinley Drive (CR 585A)
Hillsborough County**

Dear Mr. Howard:

The City of Tampa, in cooperation with the Florida Department of Transportation (FDOT), is proposing improvements to approximately 6.6 kilometers (4.1 miles) of 40th Street (CR 585A) from Hillsborough Avenue (SR 600) to Fowler Avenue (SR582). The proposed improvements include widening the existing roadway from the current undivided two lane facility to a divided four lane facility. The study team analyzed alignment impacts to the east, center, west and combinations of the three in the existing corridor. A Wetland Evaluation Report/Biological Assessment has been prepared to address the biota within the proposed project corridor.

FDOT is requesting that all notified agencies or interested parties review this proposed project. Comments concerning, related permitting requirements and/or concerns should be submitted to the Department within 30 days after receiving this report.

Thank you for providing the Department comments on the proposed activities. If you have any questions or would require any additional information, please feel free to contact me at (813) 975-6457.

Sincerely,

Todd Mecklenborg
Environmental Specialist



District PD&E Department, MS 7-500
11201 North McKinley Drive
Tampa, Florida 33612-6403

March 30, 1995

Ms. Suzanne Traub-Metlay
Florida State Clearinghouse
Intergovernmental Affairs Policy Unit
Executive Office of the Governor
Office of Planning and Budgeting
The Capitol
Tallahassee, Florida 32399-0001

RE: Advance Notification
Work Program Item Number: 7123608
State Project Number: 10007-1550
Federal Aid Number: XU-1917(1)
40th Street/Malcolm McKinley Drive (CR 585A) from Hillsborough Avenue (SR 600/US 92) to Fowler Avenue (SR 582)
Hillsborough County, Florida

Dear Ms. Traub-Metlay:

The attached Advance Notification Package is forwarded to your office for processing through appropriate state agencies in accordance with Executive Order 93-194. Distribution to local and federal agencies is being made as noted.

Although more specific comments will be solicited during the permit coordination process, we request that permitting and permit reviewing agencies review the attached information and furnish us with whatever general comments they consider pertinent at this time.

This is a Federal-aid action and the Florida Department of Transportation, in consultation with the Federal Highway Administration, will determine what degree of environmental documentation will be necessary. The determination will be based upon in-house environmental evaluations and comments received through coordination with other agencies. Please provide a consistency review for this project in accordance with the State's Coastal Zone Management Program.

In addition, please review this improvement's consistency, to the maximum extent feasible, with the approved Comprehensive Plan of the local government jurisdiction(s) pursuant to Chapter 163, Florida Statutes.

Florida State Clearinghouse
March 30, 1995
Page 2

We are looking forward to receiving your comments on the project within 45 days. Please reference the assigned Work Program Item Number in any subsequent correspondence. Should additional review time be required, a written request for an extension of time must be submitted to our office within the initial 45-day comment period.

Your comments should be addressed to:

Mr. Michael J. Coleman, P.E.
District PD&E Engineer, District Seven
PD&E Department, MS 7-500
Florida Department of Transportation
11201 North McKinley Drive
Tampa, Florida 33612-6403

Your expeditious handling of this notice will be appreciated.

Sincerely,

Michael J. Coleman, P.E.
District PD&E Engineer, District Seven

Attachment

MAILING LIST

xc: Federal Highway Administration
Federal Emergency Management Agency
Federal Railroad Administration
Federal Transit Administration
U.S. Department of Housing and Urban Development
U.S. Department of the Interior - U.S. Geological Survey
U.S. Environmental Protection Agency
U.S. Department of the Interior-Fish and Wildlife Service-Field Office
U.S. Army Corps of Engineers-Regulatory Branch, District Engineer
Federal Aviation Administration
U.S. Department of Health and Human Services-Centers for Environmental Health
and Injury Control
Florida Department of Environmental Protection
Florida Game and Fresh Water Fish Commission
Tampa Bay Regional Planning Council
Southwest Florida Water Management District
Hillsborough County Metropolitan Planning Organization
Hillsborough County City-County Planning Commission
Hillsborough County Planning Development Management
Hillsborough County Public Utilities Department
Hillsborough County School Board
Hillsborough Area Regional Transit Authority
Hillsborough County Environmental Protection Commission
Hillsborough County Board of County Commissioners
Greater Tampa Chamber of Commerce
National Association for the Advancement of Colored People (NAACP)
Historic Tampa/Hillsborough County Preservation Board
Tampa City Council
City of Tampa Land Development Coordination
City of Tampa Public Works Department
City of Tampa Recreation Department
State Transportation Commission
Federal-Aid Program Coordinator
Manager, Environmental Management Office - Central Office

4467
10-550.XX(TA)

HILLSBOROUGH COUNTY

Florida

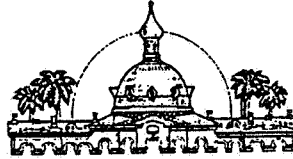
RECEIVED PD&E

Office of the County Administrator
Daniel A. Kleman

95 MAY 17 PM 2:45

BOARD OF COUNTY COMMISSIONERS

Dottie Berger
Phyllis Busansky
Joe Chillura
Chris Hart
Jim Norman
Ed Turanchik
Sandra Helen Wilson



Senior Assistant County Administrator
Patricia Bean

Assistant County Administrators
Edwin Hunzeker
Cretta Johnson
Jimmie Keel
Robert Taylor

May 12, 1995

Mr. Michael J. Coleman, P.E.
District PD&E Engineer, District Seven
PD&E Department, MS 7-500
Florida Department of Transportation
11201 North McKinley Drive
Tampa, Florida 33612-6403

SUBJECT: COMMENTS REQUESTED FOR WORK PROGRAM ITEM #7123608
ST PROJECT #10007 - 40TH STREET- MCKINLEY DRIVE
ADMINISTRATIVE REFERRAL NUMBER 38207

Dear Mr. Coleman:

This is in response to the Advance Notification Package we received for the above project, in accordance with Executive Order 93-194. The letter with the package asks that Hillsborough County provide a consistency review for this project in accordance with the State's Costal Zone Management Program. It also asks the County to review the project's consistency with the approved Hillsborough County Comprehensive Plan.

40th Street from Hillsborough Avenue to Fowler Avenue is a County road which lies entirely within the City of Tampa. It would not be germane for Hillsborough County to perform a consistency review for this project in accordance with the State's Costal Zone Management Program. Instead, the County will defer this consistency review to the Department of Community Affairs, which has informed us they will be doing so.

This segment of 40th Street is consistent with the Hillsborough County Comprehensive Plan. The widening of 40th Street from 2 lanes to 4 lanes is shown in the Transportation Element of the Plan, as a roadway project that is necessary to complete the 2010 Long Range Transportation Plan. It is also shown on the 2010 Plan, as a 4-lane divided roadway. You may also wish to verify this interpretation through the Metropolitan Planning Organization (MPO) since that organization is the official transportation planning agency for the County. By copy of this letter, we are requesting the MPO to provide you the appropriate documentation.

Post Office Box 1110 · Tampa, Florida 33601
An Affirmative Action/Equal Opportunity Employer

Mr. Coleman
May 12, 1995
Page Two

The widening of 40th Street from 2 to 4 lanes, also appears as two projects on the County's current list of Unfunded Infrastructure Needs. The two segments are 40th Street, Hillsborough Avenue to Busch Boulevard, and 40th Street, Busch Boulevard to Fowler. They are ranked as #7 and #8 on the prioritized list of unfunded projects. The Unfunded Infrastructure Needs list contains projects that are recognized as being needed now, or in the near future, to provide the level of service defined in the County Comprehensive Plan. However, they are not currently in the Capital Improvement Program (CIP).

If you have additional questions, please call Bill McCall, Senior Professional Engineer, at 276-8375.

Sincerely,



Gene Boles, AICP, Director
Planning and Development Management

WM:PL

cc: Board of County Commissioners
Daniel A. Kleman, County Administrator
Robert C. Taylor, Assistant County Administrator
Cretta A. Johnson, Assistant County Administrator
Robert R. Gordon, P.E., Director, Engineering & Construction
Services
Lucy Ayer, Director, MPO
Shirley Gersholowitz, Manager, Planning and Development
Management
William McCall, Senior Professional Engineer
Suzanne Traub-Metlay
Florida State Clearinghouse
Intergovernmental Affairs Policy Unit
Executive Office of the Governor
Office of Planning and Budget
The Capitol
Tallahassee, Florida 32399-0001



FLORIDA DEPARTMENT OF STATE
 Sandra B. Mortham
 Secretary of State
 DIVISION OF HISTORICAL RESOURCES
 R.A. Gray Building
 500 South Bronough Street
 Tallahassee, Florida 32399-0250

RECEIVED

MAY 26 1995

**Florida Coastal
 Management Program**

Director's Office
 (904) 488-1480

Telecopier Number (FAX)
 (904) 488-3353

May 23, 1995

Ms. Suzanne Traub-Metlay
 State Clearinghouse
 Executive Office of the Governor
 Room 1603, The Capitol
 Tallahassee, Florida 32399-0001

In Reply Refer To:
 Frank J. Keel
 Historic Sites Specialist
 (904) 487-2333
 Project File No. 951705

95-0349C

RE: SAI# FL950410034QC
 Florida Department of Transportation
 Advance Notification
 40th St./Malcom McKinley Drive from Hillsborough to Ave. to Fowler Ave.
 SPN: 10007-1550
 WPN: 7123608
 FPN: XU-1917(1)
 Hillsborough County, Florida

Dear Ms. Traub-Metlay:

In accordance with the provisions of Florida's Coastal Zone Management Act and Chapter 267, *Florida Statutes*, as well as the procedures contained in 36 C.F.R., Part 800 ("Protection of Historic Properties"), we have reviewed the referenced project(s) for possible impact to historic properties listed, or eligible for listing, in the *National Register of Historic Places*, or otherwise of historic or architectural value.

We have reviewed the Advanced Notification for the Florida Department of Transportation (FDOT) project referenced above. We note that the project will have a cultural resource survey performed. Therefore, conditioned upon the FDOT undertaking a cultural resource survey, and appropriately avoiding, minimizing, or mitigating project impacts to any identified significant archaeological or historic sites, the proposed project will have no effect on historic properties listed, or eligible for listing, in the National Register, or otherwise of historical or architectural value. If these conditions are met the project will also be consistent with the historic preservation aspects of Florida's Coastal Management Program.

Ms. Traub-Metlay
May 23, 1995
Page 2

If you have any questions concerning our comments, please do not hesitate to contact us.
Your interest in protecting Florida's historic properties is appreciated.

Sincerely,

Laura A. Kammerer

yo

George W. Percy, Director
Division of Historical Resources
and
State Historic Preservation Officer

GWP/Kfk
xc: Jasmine Raffington, FCMP-DCA

W. TG
GB GF



RECEIVED PD&E
95 MAY 32 PM 2:56

STATE OF FLORIDA
DEPARTMENT OF COMMUNITY AFFAIRS

2740 CENTERVIEW DRIVE • TALLAHASSEE, FLORIDA 32399-2100

LAWTON CHILES
Governor

LINDA LOOMIS SHELLEY
Secretary

May 26, 1995

Mr. Michael J. Coleman
Florida Department of Transportation
District PD & E Department
MS 7-500
11201 North McKinley drive
Tampa, Florida 33612-6403

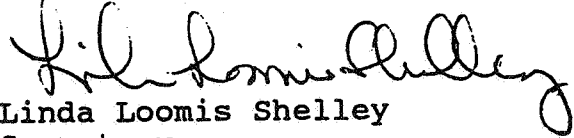
RE: Highway Planning and Construction - Work Program Item
7123608 - State Project # 10007-1550 - Federal Aid
XU-1917(1)
SAI: FL9504100349C

Dear Mr. Coleman:

The Florida State Clearinghouse is awaiting additional comments from our reviewing agencies on the above referenced project. We are therefore requesting an additional fifteen (15) days for completion of the consistency review in accordance with 15 CFR 930.41(b).

We will make every effort to conclude the review and forward the consistency determination to you on or before June 9, 1995.

Very truly yours,


Linda Loomis Shelley
Secretary

LLS/rk



Department of Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Virginia B. Wetherell
Secretary

RECEIVED
D&E
Lawton Chiles
Governor

02

AM

3

JUL

15

June 20, 1995

RECEIVED

JUN 22 1995

Suzanne Traub-Metlay
State Clearinghouse
Office of Planning and Budgeting
Executive Office of the Governor
The Capitol
Tallahassee, Florida 32399-0001

Florida Coastal
Management Program

RE: FDOT Advance Notification - 40th Street/Malcolm McKinley Drive (CR 585A) from Hillsborough Avenue (SR 600/US 92) to Fowler Avenue (SR 582), Hillsborough County

SAI: FL9504100349C

Dear Ms. Traub-Metlay:

The Department has reviewed the above-referenced project which involves evaluating improvements to the 40th Street/McKinley Drive corridor in eastern Tampa. The proposed study will also include an evaluation of the bridge over the Hillsborough River for possible widening or replacement.

Based on the available information, we find the funding request consistent with our authorities in the Florida Coastal Management Program, provided all the necessary environmental permits are obtained. We offer the following general comments.

Threatened and Endangered Species

The Hillsborough River provides habitat for manatees and special construction conditions will be required in order to protect this endangered species. Additional information is needed in order to adequately assess the expected impacts, such as whether or not explosives will be used in the demolition of existing bridges. Since this information should be provided during the permit coordination process, recommendations for reducing the expected impacts will be made at that time.

Based on the minimum information provided, the project does not appear to significantly impact sea turtles.

For further information, the FDOT may contact Carol Knox, Office of Protected Species Management, at 904/922-4330.

Sovereign State Lands

The Department of Transportation is responsible for providing


"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Ms. Traub-Metlay
FDOT/40th Street
FL9504100349C
Page Two

accurate location information to the Department so that state-owned lands within the proposed project can be identified. If Trustee-owned lands are impacted, the FDOT will be required to obtain an authorization from the Board of Trustees.

We appreciate the opportunity to comment on the proposed project. If you should have questions concerning this letter, please feel free to contact me at 904/487-2231.

Sincerely



Carliane D. Johnson
Environmental Specialist
Office of Intergovernmental Programs

/cdj

cc: Ed Irby, Marine Resources

1A PG 4A 6F



RECEIVED PD&E
05 JUL -3 AM 9:02

STATE OF FLORIDA
DEPARTMENT OF COMMUNITY AFFAIRS

2740 CENTERVIEW DRIVE • TALLAHASSEE, FLORIDA 32399-2100

LAWTON CHILES
Governor

LINDA LOOMIS SHELLEY
Secretary

June 28, 1995

Mr. Michael J. Coleman
Florida Department of Transportation
District PD & E Department, MS 7-500
11201 North McKinley drive
Tampa, FL 33612-6403

RE: Highway Planning and Construction - Work Program Item
#7123608 - State Project # 10007-1550 - Federal Aid
XU-1917(1) - 40th Street/ Malcolm McKinley Drive
(County Road 585A) from Hillsborough Avenue (State Road
600/ U.S. 92) to Fowler Avenue (State Road 582) -
Hillsborough County, Florida
SAI: FL9504100349C

Dear Mr. Coleman:

The Florida State Clearinghouse, pursuant to Presidential Executive Order 12372, Governor's Executive Order 93-194, section 216.212, Florida Statutes, the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1464, as amended, and the National Environmental Policy Act, 42 U.S.C. §§ 4321, 4331-4335, 4341-4347, as amended, has coordinated a review of the above-referenced project.

The Department of Environmental Protection (DEP) indicates special construction conditions will be required in order to protect the habitat for manatees. The DEP notes that additional information is needed in order to adequately assess the expected impacts of the proposed project. In addition, the Department of Transportation (DOT) is responsible for providing accurate location information to the DEP so that state-owned lands within the proposed project can be identified. Please refer to the enclosed DEP comments.

The Department of State (DOS) indicates that the DOT is required to conduct a cultural survey to identify any significant archaeological and/or historic sites which may be located within the project area. The proposed project will have no effect on significant archaeological and/or historic sites, if the DOT avoids or mitigates any impacts to sites identified in the survey. Please refer to the enclosed DOS comments.

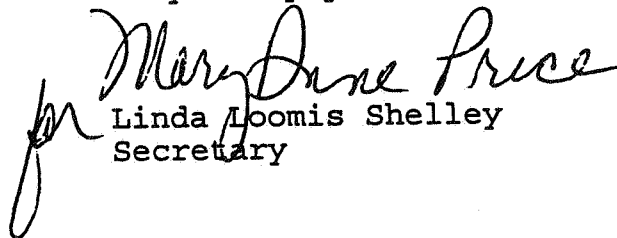
Mr. Michael J. Coleman
June 28, 1995
Page Two

Based on the information contained in the notification of intent and the enclosed comments provided by our reviewing agencies, the state has determined that the proposed action is consistent with the Florida Coastal Management Program (FCMP) at this advance notification stage. All subsequent environmental documents prepared for this project must be reviewed to determine the project's continued consistency with the FCMP. Future documents should provide thorough information regarding the location and extent of wetlands dredging and filling, borrow sources, dredging or filling associated with bridge construction and stormwater management. The state's continued concurrence with this project will be based, in part, on adequate resolution of issues identified during this and subsequent reviews. All environmental documents prepared for this project must be submitted to the Florida State Clearinghouse for interagency review.

The Department of Community Affairs (Department), pursuant to its role as the state's land planning agency has reviewed the referenced project for consistency with the relevant local government comprehensive plan. Based on the information contained in the application, the Department has determined that the project is consistent, to the maximum extent feasible, with the applicable comprehensive plan.

Please attach a copy of this letter and any enclosures to your application facesheet or cover form and forward to the federal funding agency. (If applicable, enter the State Application Identifier (SAI) number, shown above, in box 3A of Standard Form 424 or where appropriate on other cover form.) This action will assure the federal agency of your compliance with Florida's review requirements and reduce the chance of unnecessary delays in processing your application.

Very truly yours,

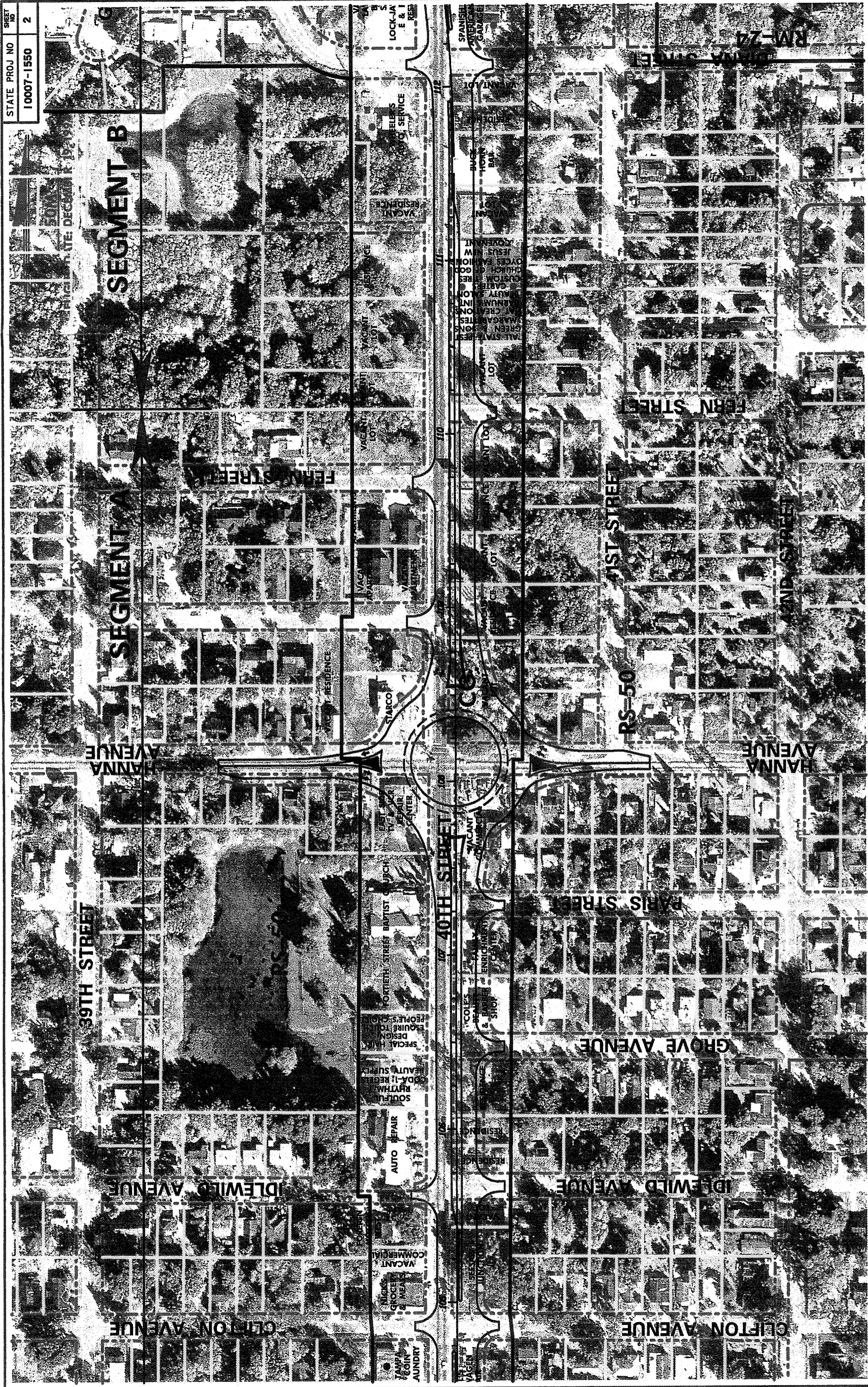

Linda Loomis Shelley
Secretary

LLS/cc

Enclosures

cc: Carliane Johnson, Department of Environmental Protection
George Percy, Department of State
Leroy Irwin, Department of Transportation

Appendix B
Preferred Alternative



STATE PROJ NO
10007-1550

SHEET NO
2

SEGMENT B

SEGMENT A

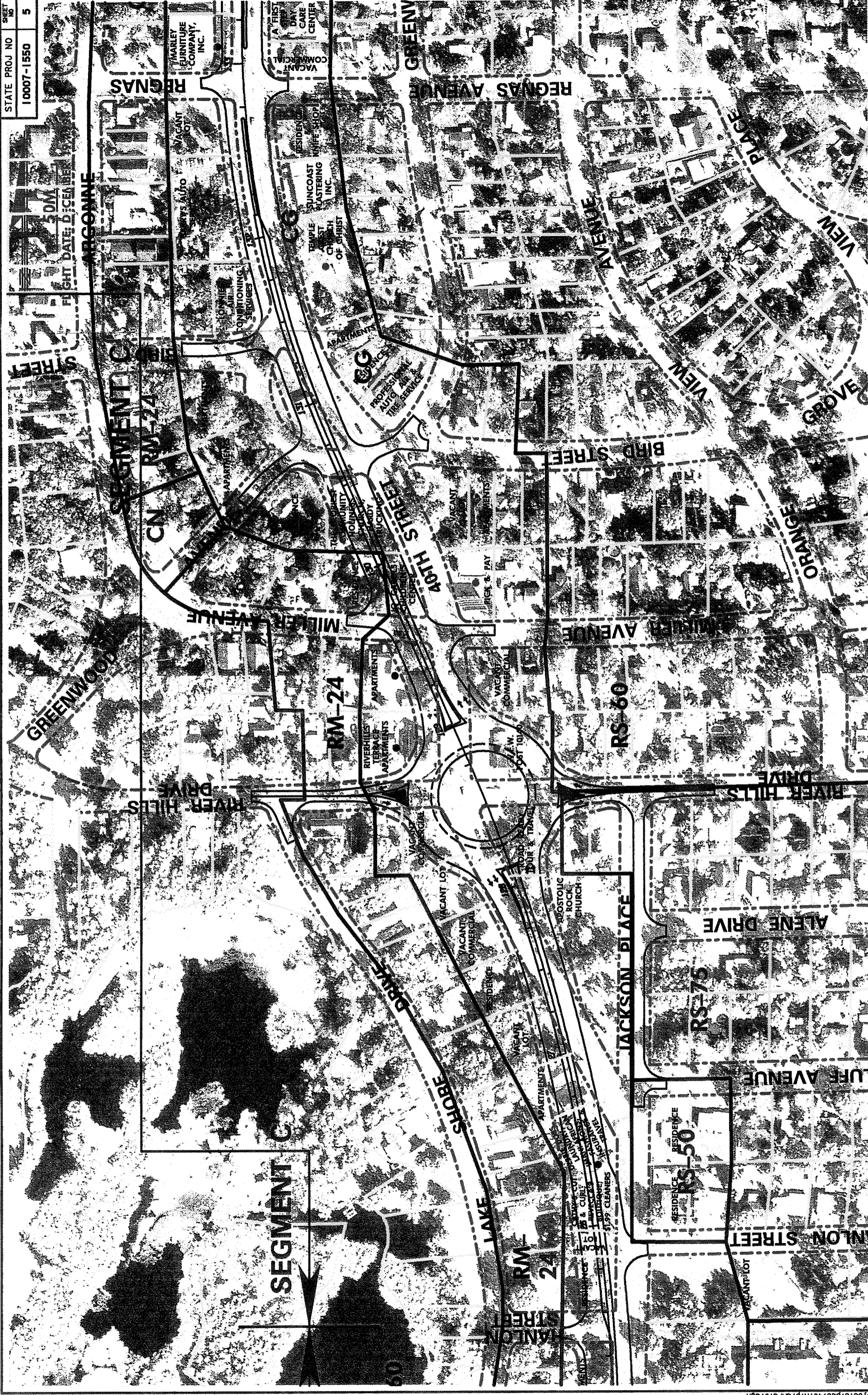
6-FE8-1997 13136
1/86410/0/proj/lects/pde/40th/pl/gr/d12.dgn

LEGEND
 - - - - - EXISTING RIGHT OF WAY
 - - - - - PROPOSED RIGHT OF WAY
 - - - - - CURB AND GUTTER
 - - - - - PROPERTY LINES
 ● POTENTIAL CONTAMINATION SITES
 ● CHURCHES
 ● CENTERLINE OF CONSTRUCTION
 ● ESTABLISHED LAND USES

CITY OF TAMPA
 AND
 FLORIDA DEPARTMENT OF
 TRANSPORTATION

PSJ
 POST, BUCKLEY, SCHEM & BERTHAM
 ENGINEERING - PLANNING - ARCHITECTURE

40TH STREET/MCKINLEY DRIVE PDRE STUDY
 HILLSBOROUGH AVENUE (SR 600) TO FOWLER AVENUE (SR 582)
 HILLSBOROUGH COUNTY, FLORIDA
 RECOMMENDED ALTERNATIVE



STATE PROJ NO
10007-1550

SHEET NO
5

ARGONNE

SEGMENT C

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

GREENWOOD

SEGMENT C

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

GREENWOOD

SEGMENT C

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

GREENWOOD

SEGMENT C

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

GREENWOOD

SEGMENT C

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

GREENWOOD

SEGMENT C

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

GREENWOOD

SEGMENT C

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

RM-24

LEGEND

- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- CURB AND GUTTER
- PROPERTY LINES
- POTENTIAL CONTAMINATION SITES
- CHURCHES
- CENTERLINE OF CONSTRUCTION
- ESTABLISHED LAND USES

CITY OF TAMPA
AND
FLORIDA DEPARTMENT OF
TRANSPORTATION

DAY CARES

PBS
POST, BUCKLEY, SCHULZ & JEROME
ENGINEERING - PLANNING - ARCHITECTURE

40TH STREET/MCKINLEY DRIVE PD&E STUDY
HILLSBOROUGH AVENUE (SR 600) TO FOMLER AVENUE (SR 502)
HILLSBOROUGH COUNTY, FLORIDA

RECOMMENDED ALTERNATIVE

FLIGHT DATE: DECEMBER 19, 1978
SCALE: 1" = 50'

SEGMENT C



LEGEND

- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- CURB AND GUTTER
- PROPERTY LINES
- CENTERLINE OF CONSTRUCTION
- POTENTIAL CONTAMINATION SITES
- CHURCHES
- ESTABLISHED LAND USES

PBS
POST, BUCKLEY, SOUW & SERRIEN
ENGINEERING - PLANNING - ARCHITECTURE

CITY OF TAMPA
AND
FLORIDA DEPARTMENT OF
TRANSPORTATION

40TH STREET/MCKINLEY DRIVE PD&E STUDY
HILLSBOROUGH AVENUE (SR 600) TO FOMLER AVENUE (SR 582)
HILLSBOROUGH COUNTY, FLORIDA

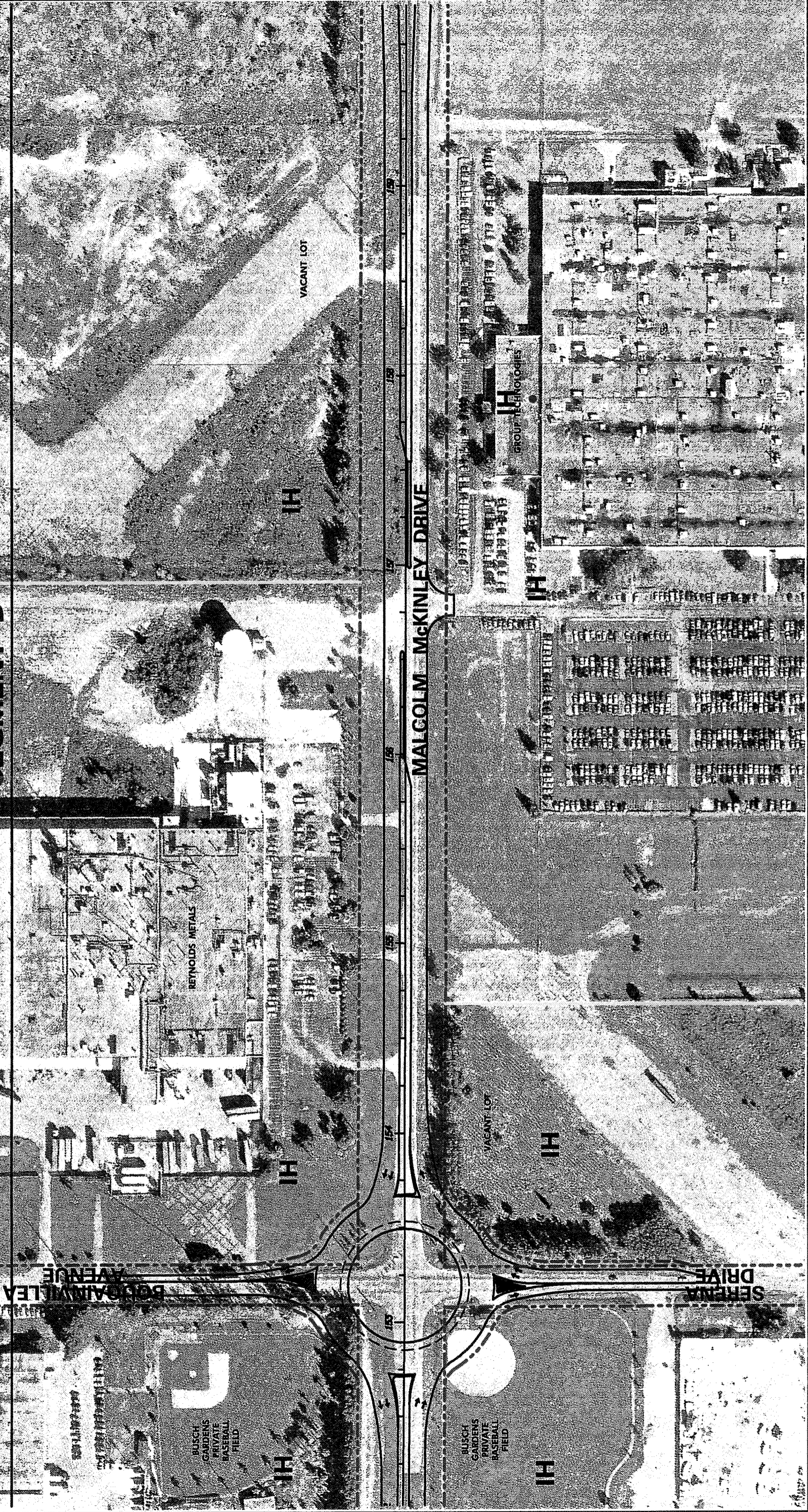
RECOMMENDED ALTERNATIVE



50M

FLIGHT DATE: DECEMBER 19, 1994

SEGMENT D



LEGEND

- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY
- CURB AND GUTTER
- PROPERTY LINES

- CENTERLINE OF CONSTRUCTION
- ESTABLISHED LAND USES

- POTENTIAL CONTAMINATION SITES
- CHURCHES

- DAY CARES

PBS
POST, BUCKLEY, SOLIH & JERIDIAN
ENGINEERING - PLANNING - ARCHITECTURE

CITY OF TAMPA
AND
FLORIDA DEPARTMENT OF
TRANSPORTATION

40TH STREET/MCKINLEY DRIVE PDR STUDY
HILLSBOROUGH AVENUE (SR 600) TO FOWLER AVENUE (SR 582)
HILLSBOROUGH COUNTY, FLORIDA
RECOMMENDED ALTERNATIVE

50M
DATE: DECEMBER 19, 1994

SEGMENT D

END PROJECT

FOWLER AVENUE

MALCOLM MCKINLEY DRIVE

NATIONAL STUDY CENTER
FOR CONTINUING MEDICAL
EDUCATION

UTILITIES EASEMENT

UTILITIES EASEMENT

BAXTER

FLORIDA HIGHWAY PATROL

FDOT DISTRICT 7 OFFICE

VACANT
SCHEDULED ECOLOGICAL MOTOR VEHICLE
ASSOCIATES; FARABO
USF BOOK CENTER; SERVICES, INC.
SCOTT SIMS, P.A. REAL ESTATE
ENGINEERING & ARCHITECTURE
& HULLS

- LEGEND
- EXISTING RIGHT OF WAY
 - PROPOSED RIGHT OF WAY
 - CURB AND GUTTER
 - CENTERLINE OF CONSTRUCTION
 - POTENTIAL CONTAMINATION SITES
 - CHURCHES
 - PROPERTY LINES
 - ESTABLISHED LAND USES

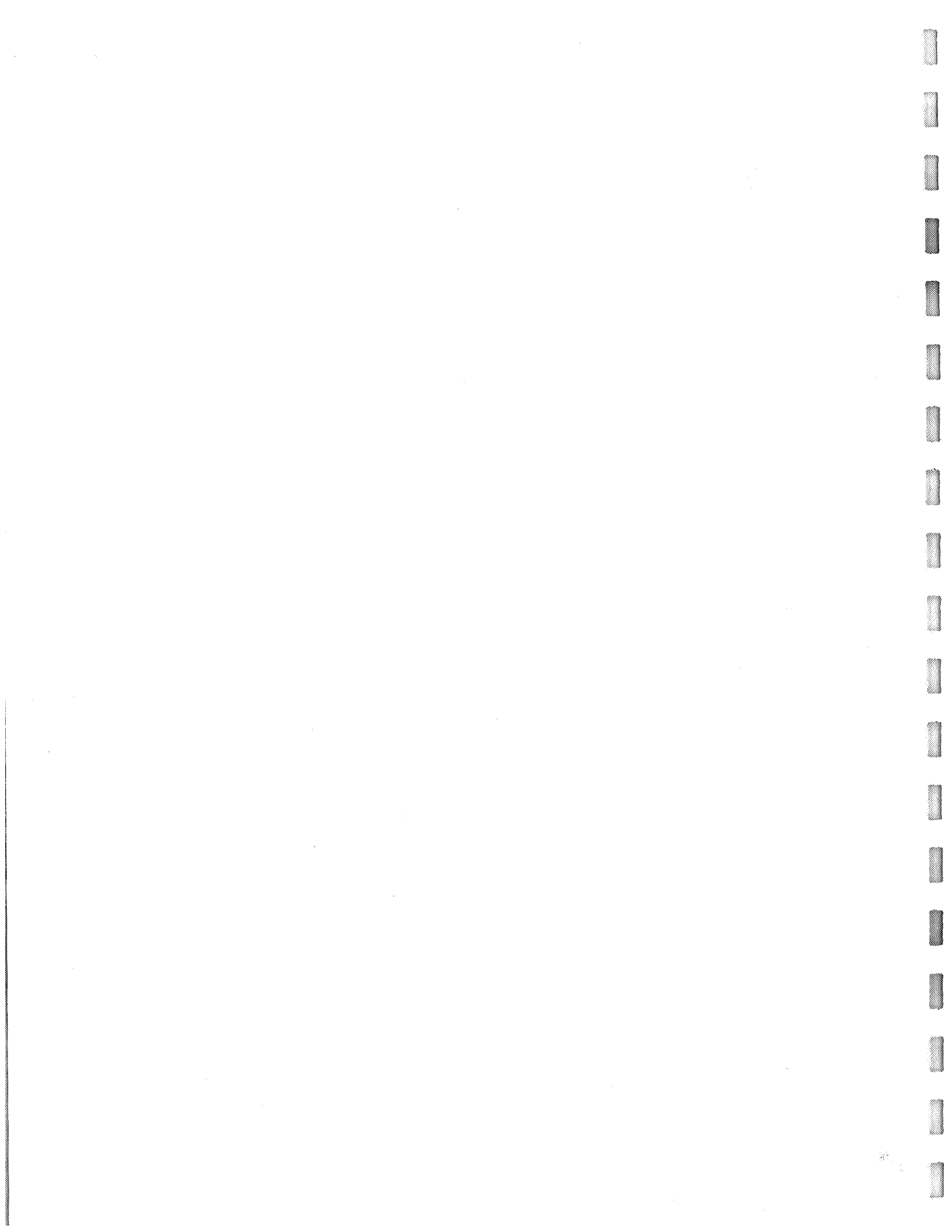
- DAY CARES
- POTENTIAL CONTAMINATION SITES
- CHURCHES

CITY OF TAMPA
AND
FLORIDA DEPARTMENT OF
TRANSPORTATION

PBSJ
POST, BUCKLEY, SOBEL & JERIDIAN
ENGINEERING - PLANNING - ARCHITECTURE

40TH STREET/MCKINLEY DRIVE PD&E STUDY
HILLSBOROUGH AVENUE (SR 600) TO FOWLER AVENUE (SR 582)
HILLSBOROUGH COUNTY, FLORIDA
RECOMMENDED ALTERNATIVE

Appendix C
Water Quality Impact Evaluation



PART 3: ENVIRONMENTAL REGULATORY REQUIREMENTS

Do environmental regulatory requirements apply? Yes No

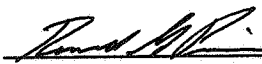
If no, proceed to Part 4 and check Box B. If yes, proceed with Part 3.

Regulatory Agency (check all that apply)	Reference citation for regulatory criteria (attach copy of pertinent pages)	Most stringent criteria (check all that apply and describe below)
USEPA <input checked="" type="checkbox"/>	Clean Water Act as amended in 1987 (NPDES)	<input type="checkbox"/>
FDEP <input checked="" type="checkbox"/>	Chapter 373 F.S.	<input type="checkbox"/>
WMD <input checked="" type="checkbox"/> SWFWMD	Chapter 373 F.S. and Chapters 40D-4 and 40D-40 F.A.C.	<input checked="" type="checkbox"/>
OTHER <input checked="" type="checkbox"/> USACOE	Section 404 Permit may apply	<input type="checkbox"/>
Describe most stringent criteria: Shall treat 1.5 inch or the first 1.5 inch of runoff. The District may apply more stringent design and performance standards than are otherwise required by Section 3.2.2, Chapter 40D-40.		

Proceed to Part 4 and check Box C.

PART 4: WQIE DOCUMENTATION

- A. No involvement in water quality issues.
- B. No regulatory requirements apply to water quality issues.
(Document by checking the "none" box for water quality in Section 6.C.3 of Form 508-01 or Section 5.C.3 of Form 508-05.)
- C. Regulatory requirements apply to water quality issues. All water quality issues will be mitigated through compliance with the quantity design requirements placed by Southwest Florida Water management District, an authorized regulatory agency.
(Document by checking the "none" box for water quality in Section 6.C.3 of Form 508-01 or Section 5.C.3 of Form 508-05.)

Evaluator Name: Ronald G. Pscion Signature: 
 Office: Tampa Date: 12/27/96
 Certificate # 0023