

**Lee County Board Of County Commissioners  
Agenda Item Summary**

Blue Sheet No. 20041117

**1. REQUESTED MOTION:**

**ACTION REQUESTED:** Request BOCC adopt alignment for Sandy Lane Extension Corridor Alignment Study from Old 41 to Pelican Colony Boulevard, as supported by the Bonita Springs City Council on August 4, 2004 and from Corkscrew Road to connect to Oriole Road as described in attachment, and authorize DOT and County Lands to proceed with voluntary acquisition of right-of-way.

**WHY ACTION IS NECESSARY:** Florida case law dictates that alignment decisions should be made by the Board of County Commissioners after due consideration of the availability of alternative routes, costs, environmental factors, long-range area planning and safety considerations. These factors have been addressed and are documented in the final report which is attached.

**WHAT ACTION ACCOMPLISHES:** Establishes roadway alignment with a record of factors considered in selection process, consistent with City Council action, and provides necessary funding to complete the project. Also allows DOT and County Lands to proceed with voluntary acquisition of right-of-way.

**2. DEPARTMENTAL CATEGORY:**  
COMMISSION DISTRICT # 3, #5

**A9A**

**3. MEETING DATE:**

**11-16-2004**

**4. AGENDA:**

CONSENT  
 ADMINISTRATIVE  
 APPEALS  
  
 PUBLIC  
 WALK ON  
 TIME REQUIRED:

**5. REQUIREMENT/PURPOSE:**  
(Specify)

STATUTE  
 ORDINANCE  
 ADMIN.  
 CODE  
 OTHER

**6. REQUESTOR OF INFORMATION:**

A. COMMISSIONER  
B. DEPARTMENT Transportation  
C. DIVISION

BY: Scott M. Gilbertson

**BACKGROUND:** The Sandy Lane Extension Corridor Alignment Study (CIP #4084) evaluates the alignment of the Sandy Lane from Old 41 to connect to existing Sandy Lane to Oriole Road. The City of Bonita Springs City Council supported an alignment within the City of Bonita Springs through the Bonita Industrial Park as indicated in the attached August 6<sup>th</sup>, 2004 letter from the City Manager, Mr. Gary Price. A summary of the meetings and comments are attached and will be posted on our website. Documentation on all alignments considered is compiled in the "Sandy Lane Extension Corridor Alignment Study" dated October 4, 2004 (attached). The report is available for inspection at  
(CONTINUED ON PAGE 2)

**8. MANAGEMENT RECOMMENDATIONS:**

**9. RECOMMENDED APPROVAL:**

A Department Director	B Purchasing or Contracts	C Human Resources	D Other	E County Attorney	F Budget Services				G County Manager
<i>[Signature]</i>	NA	NA		<i>[Signature]</i>	OA <i>[Signature]</i> 11/2/04	OM <i>[Signature]</i> 11/19/04	Risk <i>[Signature]</i> 11/2	GC <i>[Signature]</i> 11/2/04	<i>[Signature]</i> 10-29-04

**10. COMMISSION ACTION:**

APPROVED  
 DENIED  
 DEFERRED  
 OTHER

Rec. by CoAtty  
Date: 11/2/04  
Time: 9:05  
Forwarded To:  
*[Signature]*

RECEIVED BY  
COUNTY ADMIN: *[Signature]*  
11/2/04  
1:51 pm  
COUNTY ADMIN  
FORWARDED TO: *[Signature]*  
11-1-04

**BLUE SHEET NO. 20041117 (Continued)**

**7. BACKGROUND: (CONTINUED)**

LCDOT offices at 1500 Monroe Street. Cella & Associates was authorized under a Professional Services Agreement approved March 3, 2003 to perform the study. Construction of Sandy Lane is not funded in the current or proposed five-year work program. The extension of Sandy Lane south to Old 41 and north to connect to Oriole Road is included in our 2020 transportation plan. For purposes of this study, the consultant recommendation was broken down into three segment areas. The areas were Bonita Springs, Estero, and San Carlos Park. Presentations were made to City of Bonita Springs City Council, four community meetings and a public workshop were held December 2003 through August 2004.

Florida case law has provided that a condemning authority should give due consideration to certain relevant factors in determining a roadway alignment, including but not limited to: (1) the availability of alternative routes; (2) costs; (3) environmental factors; (4) long-range area planning; and (5) safety considerations. The Cella report demonstrates that these factors have been sufficiently addressed in arriving at the recommended alignment. Attached is the most recent newsletter. The factors are more fully discussed in the Final Transportation Report.

The Bonita Springs segment is mainly within the City limits but extends from the City limit to an extension of Pelican Colony Boulevard. The draft report initially recommended an alignment through the west side of San Carlos Estates connecting to Bernwood Parkway. After the Alternatives Public Workshop and discussions with the City of Bonita Springs staff, the Consultant's final recommendation is the Production Circle alignment through Bonita Industrial Park. The Production Circle alignment through Bonita Industrial Park has a lower estimated cost, fewer environmental impacts and is consistent with the 2020 plan. However, there are some operational and safety concerns with the intersection separation from U.S. 41. The report indicated that these concerns could be addressed by closure of the segment or restriction of turning movements. The report recommended further study by the City of Bonita Springs since the intersections would be within the City limits. The Bonita Springs City Council adopted the Production Circle Alignment on August 4, 2004.

For purposes of this study, the Estero segment is considered to be from Corkscrew Road to Estero Parkway (formerly Koreshan Boulevard). The study considered alternative alignments. Several used the existing Sandy Lane and one was a new alignment suggested by a person at a community meeting, generally parallel to the Seminole Gulf Railway called the "Railroad" alignment. These studied alignments all could connect to an alignment set aside through the Cascades of Estero from north of Broadway to Estero Parkway. The report recommended the railroad alignment because it had the best potential for traffic flow for a potential four-lane facility, would be consistent with the 2020 plan and low neighborhood impacts. However it had the highest estimated cost, more environmental impacts and there are operational and safety concerns with the intersection separation from the railroad crossing, however this can be rectified by proper signalization and signing.

The San Carlos Park segment is from Estero Parkway to Alico Road. It identified use of the existing reserved right-of-way from the Estero Golf Resort MPD, Bella Lago and the Reserve at Estero projects to connect to existing Oriole Road through San Carlos Park. Because the alignment is reserved and existing it would have a lower estimated cost and fewer impacts than other alternatives. The alignment is consistent with the 2020 plan. However, due to operational and safety concerns with the use of Oriole Road through San Carlos Park, further evaluation of Oriole Road is recommended. The draft study had recommended acquiring reserved right-of-way, but reevaluating the timing of the connection to Oriole Road after U.S. 41 and Three Oaks Parkway have been widened. Staff desires to proceed with design and purchase of right-of-way reserved by projects and from any willing sellers on the recommended alignment.

**Recommended Centerline Alignment Description and Sketch**

Attached.

**SANDY LANE EXTENSION CORRIDOR  
ALIGNMENT STUDY**

**SUMMARY OF PUBLIC INVOLVEMENT  
PROGRAM**

*For copying*

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Prepared For:  
Lee County Board Of County Commissioners  
Department Of Transportation  
P. O. Box 398  
Fort Myers, Florida 33902-0398

# **Sandy Lane Extension Corridor Alignment Study**

## **Public Involvement Executive Summary**

### **September 2004**

#### **Introduction**

The Sandy Lane Extension Corridor Alignment Study commenced in the spring of 2003. This corridor alignment study was conducted by the Lee County Department of Transportation (LC DOT) and their project team to evaluate alternative alignments for the extension of Sandy Lane in southern Lee County and in the City of Bonita Springs. The southern portion of the project study area extends north from Old U.S. 41 to just north of the Bonita Springs city limits. The northern portion of the study area extends from Corkscrew Road north to the intersection of Oriole Road and Alico Road. The total project length for the road is approximately five miles.

#### **Public Involvement Program**

An extensive Public Involvement Program (PIP) was conducted to inform and solicit comment from the general public. Due to the nature of this project and the potential impact it could have on local communities, this program was vitally important to the project's acceptance and success. The LC DOT approved the PIP developed for the Sandy Lane Extension Corridor Alignment Study in April 2003.

The purpose of the PIP is to establish and maintain communication with and solicit comment from the public, individuals and agencies concerned with the project. The Sandy Lane Extension Corridor Alignment Study included data collection and traffic projections, development of corridor alternatives, analysis and ranking of alternatives, and selection of a preferred corridor alternative. The public was informed throughout the study with project newsletters, meeting notices and display advertising. Public input was collected throughout the project process. A project hotline was established for the duration of the project and was widely advertised to the public.

#### **Project Kick-Off**

An introductory notification letter was sent to elected officials and agencies to announce and outline the project on June 6, 2003. A copy of the letter, the attachments, and the mailing list follow this summary.

#### **Community Presentations**

The project team held three community presentations on the Sandy Lane Extension Corridor Alignment Study. A community presentation was held for the property owners and tenants living within 300' of the right-of-way of all proposed alternatives in Bonita Springs on January 20, 2004. Attendance at this presentation was 127 people. A community presentation was held for the Estero Community Planning Panel and property owners living within 300' of the right-of-way of all alternatives from Corkscrew Road to Estero Parkway. An estimated 100 people attended this community presentation on December 8, 2003. A community presentation was also held for the San Carlos Park Civic Association and property owners living within 300' of Oriole Road on January 14, 2004. Attendance for this meeting was recorded to be 181 people.

The purpose of these presentations was to make the affected communities aware of the project and solicit public comment and input during the development and evaluation of the alternatives and the selection of the recommended alternative alignment. A copy of the slideshow can be found in the Community Presentations, Part 1, Section C.

Letters announcing the community presentations were mailed to persons with property lying within at least 300' of the right-of-way of the alternative alignments being studied. A handout that summarized the project was provided to the public at the registration table at each presentation. Project team members and representatives from LC DOT were present to explain the need for the project, discuss conceptual design alternatives and answer questions from the public. For the San Carlos and Bonita Springs community presentations, the public was provided with comment forms to have their opinions recorded as public record. A total of 117 comments were received from the San Carlos community presentation and 84 were received from the Bonita Springs community presentation. The project team summarized the oral comments from the Estero community presentation. Copies of the notification letters, mailing lists, meeting minutes, community presentation handouts and comments are provided in the attached summaries of presentations for each of the communities.

#### **Public Workshop**

A Recommended Alternative Alignments Public Information Workshop was held on Tuesday, May 25, 2004 at the Three Oaks Banquet and Conference Center, 20991 Three Oaks Parkway, Estero, Florida for the Sandy Lane Extension Corridor Alignment Study. The purpose of the workshop was to present the recommended alternative alignments that resulted from the environmental and engineering analysis for the long-range improvements for a transportation facility east of U.S. 41 from Old U.S. 41 to Oriole Road. Discussion with business owners and residents aided in the development and the evaluation of the alternative alignments for the project. The proposed alignments for Bonita Springs, Estero, and San Carlos Park were presented and the public was encouraged to give input and fill out comment forms. A total of 141 people signed in at the registration table.

A newsletter announcing the meeting was mailed on May 19, 2004 to interested persons and persons with property lying within 300' of the right-of-way of the alignments in the study. A legal display ad was printed in *The News-Press* on May 22, 2004 and in the *Naples Daily News* on May 23, 2004. Press releases were submitted to *The News-Press* and the *Naples Daily News*. Variable message boards were placed within the project limits for a period of one week prior to the workshop to inform the traveling public.

The Public Information Workshop was conducted in an open house format that allowed the public to view the project material between the hours of 5:00-7:00 p.m. A slide presentation explaining the project ran continuously throughout the meeting and a handout that summarized the project was provided to the public at the registration table. Project team members and representatives from LC DOT were present to explain the data boards and answer the public's questions.

The public was provided comment forms at the meeting in order for the project team to evaluate suggestions to improve the project, address the public's concerns and to have their opinion recorded as public record. A total of 370 comment forms were received at

the meeting and in the fourteen days following. The comments were divided into four geographic sections: City of Bonita Springs, Estero, San Carlos Park, and Pelican Landing. Copies of the newsletter, mailing list, handout, legal display ads, press releases, comment forms and summaries from the Public Information Workshop are attached in the Summary of the Recommended Alternative Alignments for the Public Information Workshop.

Following a meeting with the Bonita Springs City Council on August 4, 2004, a letter was mailed to the property owners affected by the realignment of the Production Circle option. These can be found in Section E of the Summary of the Recommended Alternative Alignments for the Public Information Workshop.

#### **Summary of Comments from the Public Information Workshop**

The comments were summarized to provide the public's opinions on the project overall and regarding specific elements or locations within the project study area as follows:

**Comment:** Opposed to proposed alignment/project (11)

**Comment:** Support the whole project (40)

**Comment:** Opposed to Estero Alignment (37)

Specifically opposed to road through Cascades (24)

Specifically opposed to road north from Corkscrew Road to Estero Parkway (13)

**Comment:** Support the recommended Estero Alignment (31)

**Comment:** Support connect to Old 41 in Bonita (6)

**Comment:** Support the Railroad/Tuck Drive/Old U.S. 41 Alignment (19)

**Comment:** Support the Production Circle Alignment (10)

**Comment:** Oppose alignment in San Carlos Estates (2)

**Comment:** Pelican Landing residents support the project connecting to Old 41 in Bonita Springs (228)

**Comment:** Pelican Landing residents oppose the project connecting to Old 41 in Bonita Springs (2)

#### **Cascades Neighborhood Meeting**

The Lee County Department of Transportation (LC DOT) held a neighborhood meeting on Tuesday, August 3, 2004 at Our Lady of Light Church, 19680 Cypress View Drive, Fort Myers, Florida for the existing and future residents of the Cascades. The meeting was held for residents who were not on the property appraisers database mailing list for the workshop in May. The purpose of this meeting was to discuss the chosen alignment alternative and to present a roundabout concept for the potential intersection at Sandy Lane and Cascade Isle Boulevard. A total of 188 people signed in at the registration table. Copies of the sign-in sheets are attached in Section A.

Letters announcing the neighborhood meeting were mailed on July 19, 2004 to existing and future residents of the Cascades development. Copies of the notification letter and mailing list are attached in Section B.

A slideshow presentation outlining the project began at 6.30 p.m. A formal question and answer period followed the presentation for approximately one hour. A handout that

summarized the project was provided to the public at the registration table. Project team members and representatives from LC DOT were present to explain the conceptual roundabout design alternative and answer questions. The meeting handout is attached in Section C.

The public was provided with comment forms in order to have their opinion recorded as public record. Seventeen comment sheets were received at the Cascades Neighborhood Meeting and in the 14 days following. All seventeen comments were against the Sandy Lane Extension going through the Cascades neighborhood. Safety was cited by eight of the residents as the most important reason for not having Sandy Lane through the Cascades. Six of the residents also stated that it would divide the community, and five others discussed the fact that they would no longer be "gated" as one development. The other issues mentioned were decreases in property values, traffic noise, and if Sandy Lane would still be warranted north of Corkscrew after the completion of the other road improvements in the area. The residents of the Cascades also believed that there were safety issues concerning pedestrian and bicyclists crossing the proposed roundabout. Copies of the comment forms are attached in Section D.

#### **Government Presentations**

Presentations were made during the study to the following government entities:

- Bonita Springs City Council, Council Meeting
  - December 3, 2003
  - February 18, 2004
  - July 21, 2004
  - August 4, 2004
  
- The Lee County Board of County Commissioners, Management Planning
  - June 2, 2004

A public hearing will be held at a future date with a summary to follow.

**SANDY LANE EXTENSION CORRIDOR  
ALIGNMENT STUDY**

**SUMMARY OF PRESENTATION TO THE  
BONITA SPRINGS COMMUNITY**

Lee County Project #: 4084

Lee County, Florida

Date of Meeting: January 20, 2004



## **Sandy Lane Extension Corridor Alignment Study Bonita Springs Community Presentation**

The Lee County Department of Transportation (LC DOT) held a community presentation on Tuesday, January 20, 2004 at the Bonita Springs Middle School at 10141 West Terry Street, Bonita Springs, Florida. The limits of the Sandy Lane Extension Corridor Alignment Study extend from Old U.S. 41 to just north of the Bonita Springs city limits and from Corkscrew Road north to the intersection of Oriole Road and Alico Road. The presentation was made the property owners and tenants living within 300' of the right-of-way of all proposed alternatives in Bonita Springs. The purpose of the presentation was to make the public aware of the project and solicit public comment and input during the development and evaluation of the alternatives and the selection of the recommended alternative. A total of 127 people signed in at the registration table. Copies of the sign-in sheets are attached in Part I, Section A.

Letters announcing the community presentation were mailed on January 8, 2004 to interested parties, tenants and persons with property lying within 300' of the right-of-way of all proposed alternatives in Bonita Springs. Copies of the notification letter and mailing list are attached in Part I, Section B.

A slide presentation outlining the project began at 6.00 p.m. A handout that summarized the project was provided to the public at the registration table. Project team members and representatives from LC DOT were present to explain conceptual design alternatives and answer the public's questions. A copy of the slideshow presentation and handout are attached in Part I, Section C.

The public was provided with comment forms at the community presentation in order to have their opinion recorded as public record. A total of 84 comment forms were received at the presentation and in the 14 days following. The comments were recorded and analyzed. A summary of written comments is included below. The number in parenthesis after each comment indicates the number of times that same comment was submitted. Copies of the comment forms are attached in Part 1, Section D.

### **Summary of Written Comments - 84 Comments Returned**

#### **Not In Favor**

- Comment:** Favor no build option (8)
- Comment:** Building it will be a road to nowhere only depositing traffic on already congested shops (1)
- Comment:** Opposed to running Sandy Lane through Rhodas Drive (1)
- Comment:** College of Life opposed to the west alignment as it would be unnecessarily expensive and would take 2,500 feet of land useable by the foundation (1)
- Comment:** Opposed to connection from Alico Road to Old U.S. 41, problems out weigh benefits (1)
- Comment:** Not one person thinks this road is necessary or a good idea (1)

**Comment:** Do not believe that the solution under discussion will help (1)

**Comment:** San Carlos will fight the road if it goes through our community; there are less disruptive routes (3)

**Comment:** Opposed to any alignment that goes through Bonita, the problems it would create are mind boggling and unnecessary (2)

#### **In Favor Of**

**Comment:** Needed as soon as possible (partly because cost of acquiring right-of-way goes up each year) and growth (7)

**Comment:** Incorrect to say only the developers will benefit, residents also will (1)

**Comment:** The No build option is not an option (2)

#### **General Comments**

**Comment:** Could not hear questions (2)

**Comment:** Excellent meeting (2)

**Comment:** The only reason Estero is in favor of Sandy Lane is so they can dump their traffic on other communities (1)

**Comment:** The problem is south of Bonita Beach Road down to Corkscrew Road (1)

**Comment:** The Brooks needs to take some of the responsibility (2)

**Comment:** Take commercial not residential properties (1)

**Comment:** The west alignment through the industrial estate is best (1)

**Comment:** Some alternatives are too winding (1)

**Comment:** Seems that retirement parks and low-income housing are being wiped out to build roads (1)

**Comment:** Extension is trouble and will cause bottlenecks where they empty to Old U.S. 41 and U.S. 41 (6)

**Comment:** Alignments east of I-75 are better (1)

**Comment:** Access to the east of U.S. 41 taking traffic to I-75 would be best (1)

**Comment:** Our tax dollars (from Pelican Landing, The Colony, etc.) should not go into restoring Old U.S. 41 but roads that affect us (1)

**Comment:** Hope the new name of the road is not Sandy Lane (1)

**Comment:** Any proposal through Production Circle will gravely affect our business and we will probably have to leave (1)

**Comment:** The County recognized the need for this road long before the Coconut Point Project was proposed (1)

## Concerns

- Comment:** The road seems to be only being built for the mall – will my taxes go up? (1)
- Comment:** The final alignment might become attractive to impatient/speeding drivers (1)
- Comment:** The western alignment extending Sandy Lane to Old U.S. 41 is dangerous and too close to U.S. 41 (1)
- Comment:** Concerned that Sandy Lane will deposit traffic at Pelican Landing (6)
- Comment:** Concerned that crime and traffic will increase (1)
- Comment:** Concerned that truck traffic will increase (1)

## Suggestions

- Comment:** Study should connect to Bonita Beach Road (1)
- Comment:** Traffic study should look at impact on traffic on Old U.S. 41 in Bonita Springs (1)
- Comment:** Widen Coconut Road with an interchange at I-75 (1)
- Comment:** Connect Alico Road to Old U.S. 41 (1)
- Comment:** The alignment should connect to Old U.S. 41 (2)
- Comment:** Go across railroad tracks south of the city limits stay on east side until Old U.S. 41 where they would join up, it would cross the cement plant but should not effect any buildings (2)
- Comment:** Use the railroad (2)
- Comment:** Use railroad track right of way but bring the road east to intersect with Old 41 (1)
- Comment:** The road should leave the mall curve east cross the railroad. Then turn south and terminate at Old 41 and Signal Rd (1)
- Comment:** Road needed from Old 41 to Coconut Road (4)
- Comment:** Road should end at Pelican and deposit on to U.S. 41 (3)
- Comment:** If it is to be effective south of Pelican Colony it must empty onto Old 41 south of Strike Lane and on U.S. 41 at or south of Signal Road (1)
- Comment:** Need to extend it south from Pelican Colony or it will back up traffic (1)
- Comment:** An alignment connecting at Signal Road would be best (18)
- Comment:** The alignment should also meet Strike Lane (1)
- Comment:** Stop Sandy Lane at Coconut Road, do not go further south (3)
- Comment:** Develop Coconut Point estate – avoids taking houses (1)
- Comment:** The alignment should displace and cause the least amount of property damage (9)
- Comment:** Avoid routing through houses (3)

**Comment:** Layer U.S. 41 (1)

**Comment:** Sandy Lane south should be four lanes (1)

**Comment:** Share the cost and effort between Lee County and Bonita Springs (15)

**Questions**

**Comment:** Can the public have input during the design phase? (1)

**Comment:** Where was the DOT years ago in planning for a problem like this? (1)

**Comment:** Why go south of Coconut Road? (1)

**Comment:** Some property owners were physically unable to come – how can we address their concerns? They may lose homes they have lived in for years (1)

**SANDY LANE EXTENSION CORRIDOR  
ALIGNMENT STUDY**

**SUMMARY OF PRESENTATION TO  
THE ESTERO COMMUNITY**

Lee County Project #: 4084

Lee County, Florida

Date of Meeting: December 8, 2003

## **Sandy Lane Extension Corridor Alignment Study Estero Community Presentation**

The Lee County Department of Transportation (LC DOT) held a community presentation on Monday, December 8, 2003 at the Marsh Landing Clubhouse, 22900 Marsh Landing Blvd., Estero, Florida. The limits of the Sandy Lane Extension Corridor Alignment Study extend from Old U.S. 41 to just north of the Bonita Springs City limits and from Corkscrew Road north to the intersection of Oriole Road and Alico Road. The presentation was made to interested parties and members of the Estero Community Planning Panel. The purpose of the presentation was to make the public aware of the project and solicit public comment and input during the development and evaluation of the alternatives and the selection of the recommended alternative. An estimated 70 people attended the meeting.

Letters announcing the community presentation were mailed on December 1, 2003 to the Estero Community Planning Panel, interested parties and property owners living within 300' of the right-of-way of all alternatives from Corkscrew Road to Estero Parkway. Copies of the notification letter and mailing list are attached in Part 2, Section A.

A slide presentation outlining the project began at 6:00 p.m. A copy of the slideshow can be found in this report before the summaries of the three community presentations. A handout that summarized the project was provided to the public at the registration table. Project team members and representatives from LC DOT were present to explain conceptual design alternatives and answer the public's questions. A copy of the handout is attached in Part 2, Section B.

The public was provided the opportunity to make comment for public record. Meeting minutes are attached in Part 2, Section C. Oral comments are summarized as follows:

- Comment:** The Groves' residents want things to stay the same along Sandy Lane
- Comment:** The Copperleaf/Brooks' representative would like Sandy Lane to extend to Old 41
- Comment:** Most of the citizens would like to see it extended to Old 41
- Comment:** Pelican Landing's representative stated they would like the extension completed because U.S. 41 will be negatively affected otherwise
- Comment:** Shadow Woods' representative indicated that they want Sandy Lane to happen sooner than later
- Comment:** Public noted if crossing the railroad is more expensive, yet will provide a better alignment, then money should be made available

**SANDY LANE EXTENSION CORRIDOR  
ALIGNMENT STUDY**

**SUMMARY OF PRESENTATION TO  
THE SAN CARLOS COMMUNITY**

Lee County Project #: 4084

Lee County, Florida

Date of Meeting: January 14, 2004

## **Sandy Lane Extension Corridor Alignment Study San Carlos Community Presentation**

The Lee County Department of Transportation (LC DOT) held a community presentation on Wednesday, January 14, 2004 at the Karl J. Drews Community Center at 18412 Lee Road, Fort Myers, Florida. The limits of the Sandy Lane Extension Corridor Alignment Study extend from Old U.S. 41 to just north of the Bonita Springs city limits and from Fort New Road north to the intersection of Oriole Road and Alico Road. The presentation was made to the San Carlos Civic Association and property owners living within 300' of Oriole Road. The purpose of the presentation was to make the public aware of the project and solicit public comment and input during the development and evaluation of the alternatives and the selection of the recommended alternative. A total of 181 people signed in at the registration table. Copies of the sign-in sheets are attached in Part 3, Section A.

Letters announcing the community presentation were mailed on December 31, 2003 to interested parties and persons with property lying within 300' of Oriole Road. Copies of the notification letter and mailing list are attached in Part 3, Section B.

A slide presentation outlining the project began at 7.30 p.m. A copy of the slideshow can be found in this report before the summaries of the three community presentations. A handout that summarized the project was provided to the public at the registration table. Project team members and representatives from LC DOT were present to explain conceptual design alternatives and answer the public's questions. The meeting handout is attached in Part 3, Section C.

The public was provided with comment forms at the community presentation in order to have their opinion recorded as public record. A total of 117 comment forms were received at the presentation and in the 14 days following. The comments were recorded and analyzed. A summary of written comments is included below. The number in parenthesis after each comment indicates the number of times that same comment was submitted. Copies of the comment forms are attached in Part 3, Section D.

### **Summary of Written Comments – 117 Comments Returned**

#### **In Favor:**

*Comment:* In favor of the connection to Oriole Road (1)

*Comment:* Sandy Lane Extension is needed now – to Old U.S. 41 and beyond e.g. to Coconut Road (4)

*Comment:* Its time to get the route funded and constructed, the longer it is delayed the more difficult it will be (2)

#### **Opposition**

*Comment:* No road through the Cascades/residential areas (12)



- Comment:** No Road/no build alternative (32)
- Comment:** Object to use of San Carlos road for the extension (1)
- Comment:** Residents of the Groves are opposed to this – please consider the impact it will have on us (4)
- Comment:** Opposed to connection to Oriole Road – dangerous for children, families, and pets, etc. (43)

**Opinion**

- Comment:** Let the people of San Carlos keep their properties and dreams. Money isn't everything (1)
- Comment:** Until the widening of U.S. 41 is completed you cannot assess the need for this road (1)
- Comment:** I'm appalled that the county would even consider this project (1)
- Comment:** Will be a disaster for the people of Oriole Road (3)
- Comment:** The road will go from four lanes into two lanes at Oriole Road, it will create a tremendous amount of traffic (2)
- Comment:** Creation of this road from Oriole Road will encourage people to use it as a short cut (5)
- Comment:** Have been told that you are taking out the stop signs (at Oriole Road) that we fought hard to have put in (1)
- Comment:** Please take out the stop signs at Oriole Road (1)
- Comment:** What's next? Four lanes on Oriole Road? (1)
- Comment:** The County states it does not want more right-of-way on Oriole Road but they may have to acquire some, as there is little room to build (1)
- Comment:** This project will not help congestion problems (8)
- Comment:** The DOT is a retarded entity; they are always behind with projects (1)
- Comment:** This was a well-run professional informative meeting (2)
- Comment:** The only people in favor of this are the Brooks and Pelican Landing because it will not impact their homes (1)
- Comment:** I live at the corner of Oriole Road and Winged Foot, since the Winged Foot Extension has opened it has become a drag strip (2)
- Comment:** Don't do this just for a mall (1)
- Comment:** The only people who want this road are the ones building the roads and the mall (1)
- Comment:** You are willing to sacrifice residential areas to line the pockets of the developers (1)
- Comment:** We must fight to maintain residential areas (2)
- Comment:** Its time to count the people (1)
- Comment:** The planners care more about the (fig) tree than the people (1)

- Comment:** The roads being built by the developers will be good enough for short local trips, leave the rest to Three Oaks Parkway and U.S. 41 (2)
- Comment:** We have other alternatives (Three Oaks Pkwy., six-laning U.S. 41, ten-laning I-75, six-laning Ben Hill Griffin) instead of this as they have the property and least impact (17)
- Comment:** We have two six-lane highways a few miles apart with this being planned between; we have had enough commercial effects in this area (Estero) (4)
- Comment:** It's ridiculous to expect taxpayers to fund a flyover through the Cascades development. The developer has already set the roadway and paid the impact fees don't people buying in that development look at the whole plan before they buy? (1)
- Comment:** Cascades was told that the road would be built between Majestic and Dynasty, I hope looking at alternatives is just a formality or the county will have a major battle with the people of Cascades (1)
- Comment:** Lee County should pay for the road as the shopping and revenue will mainly benefit them (1)
- Comment:** Owner willing to sell property in old Estero for \$2.5 million (1)
- Comment:** There is a need to control the traffic problem (3)
- Comment:** The road will be directly behind my house (3)

#### **Suggestions**

- Comment:** Stop extension at Broadway (2)
- Comment:** If you must do this extension stop the extension at Corkscrew Road; don't build north (20)
- Comment:** The western route seems to be the least disruptive to homes and less expensive (1)
- Comment:** If it has to be built, the best alignment would be adjacent to railroad right of way and will pose minimum disruption and be safest alternative (9)
- Comment:** The route east of the railroad seems the least disruptive (1)
- Comment:** Use the land on the southwest corner of Sandy Lane near the railroad; it lends itself to this project (3)
- Comment:** Widen Three Oaks Parkway (1)
- Comment:** A direct connection of Sandy Lane as a four-lane road from Coconut Point Shopping Center, north to Koreshan Blvd. and south to Old 41 is urgently needed (1)
- Comment:** Curve the extension behind houses on the west side of Sandy Lane and along the railway where there is vacant land, it may be owned by Koreshan but vacant land should be used before tearing down homes (2)
- Comment:** Double deck U.S. 41 (1)
- Comment:** If it has to be done, use traffic calming and have good sidewalks (4)
- Comment:** Need a direct route that will displace least number of residents and businesses (1)

**Comment:** Make it a limited access road (1)

**Comment:** Sandy Lane should only be a two-lane road (2)

### **Questions**

**Comment:** Can we request a residential vote? (1)

**Comment:** Study pedestrian traffic and schools? (2)

**Comment:** Can you overpass over Cascades? (3)

**Comment:** Could you build a berm to alleviate noise? It is a concern (3)

**Comment:** Can you use the access road parallel to U.S. 41 in Collier County for Sandy Lane? (1)

**Comment:** Can speed limits be adequately enforced? (5)

### **Concerns**

**Comment:** Worried about heavy traffic (14)

**Comment:** Concerned about a decrease in property values (14)

**Comment:** Realtors are already trying to get us to sell on the assumption property values will drop (1)

**Comment:** Safety for children and families is a prime concern (38)

**Comment:** Cascades purchased for safety and beauty of gated community – putting a road through or building a 'flyover' would be an eyesore (1)

**Comment:** Only the developers are being listened to, please give residents the same consideration (4)

**Comment:** Developers have donated land in return for permits (how wonderful) (1)

**Comment:** Stop lining the pockets of the developers (1)

**Comment:** Stop destroying our beloved Florida (1)

**Comment:** Hope the commissioners listen to us and don't build in Estero (1)

**Comment:** To force a high-speed road through the residential neighborhoods is the wrong option (6)

**Comment:** Existing traffic does not stick to the speed limit now, or regard stop signs (6)

**SANDY LANE EXTENSION CORRIDOR  
ALIGNMENT STUDY**

**SUMMARY OF THE RECOMMENDED  
ALTERNATIVE ALIGNMENTS  
PUBLIC INFORMATION WORKSHOP**

Lee County Project #: 4084

Lee County, Florida

Date of Meeting: May 25, 2004

# **Sandy Lane Extension Corridor Alignment Study**

## **Recommended Alternative Alignments Public Information Workshop Technical Memorandum**

The Lee County Department of Transportation (LC DOT) held a Public Information Workshop on Tuesday, May 25, 2004, at the Three Oaks Banquet and Conference Center, 20991 Three Oaks Parkway, Estero, Florida for the Sandy Lane Extension Corridor Alignment Study. The purpose of the workshop was to present the recommended alternative alignments that resulted from the environmental and engineering analysis for the long-range improvements for a transportation facility east of U.S. 41 from Old U.S. 41 to Oriole Road. The southern portion of the project study area extends north from Old U.S. 41 to just north of the Bonita Springs city limits. The northern portion of the study area extends from Corkscrew Road north to the intersection of Oriole Road and Alico Road. The total project length for the road is approximately five miles. The proposed alignments for Bonita Springs, Estero, and San Carlos Park were presented and the public was encouraged to give input and fill out comment forms. A total of 141 people signed in at the registration table. Copies of the sign-in sheets are attached in Part 1, Section A.

A newsletter announcing the meeting was mailed on May 19, 2004 to interested persons and persons with property lying within 300' of the right-of-way of the recommended alternative alignments. A legal display ad was printed in *The News-Press* on May 22, 2004 and in the *Naples Daily News* on May 23, 2004. Press releases were submitted to *The News-Press* and the *Naples Daily News*. Variable message boards were placed within the project limits for a period of one week prior to the workshop to inform the traveling public. The notification newsletter, mailing list, legal display ads, and press releases for the workshop are attached in Part 1, Section B.

The Public Information Workshop was conducted in an open house format that allowed the public to view the project material between the hours of 5:00-7:00 p.m. A slide presentation explaining the project ran continuously throughout the Public Information Workshop and a handout that summarized the project was provided to the public at the registration table. Project team members and representatives from LC DOT were present to explain the data boards and answer the public's questions. Copies of the presentation and handout are attached in Part 1, Section C.

The public was provided comment forms at the meeting in order to have their opinion recorded as public record. A total of 370 comment forms were received at the meeting and in the 14 days following. The summaries and written comments were divided into four geographic sections: City of Bonita Springs, Estero, San Carlos Park, and Pelican Landing. The comments were recorded, analyzed and included in the following pages. The number in parenthesis after each comment indicates the number of times that same comment was submitted. Copies of the comment forms are attached in Part 1, Section D.

**Sandy Lane Alignments Workshop, May 25, 2004**  
**City of Bonita Springs Comments**  
**Number of Comments received: 27**

**Opinion on Proposed Alignment**

*Comment:* Oppose the alignment in San Carlos Estates (2)

*Comment:* Oppose project (1)

*Comment:* Support project (24)

Specifically in favor of the East Railroad/Tuck Dr./U.S. 41 Alignment (15)

Specifically in favor of the Production Circle Alignment (9)

*Response:* *Comments noted.*

**Comments/Concerns about Alignments**

*Comment:* Sandy Lane should not exist at all (1)

*Response:* *The Sandy Lane Extension Corridor Alignment Study is being conducted as a result of traffic evaluations that identified the need for more north/ south roads in the future to help with congestion on other roads.*

*Comment:* I have great concerns with the flow of traffic due to extra traffic lights that would need to be installed with the East Railroad /Tuck Dr./Old 41 Alignment (1)

*Response:* *The consultant has chosen the Production Circle Alignment as their recommendation for the route of the Sandy Lane Extension through Bonita Springs. It was presented to the City of Bonita Springs who approved the recommendation.*

*Comment:* Closing the existing Strike Lane/U.S. 41 intersection may increase traffic on dangerous Stillwell entrance (1)

*Response:* *If the County chooses to build Sandy Lane, the consultant has recommended that the City of Bonita Springs should close the Old U.S. 41 connection to U.S. 41 and signalize Strike Lane at U.S. 41. These details will be finalized when the project goes into the design and construction phase.*

*Comment:* Buy the railroad right-of-way and replace it with a highway (1)

*Response:* *While Lee County has the right of condemnation over many properties, the railroad property is not among them.*

*Comment:* Let the businesses move around, not people's homes (1)

*Response:* *The recommended alignments were selected based on the minimization of impacts to properties.*

*Comment:* Strongly oppose East Railroad Alignment because it is in my back yard (1)

*Response:* *The consultant has not recommended this alignment.*

**General Comments in favor of the East Railroad/Tuck Dr./Old U.S. 41 Alignment**

*Comment:* The East Railroad/Tuck Dr./Old U.S. 41 Alignment spares our homes (1)

*Comment:* The residents of Shadow Wood fully support the extension of Sandy Lane and the Railroad/Tuck Drive/Old U.S. 41 Alignment (1)

*Comment:* The Railroad/Tuck Drive/Old U.S. 41 Alignment appears to be the least disruptive to San Carlos Estates (1)

*Comment:* Production Circle Alignment appears to impact the least amount of people but there would be more congestion on U.S. 41 (1)

*Comment:* The only alignment that makes sense is the Production Circle Alignment (1)

*Comment:* Use Production Circle, with access to U.S. 41 from Strike Lane and close off Old 41 to U.S. 41 (1)

**Comment:** Commit resources and make Strike Lane a major thoroughfare, connecting it to Three Oaks Parkway. Run the Sandy Lane Extension through Bonita Springs via the Production Circle Alignment (1)

**Comment:** We prefer one of the three following: East Railroad/Tuck, West Railroad, or Production Circle (1)

**Comment:** Would like to see Sandy Lane connect with Old 41 at Signal Road in East Railroad Alignment (1)

**Response:** *The consultant has chosen the Production Circle Alignment as their recommendation for the route of the Sandy Lane Extension through Bonita Springs. It was presented to the City of Bonita Springs who approved the recommendation.*

**Comment:** The additional lanes furnished by the extension are critical (1)

**Comment:** Pelican Landing residents strongly support the extension of Sandy Lane to Old U.S. 41 (1)

**Comment:** The southern extension is critical to local residents (1)

**Comment:** The East Railroad Alignment is the second best choice (1)

**Comment:** Improve the U.S. 41 and Old 41 intersection (1)

**Response:** *Comments noted.*

### Suggestions

**Comment:** Safety improvements would be needed on Stillwell and future Sandy Lane (1)

**Response:** *Comment noted.*

**Comment:** I would make the intersection at Strike Lane and Old U.S. 41. Close the section of Old U.S. 41 to through traffic NW of the intersection. Rework Strike Lane from Old 41 to U.S. 41. Install traffic signals at the Strike Lane/U.S. 41 intersection. Push Strike westerly to an access road running parallel with U.S. 41. Remove the traffic signals at the two existing Pelican Landing entrances. This configuration takes into account Strike Lane providing access to Three Oaks Pkwy., and provides the most direct access (1)

**Comment:** Pave Strike Lane and connect it with Three Oaks Pkwy (3)

**Response:** *The consultant has recommended the Production Circle Alignment and this has been approved by the City of Bonita Springs. This suggests closing the Old U.S. 41 connection to U.S. 41 and signaling Strike Lane at U.S. 41. Strike Lane is shown in the long-range transportation plan as a road that will connect Three Oaks Parkway and U.S. 41.*

**Comment:** It would enhance the overall community as well as Lee County and Bonita Springs tax base to pave our road in San Carlos Estates (1)

**Response:** *Comment noted.*

**Comment:** Something needs to be done to alleviate the traffic by the new mall and residences before 2012 (1)

**Response:** *Many roadways in southern Lee County are currently congested and are becoming even more congested due to the large growth in the area. Lee County recognizes this and so commissioned this study to identify a new north/south corridor.*

### Questions

**Comment:** Could a long turn lane be investigated between Pelican Colony Boulevard and Old 41 along U.S. 41 as a way of mitigating the effect of termination of Sandy Lane at Pelican Colony Boulevard? (1)

**Response:** *The consultant has chosen the Production Circle Alignment as their recommendation for the route of the Sandy Lane Extension through Bonita Springs. It was presented to the City of Bonita Springs who approved the recommendation.*

### General Comments

**Comment:** Would like to see planted buffers in right-of-way to minimize noise impacts (1)

**Response:** *Comment noted.*

**Comment:** Mitigation for wetland impacts would appear to be supported by San Carlos Estates (1)

**Response:** *Comment noted.*

**Comment:** Have Simon, Inc., et. al pay for it through Bonita Springs (1)

**Response:** *The mall developer is paying for the construction of Sandy Lane from Corkscrew Road to Pelican Colony Boulevard.*

**Comment:** I would like to see the project advanced to before 2020 (1)

**Response:** *The County's tentative five years Capital Improvements Program would provide funding for design and right-of-way acquisition from Corkscrew Road to Estero Parkway in 2008/09*

**Comment:** No road through Cascades (1)

**Response:** *Comment noted.*



**Sandy Lane Alignments Workshop, May 25, 2004**  
**Estero Comments**  
**Number of Comments Received: 108**

**OPINION ON PROPOSED ALIGNMENT**

**Comment:** Opposed to proposed alignment/project (7)

**Comment:** Opposed to Estero Alignment (39)

Specifically opposed to road through Cascades (25)

Specifically opposed to road north from Corkscrew Road to Estero Parkway (14)

**Comment:** Support the whole project (13)

**Comment:** Support connect to Old 41 in Bonita (6)

**Comment:** Support the Railroad/Tuck Drive/Old U.S. 41 Alignment (3)

**Comment:** Support the Production Circle Alignment (1)

**Comment:** Support the recommended Estero Alignment (31)

**Response:** *Comments noted.*

**Concerns About Proposed Alignment/Project**

**Comment:** Premature to rush ahead with more north/south lanes. Wait and see after the roads that have been approved are completed (1)

**Comment:** Sandy Lane is a poor choice for a north/south road, get busy and widen U.S. 41 and I-75 (1)

**Comment:** Sandy Lane should not be used as an option to reduce traffic on U.S. 41 and Three Oaks Parkway. There will be 22 lanes within approximately 1 mile of each other. Impacts to the surrounding environment and communities will be devastating (1)

**Comment:** Any extension only suits the developers and not the residents. No one wants it. It will dissect quiet neighborhoods (1)

**Comment:** This road seems to be an attempt to appease those west of U.S. 41 at the expense of those to the east (1)

**Comment:** It is unnecessary given the other roads, residents will be affected by noise and auto fumes, our environments will be greatly threatened (1)

**Response:** *Many roads in Lee County are congested and are becoming even more congested due to the large amount of growth in the area. The limited number of north/south facilities exacerbates the problem. A traffic study concluded that the traffic volume reduction on U.S. 41 with the construction of Sandy Lane is projected to be from 8,000-10,000 vehicles per day in certain locations. These traffic projections were conducted with the assumption that Three Oaks Parkway is six-laned, which U.S. 41 is six-laned and that I-75 is widened to ten lanes. The relief that Sandy Lane would bring, even with the other roads being widened is projected to be significant.*

**Comment:** Perhaps increasing access of existing I-75 exits and Corkscrew Road and Bonita Beach Road will support the mall, it seems silly to destroy the heart of a community for retail endeavors (1)

**Comment:** We do not need more roads in an area with as small a landmass as Estero. There is no community of Estero now, also the money is not available and it should be put towards other projects when it is available (1)

**Comment:** You will not be able to get from I-75 onto Estero Parkway to access Sandy Lane to get to the mall, so what is the point? (1)

**Comment:** The only reason I see for this road is the new Wal-Mart. Does big money always win? (1)

**Response:** *The extension of Oriole Road and Sandy Lane from Williams Road to Alico Road was included on the Lee County Trafficways Map first adopted by the Lee County Board of County Commissioners in September 1986. The extension remained on the Trafficways Map through December 1991 revisions. Sandy Lane was also on the August 1989, 2010 Financially Feasible Highway Plan as a reserve project. The Sandy Lane Extension from Old U.S. 41 to Alico Road was adopted to the MPO 2020 Financially Feasible Highway Plan in December 1995, long before many of the planned developments existed in Estero or were even proposed including the malls and the Cascades.*

**Comment:** This will be the second time in 28 years I have been removed from my home. I lost my home on Corkscrew Road due to the widening, the reason I moved to my property is because it abuts the railroad and I thought it would be safe. My grandchildren will lose their inheritance (1)

**Response:** *Lee County will offer fair market value for properties needed for construction of the roadway.*

**Comment:** There is no value in extending north from Corkscrew Road; perhaps a bike route would make more sense (1)

**Comment:** It's a road to nowhere. You have to get off the road to get anywhere (1)

**Response:** *Comment noted.*

**Comment:** Don't end the road at Coconut - there is enough traffic backing up there already (1)

**Response:** *Comment noted.*

**Comment:** Call the road a different name and take a different route from Bonita to Alico Road (1)

**Response:** *Comment noted.*

**Comment:** I live on Sandy Lane and I would not like to see the road built in front of my house, we moved here for the quiet atmosphere and small town life, to lose it would be a tragedy (1)

**Response:** *The recommended alignment will leave the residential portion of Sandy Lane intact. The recommended alignment is parallel to Sandy Lane and adjacent to the railroad.*

**Comment:** I will lose property value and quality of life; the road will go through wetlands and will have no buffer at all. Can you imagine the noise? This road is not necessary given the other roads planned (1)

**Comment:** With other widening projects, I think this questions the need to extend Sandy Lane north from Corkscrew Road to Estero Parkway unless it goes all the way to Alico Road. The study clearly states that Sandy Lane north from Estero Parkway needs more study; I suggest additional study is also needed for the segment between Corkscrew Road and Estero Parkway (1)

**Response:** *Many roads in Lee County are congested and are becoming even more congested due to the large amount of growth in the area. The limited number of north/south facilities exacerbates the problem. A traffic study concluded that the traffic volume reduction on U.S. 41 with the construction of Sandy Lane is projected to be from 8,000-10,000 vehicles per day in certain locations. These traffic projections were conducted with the assumption that Three Oaks Parkway is six-laned, that U.S. 41 is six-laned and that I-75 is widened to ten lanes. The relief that Sandy Lane would bring, even with the other roads being widened is projected to be significant.*

**Comment:** If the extension must be built, make it only two lanes (1)

**Response:** *The MPO 2020 Needs Plan, which shows a future four-lane need, was adopted in February of this year. At this time, the 2020 Financially Feasible Highway Plan shows a two-lane facility and our study only evaluated the two-lane concept. We elected to evaluate a 100-foot wide corridor, as this will accommodate a four-lane section in the future consistent with County policy for all collector roads.*

**Comment:** The cost will be too high and the money should go towards other things (1)

**Response:** *Comment noted.*

**Comment:** It would bisect the heart of Old Estero Village. We are trying to get historic status (1)

**Comment:** You should not build this road through the historically important Campbell/Trebell/Bigelow house as well as historic Kay McCuller's home (1)

**Response:** *Data collection efforts did not reveal any structures with historical status.*

### Cascades Concerns About the Alignment

**Comment:** It will bisect the community, creating safety issues at the intersection at Cascades Isle Blvd. This is the only way in and out, and for access to the clubhouse and recreation facilities for many residents. We will no longer live in a gated community (3)

**Comment:** There will be significant pedestrian traffic at the Cascades Isle Blvd. There is restricted viewing and these safety issues were not addressed in the Sandy Lane report. It is as if they are not

worthy of mention (1)

**Comment:** The proposed alignment will also create security issues. The Cascades is a gated community designed with a 24 hr security gate through Estero Parkway. The proposed alignment will completely destroy the concept of a gated community. Safety was a main reason for many of us buying property here. With swing gates and unmanned gates this will allow unrestricted access and a security breach (3)

**Comment:** What about safety of seniors trying to cross Sandy Lane? (2)

**Response:** *The developer planned the community around the road in the zoning process, and presumably would have considered security needs for the different pods in his plans. There are security barriers shown on the Cascades proposed site plans. As per the zoning resolution the developer is also required to construct walls and landscaping along the length of Sandy Lane that goes through their property. The issue of security at the intersection is something that would be discussed at the design stage of this project if the Lee County Board of Commissioners approves it. However, the consultant has addressed the issue by suggesting a roundabout concept at the intersection to slow traffic and make it easier to cross the roads. Whether this is incorporated will depend on public opinion, funding and the decisions that are made in the design stage.*

**Comment:** A north/south 'Flyover' at the Cascades is one option that would solve both the safety and security issues, unfortunately those involved in the study do not agree and have essentially taken a position that Lee County will not pay for a 'flyover' at this location because of cost. Lee County Department Of Transportation has also stated that 4-way stop signs or lights are not likely to be installed because of federal regulations. This leaves one option, a thru street with no traffic control devices at Cascades Isle Blvd. This would be intolerable, especially if the road was eventually widened to 4-lanes (1)

**Comment:** Would only support the extension if funding from the mall, Wal-Mart and the County built a flyover over Cascades. We do not see a valid reason for the Sandy Lane Extension from Corkscrew Road to Estero Parkway (1)

**Response:** *Lee County has not refused to consider this option; the developer could approach the County about funding the design and construction of a flyover himself, as it has been done by other developments in the County. However, Lee County will not use taxpayer's dollars to fund a grade separation that is not necessary from an operational standpoint and would only benefit one sub-division.*

**Comment:** Originally Sandy Lane was dedicated for a two-lane road, and now the word is that it will be four lanes. How safe can this be? (1)

**Response:** *The MPO 2020 Needs Plan, which shows a future four-lane need, was adopted in February of this year. At this time, the 2020 Financially Feasible Highway Plan shows a two-lane facility and our study only evaluated the two-lane concept. We elected to evaluate a 100-foot wide corridor, as this will accommodate a four-lane section in the future consistent with County policy for all collector roads.*

**Comment:** The development should never have been represented as a gated community. I was not aware that this area was going to be turned into a traffic jam. I would never have moved this far from Fort Myers. It's a shame the safety and integrity of this state has to fall prey to the hard hands of commerce (1)

**Comment:** This road was represented as a community road (1)

**Comment:** This will have a detrimental effect on the Cascades community (2)

**Comment:** It will affect property prices in the Cascades (1)

**Comment:** Concerns about the Cascades (2)

**Comment:** End Sandy Lane at Corkscrew Road, please do not go through the preserve. Consider other routes (2)

**Response:** *Comments noted.*

**Comment:** The new extension should have a different name (1)

**Comment:** I believe the curve as proposed on Sandy Lane is very dangerous (1)

**Response:** *Currently this project is only to study and recommend an alignment route for the road. If the Lee County Board of County Commissioners chooses to approve the project, design and aesthetic issues such as these will be investigated.*

**Comment:** We do not need any more building; more roads should be the #1 priority (1)

**Response:** *Comment noted.*

**Comment:** I-75 should happen long before these secondary roads (1)

**Response:** *Comment noted.*

### **In Favor Comments About the Alignment**

**Comment:** It is imperative that traffic congestion be dealt with as soon as possible (1)

**Response:** *Comment noted.*

**Comment:** Don't dead-end the extension at Pelican Landing, this will be a major error (1)

**Response:** *Comment noted.*

**Comment:** We need four-lanes in the future (1)

**Response:** *The MPO 2020 Needs Plan, which shows a future four-lane need, was adopted in February of this year. At this time, the 2020 Financially Feasible Highway Plan shows a two-lane facility and our study only evaluated the two-lane concept. We elected to evaluate a 100-foot wide corridor, as this will accommodate a four-lane section in the future consistent with County policy for all collector roads.*

**Comment:** We would like to see pedestrian access on the current bridge over the Estero River Bridge, and maintain pedestrian access at Broadway if it dead-ended (1)

**Response:** *Broadway will not be closed. If the Sandy Lane Extension Project is approved the treatment of existing Sandy Lane over the river would be studied in more detail before making a decision.*

### **Questions**

**Comment:** Has an environmental study been done? (1)

**Response:** *The Sandy Lane Corridor Alignment Study is being conducted to study environmental and community impacts and to recommend the most suitable route for the road taking these factors into account.*

**Comment:** Why can't you buy the railroad and tracks? This would not take people houses and it goes a long way. The train only goes by once a week (1)

**Response:** *While Lee County has the right of condemnation over many properties, the railroad property is not among them.*

**Comment:** How will people living east of the railroad get to and from their homes? (1)

**Response:** *Broadway will remain open with access to Sandy Lane and U.S. 41.*

### **Brooks Neighborhood Comments**

**Comment:** We are interested in the destiny of Sandy Lane as it is likely to impact on the quality of life for the residents of the Brooks (1)

**Response:** *Comment noted.*

**Comment:** We are concerned that Sandy Lane will not be built for another five years; it should have a higher priority given the projected volumes of traffic. Considering the part from Coconut Point will be constructed by 2006, the southerly portion should be constructed to avoid back up of traffic on Sandy Lane from Pelican Colony Blvd. north to Coconut Road (1)

**Response:** *If the project is approved, traffic projections indicate that the section from Corkscrew Road to Estero Parkway should be built by 2010; the section from Estero Parkway to Alico Road should be built by 2020.*

**Comment:** We offer the support of The Brooks to the County regarding its plans to construct the southern portion in Bonita Springs (1)

**Response:** *Comment noted.*

### **Broadway Comments**

**Comment:** I do not understand the cul-de-sac idea for East Broadway, what will this entail? (1)

**Comment:** I do not want East Broadway to end at the railway tracks (1)

**Comment:** A new development is planned south of Estero River that will use this road. If Sandy Lane residents have to exit onto Broadway, why cul-de-sac the road? If you really want to speed up traffic, spend your money on Three Oaks Parkway (1)

**Comment:** Traffic on Broadway should have full access to Sandy Lane and any extension. They are very important connections for local traffic and cutting it off would make a hazard (1)

**Comment:** I think it is OK to cul-de-sac at Sandy Lane and Broadway (1)

**Comment:** The western corridor alignment is fine provided there is a safe way to connect Sandy Lane to Broadway due to the location of the fire station and how it uses Broadway. Closing it will double their (EMS) response time. Residents on the east side of the tracks would have to use Corkscrew Road/U.S. 41 to get to the post office instead of using Broadway. The objective is to reduce traffic on U.S. 41 not increase it (1)

**Response:** *Broadway will not be closed off. If the Sandy Lane Extension Project is approved the treatment of existing Sandy Lane over the river would be studied in more detail before making a decision.*

### **General Comments**

**Comment:** We commend you for an effective presentation (1)

**Comment:** Thank you for your effort on this project (1)

**Comment:** This will be the least disruptive and most effective of routes considered (1)

**Response:** *Comments noted.*

**Comment:** Two Wal-Marts are planned for Estero; it is a nightmare that will destroy the general neighborhood and burden U.S. 41 long-term. Reports have shown they need expanded police protection, security and there is more litter leading to higher taxes (1)

**Comment:** Don't let the Simon Group control this (1)

**Response:** *Comments noted.*

**Comment:** The idea to buy 100 ft. of right-of-way north of Estero Parkway is ludicrous; any road extension would end up at the back of our homes. These consultants should let someone else worry for a solution (1)

**Response:** *The consultant is not recommending that the alignment continue from Estero Parkway to Alico Road at this time due to the impact it would have on the communities on Oriole Road. They are recommending that further study be conducted on this section in the future. The developers of Belle Lago have set aside 100 feet of right-of-way for Sandy Lane.*

**Comment:** Please don't 4-lane Sandy Lane the impacts would be significant. With other roads being widened it would be ok to stop it at Estero River and allow mall traffic to go to other roads from there (1)

**Response:** *Comment noted.*

**Comment:** Four-lane Williams Road to Three Oaks Parkway, and then Three Oaks Parkway to Alico Road (1)

**Response:** *A four-lane road is planned for Three Oaks Parkway, which will be expandable to six lanes. The Three Oaks Parkway Widening is in the design phase now and Lee County Department Of Transportation has started right-of-way acquisition. Construction is planned for next fall; Lee County Department of Transportation may have to wait for the next funding cycle due to rising material costs.*

**Comment:** Keep the Estero River Bridge (1)

***Comment:*** Building a new bridge would stress an already suffering river (1)

***Response:*** *The decision on eliminating the Estero River Bridge will be studied in the design phase.*

***Comment:*** We would like one or more of the County Commissioners to come to the Cascades to see what the road will do to the community (1)

***Response:*** *Two of the County Commissioners, John Albion and Ray Judah, attended the Cascades Neighborhood meeting in August to talk to the Cascades residents about the proposed alignment and to listen to residents' concerns.*

**Sandy Lane Alignments Workshop, May 25, 2004**  
**San Carlos Comments**  
**Number of Comments received: 6**

**Opinion on Proposed Alignment**

**Comment:** Strongly Opposed (3)

**Comment:** Support (3)

**Response:** *Comment noted.*

**Comments/ Concerns about Alignment**

**Comment:** Concerned property value decreasing (2)

**Response:** *Comment noted.*

**Comment:** Concerned about displacing people on Oriole Rd (1)

**Response:** *The consultant is not recommending that the alignment continue from Estero Parkway to Alico Road at this time due to the impact it would have on the communities on Oriole Road. They are recommending that further study be conducted on this section in the future.*

**Comment:** Closing this segment of Broadway will more than double the Estero Fire Rescue's response time to homes east of the railroad tracks (3)

**Response:** *Broadway will not be closed off. If the Sandy Lane Extension Project is approved the treatment of existing Sandy Lane over the river would be studied in more detail before making a decision.*

**Comment:** This would increase traffic on Corkscrew/U.S. 41 and Estero/U.S. 41 from people who live east of the corridor (3)

**Response:** *Comment noted.*

**Suggestions**

**Comment:** Ben Hill Griffin or something farther to the east should be looked at (1)

**Comment:** Build a new north/south highway from Alligator Alley north (1)

**Response:** *Many roads in Lee County are congested and are becoming even more congested due to the large amount of growth in the area. The limited number of north/south facilities exacerbates the problem. A traffic study concluded that the traffic volume reduction on U.S. 41 with the construction of Sandy Lane is projected to be from 8,000-10,000 vehicles per day in certain locations. These traffic projections were conducted with the assumption that Three Oaks Parkway is six-laned, that U.S. 41 is six-laned and that I-75 is widened to ten lanes. The relief that Sandy Lane would bring, even with the other roads being widened is projected to be significant.*

**Comment:** Bisecting Cascades will cause safety issues at Cascades Isle Blvd. We urge the final report to be amended to recognize the safety issues at this intersection and to require that all feasible solutions are studied with substantial community input (3)

**Response:** *The consultant has suggested a roundabout concept at the intersection to slow traffic and make it easier to cross the roads. The incorporation of this or any other ideas will depend on public opinion, funding and the decisions that are made in the design stage.*

## Comments

**Comment:** Widening U.S. 41 and I-75 will be enough (1)

**Response:** *Many roads in Lee County are congested and are becoming even more congested due to the large amount of growth in the area. The limited number of north/south facilities exacerbates the problem. A traffic study concluded that the traffic volume reduction on U.S. 41 with the construction of Sandy Lane is projected to be from 8000-10000 vehicles per day in certain locations. These traffic projections were conducted with the assumption that Three Oaks Parkway is six-laned, that U.S. 41 is six-laned and that I-75 is widened to ten lanes. The relief that Sandy Lane would bring, even with the other roads being widened is projected to be significant.*

**Comment:** Existing Sandy Lane should retain its name and the new road should take on a new name.  
Community would like to be involved in this process (1)

**Response:** *Comment noted.*

**Comment:** If this has anything to do with Commercial Real Estate Developers I'm sure it will be revealed!  
(1)

**Response:** *Comment noted.*

**Comment:** I believe a cul-de-sac at Broadway and Sandy Lane would make more traffic on U.S. 41 near Corkscrew (1)

**Comment:** I am concerned for the residents east on Sandy Lane in regards to the emergency vehicle access if their road were to end in a cul-de-sac (1)

**Response:** *Broadway will not be closed off. If the Sandy Lane Extension Project is approved the treatment of existing Sandy Lane over the river would be studied in more detail before making a decision.*

## Questions

**Comment:** What will happen with Three Oaks Middle School and the park? (1)

**Response:** *The Sandy Lane Extension Project would not affect the school or the park.*



**Sandy Lane Alignments Workshop, May 25, 2004**  
**Pelican Landing Comments**  
**Number of Comments received: 232**

**Opinion on Proposed Project**

- Comment:* Support the extension of Sandy Lane (175)  
*Comment:* Support the recommendation of the consultant (55)  
*Comment:* Against this project (2)  
*Response:* *Comments noted.*

**Comments on East Railroad/TuckDr./Old 41 Alignment**

- Comment:* By using the Railroad/Tuck Dr./Old 41 Alignment a much safer "T" intersection could be used (1)  
*Comment:* The railroad alignment is far superior to others because it's intersection with Old 41 is the farthest from U.S. 41 and Pelican Landing Blvd. (1)  
*Comment:* The railroad route avoids intolerable traffic congestion directly in front of Pelican Landing (1)  
*Comment:* The railroad alignment is practical and less intrusive (3)  
*Comment:* The railroad alignment seems to minimize the impact on the community (2)  
*Comment:* The railroad alignment, in the long run, will be beneficial to commercial enterprises (1)  
*Comment:* The Tuck Drive Alignment will help to alleviate problems at the U.S. 41/Old 41 intersection (1)  
*Comment:* The railroad alignment appears more cost-effective (1)  
*Response:* *The consultant has chosen the Production Circle Alignment as their recommendation for the route of the Sandy Lane Extension through Bonita Springs. It was presented to the City of Bonita Springs who approved the recommendation.*

- Comment:* The road should be implemented ASAP (1)  
*Response:* *Comment noted.*

- Comment:* The recommended alignment seems to provide better traffic routing and safety (1)  
*Response:* *Comment noted.*

- Comment:* I either recommend an extension which connects to Old 41 south of Strike Lane, or having Sandy Lane stop at Pelican Colony (1)  
*Response:* *Comment noted.*

**Safety Concerns**

- Comment:* The "Y" intersection near Old 41 would be dangerous and should be converted to a "T" Intersection (1)  
*Response:* *Issues such as this will be addressed in the design phase of the project.*

**Suggestions**

- Comment:* Previously I proposed the following alignment of North on U.S. 41 to Bernwood Pkwy., Right on Bernwood Pkwy. to Old 41, across Old 41 and straight on a new road to Bonita Bill Road, left on Bonita Bill Rd. to the south extension of Sandy Lane. Bonita Bill Rd. could be connected to Three Oaks Pkwy. The three-north/south routes would then be interconnected. The advantage is that the Sandy Lane connection to Old 41 is not in front of the middle entrance to Pelican Landing (1)  
*Response:* *The consultant has chosen the Production Circle Alignment as their recommendation for the route of the Sandy Lane Extension through Bonita Springs. It was presented to the City of Bonita Springs who approved the recommendation.*

**Comment:** I would suggest options such as increased berm height, improved vegetation landscaping, a higher boulder wall, a poured concrete wall, or a combination to help alleviate traffic noise (1)

**Response:** *Comment noted.*

**Comment:** We desperately need Imperial widened and probably further widening of U.S. 41 (1)

**Response:** *Comment noted.*

### Questions

**Comment:** If the new project creates a new railroad crossing, why do you state that the railroad crossings are unlawful? (1)

**Response:** *There are no new railroad crossings proposed on the recommended alignment.*

**Comment:** It would be great to get traffic off of U.S. 41, but what will happen to Old U.S. 41? (1)

**Response:** *Sandy Lane will extend into Old U.S. 41.*

### Supporting Comments

**Comment:** The extension will have a positive impact on traffic flow and reduce the number of traffic accidents (1)

**Comment:** If U.S. 41 must absorb more traffic now, six-lanes will be obsolete (1)

**Comment:** The safety factor alone justifies the extension (2)

**Comment:** Please complete this ASAP (2)

**Comment:** Estero Chamber of Commerce strongly supports the Sandy Lane Extensions, both north and south (1)

**Comment:** Lighthouse Bay supports the extension of Sandy Lane south (1)

**Response:** *Comments noted.*

**Comment:** I suggest that the intersection of Sandy Lane and Old 41 would be best at Signal Rd. (1)

**Comment:** Will Pelican Colony Blvd. be extended to Sandy Lane? Won't this cause the shopping mall traffic to pile up at the intersection of U.S. 41 and Pelican Colony Blvd.? (1)

**Comment:** I support the extension of Sandy Lane as long as it does not cross to Signal Road (1)

**Response:** *The consultant has chosen the Production Circle Alignment as their recommendation for the route of the Sandy Lane Extension through Bonita Springs. It was presented to the City of Bonita Springs who approved the recommendation.*

### General Comments

**Comment:** We hope the County will appropriately fund their share of the cost and work with the City of Bonita Springs to a rapid solution (1)

**Comment:** Residents in Bonita Springs, Estero, and surrounding areas are concerned about the negative impact of not completing the extension in a timely manner (1)

**Comment:** The elected representatives need to look at the needs of the greater community and cooperate to move this project ahead quickly (1)

**Comment:** Providing an alternate north/south route is critical due to planned developments in the area (2)

**Response:** *Lee County has identified the need for more north/south corridors due to future traffic needs and is conducting these studies now to provide roads for the future.*

**Comment:** The noise at the entrance of Pelican Landing is now unbearable (1)

**Comment:** Much of the traffic through Bonita Springs is not local (1)

**Comment:** Pelican Landing residents are funding more of the Bonita Springs taxes than the average resident and we deserve some return (1)

**Comment:** I wish our officials would also see the importance of tying Airport-Pulling northward to allow a traffic alternative (1)

**Comment:** Please work to resolve issues of whom will pay and what route will be taken as quickly as possible (1)

**Comment:** Thanks for sending the information to us (1)

**Comment:** I prefer not to extend Pelican Colony Blvd. to Sandy Lane (1)

**Comment:** We are in favor of minimizing traffic in front of Pelican Landing (1)

**Comment:** None of the suggestions are more than a band-aid for the failure to provide a long-term solution to north/south traffic 30 years ago (1)

**Response:** *Comments noted.*

**Comment:** I strongly believe the residents of Pelican Landing should be told the full effect of extending Sandy Lane, such as traffic lights, before being asked for their endorsement (1)

**Response:** *These details will be studied in the design phase.*

#### **Comments on Production Circle Alignment**

**Comment:** The alignment along Production Circle makes the most sense (1)

**Response:** *The consultant has chosen the Production Circle Alignment as their recommendation for the route of the Sandy Lane Extension through Bonita Springs. It was presented to the City of Bonita Springs who approved the recommendation.*

#### **Concerns about Production Circle Alignment**

**Comment:** This road would be too close to U.S. 41 (1)

**Comment:** This alignment unfairly holds Pelican Landing hostage while allowing Coconut Point to benefit only (1)

**Comment:** To dump Sandy Lane traffic to U.S. 41 so it can continue south makes no sense at all (2)

**Comment:** Most of this traffic will be left waiting to make a left turn on Old 41 (1)

**Response:** *Comments noted.*

**SANDY LANE EXTENSION CORRIDOR  
ALIGNMENT STUDY**

**CASCADES NEIGHBORHOOD MEETING**

Lee County Project #: 4084

Lee County, Florida

Date of Meeting: August 3, 2004

**Sandy Lane Extension Corridor Alignment Study  
Cascades Neighborhood Meeting  
August 3, 2004**

The Lee County Department of Transportation (LC DOT) held a neighborhood meeting on Tuesday, August 3, 2004 at Our Lady of Light Church, 19680 Cypress View Drive, Fort Myers, Florida for the existing and future residents of the Cascades. The meeting was held for residents who were not on the property appraisers database mailing list for the workshop in May. The purpose of this meeting was to discuss the chosen alignment alternative and to present a roundabout concept for the potential intersection at Sandy Lane and Cascade Isle Boulevard. A total of 188 people signed in at the registration table. Copies of the sign-in sheets are attached in Section A.

Letters announcing the neighborhood meeting were mailed on July 19, 2004 to existing and future residents of the Cascades development. Copies of the notification letter, mailing list, and news articles for the presentation are attached in Section B.

A slideshow presentation outlining the project began at 6:30 p.m. A formal question and answer period followed the presentation for approximately one hour. A handout that summarized the project was provided to the public at the registration table. Project team members and representatives from LC DOT were present to explain the conceptual roundabout design alternative and answer questions. The meeting handout is attached in Section C.

The public was provided with comment forms in order to have their opinion recorded as public record. Seventeen comment sheets were received at the Cascades Neighborhood Meeting and in the fourteen days following. All seventeen comments were against the Sandy Lane Extension going through the Cascades neighborhood. Safety was cited by eight of the residents as the most important reason for not having Sandy Lane through the Cascades. Six of the residents also stated that it would divide the community, and five others discussed the fact that they would no longer be "gated" as one development. The other issues mentioned were decreases in property values, traffic noise, and if Sandy Lane would still be warranted north of Corkscrew after the completion of the other road improvements in the area. The residents of the Cascades also believed that there were safety issues concerning pedestrian and bicyclists crossing the proposed roundabout. Copies of the comment forms are attached in Section D.



**LEE COUNTY**  
SOUTHWEST FLORIDA

Department of Transportation

**Andrew Getch, P.E.**  
Project Manager  
1500 Monroe Street  
Fort Myers, Florida 33901  
239-479-8580  
getchaj@leegov.com

## PUBLIC INFORMATION WORKSHOP

Date: Tuesday, May 25

Time: 5-7 p.m.

Place: Three Oaks Banquet  
and Conference Center  
20991 Three Oaks Pkwy  
Estero, Florida

## QUESTIONS? NEED MORE PROJECT INFORMATION?

Contact the project representative  
**Kris Cella**  
Cella & Associates, Inc.  
2125 First Street, Suite 201  
Fort Myers, FL 33901  
239-337-1071  
kcella@cella.cc

Anyone needing special accommodations under the Americans with Disabilities Act of 1990 should contact Kris Cella using the information above.

# SANDY LANE EXTENSION CORRIDOR ALIGNMENT STUDY

Newsletter No. 1

May 2004

The Lee County Department of Transportation (LC DOT) is conducting a Corridor Alignment Study to evaluate alternative alignments for the extension of Sandy Lane in southern Lee County and the City of Bonita Springs. The southern portion of the project study area extends north from Old U.S. 41 to just north of the Bonita Springs city limits. The northern portion of the study area extends from Corkscrew Road north to the intersection of Oriole Road and Alico Road. The total project length for this study is approximately 5 miles.

### Purpose of the Study

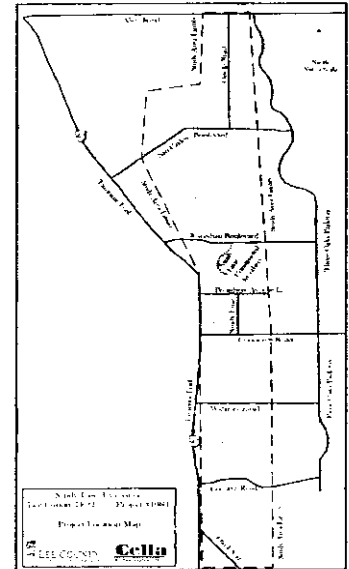
The objectives of this study are to develop a transportation facility that is economically efficient and environmentally sound. This study will document the results of the environmental and engineering analyses conducted to assist the LC DOT in reaching a decision on the location and conceptual design for the long-range improvements for a transportation facility east of U.S. 41 from Old U.S. 41 to Oriole Road. The design year for the proposed improvements is 2020. The study documents the need for improvements and the procedures used to evaluate the alternatives developed for this study.

### Traffic Evaluation

Many roadways in southern Lee County are currently congested and are becoming even more congested due to the large amount of growth in the area. The problem is exacerbated by the limited number of north-south facilities in San Carlos Park, Estero and Bonita Springs. Sandy Lane is currently a two lane local roadway that runs north/south from Broadway Street to south of Corkscrew Road in Estero. The Metropolitan Planning Organization's (MPO) *Long Range Transportation Plan* shows Sandy Lane as a two lane undivided arterial running from Alico Road in San Carlos Park to Old U.S. 41 in Bonita Springs. The proposed extension of Sandy Lane includes an upgrade to Oriole Road which runs from Alico Road south for approximately two miles. The purpose of the proposed facility is to provide congestion relief to U.S. 41 and Three Oaks Parkway in south Lee County.

To determine whether or not the Sandy Lane Extension will provide traffic relief in southern Lee County, traffic projections both with and without the facility were developed. Traffic model "runs" were performed to project future year traffic volumes on the facilities in the area. The input data were obtained from the MPO's web site and modified to represent the proposed alignments for the Sandy Lane Extension. In addition, the socio-economic data used as input for the model was modified to incorporate several proposed developments in the area, including Coconut Point, North Point, Estero Community Park and the proposed elementary school next to Estero High School. The traffic volume reduction on U.S. 41 with the construction of Sandy Lane is projected to be as much as 10,000 vehicles per day (vpd) in certain locations. This is a significant reduction which will help ease the congestion on U.S. 41.

Congestion relief on Three Oaks Parkway with the extension of Sandy Lane is also projected to be fairly significant. Based on the congestion relief predicted by the traffic model, the Sandy Lane Extension will provide additional north-south capacity and provide traffic volume reduction on U.S. 41 and Three Oaks Parkway.



## Recommended Alternative(s)

### Bonita Springs

The consultants' final recommendation in Bonita Springs is the "Railroad/Tuck Drive/Old U.S. 41" Alignment, as shown below in bright pink. Of all the alignment alternatives considered, this alignment was most desirable geometrically, socially, environmentally and from a traffic operations perspective. The alignment also proved to be the least disruptive to the San Carlos Estates community, where residential impacts were minimized and neighborhoods were not isolated from each other. The commercial impacts were limited as well. This would only require one new railroad crossing at the northwest corner of San Carlos Estates. The Seminole Gulf Railroad is under a mandate to eliminate railroad crossings. The existing crossing on Strike Lane is not a permitted crossing and is sub standard. The railroad may close the Strike Lane crossing. San Carlos Estates residences would use Sandy Lane to access Old U.S. 41 and U.S. 41.



The City of Bonita Springs is currently evaluating their area network. The Production Circle alignment alternative may become the preferred alignment alternative subject to changes in the 2020 plan. Revisions to traffic operations may be necessary. Under this scenario, Sandy Lane would become the extension of Old U.S. 41.

### Estero

The consultants' recommended alignment for Sandy Lane between Corkscrew Road and Estero Parkway, as shown in the graphic on the following page, begins at Corkscrew Road and runs north along existing Sandy Lane for 370± feet. The alignment curves to the west just before the Estero River. It continues straight as it crosses the Estero River over a new bridge in a new location. The alignment then curves to the north as it parallels the Seminole Gulf Railroad. After crossing Broadway Street, the alignment slightly curves to the west as it ties into The Cascades dedicated right of way for Sandy Lane, which ultimately connects to Estero Parkway (Korshan Boulevard). This alignment is recommended because it reduces direct impacts to the residences along existing Sandy Lane, will accommodate drainage requirements and will provide for a four-lane section in the future. Existing Sandy Lane right-of-way width is only 50 feet wide and would not accommodate a future four-laning without the need to purchase right-of-way on one or both sides in the future. Traffic impacts to the existing residences on Sandy Lane could be reduced by terminating Sandy Lane at the Estero River and only allow access to existing Sandy Lane from Broadway Street. An advanced railroad signal would be required on relocated Sandy Lane due to the proximity to the railroad crossing of this recommended alignment.



## San Carlos Park

The extension of Sandy Lane from Estero Parkway (Koreshan Boulevard) north through San Carlos Park to Alico Road along Oriole Road was analyzed. The scope of work envisioned tying into Oriole Road with no major improvements or right-of-way acquisition. Traffic volume drops off to 10,000 vpd at Estero Parkway (Koreshan Boulevard) from 16,000 vpd. The limited right-of-way, excessive number of driveways and stop signs would degrade the quality of this segment as a viable alternative and may pose a safety issue for pedestrians. After the widening of Three Oaks Parkway and U.S. 41, the traffic conditions should be reevaluated to determine when this segment may be needed. If the connection is made to Oriole Road, it is recommended that a detailed alignment evaluation study be conducted. This would consist of an evaluation of the impacts of acquiring right-of-way to provide a roadway that provides the capacity, level-of-service and safety that is warranted by traffic demand. It is recommended by the consultants' that Lee County pursue the acquisition of the 100-foot right-of-way from Estero Parkway (Koreshan Boulevard) to the south end of Oriole Road.



## Recommendations

Below are the consultants' recommended alignment alternatives for Sandy Lane.

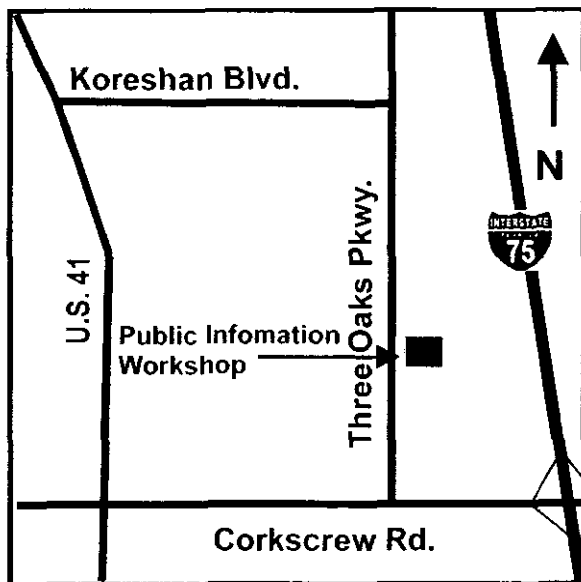
- **Bonita Springs** - East Railroad to Tuck Drive to Old U.S. 41
- **Estero** - Railroad alignment connecting to The Cascades with a proposal to cul-de-sac existing Sandy Lane and possibly Broadway Street
- **San Carlos Park** - Reserve right-of-way in Belle Lago and reevaluate the Oriole Road connection at a later date





**LEE COUNTY**  
SOUTHWEST FLORIDA  
Department of Transportation  
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Fort Myers, Florida 33902

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## **SANDY LANE ALTERNATIVE ALIGNMENTS PUBLIC INFORMATION WORKSHOP**

**Date :** Tuesday, May 25

**Time:** 5-7 p.m.

**Place:** Three Oaks Banquet  
and Conference Center  
20991 Three Oaks Parkway  
Estero, Florida

---

### **What's next?**

- Presentation to Management and Planning Committee of the Lee County Board of County Commissioners
  - Presentation and selection of Bonita Springs alternative (includes no-build alternative) by city council
  - Public hearing for alternative adoption by Lee County Board of County Commissioners
  - Finalize alternative alignments report
-



Albion

August 6, 2004

*City of  
Bonita Springs*

9220 BONITA BEACH ROAD  
SUITE 111  
BONITA SPRINGS, FL 34135  
TEL: (239) 390-1000  
FAX: (239) 390-1004  
www.cityofbonitasprings.org

**Jay Arend**  
Mayor

**Wayne P. Edsall**  
Councilman  
District One

**Alex Grantt**  
Councilman  
District Two

**R. Robert Wagner**  
Councilman  
District Three

**John Joyce**  
Councilman  
District Four

**David T. Piper, Jr.**  
Councilman  
District Five

**Ben L. Nelson, Jr.**  
Councilman  
District Six

~  
**Gary A. Price**  
City Manager

**Audrey E. Vance**  
City Attorney

The Honorable John E. Albion  
Chairman  
Board of County Commissioners  
Lee County  
Post Office Box 398  
Fort Myers, FL 33902

RE: Sandy Lane Alignment within the  
City of Bonita Springs

Dear Chairman Albion:

After serious public considerations and presentation by Kris Cella and Associates, Inc. and our transportation planner Mohsen Salehi, the City Council has at their August 4, 2004 meeting passed a motion supporting, as their favored route, the revised Production Circle Alignment shown in blue on the Sandy Lane Extension Corridor Alignment Study Map.

City Council supports this route with the understanding that the City will not pay for its construction and also recommends that the existing lighted intersection serving the main entrance of Pelican Landing remain to serve the residents of this area.

Respectfully,

Gary A. Price  
City Manager

GAP/kw

cc: Lee County Board of County Commissioners  
City of Bonita Springs Mayor and City Council  
Don Stilwell, County Manager, Lee County  
Scott Gilbertson, Director, Department of Transportation, Lee County  
Dave Loveland, Manager, Transportation Planning Program, Lee County  
Kris Cella, Chief Executive Officer, Cella and Associates, Inc.  
Mohsen Salehi, AICP, Traffic Consultant, Salehi Consulting Services

AUG 09 2004  
RECEIVED

SANDY LANE EXTENSION (SOUTH) CORRIDOR ALIGNMENT  
SECTION 16, TOWNSHIP 47 SOUTH, RANGE 25 EAST  
LEE COUNTY, FLORIDA

LEGAL DESCRIPTION:

A PROPOSED ROAD WAY ALIGNMENT LYING WITHIN IN SECTION 16, TOWNSHIP 47 SOUTH, RANGE 25 EAST, LEE COUNTY, FLORIDA THE CENTERLINE FOR WHICH IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF SAID SECTION 16; THENCE N 00°24'12" W, ALONG THE EAST LINE OF SAID SECTION 16, A DISTANCE OF 207.07 FEET TO THE EXISTING CENTERLINE OF OLD U.S. 41, SAID POINT LYING S 00°24'12" E, 2427.13 FEET FROM THE EAST 1/4 CORNER OF SAID SECTION 16; THENCE N 3°01'06" W, ALONG SAID CENTERLINE, A DISTANCE OF 750.71 FEET TO THE CENTERLINE INTERSECTION OF STRIKE LANE AND OLD U.S. 41 SAID POINT BEING THE POINT OF BEGINNING:

THENCE CONTINUE N 3°01'06" W ALONG THE CENTERLINE OF OLD U.S. 41 AND THE PROPOSED ALIGNMENT CENTERLINE OF SANDY LANE EXTENSION, A DISTANCE OF 369.45 FEET TO A POINT OF CURVATURE; THENCE DEPARTING SAID EXISTING CENTERLINE OF OLD U.S. 41 AND ALONG THE PROPOSED ALIGNMENT CENTERLINE OF SANDY LANE AND ALONG THE ARC OF SAID CURVE TO THE RIGHT HAVING A RADIUS OF 1150.00 FEET, A DELTA OF 29°57'47", CHORD BEARING OF N 16°02'12" W AND CHORD DISTANCE OF 594.57 FEET, AN ARC DISTANCE OF 601.40 FEET TO THE END OF SAID CURVE; THENCE ALONG SAID PROPOSED ALIGNMENT CENTERLINE N 0°03'19" W, A DISTANCE OF 566.63 FEET TO A POINT OF CURVATURE; THENCE ALONG THE ARC OF SAID CURVE TO THE RIGHT HAVING A RADIUS OF 1150.00 FEET, A DELTA OF 38°23'55", CHORD BEARING OF N 18°08'39" E AND CHORD DISTANCE OF 756.37 FEET, AN ARC DISTANCE OF 770.71 FEET TO A POINT OF REVERSE CURVATURE; THENCE ALONG THE ARC OF SAID CURVE TO THE LEFT HAVING A RADIUS OF 450.00 FEET, A DELTA OF 37°31'12", CHORD BEARING OF N 18°35'00" E AND CHORD DISTANCE OF 289.44 FEET, AN ARC DISTANCE OF 294.68 FEET TO THE END OF SAID CURVE AND TO A POINT ON THE EXISTING CENTERLINE OF PRODUCTION CIRCLE; THENCE N 00°10'36" W, ALONG SAID COMMON CENTERLINES, A DISTANCE OF 1775.67 FEET TO A POINT OF CURVATURE; THENCE ALONG THE ARC OF SAID CURVE TO THE RIGHT HAVING A RADIUS OF 720.00 FEET, A DELTA OF 15°06'06", CHORD BEARING OF N 07°22'07" E AND CHORD DISTANCE OF 189.22 FEET, AN ARC DISTANCE OF 189.77 FEET TO A POINT ON THE NORTH LINE OF SAID SECTION 16 AND THE POINT OF TERMINUS, SAID POINT LYING S 88°56'29" W, 369.75 FEET FROM THE NORTHEAST CORNER OF SAID SECTION 16.

NOTE:

BEARINGS ARE BASED UPON THE EAST LINE OF SECTION 16 HAVING A BEARING OF S 00°24'12" E.

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.



Licensed Business Number 3114

AIM ENGINEERING & SURVEYING, INC.  
5300 LEE BLVD.  
P.O. BOX 1235  
LEHIGH ACRES  
FLORIDA 33970  
239/332-4569  
FX:239/332-8734

PREPARED BY:  
AIM ENGINEERING & SURVEYING, INC.

BOB L. POTTER, P.E.  
PROFESSIONAL SURVEYOR  
FLORIDA CERTIFICATE NO. 10271

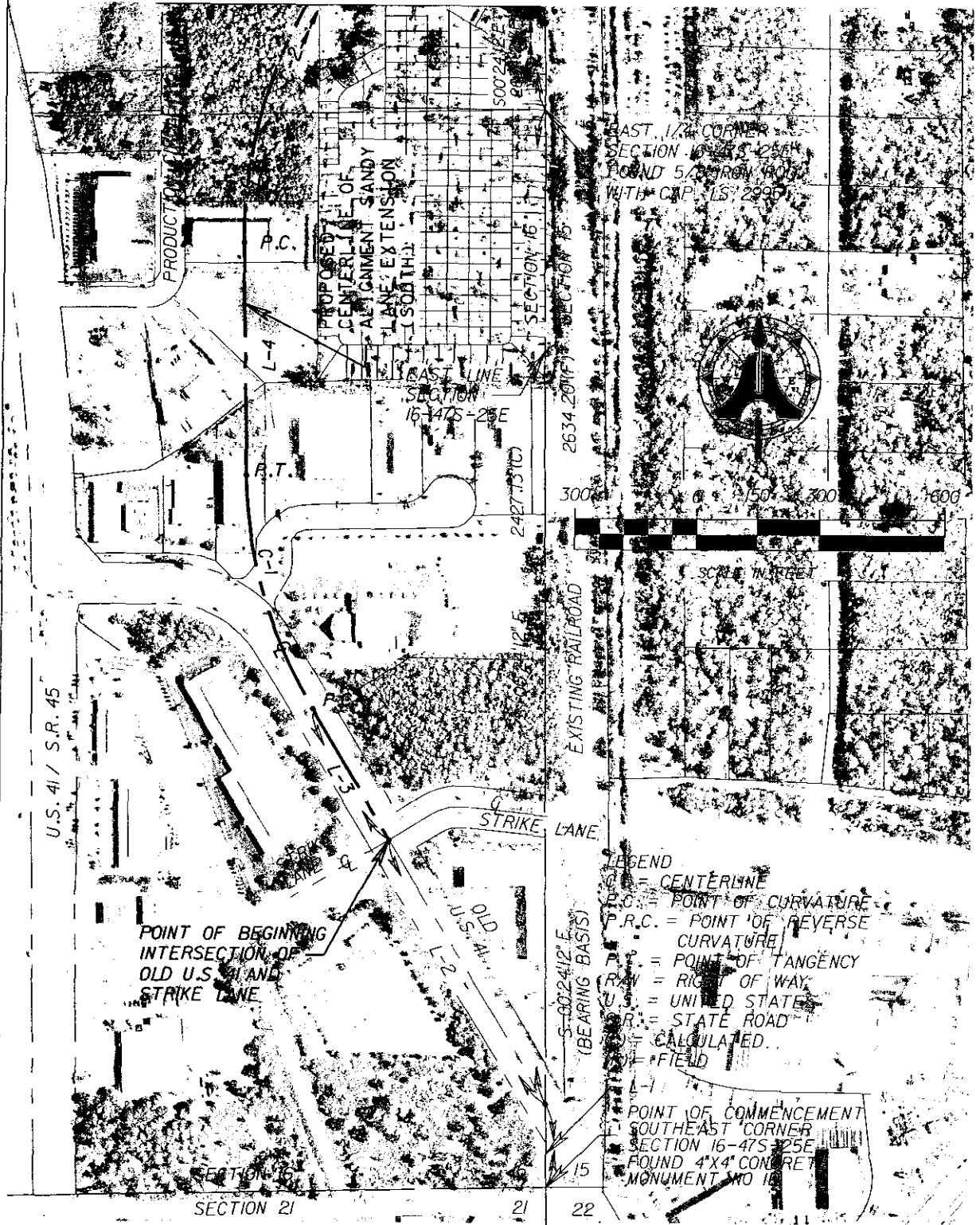
DATE  
10/21/04

THIS IS NOT A SURVEY SHEET 1 OF 3

PROJECT NUMBER: 04-8663	DESCRIPTION: SANDY LANE EXTENSION (SOUTH) CORRIDOR ALIGNMENT	SKETCH OF DESCRIPTION
DRAWN BY: LWC	CUENT:	LEE COUNTY DEPARTMENT OF TRANSPORTATION
DATE: 10/18/04	SEC-TWP-RGE 16-47S-25E	FILE: 8663 (S-1)
		LEESVILLE LEE COUNTY

SANDY LANE EXTENSION (SOUTH) CORRIDOR ALIGNMENT  
SECTION 16, TOWNSHIP 47 SOUTH, RANGE 25 EAST  
LEE COUNTY, FLORIDA

MATCH LINE SEE SHEET 3



CURVE	RADIUS	DELTA	ARC	CHORD	CHORD BEARING
C-1	1150.00'	29°57'47"RT.	601.40'	594.57'	N16°02'12"W
C-2	1150.00'	38°23'55"RT.	770.71'	756.37'	N18°08'39"E
C-3	450.00'	37°31'12"LT.	294.68'	289.44'	N18°35'00"E
C-4	720.00'	15°06'06"RT.	189.77'	189.22'	N07°22'07"E

LINE	BEARING	DISTANCE
L-1	N00°24'12"W	207.07'
L-2	N31°01'06"W	750.71'
L-3	N31°01'06"W	369.45'
L-4	N01°03'19"W	566.63'
L-5	N00°10'36"W	1775.67'
L-6	S88°56'29"W	369.75'

**AIM ENGINEERING & SURVEYING, INC.**  
5300 LEE BLVD.  
P.O. BOX 1235  
LEHIGH ACRES  
FLORIDA 33970  
239/332-4569  
FX:239/332-8734

**AIM**

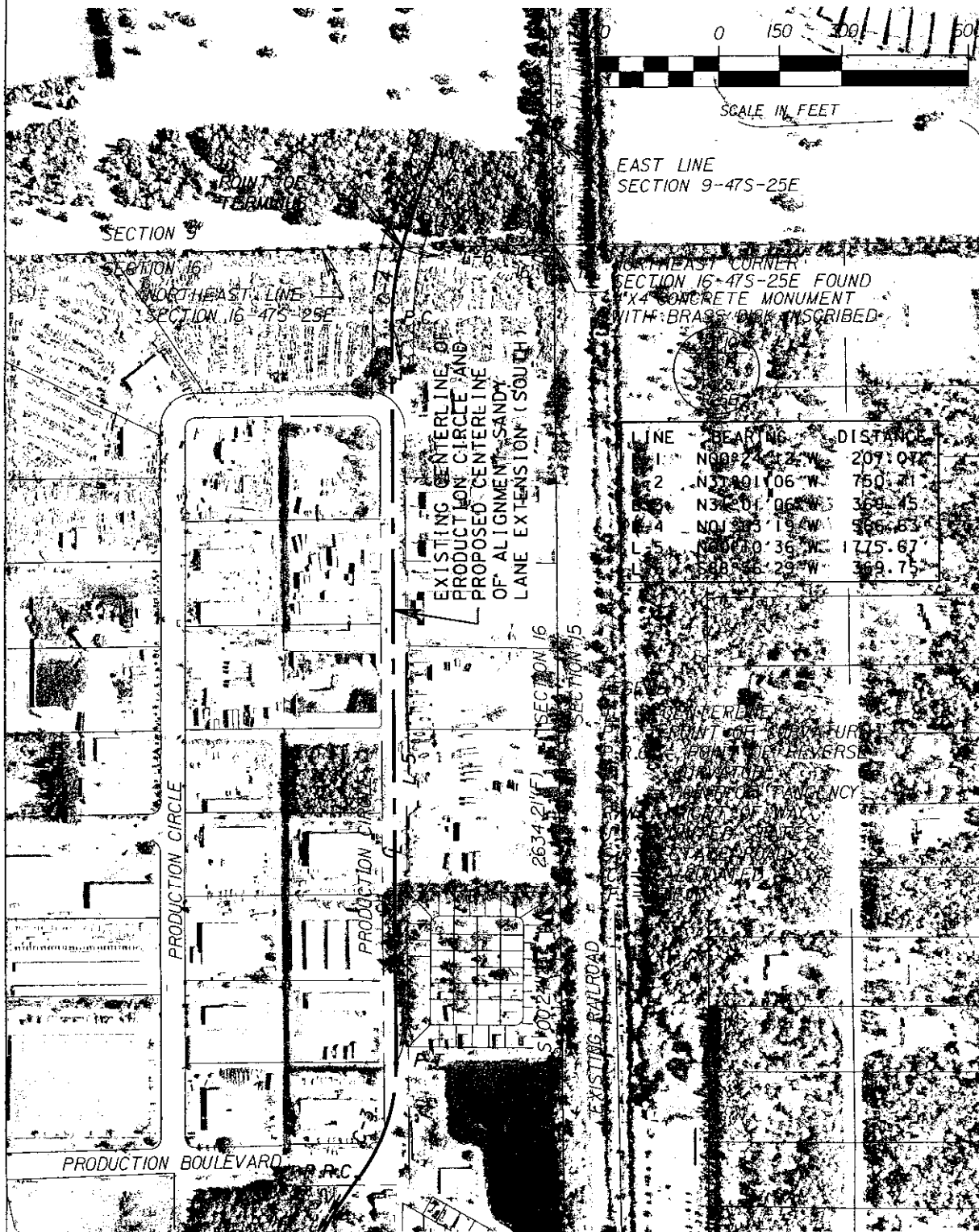
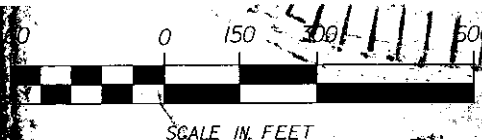
Licensed Business Number 3114

THIS IS NOT A SURVEY SHEET 2 OF 3

PROJECT NUMBER:	DESCRIPTION:	SKETCH OF DESCRIPTION
04-8663	SANDY LANE EXTENSION (SOUTH) CORRIDOR ALIGNMENT	
DRAWN BY:	CLIENT:	
LWC	LEE COUNTY DEPARTMENT OF TRANSPORTATION	
DATE:	SEC-TWP-RGE	FILE:
10/18/04	16-47S-25E	8663 (S-2)
COUNTY:	LEE COUNTY	

SANDY LANE EXTENSION (SOUTH) CORRIDOR ALIGNMENT  
SECTION 16, TOWNSHIP 47 SOUTH, RANGE 25 EAST  
LEE COUNTY, FLORIDA

CURVE	RADIUS	DELTA	ARC	CHORD	CHORD BEARING
C-1	1150.00'	29°57'47"RT.	601.40'	594.57'	N16°02'12"W
C-2	1150.00'	38°23'55"RT.	770.71'	756.37'	N18°08'39"E
C-3	450.00'	37°31'12"LT.	294.68'	289.44'	N18°35'00"E
C-4	720.00'	15°06'06"RT.	189.77'	189.22'	N07°22'07"E



LINE	BEARING	DISTANCE
L-1	N089°24'12"W	207.07'
L-2	N37°01'06"W	750.71'
L-3	N37°01'06"W	368.75'
L-4	N01°35'18"W	566.83'
L-5	N00°00'36"W	1775.67'
L-6	S08°56'29"W	369.75'

MATCH LINE SEE SHEET 2

**AIM ENGINEERING & SURVEYING, INC.**  
5300 LEE BLVD.  
P.O. BOX 1235  
LEHIGH ACRES  
FLORIDA 33970  
239/332-4569  
FX:239/332-8734  
Licensed Business Number 3114

THIS IS NOT A SURVEY SHEET 3 OF 3

PROJECT NUMBER: 04-8663	DESCRIPTION: SANDY LANE EXTENSION (SOUTH) CORRIDOR ALIGNMENT	SKETCH OF DESCRIPTION
DRAWN BY: LWC	CLIENT: LEE COUNTY DEPARTMENT OF TRANSPORTATION	
DATE: 10/18/04	SEC-TWP-RGE 16-47S-25E	FILE: 8663 (S-3)
		COUNTY: LEE COUNTY

SANDY LANE EXTENSION (NORTH) CORRIDOR ALIGNMENT  
 SECTIONS 28 AND 33, TOWNSHIP 46 SOUTH, RANGE 25 EAST  
 LEE COUNTY, FLORIDA

LEGAL DESCRIPTION:

A PROPOSED ROAD WAY ALIGNMENT FOR SANDY LANE EXTENSION LYING WITHIN IN SECTIONS 28 AND 33, TOWNSHIP 46 SOUTH, RANGE 25 EAST, LEE COUNTY, FLORIDA THE CENTERLINE FOR WHICH IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 33; THENCE N 01°12'1" W, ALONG THE EAST LINE OF SAID SECTION 33, A DISTANCE OF 377.44 FEET TO A POINT OF CURVATURE; THENCE ALONG THE ARC OF SAID CURVE TO THE LEFT HAVING A RADIUS OF 1146.00 FEET, A DELTA OF 36°01'28", CHORD BEARING OF N 19°12'05" W AND CHORD DISTANCE OF 708.73 FEET, AN ARC DISTANCE OF 720.54 FEET TO THE END OF SAID CURVE AND TO A POINT OF REVERSE CURVATURE; THENCE ALONG THE ARC OF SAID CURVE TO THE RIGHT HAVING A RADIUS OF 1146.00 FEET, A DELTA OF 36°51'46", CHORD BEARING OF N 18°46'56" W AND CHORD DISTANCE OF 724.66 FEET, AN ARC DISTANCE OF 737.31 FEET TO A POINT LYING 50.00 FEET EAST OF THE EAST RIGHT OF WAY LINE OF EXISTING RAILROAD; THENCE N 00°21'03" W, PARALLEL AND 50.00 FEET EAST OF SAID EAST RIGHT OF WAY LINE, A DISTANCE OF 2352.71 FEET TO A POINT OF CURVATURE; THENCE ALONG THE ARC OF SAID CURVE THE LEFT HAVING A RADIUS OF 4500.00 FEET, A DELTA OF 06°47'55", A CHORD BEARING OF N 03°45'00" W AND CHORD DISTANCE OF 533.65 FEET, AN THE ARC DISTANCE OF 533.97 FEET TO A POINT OF REVERSE CURVATURE; THENCE ALONG THE ARC OF SAID CURVE TO THE RIGHT HAVING A RADIUS OF 800.00 FEET, A DELTA OF 41°21'38", CHORD BEARING OF N 13°31'51" E AND CHORD DISTANCE OF 565.04 FEET, AN ARC DISTANCE OF 577.50 FEET TO THE END OF SAID CURVE; THENCE N 34°12'40" E, A DISTANCE OF 389.16 FEET TO A POINT OF CURVATURE; THENCE ALONG THE ARC OF SAID CURVE TO THE LEFT HAVING A RADIUS OF 500.00 FEET, A DELTA OF 33°47'18", CHORD BEARING OF N 17°19'01" E AND CHORD DISTANCE OF 290.60 FEET, AN ARC DISTANCE OF 294.86 FEET TO THE END OF SAID CURVE; THENCE N 00°25'22" E, A DISTANCE OF 553.04 FEET; THENCE N 05°34'38" W, A DISTANCE OF 96.45 FEET TO A POINT ON THE NORTH LINE OF SAID SECTION 28 AND THE POINT OF TERMINUS, SAID POINT LYING N 89°14'00" W, 10.45 FEET FROM THE NORTHEAST CORNER OF SAID SECTION 28.


NOTE:

BEARINGS ARE BASED UPON THE EAST LINE OF SOUTHEAST 1/4 OF SECTION 28 HAVING A BEARING OF S 00°21'03" E.

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

PREPARED BY:  
 AIM ENGINEERING & SURVEYING, INC.

*Bob L. Potter* 10/21/04  
 BOB L. POTTER, P.E.M. BATE  
 PROFESSIONAL SURVEYOR AND MAPPER  
 FLORIDA CERTIFICATE NO. 2288

AIM ENGINEERING & SURVEYING, INC.  
  
 5300 LEE BLVD.  
 P.O. BOX 1235  
 LEHIGH ACRES  
 FLORIDA 33970  
 239/332-4569  
 FX:239/332-8734  
 Licensed Business Number 3114

THIS IS NOT A SURVEY SHEET 1 OF 3

PROJECT NUMBER: 04-8663		DESCRIPTION: SKETCH OF DESCRIPTION SANDY LANE EXTENSION (NORTH) CORRIDOR ALIGNMENT	
DRAWN BY: LWC		CLIENT: LEE COUNTY DEPARTMENT OF TRANSPORTATION	
DATE: 10/18/04	SEC-TWP-RGE: 28 & 33-46S-25E	FILE: 8663 (N-1)	COUNTY: LEE COUNTY

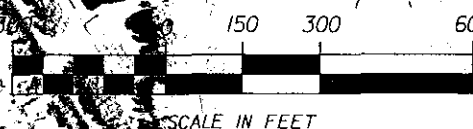


SANDY LANE EXTENSION (NORTH) CORRIDOR ALIGNMENT  
 SECTIONS 28 AND 33, TOWNSHIP 46 SOUTH, RANGE 25 EAST  
 LEE COUNTY, FLORIDA

NORTHEAST  
 CORNER  
 SECTION  
 28-46S-25E  
 FOUND P.K. NAIL  
 INK ENGINEERING  
 PCP REF PLS  
 NO. 856



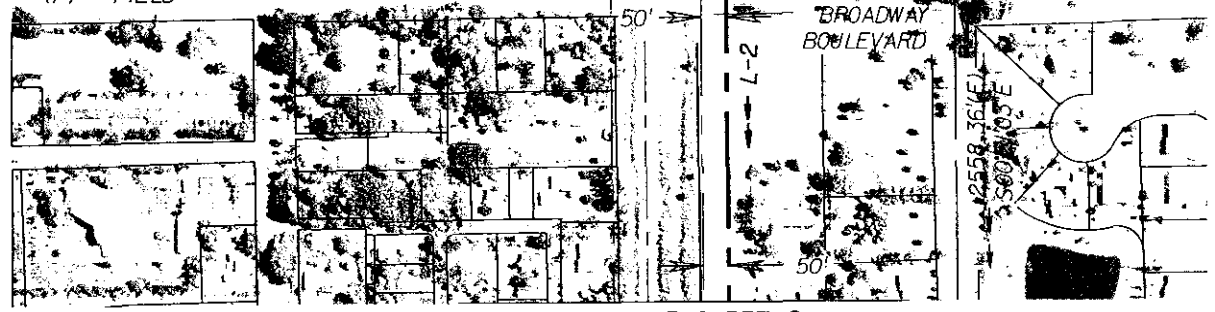
KORESHAN BOULEVARD



CURVE	RADIUS	DELTA	ARC	CHORD	CHORD BEARING
C-1	1146.00'	28°LT.	720.54'	708.73'	N19°2'05"W
C-2	1146.00'	46°RT.	737.31'	724.66'	N18°46'56"W
C-3	4500.00'	55°LT.	533.97'	533.65'	N03°45'00"W
C-4	800.00'	21°RT.	577.50'	565.04'	N13°31'51"E
C-5	500.00'	47°LT.	294.86'	290.60'	N17°58'01"E

LINE	BEARING	DISTANCE
L-1	N01°17'21"W	377.44'
L-2	N00°21'03"W	2352.71'
L-3	N34°12'40"E	389.16'
L-4	N09°25'22"E	553.04'
L-5	N03°34'38"W	96.45'
L-6	N89°14'00"W	10.45'

LEGEND  
 C.C. = CENTERLINE  
 P.C. = POINT OF CURVATURE  
 P.O.V. = POINT OF REVERSE CURVATURE  
 P.T. = POINT OF TANGENCY  
 R/W = RIGHT OF WAY  
 U.S. = UNITED STATES  
 S.R. = STATE ROAD  
 (C) = CALCULATED  
 (F) = FIELD



MATCH LINE SHEET 2

THIS IS NOT A SURVEY

SHEET 3 OF 3

AIM ENGINEERING & SURVEYING, INC.  
 5300 LEE BLVD.  
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 LEHIGH ACRES  
 FLORIDA 33970  
 239/332-4569  
 FX:239/332-8734  
 Financial Business Number 3114

PROJECT NUMBER: 04-8663	DESCRIPTION: SKETCH OF DESCRIPTION SANDY LANE EXTENSION (NORTH) CORRIDOR ALIGNMENT
DRAWN BY: LWC	CLIENT: LEE COUNTY DEPARTMENT OF TRANSPORTATION
DATE: 10/18/04	SEC-TWP-RGE: 28 & 33-46S-25E
FILE: 8663 (N-3)	COUNTY: LEE COUNTY



# **SANDY LANE EXTENSION CORRIDOR ALIGNMENT STUDY**

## **Evaluation of the Extension of Sandy Lane in the City of Bonita Springs, Estero and San Carlos Park Lee County, Florida**



*Prepared for:*

**Lee County Board of County Commissioners  
Department of Transportation  
P.O. Box 398  
Fort Myers, Florida 33902-0398  
Contract Number 2376**

**October 4, 2004**

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## **Section 1.0 INTRODUCTION**

---

The Lee County Department of Transportation (LC DOT) is conducting a Corridor Alignment Study to evaluate alternative alignments for the extension of Sandy Lane in southern Lee County and the City of Bonita Springs east of U.S. 41 from Old U.S. 41 to Oriole Road as shown on Exhibit 1-1. The southern portion of the project study area extends north from Old U.S. 41 to just north of the Bonita Springs city limits. The northern portion of the study area extends from Corkscrew Road north to the intersection of Oriole Road and Alico Road. The total project length for this study is approximately 5 miles (mi).

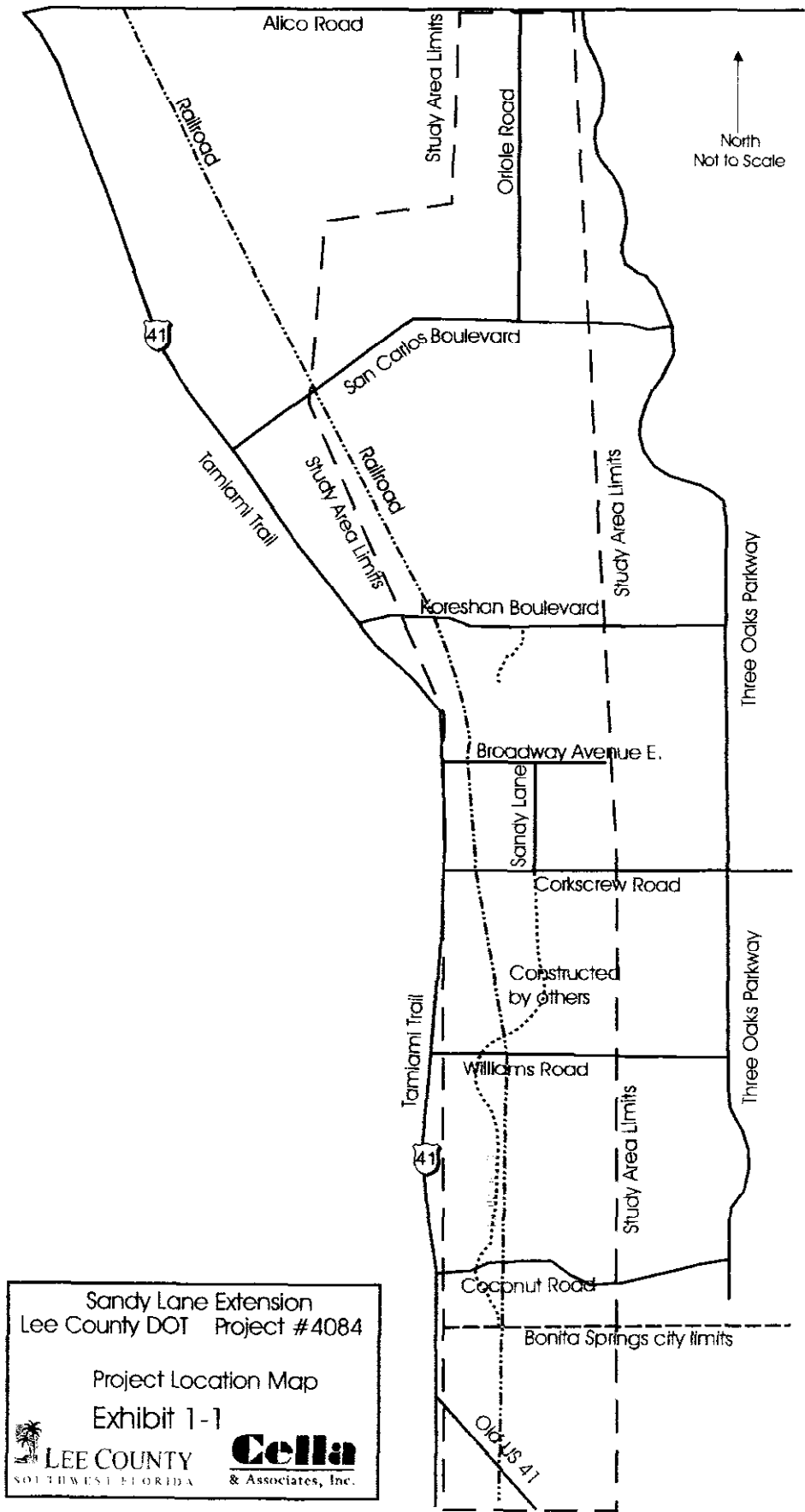
### **1.1 PURPOSE**

The objectives of this study are to develop a transportation facility that is economically efficient and environmentally sound. This study will document the results of the environmental and engineering analyses conducted to assist LC DOT in reaching a decision on the location and conceptual design for the long-range improvements for a transportation facility east of U.S. 41 from Old U.S. 41 to Oriole Road. The design year for the proposed improvements is 2020. This report documents the need for improvements and the procedures used to evaluate the alternatives developed for this study. Using the engineering and environmental data collected for the project, a comparison of the Build Alternative verses the No-Build Alternative will be detailed in a matrix format that will identify the effects that each alignment has on the community and the environment. This report summarizes the factors considered in the development of the preferred alignment:

- Alternative Alignment Evaluation
- Costs including right-of-way acquisition requirements
- Environmental Factors
- Safety Considerations
- Long-range area planning
- Utilities and drainage
- Contamination screening
- Public involvement

### **1.2 PROJECT DESCRIPTION**

The project limits of the Sandy Lane Extension Corridor Alignment Study will be generally east of U.S 41 from Old U.S. 41 to Oriole Road. The project limits begin at Old U.S. 41 in the City of Bonita Springs to the City of Bonita Springs city limits approximately one mile in length. To date, private parties have indicated that they will construct portions of the extension of Sandy Lane from the Bonita Springs city limits north to Corkscrew Road. The project study limits then resume at the intersection of Corkscrew Road and existing Sandy Lane and proceed north to the intersection of Oriole Road and Alico Road, approximately four



Sandy Lane Extension  
 Lee County DOT Project #4084

Project Location Map  
 Exhibit 1-1




(4) miles in length. The existing segments of Old U.S. 41, Sandy Lane and Oriole Road will be utilized to the greatest extent feasible. The No-Build Alternative will be a viable alternative throughout the study.

## **2.1 BACKGROUND**

The transportation planning process takes into account the needs for Lee County over a twenty-year horizon. This ongoing process identifies what types of improvements will be needed by the planning horizon year. The Lee County Metropolitan Planning Organization (MPO) consists of the Florida Department of Transportation (FDOT), Lee County and all incorporated cities within the county. These government entities work together in an attempt to identify and meet the transportation needs for the county as a whole. During the planning process, the MPO advertises meetings regarding transportation planning in the local media and provides full public access to decisions and documents. It supports early and continuing public involvement in the development and review of its transportation plans and programs. Once decisions are made they are adopted into the MPO 2020 Financially Feasible Highway Plan which outlines the County's future transportation needs and establishes if funding is available by which those needs can be accomplished. The extension of Sandy Lane from Old U.S. 41 to Oriole Road was incorporated into the MPO 2020 Financially Feasible Plan in 1995 and is identified as a two-lane roadway, see Exhibit 2-1. In February 2004, the four-laning of Sandy Lane from Estero Parkway to Old U.S. 41 was incorporated into the 2020 Needs Assessment, see Exhibit 2-2.

## **2.2 EXISTING CONDITIONS**

Existing Sandy Lane is a two-lane local roadway in Estero that runs from Broadway Street to south of Corkscrew Road, see Exhibit 2-3. Oriole Road, part of the potential Sandy Lane improvement, runs from Alico Road to Matanzas Road in San Carlos Park, see Exhibit 2-4. There are no signalized intersections on either of these existing facilities. The areas are currently residential in nature, however, several commercial centers have been approved or are being proposed along the corridor, including Coconut Point (formerly known as Simon Suncoast), North Point, and Estero Community Park. These developments will greatly impact the nature of traffic on Sandy Lane and the other roadways in the area.

## **2.3 FACILITY NEED**

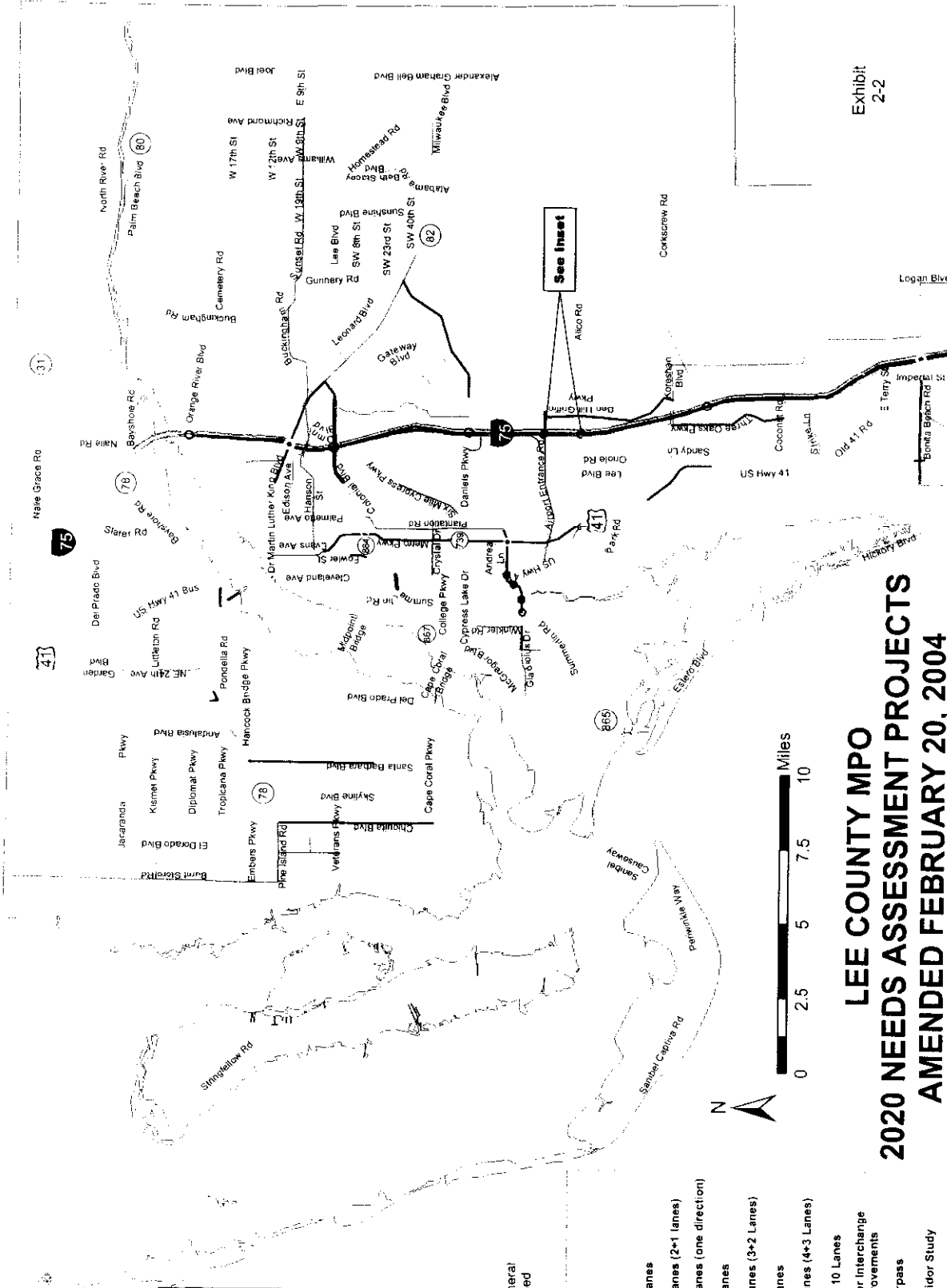
The traffic evaluation is presented in Section 5.0 and reveals that the Sandy Lane Extension would benefit U.S. 41 and Three Oaks Parkway. The traffic volume reduction on U.S. 41 with the construction of Sandy Lane is projected to be as much as 10,000 vehicles per day (vpd) in places. This is a significant reduction which will help reduce the congestion on U.S. 41. The congestion relief on Three Oaks Parkway is also fairly significant.

## **2.4 HURRICANE EVACUATION**

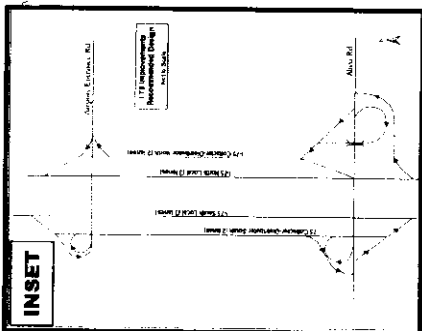
Hurricane evacuation is an especially critical issue in Lee County with its multitude of barrier island communities, lengthy Gulf of Mexico coastline, and generally low-lying topography.







# LEE COUNTY MPO 2020 NEEDS ASSESSMENT PROJECTS AMENDED FEBRUARY 20, 2004

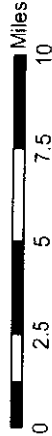


The lines on the map represent only the general routes. Specific alignments will be determined through corridor and design studies.

### 2020 Highway Projects Financially Feasible Upon Additional Highway Plan Funding

- 2 Lanes
- 3 Lanes (2+1 lanes)
- 3 Lanes (one direction)
- 4 Lanes
- 5 Lanes (3+2 Lanes)
- 6 Lanes
- 7 Lanes (4+3 Lanes)

- 8 or 10 Lanes
- Major Interchange Improvements
- Overpass
- Corridor Study



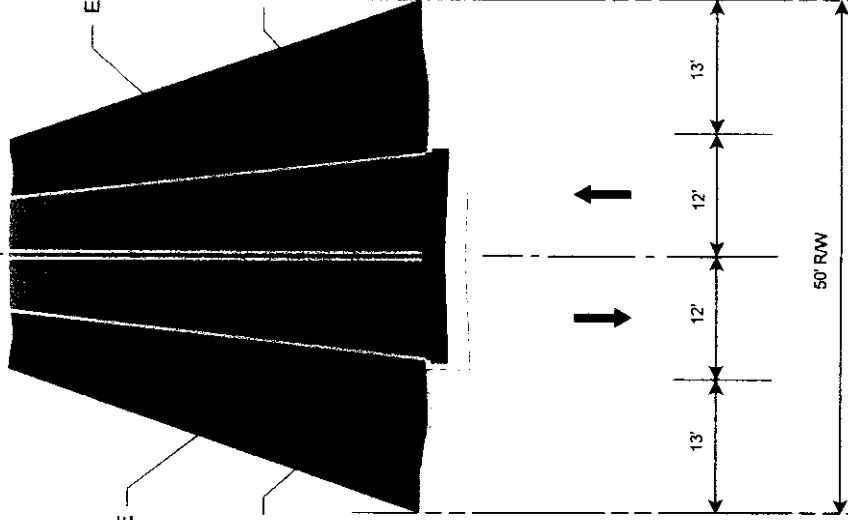
CENTER LINE OF EXISTING ROADWAY

EXISTING SWALE

EXISTING SHOULDER

EXISTING SWALE

EXISTING SHOULDER



POSTED SPEED = 30 MPH

SANDY LN. LOOKING SOUTH  
AT BROADWAY STREET

Exhibit  
2-3

DATE	BY	DESCRIPTION	 LEE COUNTY DEPARTMENT OF TRANSPORTATION ROADS PROJECT NO. 2000-0001 SHEET NO. 2-3 OF 2	 CELLA & Associates, Inc.	EXISTING TYPICAL SECTION SANDY LANE	SHEET NO. NO.
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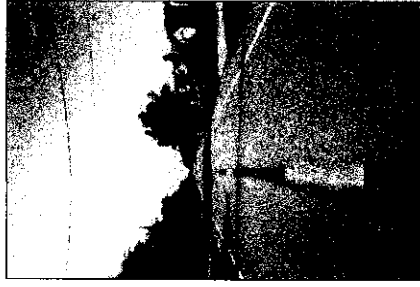
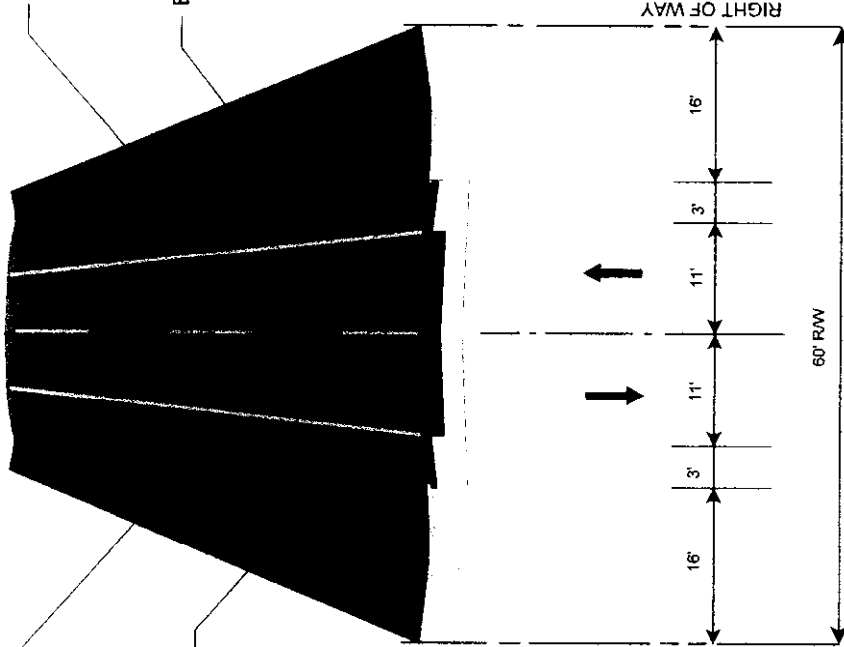
CENTER LINE OF EXISTING ROADWAY

EXISTING SWALE

EXISTING PAVED SHOULDER

EXISTING SWALE

EXISTING PAVED SHOULDER



POSTED SPEED = 30 MPH

Exhibit 2-4

ORIOLE RD. LOOKING SOUTH IN THE VICINITY OF ALICO RD.

DATE	SCALE	PROJECT NO.	DATE

**Cella**  
& Associates, Inc.



LEE COUNTY  
DEPARTMENT OF TRANSPORTATION  
COUNTY ENGINEER

**EXISTING TYPICAL SECTION**  
**ORIOLE ROAD**

The Lee County Division of Public Safety – Emergency Management Department and the Southwest Florida Regional Planning Council are responsible for developing plans for the safe and efficient evacuation of residents in low-lying Lee County.

To prevent the overcrowding of bridges and arterial roadways during an evacuation event, several routes have been identified throughout the county to accommodate people moving from low-lying areas to higher ground. U.S. 41 and I-75 are designated as north/south hurricane evacuation routes in the project study area. Corkscrew and Alico Roads are designated as east-west hurricane evacuation routes. Sandy Lane Extension would provide additional north-south access for hurricane evacuation.

## **2.5 SOCIAL AND ECONOMIC DEMANDS**

North Naples, the City of Bonita Springs and Estero are one of the fastest growing areas in Lee and Collier Counties. Tables 2.1 through 2.3 represent the acreages available for development for Estero, Bonita Springs and San Carlos Park planning communities. The information was obtained from the Lee County Department of Community Development.

**Table 2.1 Bonita Springs Planning Community**

<b>Residential Use by Future Land Use Category</b>	<b>Acreage</b>		
	<b>Allocation for Year 2020</b>	<b>Existing</b>	<b>Available</b>
<b>Central Urban (CU)</b>	239	126	113
<b>Urban Community (UC)</b>	3779	3239	684
<b>Suburban (S)</b>	128	315	215
<b>Outlying Suburban (OS)</b>	1050	616	1190
<b>Industrial Development (ID)</b>	15	21	-6
<b>General Interchange (GI)</b>	7	33	-11
<b>Rural (R)</b>	1037	645	392
<b>Wetlands (WL)</b>	0	7.44	-7.44
<b>Density Reduction/Ground Water Resource (DRGR)</b>	750	431.72	318.28
<b>Total Residential</b>	<b>7005</b>	<b>5174.62</b>	<b>1830.38</b>
<b>Other Uses</b>	<b>Acreage</b>		
	<b>Allocation for Year 2020</b>	<b>Existing</b>	<b>Available</b>
<b>Commercial</b>	1066	957.08	109
<b>Industrial</b>	480	18.52	461.48

**Table 2.2 Estero Planning Community**

<b>Residential Use by Future Land Use Category</b>	<b>Acreage</b>		
	<b>Allocation for Year 2020</b>	<b>Existing</b>	<b>Available</b>
<b>Urban Community (UC)</b>	327	245.9	81.1
<b>Suburban (S)</b>	1572	1076.84	495.16
<b>Outlying Suburban (OS)</b>	837	272.58	564.42
<b>General Interchange (GI)</b>	15	3.1	11.9
<b>Rural (R)</b>	900	263.5	636.5
<b>Wetlands (RPA)</b>	0	7.64	-7.64
<b>Total Residential</b>	3651	1869.56	1781.44














<b>Other Uses</b>	<b>Acreage</b>		
	<b>Allocation for Year 2020</b>	<b>Existing</b>	<b>Available</b>
<b>Commercial</b>	1399	197.32	1201.68
<b>Industrial</b>	87	0	87

**Table 2.3 San Carlos Park Planning Community**

<b>Residential Use by Future Land Use Category</b>	<b>Acreage</b>		
	<b>Allocation for Year 2020</b>	<b>Existing</b>	<b>Available</b>
<b>Central Urban (CU)</b>	15	15.43	-0.43
<b>Urban Community (UC)</b>	930	638.96	291.04
<b>Suburban (S)</b>	2250	1643.07	607
<b>Industrial (IND)</b>	13	5.8	7.2
<b>University Community (UNC)</b>	860	3.27	856.73
<b>Rural (R)</b>	160	13.1	146.9
<b>Total Residential</b>	<b>4228</b>	<b>2319.63</b>	<b>1908.37</b>

<b>Other Uses</b>	<b>Acreage</b>		
	<b>Allocation for Year 2020</b>	<b>Existing</b>	<b>Available</b>
<b>Commercial</b>	1613	288.56	1324.44
<b>Industrial</b>	350	19.11	330.89

Exhibit 2-5 reflects the planned developments in the Bonita Springs, Estero and San Carlos Park area. Population increases and commercial/retail development have continued to overwhelm the south Lee County transportation system and it is anticipated that this pace will continue.

-  City of Bonita Springs
  -  Development Type
  -  Residential
  -  Commercial
  -  Industrial
  -  Mixed
  -  Mobile Home
  -  RVPD
  -  PUD
  -  Community Facility
  -  Private Rec Facilities
  -  Withdrawn
  -  Land Use Change
- \* Indicates County Owned Conservation Lands and existing conservation lands owned by other agencies

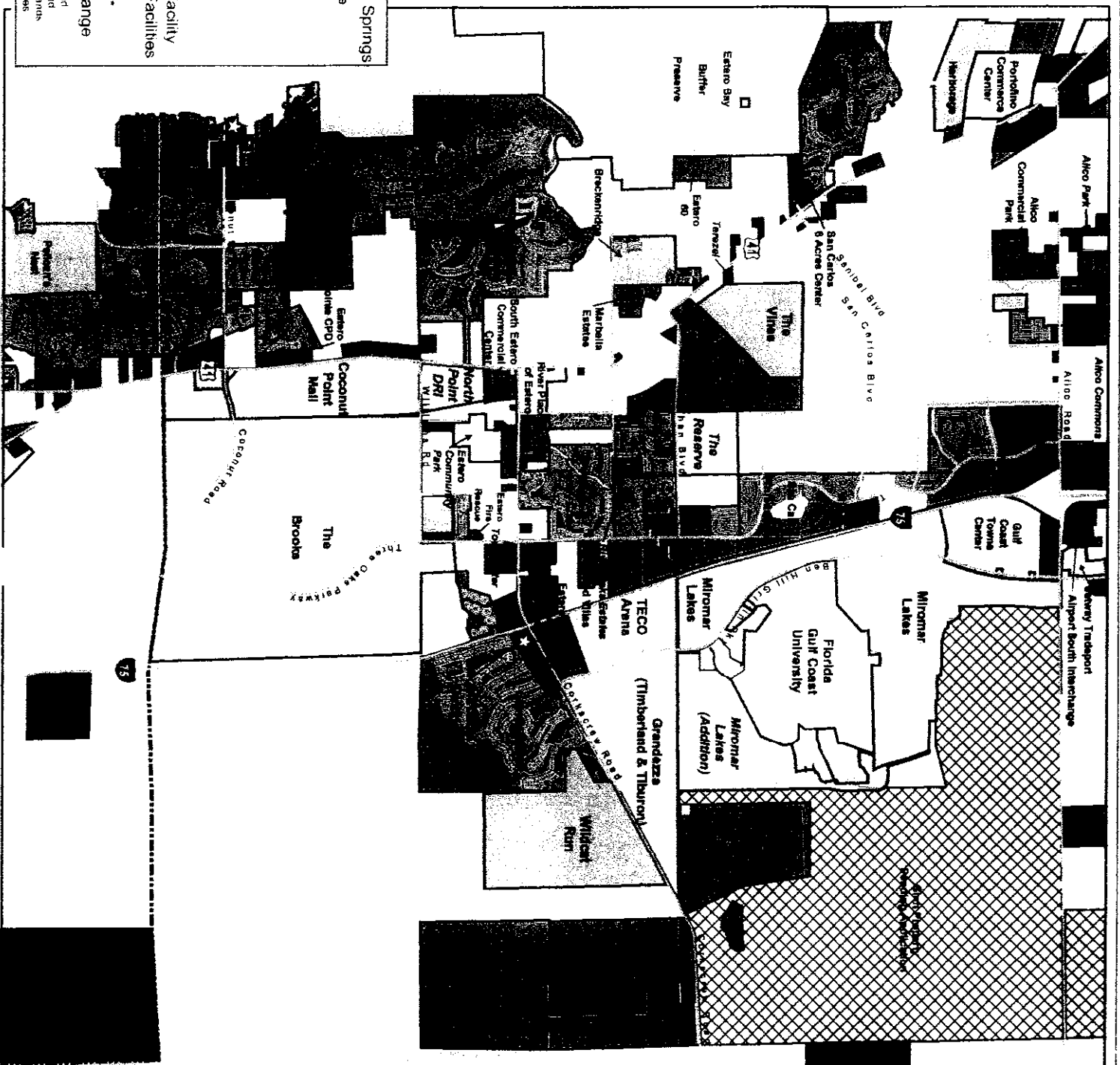


Exhibit  
2-5



Map Generated: October 2003



## **2.6 Summary**

The Sandy Lane Extension will provide significant traffic congestion relief in the southern portions of Lee County. The facility should run from Alico Road to Old U.S. 41 south of Strike Lane. The segment of Strike Lane between the new corridor and Old U.S. 41 should be removed to prevent stacking traffic conflicts at Strike Lane and U.S. 41.

### **3.1 EXISTING ROADWAY CHARACTERISTICS**

Existing Sandy Lane is a two-lane local roadway in Estero that runs from Broadway Street to Corkscrew Road. Oriole Road, part of the potential Sandy Lane improvement, runs from Alico Road to Matanzas Road in San Carlos Park. There are no signalized intersections on either of these existing facilities.

Sandy Lane between Corkscrew Road and Broadway Street is classified as a two-lane residential road. The road is 24 feet wide with no paved shoulders. It is a rural road with small drainage swales on either side that drain into Estero River. The right-of-way width varies between 40 and 50 feet. The posted speed limit is 30 MPH.

The Cascades development has set aside 80 feet of right-of-way for the extension of Sandy Lane. There is an additional 45-foot drainage easement that can be used for road right-of-way if the drainage needs are incorporated in the roadway design. The needed right-of-way width to accommodate the proposed typical section is 100 feet. It will be classified as a residential road.

Oriole Road between Matanzas Road and San Carlos Boulevard is classified as a two lane residential road. The road is 28 feet wide with paved shoulders on either side. Small drainage swales are located on both sides of the roadway. The width of the right-of-way varies from 60 to 70 feet. The posted speed limit is 30 MPH.

Oriole Road between San Carlos Boulevard and Alico Road is classified as a two lane residential road. The road is 28 feet wide with paved shoulders on both sides. Small drainage swales are located on both sides of the roadway. The width of the right-of-way is 60 feet. The posted speed limit for this section of Oriole is 30 MPH.

### **3.2 PEDESTRIAN AND BICYCLE FACILITIES**

On existing Sandy Lane, between Corkscrew Road and Broadway Street there are no pedestrian or bicycle facilities. On Oriole Road there are paved shoulders on both sides of the road used by bicycle traffic.

### **3.3 GEOTECHNICAL DATA**

A geotechnical evaluation was conducted to determine soil types in the study area as follows:

#### **Bonita Springs (east of the railroad)**

- Isle fine sand, depressional
- Felda fine sand, depressional
- Hallendale fine sand
- Copeland sandy loam depressional

## **Section 4.0 DESIGN CRITERIA**

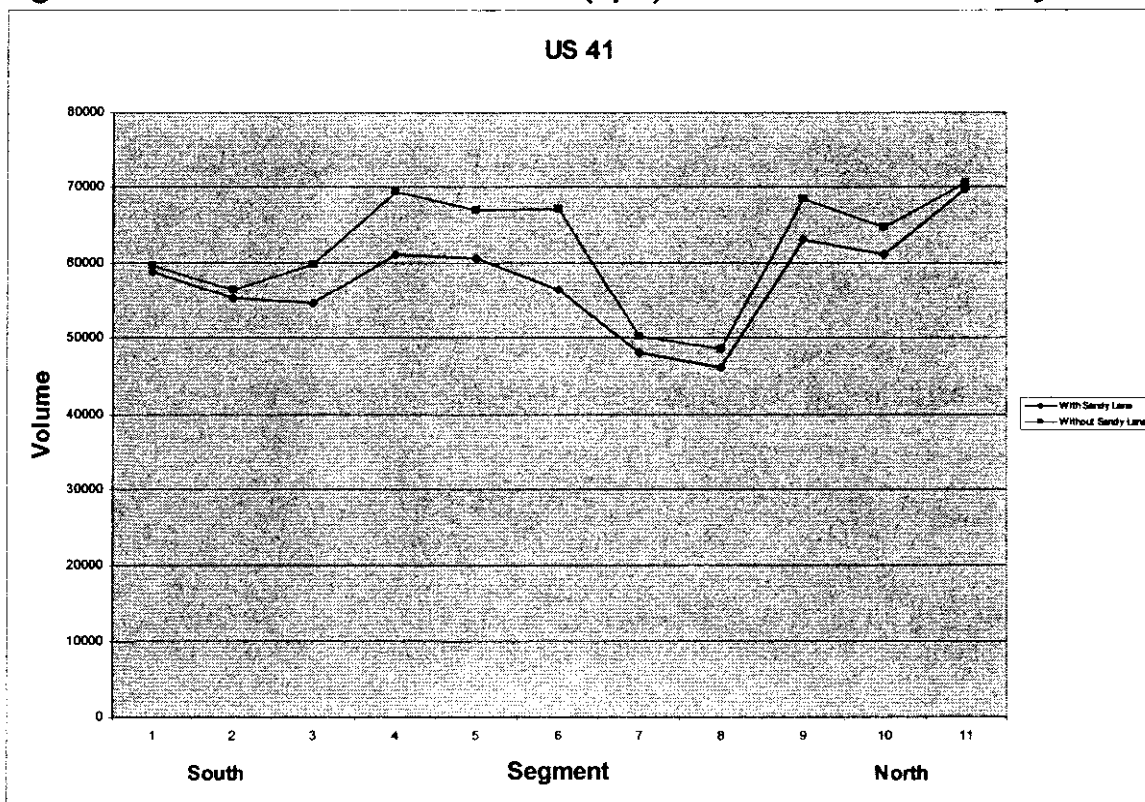
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The design speed for Sandy Lane extension is 35 MPH. The road will be classified as a collector facility that would accommodate bicycles and pedestrians. Per FDOT Plans Preparation Manual, Volume I, Chapter 2, certain geometric design criteria have to be met. Section 2.1, Table 2.1.1 suggests the use of 12' travel lanes for collector type road for either rural or urban setting. Section 2.3 Table 2.3.4 suggests a slope of 0.06 for a 5' paved shoulder for collector type road for a total shoulder width of 10 feet. Intersection angle of 15 degrees or less shall be used. Per Section 2.9, Table 2.9.2, using the 35 MPH speed limit, the minimum radius allowed for a curve with normal crown is 1146 feet. For a reverse crown, the minimum radius is 546 feet. Anything less than 546 feet will be required to be further superelevated. For the superelevation calculations a transition rate of 1:125 was used as stated in Table 2.9.4.

## Section 5.0 TRAFFIC

To determine whether or not the Sandy Lane Extension will provide traffic relief in southern Lee County, traffic projections both with and without the facility were developed. Florida Standard Urban Transportation Modeling Structure (FSUTMS) model runs were performed to project future year traffic volumes on the facilities in the area. The Lee County Metropolitan Planning Organization's (MPO) *Long Range Transportation Plan* uses this model to project traffic for the years 2020 and 2010. The input data for these years were obtained from the MPO's website and modified to represent the proposed alignments for the Sandy Lane Extension. In addition, the socio-economic data used as input for the model was modified to incorporate several proposed developments in the area, including Coconut Point, North Point, Estero Community Park and the proposed elementary school next to Estero High School. The year 2020 Peak Season Weekday Daily Traffic (PSWDT) volumes for U.S. 41 both with and without the Sandy Lane Extension are shown in Figure 5-1.

**Figure 5-1: U.S. 41 Year 2020 PSWDT (vpd) With And Without Sandy Lane Extension**

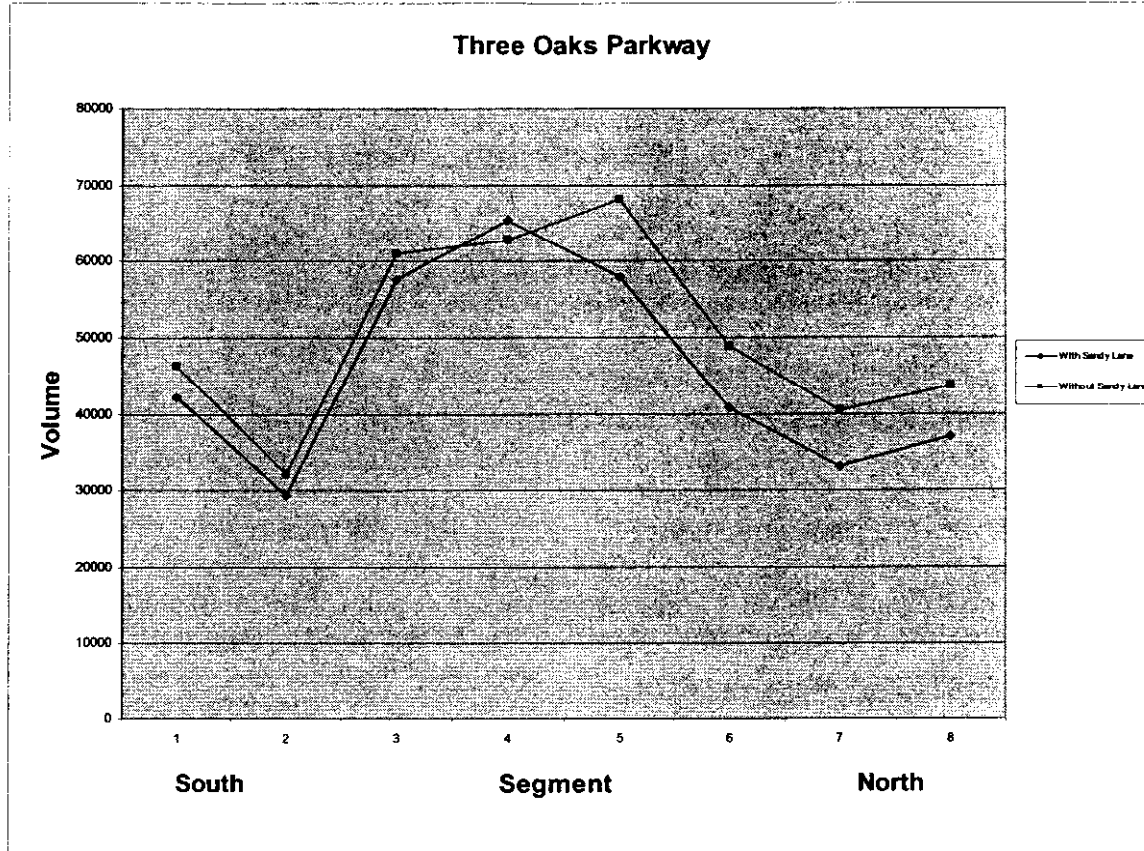


As shown in Figure 5-1, the traffic volume reduction on U.S. 41 with the construction of Sandy Lane is projected to be as much as 10,000 vehicles per day (vpd) in places. This is a significant reduction which will help reduce the congestion on U.S. 41.

The 2020 PSWDT volumes for Three Oaks Parkway both with and without the Sandy Lane

Extension are shown in Figure 5-2.

**Figure 5-2: Three Oaks Parkway Year 2020 PSWDT With And Without Sandy Lane**



The congestion relief on Three Oaks Parkway, shown in Figure 5-2, is also fairly significant. Based on the congestion relief predicted by the FSUTMS model, it is recommended that the Sandy Lane Extension be constructed.

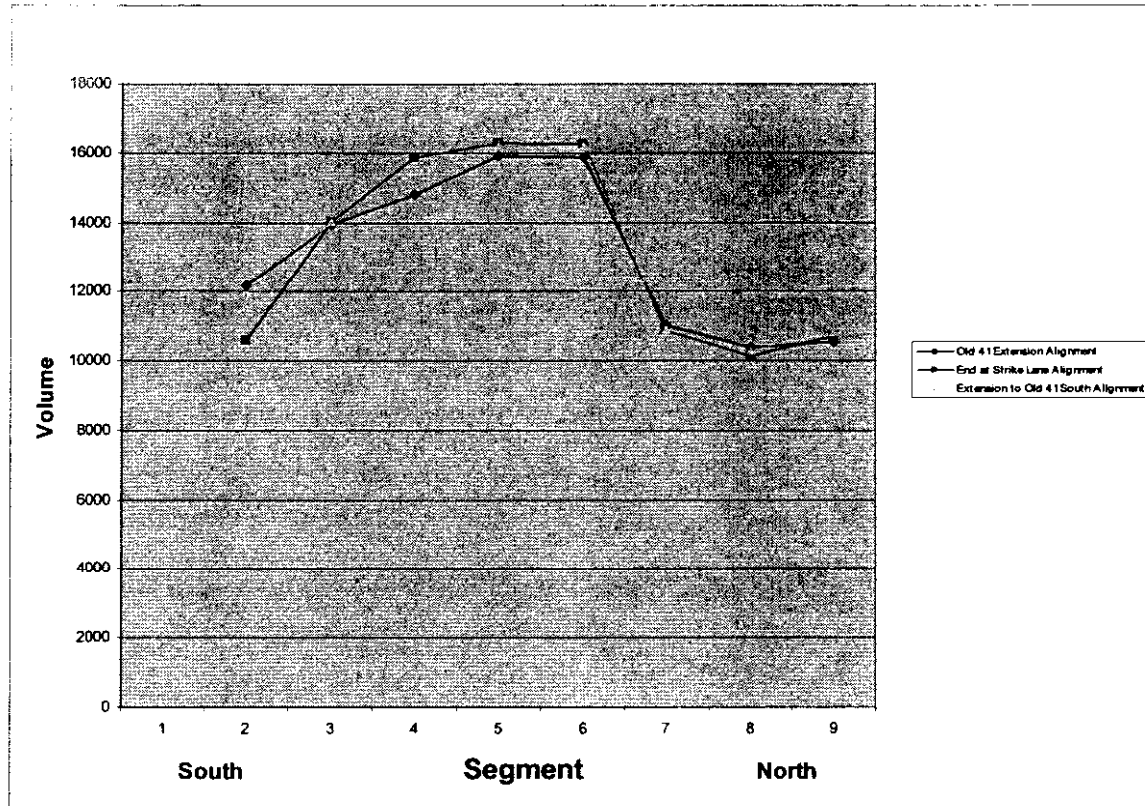
### 5.1 Alternatives Analysis

Many alternative alignments were identified in the preliminary stages of development of the project, however, for traffic modeling purposes, three basic alignments were developed to represent all alignments identified. This is due to the similarity of the various alignments from the standpoint of the model's traffic distribution and assignment function. The three alternatives were determined by the connection on the southern end of the project. The first alternative acted as an extension of Old U.S. 41 northward, the second tied into, but stopped at, Strike Lane east of Old U.S. 41, and the third was similar to the second with the exception that it extended across Strike Lane to tie into Old U.S. 41 on the south.

Traffic volume projections for the year 2020 and 2010 for Sandy Lane were determined using the FSUTMS traffic model. The reasonableness of the model distribution and assignment was analyzed using "select link" model runs. Review of the select link model runs showed

that no manual adjustments were necessary to the Sandy Lane traffic volumes to account for potential anomalies in the model. The projected Peak Season Weekday Daily Traffic (PSWDT) for each alternative alignment for the year 2020 is shown in Figure 5-3.

**Figure 5-3: Year 2020 PSWDT Volumes Sandy Lane Alternatives**



As shown, the overall volumes on Sandy Lane remain fairly constant regardless of the alignment proposed. Therefore, as overall corridor congestion relief is not alignment dependent, other issues, such as safety and traffic operations, will be the determining factor in alignment selection.

The intersections of Sandy Lane with Old U.S. 41 and Broadway Street are the most significantly impacted by the alignment chosen. This is due to the proximity of these intersections to other north-south transportation facilities. In the instance of the Old U.S. 41 intersection, the proximity of the first alternative (the Old U.S. 41 extension alignment) to U.S. 41 raises the issue of stacking of vehicles at the Strike Lane/U.S. 41 intersection and the safety of those vehicles. A possible solution is to eliminate the intersection. Therefore, an analysis with, the intersection eliminated was performed to determine the impact on traffic volumes. This analysis showed little impact on traffic volumes, however, with this change, traffic operations would be improved significantly.

The westernmost alignment is adversely affected by the Broadway Street intersection with Sandy Lane due to its close proximity to the railroad tracks. However, Seminole Gulf Railway stated that advanced warning signs should prevent safety issues with this intersection at the railroad.

The northern sections of the alignment have little influence on the traffic attracted to the corridor, therefore, traffic is not the issue which should determine the location of these segments. However, based on the considerations discussed here and in other sections of this report, it is recommended that the southern terminus of the facility should be Old U.S. 41 south of Strike Lane with a T-intersection at Strike Lane. The section of Strike Lane between Old U.S. 41 and the new corridor should be removed. In addition, the segment connecting Broadway Street to the new corridor should be removed, if the westernmost alignments are to be used. This will remove conflicts with the railroad crossing.

### **Factor Development**

The FSUTMS model produces Peak Season Weekday Daily Traffic (PSWDT). The Lee County Comprehensive Plan requires that roadways be designed for peak season, peak hour, peak direction conditions. Therefore, PSWDT volumes must be converted to peak season, peak hour, and peak direction using peak hour ( $K_{100}$ ), peak season (PSF) and peak direction (D) factors.

#### **Peak Season Factor (PSF)**

The Peak Season Factor is used to convert the Peak Season Weekday Daily Traffic to the Annual Average Daily Traffic. Historic information from the following Lee County Permanent Count Stations was used:

- 10 – Alico Road, west of I-75
- 15 – Corkscrew Road, west of I-75
- 16 – Old U.S. 41, 300 feet north of the Collier County Line
- 23 – U.S. 41, ¼ mile north of the Collier County Line
- 25 – U.S. 41, 500 feet south of Hickory Drive

It should be noted that values from Stations 7 – Bonita Beach Road, 1000 feet east of Vanderbilt Drive and 42 – Bonita Beach Road, ¼ mile west of I-75, while also in the study area, were not used in developing the peak season factor. This is due to the fact that these locations are more sensitive to seasonal variation than Sandy Lane Extension is likely to be. Although some seasonal variations are expected, the high seasonal variations experienced on Bonita Beach Road as it approaches the beaches and barrier islands are not expected. Using the data from the count stations described above, a factor of 1.144 was developed.

#### **Peak Hour ( $K_{100}$ )**

The  $K_{100}$  factor is applied to the Annual Average Daily Traffic to determine the peak hour

traffic of the roadway. For the  $K_{100}$  factor, historic information from the above listed Permanent Count Stations, including stations 7 and 42, was used. These data yielded an average of 10.6%.

### Peak Direction Factor (D)

For the D factor, again, the Permanent Count Stations 7, 10, 15, 16, 23, 25 and 42 were used. This yielded a factor of 0.57. The peak direction in the vicinity was assumed to be northbound based on the Permanent Count Station information. This factor was applied to all segments of the Sandy Lane Extension.

## 5.2 Level of Service Analysis

The adopted level of service for roadways in Lee County is E on a peak season, peak hour, peak direction basis. The PSWDT volumes were converted to Annual Average Daily Traffic (AADT) volumes using the Peak Season Factor (PSF) determined above. The AADT was then converted to peak season, peak direction using the  $K_{100}$  and D factors also determined above. Levels of service are determined using the Lee County Department of Transportation's *Generalized Peak Hour Directional Service Volumes for Urbanized Areas* and are shown in Table 5.1 for the year 2020.

**Table 5.1: Level of Service Calculations for Sandy Lane Extension for Year 2020**

FROM	TO	FSUTMS Model PSWDT	$K_{100}$	D	PSF	Peak Hour Two Way	Peak Hour Peak Direction	Service Volume	L O S
Old U.S. 41 South	Strike Lane	12229	0.102	0.57	1.137	1097	625	920	C
Old U.S. 41 North/ Strike Lane	Coconut Rd	11610	0.102	0.57	1.137	1042	594	920	C
Coconut Rd	Williams Rd	14027	0.102	0.57	1.137	1258	717	920	C
Williams Rd	Corkscrew Rd	15511	0.102	0.57	1.137	1392	793	920	D
Corkscrew Rd	Broadway	16236	0.102	0.57	1.137	1456	830	920	D
Broadway	Esteros Parkway	16184	0.102	0.57	1.137	1452	828	920	D
Esteros Parkway	San Carlos Blvd	10915	0.102	0.57	1.137	979	558	920	C
San Carlos Blvd	Winged Foot	10302	0.102	0.57	1.137	924	527	920	C
Winged Foot	Alico Rd	10833	0.102	0.57	1.137	972	554	920	C

All segments of the Sandy Lane Extension are projected to operate at an acceptable level of service through the year 2020.

## 5.3 Revised Traffic Projections Based on Recommendations

Based on the recommendation to further study the connection to Oriole Road, a revised traffic analysis without this connection was conducted as shown in Table 5.2.



**Table 5.2: Year 2020 Traffic Projections – Without Connection to Oriole Road**

ROADWAY	FROM	TO	TWO LANE
Sandy Lane	Old U.S. 41 South	Strike Lane	7947
Sandy Lane	Old U.S. 41 North/Strike Lane	Coconut Rd	8774
Sandy Lane	Coconut Rd	Williams Rd	14175
Sandy Lane	Williams Rd	Corkscrew Rd	16835
Sandy Lane	Corkscrew Rd	Broadway Street	12124
Sandy Lane	Broadway Street	Estero Parkway	11912
Sandy Lane	Estero Parkway	San Carlos Blvd	NA
Sandy Lane	San Carlos Blvd	Winged Foot	9297
Sandy Lane	Winged Foot	Alico Rd	10611

The projections demonstrate that even without the initial connection to Oriole Road, Sandy Lane will provide needed north-south capacity.

## **6.1 NO-BUILD ALTERNATIVE**

Assuming that private parties construct the portion of Sandy Lane from Corkscrew Road to the proposed extension of Pelican Colony Boulevard, the No-Build Alternative consists of not constructing the connection from Pelican Colony to Old U.S. 41 and not constructing the connection from Broadway Street to Oriole Road. Certain advantages are inherent with the No-Build Alternative, including:

- No new construction costs
- No disruption to existing land uses due to construction activities
- No disruption to traffic due to construction activities
- No right-of-way acquisitions or relocations
- No disturbance to natural resources

The disadvantages of the No-Build Alternative include impacts to U.S. 41 and to a lesser degree Three Oaks Parkway as follows:

- Increased roadway maintenance and user costs
- Increased roadway congestion
- Deterioration of air quality
- Inconsistency with the local transportation plans

## **6.2 BUILD ALTERNATIVES**

To effectively develop and evaluate all viable improvement options, the following seven-step process was applied:

**Step One:** Typical sections were developed

**Step Two:** Alternative alignments were developed

**Step Three:** Community meetings were held to take public input

**Step Four:** Alternative alignments were revised and additional alignments developed

**Step Five:** Costs and impacts were estimated for the alternative alignments and will be presented at a Public Workshop

**Step Six:** A recommended alternative was presented at the Public Workshop

**Step Seven:** A Public Meeting to adopt the alignment will be held at a regularly scheduled Board of County Commissioners meeting

Certain advantages would be associated with the Build Alternative, including:

- Increased north/south capacity
- Less traffic congestion on U.S. 41
- Consistency with local transportation plans

The disadvantages include:

- Design, right-of-way, and construction costs
- Right-of-way acquisition for roadway and for stormwater treatment
- Temporary disruption to traffic during construction
- Impacts to the natural and physical environment

## 6.3 TYPICAL SECTION EVALUATION

Several typical sections were developed and evaluated. The preferred typical sections selected for the project are discussed below and shown on Exhibits 6-1 and 6-2.

### Rural Typical Section

The rural typical section represents a collector facility with a 35 MPH design speed that will accommodate bicycles and pedestrians.

The typical section consists of two 12' wide travel lanes with a 5' paved shoulder. The paved shoulder can be utilized as an undesignated bike path. A 5' sidewalk is provided on both sides of the roadway adjacent to the right-of-way. Swales for drainage are located between the roadway and the sidewalk. The width of the right-of-way is 100 feet.

### Urban Typical Section

The urban typical section represents a collector facility with a 35 MPH design speed that will accommodate bicycles and pedestrians.

The typical section consists of two 12' wide travel lanes with a type F curb and gutter. There are two 4' undesignated bike paths on each side of the road. A 6' sidewalk is located behind the curb and gutter on both sides of the road. Interceptor swales for offsite drainage can be located behind the sidewalk if needed. The width of the right-of-way is 100 feet.

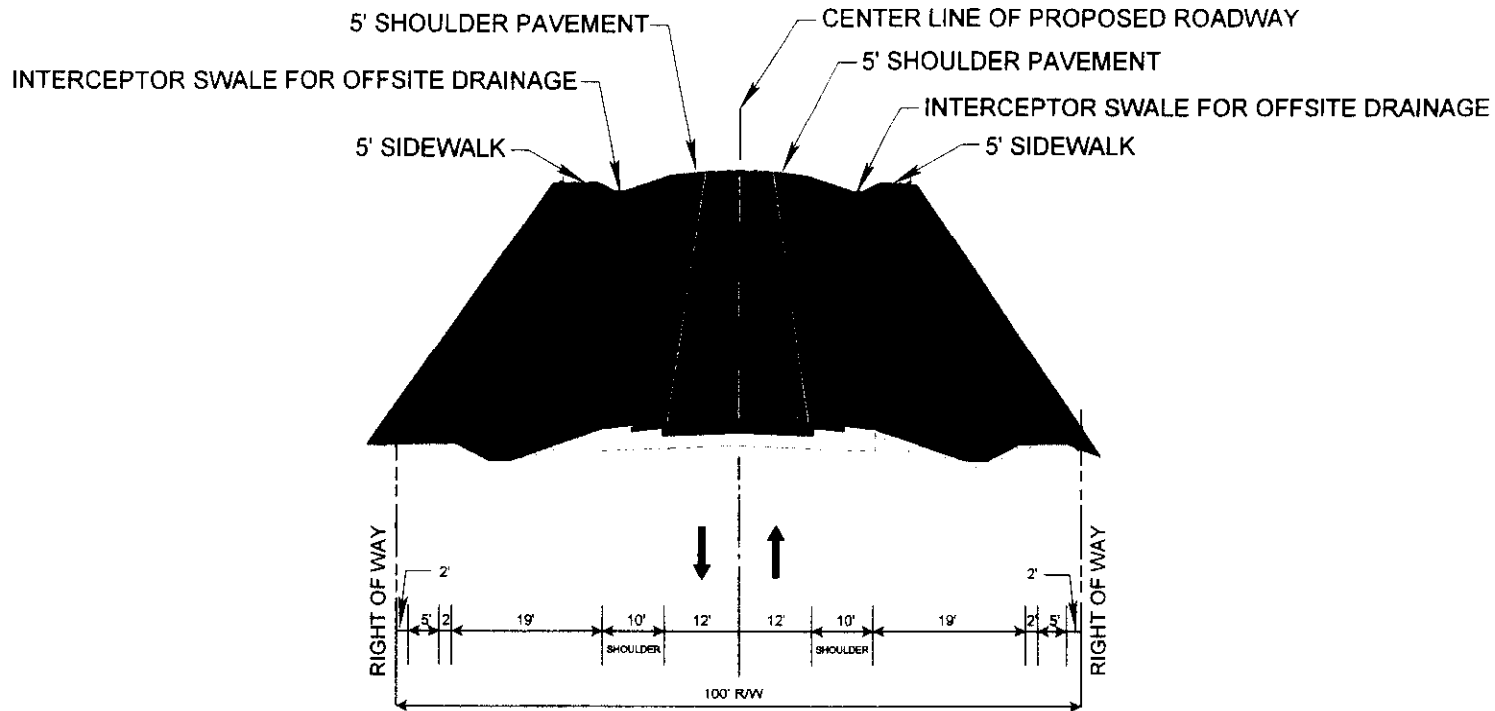
## 6.4 ALTERNATIVES

The following discussion presents the description of the alternatives as shown on Exhibits 6-3 through 6-5:

### ***Bonita Springs - Old U.S. 41 to Pelican Colony Boulevard***

#### *Rodas Alignment*

The Rodas alignment is located between Strike Lane and Pelican Colony Boulevard. As the Rodas alignment begins at Strike Lane it runs straight north along the existing two-way dirt road for 3800± feet in a 100' right-of-way. There are small swales located on both sides of the road that provide limited drainage. As the alignment approaches the northern end of Rodas Drive it curves west. The alignment proceeds straight for 605 feet until it crosses the Seminole Gulf Railroad, where it curves to the north. Both curves on this alignment are superelevated. This alignment is located in a predominately residential neighborhood, and

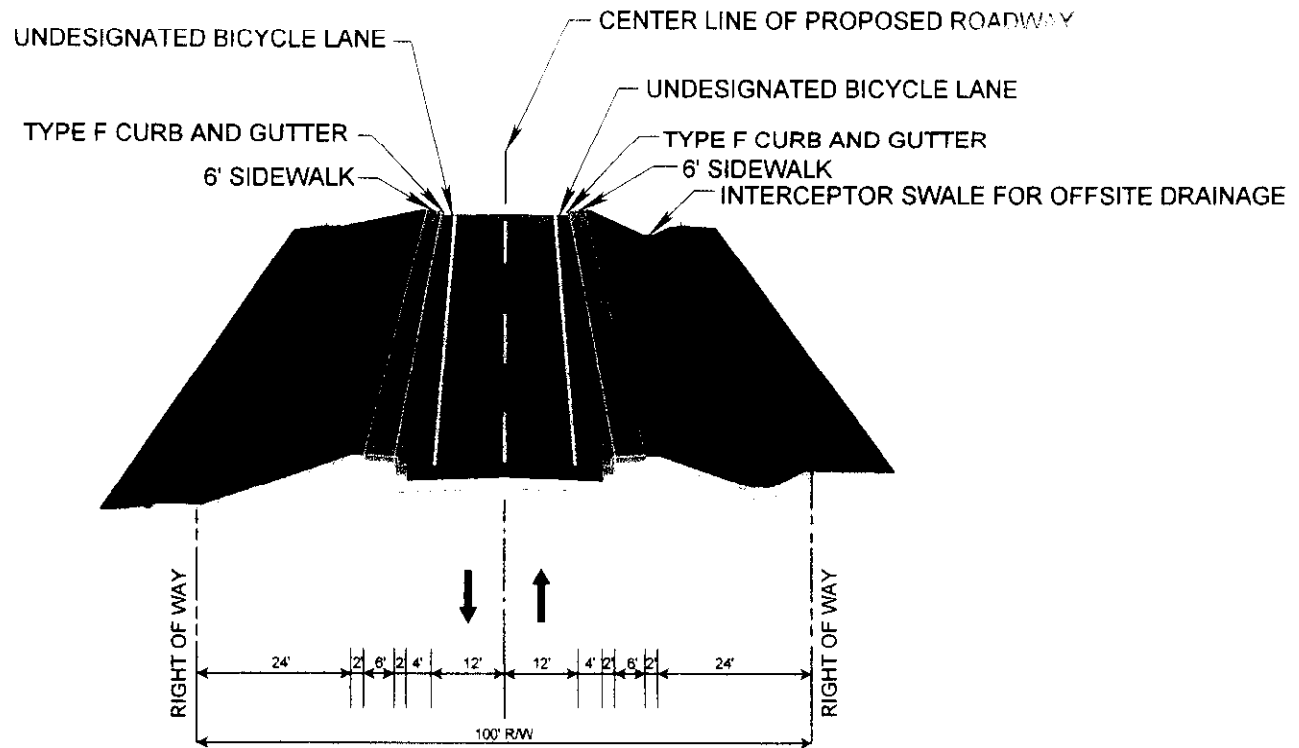


TRAFFIC DATA

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 ESTIMATED OPENING YEAR = AADT =  
 ESTIMATED DESIGN YEAR = AADT =  
 K = % D = % T = % (24 HOUR)  
 DESIGN HOUR T = %  
 DESIGN SPEED = 35 MPH  
 ROADWAY CLASSIFICATION = COLLECTOR

Exhibit  
6-1

			<p>LEF COUNTY DEPARTMENT OF TRANSPORTATION</p>	<p>RURAL TYPICAL SECTION CORRIDOR ALIGNMENT STUDY</p>	
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TRAFFIC DATA

CURRENT YEAR = AADT =  
 ESTIMATED OPENING YEAR = AADT =  
 ESTIMATED DESIGN YEAR = AADT =  
 K = % D = % T = % (24 HOUR)  
 DESIGN HOUR T = %  
 DESIGN SPEED = 35 MPH  
 ROADWAY CLASSIFICATION = COLLECTOR

Exhibit  
6-2

				LEE COUNTY DEPARTMENT OF TRANSPORTATION		URBAN TYPICAL SECTION CORRIDOR ALIGNMENT STUDY		SHEET 6-2

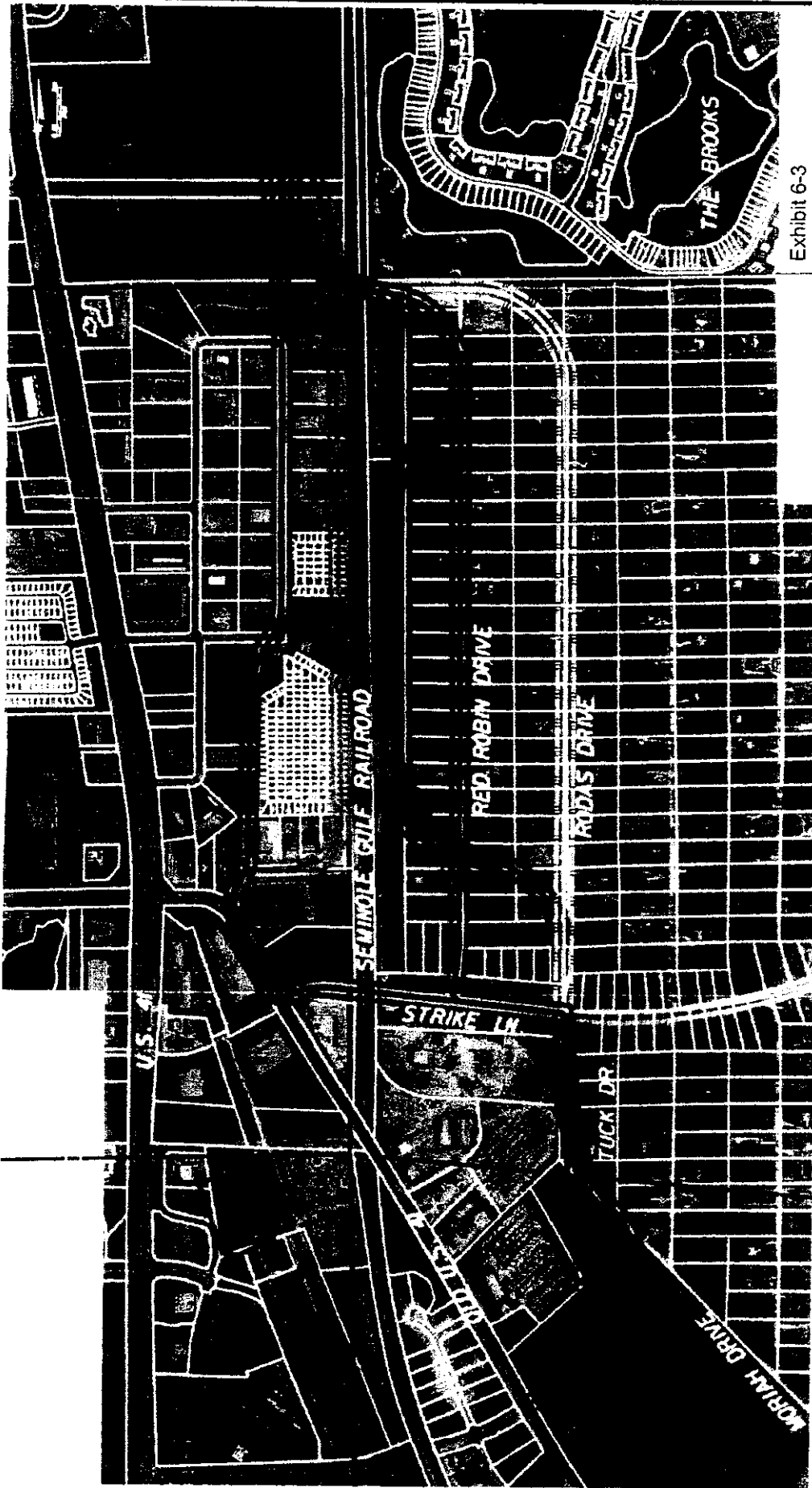
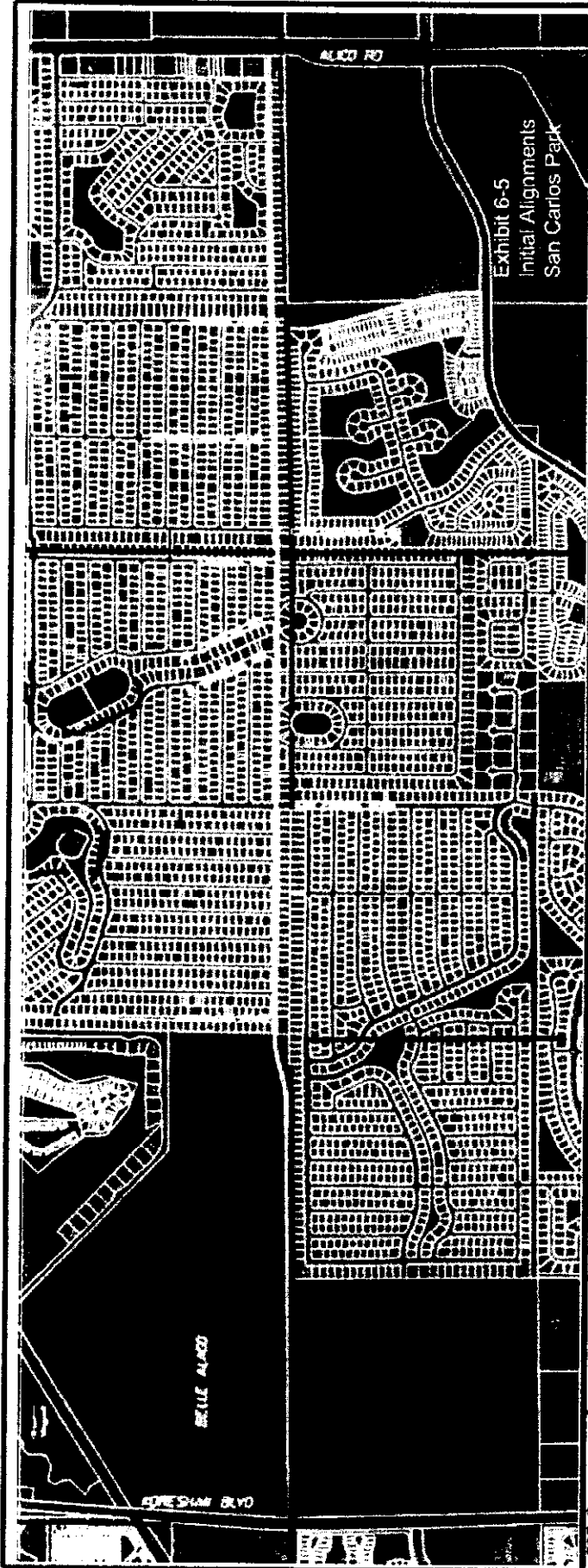


Exhibit 6-3  
Initial Alignments  
Bonita Springs

<b>LEGEND</b> 	DATE OF AERIAL APRIL 2008			THE COUNTY AUTHORITY OF TRANSPORTATION COUNTY PROJECT NO. 20071     PLAN NUMBER 80307.00	SHEET NO.
					SANDY LANE EXTENSION CORRIDOR ALIGNMENT STUDY





<p><b>Colton</b> &amp; Associates, Inc.</p>	<p>DATE OF AERIAL APRIL 1988</p>	<p>DATE OF STUDY EST. 1978</p>	<p>DATE OF AERIAL APRIL 1988</p>	<p>DATE OF STUDY EST. 1978</p>
	<p>DATE OF AERIAL APRIL 1988</p>	<p>DATE OF STUDY EST. 1978</p>	<p>DATE OF AERIAL APRIL 1988</p>	<p>DATE OF STUDY EST. 1978</p>

**SANDY LANE EXTENSION  
CORRIDOR ALIGNMENT STUDY**

Exhibit 6-5  
Initial Alignments  
San Carlos Park



will impact numerous residential lots.

As the alignment crosses the railroad and approaches Pelican Colony Boulevard, it impacts a salvage yard. This property is classified as a contamination site and is suspected of containing hazardous materials. A new railroad crossing will be required to make a connection between Strike Lane and Pelican Colony Boulevard.

Community cohesion will be impacted as the location of the alignment will divide a portion of the neighborhood.

According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRMS), no floodplain encroachment will occur.

#### *Red Robin Alignment*

This alignment is located between Old U.S. 41 and Pelican Colony Boulevard. There are two options at the beginning of this alignment. The first option is to begin at Old U.S. 41 and head northeast, then curve to the north and tie into Moriah Drive/Tuck Drive. Then the alignment curves to the west as it approaches Strike Lane. At Strike Lane the alignment turns west to Red Robin Drive. The second option is to begin the alignment at the intersection of Old U.S. 41 and Strike Lane, where the alignment runs straight east until it reaches Red Robin Drive. At Red Robin Drive, the alignment runs straight north along the existing two-way dirt road for a distance of 3800<sup>±</sup> feet. There are small swales located on both sides of the road for limited drainage. As it approaches the northern end of the existing road, the alignment curves to the west. The alignment runs straight for 220<sup>±</sup> feet as it crosses the Seminole Gulf Railroad, then curves north. The alignment then runs north until it reaches Pelican Colony Boulevard. All curves on this alignment are in superelevation. Since the alignment is located in a mostly residential neighborhood, it will have several residential impacts.

As the alignment crosses the railroad and approaches Pelican Colony Boulevard it impacts a salvage yard. This property is classified as a contamination site and is suspected of containing hazardous materials. A new railroad crossing will be required to provide a connection between Old U.S. 41 and Pelican Colony Boulevard.

Community cohesion will be impacted as the location of this alignment will divide a portion of the neighborhood.

According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRMS), no floodplain encroachment will occur.

#### *Railroad Alignment to Tuck , Old U.S. 41*

The location of this alignment is between Old U.S. 41 and Pelican Colony Boulevard. The alignment begins perpendicular to Old U.S. 41 and then curves north as it ties into Moriah Drive and Tuck Drive. The alignment remains straight for 850<sup>±</sup> feet as it crosses Strike Lane. Then it curves to the west and again to the north as it parallels Seminole Gulf Railroad. There it runs straight north for a distance of 1420<sup>±</sup> feet before it curves to the east and then to the west. The alignment runs straight as it crosses the Seminole Gulf Railroad, then curves

to the north as it approaches Pelican Colony Boulevard. The location of this alignment will have some residential impacts.

As the alignment crosses the railroad and approaches Pelican Colony Boulevard, it impacts a salvage yard. This property is classified as a contamination site and is suspected of containing hazardous materials. A new railroad crossing will be required to provide a connection between Old U.S. 41 and Pelican Colony Boulevard.

According to Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRMS), no floodplain encroachment will occur.

*East Railroad Alignment – Old U.S. 41*

This alignment is located between Old U.S. 41 and Pelican Colony Boulevard. The alignment begins at Old U.S. 41 near Rinker Concrete plant; it curves to the north to parallel Seminole Gulf Railroad. The alignment impacts the Rinker Concrete plant at this location. It also crosses the railroad spur at this location. It parallels the Seminole Gulf Railroad for 3635<sup>±</sup> feet before it curves to the east and then to the west to align for the railroad crossing. As the alignment crosses the railroad, it runs straight and then curves to the north as it approaches Pelican Colony Boulevard. All but one curve in this alignment are superelevated. Since the alignment is located in a mostly residential neighborhood, it will have some residential impacts.

As the alignment crosses the railroad and approaches Pelican Colony Boulevard it impacts a salvage yard. This property is classified as a contamination site and is suspected of containing hazardous materials.

New railroad crossings will be required to provide a connection between Old U.S. 41 and Pelican Colony Boulevard. A new railroad crossing would be required at the Rinker railroad spur, at Strike Lane and at the cross over to Pelican Colony Boulevard.

Community cohesion will not be severely impacted as the location of the alignment will have limited impacts on portions of the neighborhood.

According to Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRMS), no floodplain encroachment will occur.

*West Railroad Alignment*

This alignment begins at the intersection of Old U.S. 41 and Frontage Road. Then runs parallel to the church for a distance of 235<sup>±</sup> feet and again curves to the west. This intersection is too close to U.S. 41 and traffic operations at the intersection would be very poor. There is some minor property impact to the church at the beginning of this alignment. The alignment parallels the Seminole Gulf Railroad in the back of a residential neighborhood, Gulf Coast Camping Resort, a business park and through an existing retention pond for 3320<sup>±</sup> feet. The alignment slightly turns west as it approaches Pelican Colony Boulevard. Two of the curves in the alignment are superelevated. The locations of this alignment will have extensive residential (Gulf Coast Camping Resort) and commercial/industrial impacts.

The alignment impacts a salvage yard that is classified as a contamination site and is suspected of containing hazardous materials. In addition, there will also be other extensive business impacts associated with this alignment. Due to tight conditions at the tie in point to Old U.S. 41, the church property will also sustain some minor impacts.

According to Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRMS), no floodplain encroachment will occur.

*Production Circle Alignment*

This alignment begins at the intersection of Old U.S. 41 and Frontage Road. This intersection is too close to U.S. 41 and traffic operations at the intersection would be very poor. The alignment turns onto Production Circle and utilizes Production Circle for 275<sup>±</sup> feet. This location has some property impact to both the church and businesses. The alignment then curves to the east and then to the north as it again ties into Production Circle. This roadway is utilized for a distance of 1870<sup>±</sup> feet until the alignment passes through a salvage yard and terminates at Pelican Colony Boulevard. The proposed alignment will have some residential impacts to lots in the Gulf Coast Camping Resort.

The alignment impacts a salvage yard that is classified as a "high" contamination site, is suspected of containing hazardous materials and has received six contamination violations. There is also one "low" rated contamination site on Production Circle, R&S Equipment Sales and Leasing. In addition, all businesses located along the corridor of the proposed alignment will sustain some impacts as right-of-way acquisition will be necessary on both sides of the road.

According to Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRMS), no floodplain encroachment will occur.

***Estero - Corkscrew Road to Estero Parkway***

*East Alignment*

The proposed alignment is located between Corkscrew Road and Estero Parkway. The alignment begins at Corkscrew Road and runs straight north along existing Sandy Lane within a 100-foot right-of-way for a distance of 3300<sup>±</sup> feet. As it approaches Broadway Street, it curves to the east and then to the north. The alignment runs straight north as it crosses Broadway Street, curves to the east and then to the west as it ties into the Cascades, which ultimately connects to Estero Parkway. Due to the location of the alignment, some residential impacts will occur. All curves in this alignment are superelevated. The Lee County Department of Natural Resources has negotiated a "preserve" with the property owners south of the Cascades and this alignment will impact the preserve.

Community cohesion will be impacted as the location of the alignment will divide a portion of the neighborhood.

According to Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRMS), no floodplain encroachment will occur.

### *Middle Alignment*

The proposed alignment is located between Corkscrew Road and Estero Parkway. The alignment begins at Corkscrew Road and runs north along existing Sandy Lane within a 100-foot right-of-way for a distance of 3300<sup>±</sup> feet. As it approaches Broadway Street it curves to the west and then to the north. The alignment runs straight north as it crosses Broadway Street and again curves to the west and then to the north as it ties into the Cascades, which ultimately connects to Estero Parkway. Due to the location of the alignment, some residential impacts will occur. All curves in this alignment are superelevated. This alignment also passes in close proximity to the Mysore Fig tree located at the intersection of Sandy Lane and Broadway Street

Community cohesion will be impacted as the location of the alignment will divide a portion of the neighborhood.

According to Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRMS), no floodplain encroachment will occur.

### *West Alignment*

The proposed alignment is located between Corkscrew Road and alignment begins at Corkscrew Road and runs straight north along existing Sandy Lane within a 100-foot right-of-way for a distance of 3300<sup>±</sup> feet. As it approaches Broadway Street it curves to the west farther than the middle alignment and then to the north. The alignment runs straight north as it crosses Broadway Street and again curves to the west and then to the north as it ties into the Cascades, which ultimately connects to Estero Parkway. Due to the location of the alignment, some residential impacts will occur. All curves in this alignment are superelevated.

Community cohesion will be impacted as the location of the alignment will divide a portion of the neighborhood.

According to Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRMS), no floodplain encroachment will occur.

### *Railroad Alignment*

The proposed alignment is located between Corkscrew Road and Estero Parkway. The alignment begins at Corkscrew Road and runs straight north along existing Sandy Lane for 370<sup>±</sup> feet. The alignment curves to the west just before the Estero River. It continues straight as it crosses the Estero River over a new bridge in a new location. The alignment then curves to the north as it parallels to the Seminole Gulf Railroad for a distance of 2315<sup>±</sup> feet. After crossing Broadway Street, the alignment slightly curves to the west as it ties into the Cascades, which ultimately connects to Estero Parkway. Due to the location of the alignment, minor residential impacts will be occurring.

Community cohesion will have minor impacts as the location of the alignment will divide only limited portions of the neighborhood.

According to Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps

(FIRMS), no floodplain encroachment will occur.

### **San Carlos Park – Estero Parkway to Alico Road**

The San Carlos Park alignment is located between Estero Parkway and Alico Road. The alignment begins at Estero Parkway at the Bella Lago, Estero Golf Resort and the Reserve at Estero projects and runs north along a 100-foot right-of-way for a distance of 5,464 feet, where the right-of-way terminates at Mantazas Road. The Oriole alignment continues to run straight north at Mantazas Road, utilizing the existing Oriole Road for a distance of 10,526 feet until it terminates at Alico Road. Existing Oriole Road has hundreds of driveways that will affect traffic operations of the proposed Sandy Lane extension.

According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRMS), no floodplain encroachment will occur.

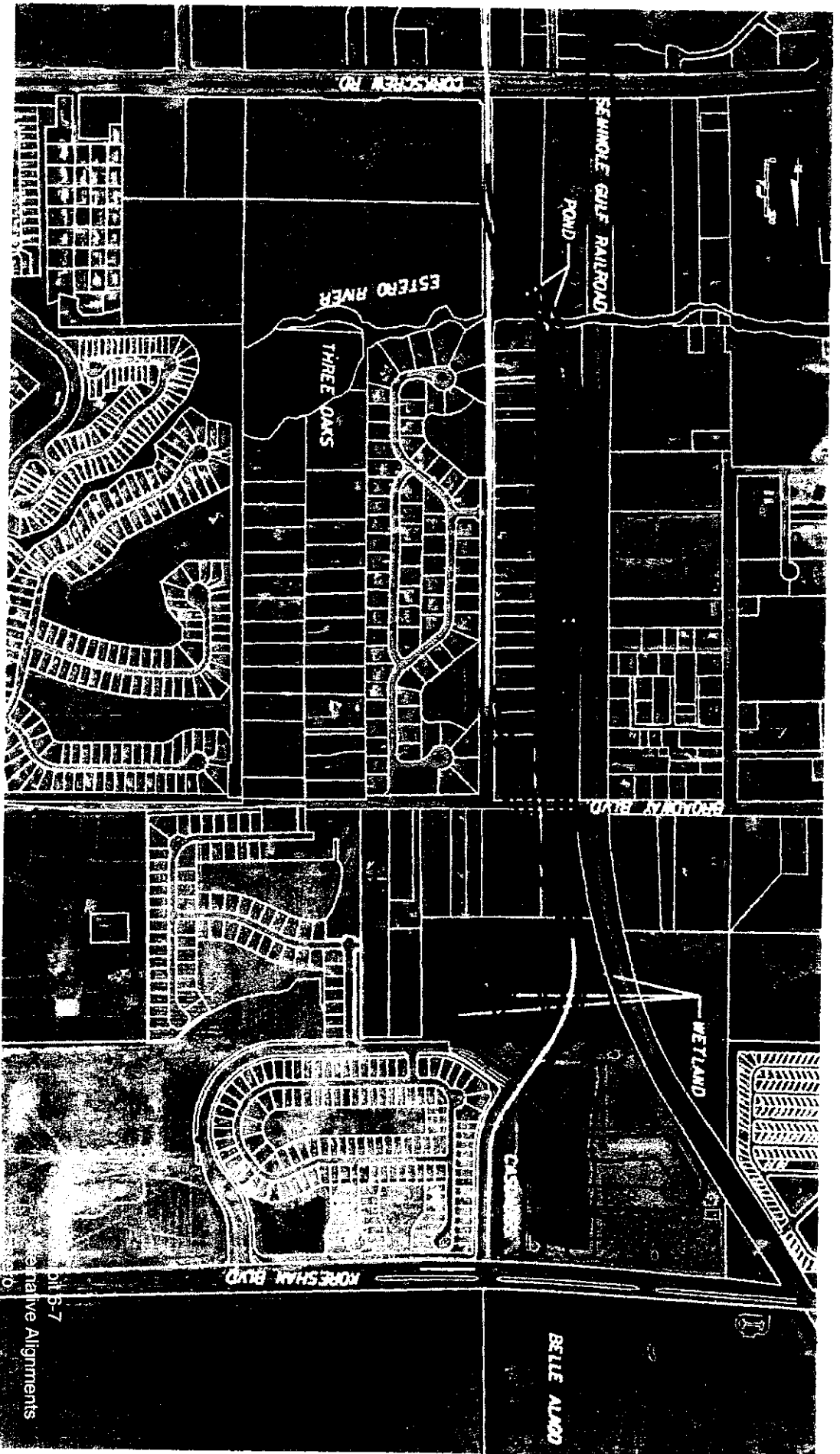
## **6.5 DRAINAGE DESIGN**

The drainage for the Sandy Lane Extension was divided up into three basins using the recommended alternatives for preliminary analysis and pond sizing. In the preliminary planning process, it is pertinent to plan for pond sizes and locations. To determine these sizes and locations a number of assumptions were made. The water quality treatment criteria for this proposed corridor assumed a future typical section which was to be a four-lane urban section (curbed median and exterior lanes with closed drainage) in a 100' right-of-way, and a six-foot sidewalk on each side of the roadway. This is conservative as the project is a two-lane project only. This typical section revealed that 68' of the 100' right-of-way will be impervious. The pond sizing and design assumed that the water quality treatment would be governed by the runoff volume of 1" over the right-of-way or 2.5" depth over the impervious surface for the length of each basin, whichever is greater. Since each of the basins discharge or ultimately discharge to the Estero River Basin, an Outstanding Florida Water, 50% additional treatment will be required. The attenuation volume (difference in pre-development versus post-development discharge) was added in addition to the water quality treatment for a conservative design. The total pond area was calculated using the wet detention criteria (no treatment reduction credits) and assumed that nearly three feet of storage from the pond control elevation to the maximum allowable stage was available and that the runoff would have the capability of reaching the associated ponds. This area also includes an additional 20' width around the perimeter for a maintenance berm and utilizes a 10% contingency.

## **6.6 CONCEPTUAL DESIGN ANALYSIS**

The initial design concept consisted of several different alignment alternatives on both the north and south portion of the corridor study as shown on Exhibits 6-3 through 6-5. After three community meetings, as well as further studies that have shown either environmental or construction infeasibilities, some of the alignments were eliminated, revised and/or combined into the alignments shown on Exhibits 6-6 through 6-8, that are presented here for further discussion. An initial screening was performed to evaluate alignment viability, Table 6.1 presents the Initial Screening Matrix. Two alignments were eliminated from further evaluation





DATE OF AERIAL  
APRIL 1968

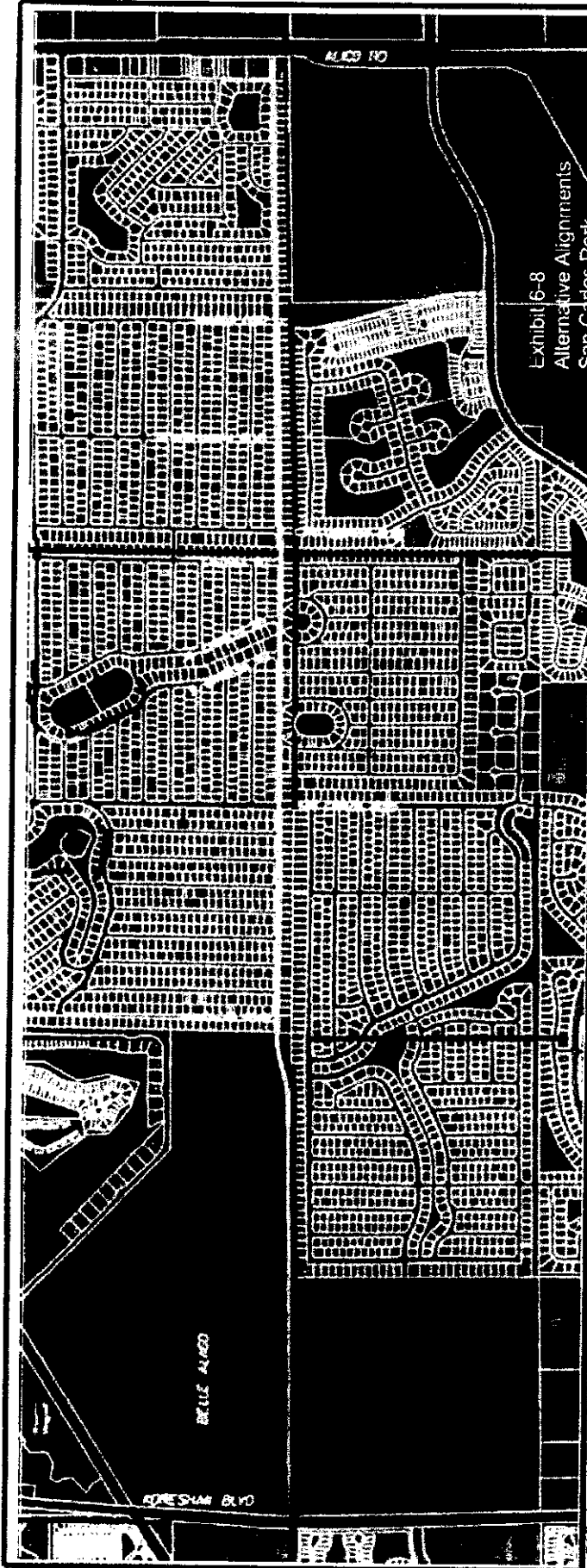
LEE COUNTY  
DEPARTMENT OF TRANSPORTATION

SANDY LANE EXTENSION CORRIDOR ALIGNMENT STUDY



12701 North 15th Lane  
Fort Worth, TX 76151  
(817) 336-1000

Alternative Alignments  
11-5-7  
11-5-7



	CITY OF SAN CARLOS DEPARTMENT OF TRANSPORTATION 1000 SAN CARLOS AVENUE SAN CARLOS, CA 95060	SAN CARLOS 95060	SANDY LANE EXTENSION CORRIDOR ALIGNMENT STUDY	SHEET NO.
	DATE OF AERIAL PHOTOGRAPHY APRIL 2006	DATE OF AERIAL PHOTOGRAPHY APRIL 2006	CITY OF SAN CARLOS DEPARTMENT OF TRANSPORTATION 1000 SAN CARLOS AVENUE SAN CARLOS, CA 95060	SHEET NO.



**Table 6.1  
Sandy Lane Extension Corridor Alignment Study  
Initial Screening - January 9, 2004**

**Bonita Springs Alignments**

<b>Rodas Drive</b>	<b>Red Robin</b>	<b>East of RR</b>	<b>West of RR</b>	<b>Production Circle</b>
<b>Positive:</b> <ul style="list-style-type: none"> <li>• Good continuity</li> <li>• Good geometrics</li> </ul>	<b>Positive:</b>	<b>Positive:</b> <ul style="list-style-type: none"> <li>• Fewer parcels</li> <li>• Alignment adjacent to Railroad leave neighborhood intact</li> <li>• Close Strike Lane (won't require upgrade of RR crossing)</li> </ul>	<b>Positive:</b> <ul style="list-style-type: none"> <li>• No impact to San Carlos Estates</li> <li>• No Railroad crossing required</li> <li>• With exception of intersection at Frontage Road and also Old 41, good geometrics</li> </ul>	<b>Positive:</b> <ul style="list-style-type: none"> <li>• No impact to San Carlos Estates</li> <li>• No Railroad crossing required</li> <li>• With exception of intersection at Frontage Road and also Old 41, good geometrics</li> <li>• Minimal impact to residential (RV) subdivision</li> </ul>
<b>Negative Impacts:</b> <ul style="list-style-type: none"> <li>• Severs neighborhood (residential impacts)</li> <li>• Many parcels/right-of-way acquisition</li> <li>• Railroad crossing \$</li> <li>• Small Haz Mat</li> <li>• Small Wetland Impact</li> </ul>	<b>Negative Impacts:</b> <ul style="list-style-type: none"> <li>• Lack of network continuity (can't end project at Strike Lane)</li> <li>• Severs/isolates neighborhood (residential impacts)</li> <li>• Many parcels/right-of-way acquisition</li> <li>• Railroad crossing \$</li> <li>• Small Haz Mat More Wetland Impacts than Red Robin</li> </ul>	<b>Negative Impacts:</b> <ul style="list-style-type: none"> <li>• Railroad crossing \$</li> <li>• Small Haz Mat</li> <li>• More Wetland Impacts</li> <li>• Geometrics less desirable than Red Robin</li> <li>• San Carlos Estates Drainage district ponds adjacent to RR must be re or co-located</li> </ul>	<b>Negative Impacts:</b> <ul style="list-style-type: none"> <li>• Potential for major Haz Mat</li> <li>• Right-of-way costs</li> <li>• Impact to industrial parcels</li> <li>• Major impact to residential (RV) subdivision</li> <li>• More Wetland Impacts</li> <li>• Intersection at Old 41 proximity to US 41 intersection (stacking distance)</li> </ul>	<ul style="list-style-type: none"> <li>• Potential for major Haz Mat and additional haz mat property purchase may be required for clean up</li> <li>• Right-of-way costs</li> <li>• impact to industrial parcels</li> <li>• More Wetland Impacts</li> <li>• Intersection at Old 41 proximity to US 41 intersection (stacking distance)</li> </ul>
Alignment south of Strike lane (Segment 11) eliminated because of wetland impacts and impact to development continuity		Alignment south of Strike lane (Segment 11) eliminated because of wetland impacts and impact to development continuity (Combined two segments)		

**Corkscrew Road to Estero Parkway (Koreshan Boulevard)**

<b>Existing Sandy Lane to East</b>	<b>Existing Sandy Lane Middle</b>	<b>Existing Sandy Lane to West</b>	<b>East of Railroad to Cascades</b>
<b>Positive:</b> <ul style="list-style-type: none"> <li>• Stays on existing alignment minimal right-of-way acquisition to Broadway</li> <li>• No RR crossing improvements required</li> </ul>	<b>Positive:</b> <ul style="list-style-type: none"> <li>• Stays on existing alignment minimal right-of-way acquisition to Broadway</li> <li>• May not require RR crossing improvements</li> <li>• Better geometrics than eastern alignment – connects to roadway reserved for Sandy Lane Extension</li> </ul>	<b>Positive:</b> <ul style="list-style-type: none"> <li>• Stays on existing alignment minimal right-of-way acquisition to Broadway</li> <li>• Better geometrics than two alignments to the east - connects to roadway reserved for Sandy Lane Extension</li> <li>• No impact to fig tree</li> </ul>	<b>Positive:</b> <ul style="list-style-type: none"> <li>• Minimizes impact to existing residential neighborhood along Sandy Lane</li> <li>• Good geometrics</li> </ul>
<b>Negative:</b> <ul style="list-style-type: none"> <li>• New development north of Broadway – impact to exist and proposed residential lots</li> <li>• Right-of-way acquisition \$</li> <li>• Goes through Indigenous Preservation Area</li> <li>• Goes through tortoise habitat</li> <li>• Poor continuity – stop condition at Cascades</li> </ul>	<b>Negative:</b> <ul style="list-style-type: none"> <li>• May impact fig tree</li> <li>• Misses existing home just north of Broadway (this may be a positive? Property owner dependent)</li> </ul>	<b>Negative:</b> <ul style="list-style-type: none"> <li>• Will require RR crossing improvements</li> <li>• Requires purchase of home north of Broadway</li> </ul>	<b>Negative:</b> <ul style="list-style-type: none"> <li>• Will require RR crossing improvements</li> <li>• Requires purchase of home north of Broadway</li> <li>• Right-of-way acquisition involves Koreshan</li> <li>• New bridge across Estero River (\$/permitting)</li> </ul>

**Estero Parkway (Koreshan Boulevard) to Alico Road**

<b>Koreshan to Oriole</b>	<b>Oriole Road (to Alico)</b>
<b>Positive</b> <ul style="list-style-type: none"> <li>• Right-of-way set aside</li> </ul>	<b>Positive:</b> <ul style="list-style-type: none"> <li>• Provides additional north/south route</li> </ul>
	<b>Negative:</b> <ul style="list-style-type: none"> <li>• Increased traffic to neighborhood</li> <li>• Numerous stop signs</li> </ul>
	<b>Topics for discussion:</b> <ul style="list-style-type: none"> <li>• Purchase additional right-of-way</li> <li>• Study potential to cul-de-sac some roads</li> </ul>

in the Estero study area. The East Alignment impacted an indigenous species preserve recently dedicated to Lee County. The Middle Alignment was also eliminated, as it would partially impact the Mysore Fig at the corner of Broadway Street and Sandy Lane.

## **6.7 EVALUATION PROCESS**

### **6.7.1 Quantifiable Criteria**

An evaluation matrix was developed to evaluate the viable Build Alternatives using quantifiable criteria from a multitude of categories including socioeconomic, environmental, cultural, hazardous material/petroleum contamination, and cost (engineering, right-of-way, and construction). The matrix data were developed utilizing aerial photography depicting the proposed right-of-way requirements for each alternative. A brief description of these quantifiable evaluation criteria is presented below:

- **Potential Business Impacts** - The number of businesses expected to be impacted by the proposed improvements for the Build Alternative including relocation and other business impacts expected to be incurred due to the proposed improvements that will not require relocation (i.e., parking loss) were also considered as part of the right-of-way acquisition cost estimate.
- **Potential Residential Impacts** including existing homes and residential lots - The number of residences that exist within the proposed right-of-way and will have to be relocated if the Build Alternative is implemented and the number of residential lots impacted by the Build Alternative.
- **Impacts on Cultural/Historic Resources and Public Parks** - The number of historically and archaeologically significant sites, structures, and public parks impacted within the proposed improvements.
- **Natural Environmental Impacts** - Impacts to the natural environment within the proposed improvements.
- **Potential Contaminated Sites** - Several potential hazardous material and/or petroleum-contaminated sites exist along the project.
- **Right-of-Way Impacts** - The right-of-way acquisition costs include the costs of potential business and residential relocations, private property purchases, and reimbursement costs for miscellaneous business damages and were prepared by the Lee County Lands Division.
- **Estimated Project Costs** - The construction costs were calculated using prices based on FDOT Office of Policy Planning, "2002 Transportation Costs", released March 2003. Cost estimates were prepared for roadway construction, bridge construction, right-of-way acquisition and wetland mitigation. The engineering (final design) costs and construction engineering and inspection costs were calculated as a percentage of the construction cost.

The alternatives evaluation matrix for a rural typical section is provided in Tables 6.2 and 6.3. Table 6.4 provides the cost estimate for the rural typical section. The alternatives evaluation matrix for an urban typical section is provided in Tables 6.5 and 6.6. Table 6.7 provides the cost estimate for the urban rural typical section.

**Table 6.2**  
**Sandy Lane Extension Corridor Alignment Study - Bonita Springs Rural 2 Lane Construction**  
**Evaluation Matrix**

Evaluation Measure	Rodas/Old 41	Red Robin/ Strike	East Railroad/ Tuck/Old 41	East Railroad to Old 41	West Railroad	Production Circle
<b>Travel Service</b>						
Future Year (2010) Travel Demand (Traffic Projections) LOS	Equal	Equal	Equal	Equal	Equal	Equal
Future Year (2020) Travel Demand (Traffic Projections) LOS	Equal	Equal	Equal	Equal	Equal	Equal
Traffic Operations	Fair (driveways)	Medium (driveways)	Good	Medium (RR xings)	Poor (US41)	Poor (US41)*
Project Length (centerline miles)	1.3	1.8	1.8	1.5	1	1.2
<b>Social/Cultural Impacts</b>						
Impacts to Residential Improved	3	1	7	4		
Impacts to Residential Vacant	56	51	16	5	53 manufactured	7 manufactured
Impacts to Agricultural	1	1	1	1	0	0
Potential Business Impacts	2	2	2	3	5	17
Potential Community Facilities Impacts	0	0	0	0	1	2
Potential Historic/Archaeological Sites	0	0	0	0	0	0
Public Lands/Recreation Areas	0	0	0	0	0	1
Neighborhood Impacts	High	High	Low	low	high	low
<b>Natural Environment Impacts (in Acres)</b>						
Wetland Habitat	0.05	0.93	2.45	0.42	OSW	DEP
Upland Habitat	0	0	0	0	0	0
Potential Flow ways	2	2	2	1	1	0
Potential 100-year Base Floodplain	0	0	0	0	0	0
<b>Physical Environment Impacts</b>						
Potential Contamination Sites	1 high	1 high	1 high	2 high	1 high	1 high, 1 low
Potential Utility Relocations	3	8	9	4	2	5
Railroad	1	1	1	3	0	0
<b>Project Cost</b>						
<sup>(1)</sup> Final Design, Construction Plans and CEI	\$1,452,207	\$2,101,049	\$1,989,248	\$1,722,924	\$1,056,780	\$1,034,688
Right-of-Way Acquisition	\$4,800,000	\$5,000,000	\$5,600,000	\$6,750,000	\$7,000,000	\$8,000,000
<sup>(2)</sup> Construction - Rural 2 lane road	\$4,033,908	\$5,836,248	\$5,525,688	\$4,785,900	\$2,935,500	\$2,874,132
Railroad Crossing	\$1,000,000	\$1,000,000	\$1,000,000	\$2,750,000	\$0	\$0
Contamination Cleanup Costs	Cost Equal	Cost Equal	Cost Equal	Cost Equal	Cost Equal	Cost Equal
Environmental Mitigation	\$554	\$12,000	\$86,000	\$0	\$0	\$0
<b>TOTAL PROJECT COST</b>	<b>\$11,286,669</b>	<b>\$13,949,297</b>	<b>\$14,200,936</b>	<b>\$16,008,824</b>	<b>\$10,992,280</b>	<b>\$11,908,820</b>

(1) Prices are based on FDOT Office of Policy Planning, "2002 Transportation Costs", released March 2003

(2) Includes roadway, structures, drainage, signing, marking, traffic control and maintenance of traffic, aesthetics, etc.

\* Note: Traffic Operations can be improved by eliminating direct access to the US 41 intersection.

Table 6.3  
Sandy Lane Extension Corridor Alignment Study - Estero Rural 2 Lane Construction  
Evaluation Matrix

Evaluation Metric	Exist Sandy Lane (west)	Railroad	Railroad - Broadway Closed
<b>Travel Service</b>			
Future Year (2010) Travel Demand (Traffic Projections) LOS	Equal	Equal	Equal
Future Year (2020) Travel Demand (Traffic Projections) LOS	Equal	Equal	Equal
Traffic Operations	Fair	Poor	Good
Project Length (centerline miles)	0.8	0.8	0.8
<b>Social/Cultural Impact</b>			
Impacts to Residential Improved	2	3	3
Impacts to Residential Vacant	2	5	5
Impacts to Agricultural	0	0	0
Potential Business Impacts	0	0	0
Potential Community Facilities Impacts	0	0	0
Potential Historic/Archaeological Sites	0	0	0
Public Lands/Recreation Areas	0	0	0
Neighborhood Impacts	Medium	Low	Low
<b>Natural Environment Impacts (in Acres)</b>			
Wetland Habitat		New Bridge OFW	New Bridge OFW
Upland Habitat	Indigenous Preserve	Indigenous Preserve	Indigenous Preserve
Potential Flow ways	1	1	1
Potential 100-year Base Floodplain	0	1	1
<b>Physical Environment Impact</b>			
Potential Contamination Sites	0	0	0
Potential Utility Relocations	10	8	8
Railroad	1	1	0
<b>Project Cost (millions)</b>			
<sup>(1)</sup> Final Design, Construction Plans and CEI	\$475,951	\$1,081,054	\$1,081,054
Right-of-Way Acquisition	\$1,800,000	\$3,900,000	\$3,900,000
<sup>(2)</sup> Construction - Rural 2 lane road	\$1,322,088	\$3,002,928	\$3,002,928
Railroad Crossing or Advance Warning signals	\$20,000	\$20,000	
Contamination Cleanup Costs	\$0	\$0	\$0
Environmental Mitigation	\$15,000	\$15,000	\$15,000
<b>TOTAL PROJECT COST</b>	<b>\$3,633,039</b>	<b>\$8,018,982</b>	<b>\$7,998,982</b>

(1) Prices are based on FDOT Office of Policy Planning, "2002 Transportation Costs", released March 2003

(2) Includes roadway, structures, drainage, signing, marking, traffic control and maintenance of traffic, aesthetics, etc.

**Table 6.5**  
**Sandy Lane Extension Corridor Alignment Study - Bonita Springs Urban 2 Lane Construction**  
**Evaluation Matrix**

Valuation Method	Rodas/Old 41	Red Robin/ Strike	East Railroad/ Tuck/Old 41	East Railroad to Old 41	West Railroad	Production Circle
<b>Travel Studies</b>						
Future Year (2010) Travel Demand (Traffic Projections) LOS	Equal	Equal	Equal	Equal	Equal	Equal
Future Year (2020) Travel Demand (Traffic Projections) LOS	Equal	Equal	Equal	Equal	Equal	Equal
<b>Traffic Operations</b>	Fair (driveways)	Medium (driveways)	Good	Medium (RR xings)	Poor (US41)	Poor (US41)*
Project Length (centerline miles)	1.3	1.8	1.8	1.5	1	1.2
<b>Social/Cultural Impacts</b>						
Impacts to Residential Improved	3	1	7	4		
Impacts to Residential Vacant	56	51	16	5	53 manufactured	7 manufactured
Impacts to Agricultural	1	1	1	1	0	0
Potential Business Impacts	2	2	2	3	5	17
Potential Community Facilities Impacts	0	0	0	0	1	2
Potential Historic/Archaeological Sites	0	0	0	0	0	0
Public Lands/Recreation Areas	0	0	0	0	0	1
Neighborhood Impacts	High	High	Low	low	high	low
<b>Natural Environment Impacts (in Acres)</b>						
Wetland Habitat	0.05	0.93	2.45	0.42	OSW	DEP
Upland Habitat	0	0	0	0	0	0
Potential Flow ways	2	2	2	1	1	0
Potential 100-year Base Floodplain	0	0	0	0	0	0
<b>Physical Environment Impacts</b>						
Potential Contamination Sites	1 high	1 high	1 high	2 high	1 high	1 high, 1 low
Potential Utility Relocations	3	8	9	4	2	5
Railroad	1	1	1	3	0	0
<b>Project Cost</b>						
<sup>(1)</sup> Final Design, Construction Plans and CEI	\$1,633,668	\$2,341,068	\$2,243,177	\$1,926,417	\$1,177,860	\$1,110,201
Right-of-Way Acquisition	\$4,800,000	\$5,000,000	\$5,600,000	\$6,750,000	\$7,000,000	\$8,000,000
<sup>(2)</sup> Construction - Urban 2 lane road	\$4,537,968	\$6,502,968	\$6,231,048	\$5,351,160	\$3,271,836	\$3,083,892
Railroad Crossing	\$1,000,000	\$1,000,000	\$1,000,000	\$2,750,000	\$0	\$0
Contamination Cleanup Costs	Cost Equal	Cost Equal	Cost Equal	Cost Equal	Cost Equal	Cost Equal
Environmental Mitigation	\$554	\$12,000	\$86,000	\$0	\$0	\$0
<b>TOTAL PROJECT COST</b>	<b>\$11,972,190</b>	<b>\$14,856,036</b>	<b>\$15,160,225</b>	<b>\$16,777,577</b>	<b>\$11,449,696</b>	<b>\$12,194,093</b>

(1) Prices are based on FDOT Office of Policy Planning, "2002 Transportation Costs", released March 2003

(2) Includes roadway, structures, drainage, signing, marking, traffic control and maintenance of traffic, aesthetics, etc.

\* Note: Traffic Operations can be improved by eliminating direct access to the US 41 intersection.

**Table 6.6  
Sandy Lane Extension Corridor Alignment Study - Estero Urban 2 Lane Construction  
Evaluation Matrix**

<b>Evaluation Measure</b>	<b>Exist Sandy Lane (west)</b>	<b>Railroad</b>	<b>Railroad - Broadway Closed</b>
<b>Travel/Service</b>			
Future Year (2010) Travel Demand (Traffic Projections) LOS	Equal	Equal	Equal
Future Year (2020) Travel Demand (Traffic Projections) LOS	Equal	Equal	Equal
Traffic Operations	Fair	Poor	Good
Project Length (centerline miles)	0.8	0.8	0.8
<b>Social/Cultural Impacts</b>			
Impacts to Residential Improved	2	3	3
Impacts to Residential Vacant	2	5	5
Impacts to Agricultural	0	0	0
Potential Business Impacts	0	0	0
Potential Community Facilities Impacts	0	0	0
Potential Historic/Archaeological Sites	0	0	0
Public Lands/Recreation Areas	0	0	0
Neighborhood Impacts	Medium	Low	Low
<b>Natural Environment Impacts (In Acres)</b>			
Wetland Habitat		New Bridge OFW	New Bridge OFW
Upland Habitat	Indigenous Preserve	Indigenous Preserve	Indigenous Preserve
Potential Flow ways	1	1	1
Potential 100-year Base Floodplain	0	1	1
<b>Physical Environment Impacts</b>			
Potential Contamination Sites	0	0	0
Potential Utility Relocations	10	8	8
Railroad	1	1	0
<b>Project Cost (millions)</b>			
<sup>(1)</sup> Final Design, Construction Plans and CEI	\$483,546	\$1,190,047	\$1,190,047
Right-of-Way Acquisition	\$1,800,000	\$3,900,000	\$3,900,000
<sup>(2)</sup> Construction - Urban 2 lane road	\$1,343,184	\$3,305,688	\$3,305,688
Railroad Crossing or Advance Warning signals	\$20,000	\$20,000	\$0
Contamination Cleanup Costs	\$0	\$0	\$0
Environmental Mitigation	\$15,000	\$15,000	\$15,000
<b>TOTAL PROJECT COST</b>	<b>\$3,661,730</b>	<b>\$8,430,735</b>	<b>\$8,410,735</b>

(1) Prices are based on FDOT Office of Policy Planning, "2002 Transportation Costs", released March 2003

(2) Includes roadway, structures, drainage, signing, marking, traffic control and maintenance of traffic, aesthetics, etc.

Table 6-2  
 Section 6 - Extension Corridor Alignment Study Cost Option for Urban Typical Section  
 Lee County  
 Project No. 20307.100

Item	Quantity	Unit	Rate	Amount	Red Robin Alignment	East Vanouss Old US 41 Alignment	West Railroad Alignment	Production Circle Alignment	West Vanouss Old US 41 Alignment	West Railroad Alignment	Production Circle Alignment	West Vanouss Old US 41 Alignment
URBAN TYPICAL ROAD												
Subtotal												
Right-of-Way (Centerline Mile)	1.3	m	\$2,327,800.00	\$3,026,340.00	\$5,079,240.00	\$4,232,780.00	\$7,539,620.00	\$4,232,780.00	\$5,079,240.00	\$7,539,620.00	\$4,232,780.00	\$5,079,240.00
Right-of-Way (Construction Mile)		m	\$422,000.00									
Right-of-Way (Total)		m	\$374,000.00									
Bridge (Per SF)	650.00	SF	\$60.00	\$39,000.00								
Tram Signal (Main Arm) (Per Intersection)	1	st	\$113,300.00	\$113,300.00								
Railroad Crossing or Advanced Warning												
Subtotal				\$113,300.00								
Total Construction Cost with 20% Contingency				\$3,139,640.00	\$5,079,240.00	\$4,232,780.00	\$7,539,620.00	\$4,232,780.00	\$5,079,240.00	\$7,539,620.00	\$4,232,780.00	\$5,079,240.00
BMV Cost				\$4,781,640.00	\$6,415,140.00	\$7,209,300.00	\$12,761,550.00	\$7,209,300.00	\$6,415,140.00	\$12,761,550.00	\$7,209,300.00	\$6,415,140.00
Engineering Cost (5%)				\$5,737,960.00	\$7,471,048.00	\$8,651,160.00	\$15,271,636.00	\$8,651,160.00	\$7,471,048.00	\$15,271,636.00	\$8,651,160.00	\$7,471,048.00
Subtotal				\$10,519,600.00	\$13,886,188.00	\$15,860,460.00	\$28,033,186.00	\$15,860,460.00	\$13,886,188.00	\$28,033,186.00	\$15,860,460.00	\$13,886,188.00
TOTAL				\$13,659,240.00	\$18,965,428.00	\$19,793,240.00	\$35,572,806.00	\$19,793,240.00	\$18,965,428.00	\$35,572,806.00	\$19,793,240.00	\$18,965,428.00

Note: The above prices are based on FDOT Office of Policy Planning "2002 Transportation Cost" released March 2003.  
 Tram Signal quantity is assumed.

## 6.8 ALTERNATIVES EVALUATION

### 6.8.1 Public Involvement Program

The LC DOT held three community meetings on the Sandy Lane Extension Corridor Alignment Study. Approximately 127 people attended the community meeting for Bonita Springs at Bonita Springs Middle School. Approximately 100 people attended the Estero community meeting held at the regularly scheduled meeting of the Estero Community Planning Council. The community meeting for San Carlos Park was held at their regularly scheduled civic association meeting and approximately 181 people attended the meeting.

The purpose of these community meetings and the presentations was to make the public aware of the project and solicit public comment and input during the development and evaluation of the alternatives.

Letters announcing the community meetings were mailed to persons with property lying within at least 300' of the right-of-way. (In some instances, homeowners associations were notified and flyers posted within neighborhoods). The meetings were formally conducted with a presentation and question and answer period. A handout that summarized the project was provided to the public at the registration table at each meeting. Project team members and representatives from LC DOT were present to explain conceptual design alternatives and answer the public's questions.

There were 84 comments received at the Bonita Springs meeting as shown on Table 6.8. The project team summarized the Estero community meeting oral comments as shown in Table 6.9. A total of 117 comments were received at the San Carlos community meeting and are presented in Table 6.10. The comments listed below are summaries of key comments received from the public workshops.

**Table 6.8 Bonita Springs Community Meeting**

Date of the public workshop	January 20, 2004
Number of people attended	127
Number of comments received	84
Summary of key comments	<ul style="list-style-type: none"><li>• An alignment connecting at Signal Road would be best (18)</li><li>• Share the cost and effort between Lee County and Bonita Springs (15)</li><li>• The alignment should displace and cause the least amount of property damage (9)</li><li>• Favor no build option (8)</li><li>• Needed as soon as possible (partly because cost of acquiring right-of-way with go up each year) and</li></ul>



	<p>growth (7)</p> <ul style="list-style-type: none"> <li>• Extension is trouble and will cause bottlenecks where they empty to Old U.S. 41 and U.S. 41 (6)</li> <li>• Concerned that Sandy Lane extension will deposit traffic at Pelican landing (6)</li> <li>• Road needed from Old U.S. 41 to Coconut Road (4)</li> <li>• San Carlos will fight the road if it goes through our community; there are less disruptive routes (3)</li> <li>• Stop Sandy Lane at Coconut Road, do not go further south (3)</li> </ul>
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**Table 6.9 Estero Community Meeting**

Date of the public workshop	December 08, 2004
Number of people attended	Approx. 100
Summary of key comments	<ul style="list-style-type: none"> <li>• The alignment adjacent to the railroad, between Corkscrew and Broadway, needs to be looked at because the ECPP wants the impacts to The Groves minimized. The Groves' residents want things to stay the same along Sandy Lane.</li> <li>• ECPP want the 2006/2007 horizon needs to be used as a study year in addition to the years we are presently doing.</li> <li>• The Copperleaf/Brooks representative would like Sandy Lane to extend to Old U.S. 41.</li> <li>• Most of the citizens would like to see it extended to Old U.S. 41.</li> <li>• ECPP want the study to move forward with what we have for now as soon/fast as the study can go.</li> <li>• Pelican Landing's representative voiced that they would like the extension to Old U.S. 41, as the impacts on U.S. 41 of not doing it would be bad.</li> <li>• Shadow Wood's representative indicated that they want Sandy Lane to happen sooner rather than later</li> <li>• Corridor design based on 35-mph. Three-thousand (3,000) vehicles/day have been counted on Sandy Lane by LCDOT.</li> <li>• Public noted if crossing the railroad is more expensive</li> </ul>

	<p>yet will provide a better alignment, then money should be made available.</p> <ul style="list-style-type: none"> <li>Public was interested in the limits and the timeline of the mall developer.</li> </ul>
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**Table 6.10 San Carlos Community Meeting**

Date of public workshop	January 14, 2004
Number of people attended	181
Number of comments received	117
Summary of key comments	<ul style="list-style-type: none"> <li>Opposed to connection to Oriole Road – dangerous for children, families and pets etc. (43)</li> <li>Safety for children and families is a prime concern (38)</li> <li>No project/build alternative (32)</li> <li>If you must do this extension stop extension at Corkscrew - don't build north (20)</li> <li>We have other alternatives (Three Oaks, 6 laning U.S. 41, 10 laning I-75, 6 laning Ben Hill Griffin) instead of this as they have the property and least impact (17)</li> <li>Worried about heavy traffic (14)</li> <li>Concerned about a decrease in property values (14)</li> <li>No road through cascades/residential areas (12)</li> <li>If it has to be built, the best alignment would be adjacent to railroad right-of-way and will pose minimum disruption and be safest alternative (9)</li> <li>This project will not help congestion problems (8)</li> <li>To force a high speed road through the residential neighborhoods is the wrong option (6)</li> <li>Sandy Lane extension is needed now – to Old U.S. 41 and beyond e.g. to Coconut Road (4)</li> </ul>

A meeting was held for the Cascades neighborhood on August 3, 2004. Seventeen comment sheets were received at the Cascades neighborhood meeting. All seventeen comments were against the Sandy Lane Extension going through the Cascades neighborhood. Safety was cited by eight of the residents as the most important reason for not having Sandy Lane

through the Cascades. Six of the residents also cited that it would divide the community, and five others discussed the fact that they would no longer be "gated" as one development. The other issues mentioned were decrease in property values, noise, and if Sandy Lane will be warranted north of Corkscrew with the other road improvements in the area. The residents of the Cascades also believed that there were safety issues concerning pedestrian and bicyclists crossing the proposed roundabout.

### **6.8.2 Drainage**

In order to evaluate the impacts associated with the alignments, the drainage was evaluated and ponds located for the various alignments.

#### **Old U.S. 41 to Strike Lane**

This section of roadway is from Strike Lane to Old U.S. 41 (approximately 2,700 feet). The proposed pond for this section will be on the east side of the road and utilize the remainder of four of the affected parcels (due to anticipated right-of-way acquisition) located off of Tuck Drive. Using this area for treatment will not require land acquisition from the Rinker Materials site. The outfall from this pond will be directed to the existing outfall conveyance for San Carlos Estates that ultimately discharges under Old U.S. 41.

The total pond surface area (assuming wet detention) for water quality treatment and attenuation for this section of roadway is approximately 1.30 acres.

#### **Strike Lane to Pelican Colony Boulevard**

This section of roadway is from approximately Pelican Colony Boulevard to Strike Lane. This section will require the most water quality treatment and attenuation due to the length of the corridor (approximately 7,000 feet). Runoff from this section will begin on the east side of the Seminole Gulf Railroad. Runoff from the west side is anticipated to be treated by the future development(s) adjacent to Pelican Colony Boulevard. The northern pond on this section will utilize the remainder of the four parcels that the proposed alignment will be required to obtain. It is anticipated that this pond will outfall to the existing drainage conveyance on the east side of the railroad.

The southern pond will be located on the southwest side of the road where the alignment separates from the railroad. This pond will require the use of one parcel that will need to be acquired due to the right-of-way acquisition and a second adjacent to it which appears to be undisturbed land.

The total pond surface area (assuming wet detention) for water quality treatment and attenuation for this section of roadway is approximately 2.90 acres.

#### **Corkscrew Road to Broadway Street**

This section of roadway is from Broadway Street to Corkscrew Road, which is approximately 4,300 feet. This first section of roadway crosses over the Estero River, therefore the

drainage along this section would use the river as an outfall. To use the Estero River as an outfall, selecting pond sites close to it is optimal. On the north side of the river, the proposed roadway right-of-way will require the purchase of two large parcels. The remainder of these parcels will be used for detention ponds. Along this section of road there is potential to utilize a series of dry detention step down basins to obtain the required water quality treatment and attenuation. This option will also allow the drainage piping cost to be minimized due to minimal longitudinal piping (conveyance) costs. If a wet detention area is designed instead of the dry, it appears that the minimal SFWMD width may be met and the water quality/attenuation requirements may still be satisfied. This option will reduce the amount of detention area needed, but will increase the cost of the drainage due to the longitudinal piping costs.

On the south side of the Estero River, there also will be a detention pond. One is needed on this side of the river because it is not feasible to pipe under the river to the northern treatment areas. The proposed pond will be located on the northeastern side of the corner parcel of Corkscrew Road and Sandy Lane. The remainder of this parcel should be able to be used for future development.

The total pond surface area (assuming wet detention) for water quality treatment and attenuation for this section of roadway is approximately 1.89 acres. Note that it is assumed that the roadway through the Cascade's development is treated by that development.

### **6.8.3 Environmental Evaluation**

#### **Methodology**

The United States Army Corps of Engineers (USACE) and the South Florida Water Management District (SFWMD) are the regulatory agencies that regulate development activities in wetlands. Generally, three diagnostic characteristics, which consist of hydrophytic vegetation (wetland plants), hydric soil (wetland soil), and hydrology distinguish wetlands. Specifically, the USACE uses the Corps of Engineers Wetlands Delineations Manual (Environmental Laboratory 1987) and SFWMD uses the Florida Wetlands Delineation Manual (1985) in determining the presence of wetland. Because hydric soil, wetland hydrology, and wetland vegetation are needed for an area to be considered as a wetland, we searched the project area for indicators of these parameters.

In regards to wetland impacts, it is anticipated that mitigation will be assessed by the agencies that regulate development in wetlands. Mitigation will likely be assessed for direct and secondary impacts. Secondary impacts are the impacts that can result from the placement of a linear roadway, which has the potential to sever wetlands and disrupt sheet-flow and as a result impact the wetland functions of the wetland adjacent to the proposed roadway.

Mitigation needs are determined by performing a wetland functional analysis, which estimates the potential loss of wetland functions and values of the impact. For the purpose of this report, we used the Little Pine Island Mitigation Bank: A Functional Assessment Procedure for Wetland Impact Sites – July 1996.

In addition we analyzed the alignments for potential to support protected species. A formal protected species survey would be necessary prior to permitting.

The alignment alternatives extend through a mix of land-uses, primarily consisting of a patchwork of native forested areas and semi-urban disturbed lands. The alignments are situated in a rapidly developing portion of Lee County. Seven wetlands were identified that could be affected by the various alignments, as well as the Estero River. These wetlands were generally similar type, pine and cypress mix. The wetlands were situated within the platted lands of San Carlos Estates. Ditching and roads have impacted these wetlands to an extent. For the most part, these wetlands appear to be isolated.

### **Bonita Springs**

Rodas, Red Robin and the Railroad/Tuck Alignments are affected by these wetlands. These wetlands are jurisdictional water bodies and would require mitigation for impacts during SFWMD permitting. USACE permitting will not be required for any wetlands deemed to be isolated.

### **Estero**

The East Alignment passes through an area that is part of a development order that shows Lee County indigenous preserve and lots. The alignment through the undeveloped portion of the Cascades passes over a conservation easement, and the Railroad Alignment crosses the Estero River, as well as impacting several wetlands.

Several of the alignments cross or impact Other Surface Waters (OSW). Normally no mitigation is required for impacts to these water bodies, however, relocation and replacement may be required.

Stormwater management ponds are also shown on the attached map and analyzed for potential impacts. Pond 1 and 2 impact wetlands. Table 6.11 lists the estimated impacts of each alignment and the stormwater ponds and their respective costs. Note that the costs were based on per credit cost that Little Pine Island Mitigation Bank gives Lee County. These may be subject to availability, and that per credit costs in alternative mitigation banks is higher.

**Table 6.11 Mitigation Required For Direct And Secondary Wetland Impacts Within Proposed Alignments Using Little Pine Island Mitigation Bank Assessment Procedure.**

Alignment	Impacted wetlands & OSW other	Direct Impacts (AC.)	Secondary Impacts (10-100%)	Total Impacts	LPI Analysis		Total Credits
					Functional Score	Credits (total impact x score)	
Fodas	Wetland 7	0.01	0.04 (10%)	0.05	0.40	0.02	0.2
	OSW 2	--	--	--	--	--	--
	OSW 3	--	--	--	--	--	--
Red Robin	Wetland 2	0.20	0.02 (10%)	0.01	0.35	0.01	0.44
	Wetland 3	0.14	0.30 (10%)	0.44	0.50	0.22	
	Wetland 4	0.14	0.14 (10%)	0.28	0.45	0.13	
	Wetland 5	0.07	0.14 (10%)	0.20	0.40	0.08	
	OSW 2	--	--	--	--	--	
	OSW 3	--	--	--	--	--	
	OSW 4	--	--	--	--	--	
East Railroad	Wetland 2	1.08	2.45 (100%)	3.54	0.35	1.24	3.1
	Wetland 3	0.75	2.08 (100%)	2.83	0.5	1.42	
	Wetland 4	0.39	0.84 (100%)	1.23	0.45	0.55	
	OSW 2	--	0.13**	--	--	--	
	OSW 4	--	--	--	--	--	
	Estero River	--	--	0.13	0.9	0.11	
West Railroad	OSW 5	--	--	--	--	--	--
Production Circle	--	--	--	--	--	--	--
Middle Estero	--	--	--	--	--	--	--
East Estero	Upland Indigenous veg.	0.76	--	0.76	0.60	0.45	0.45
East Railroad/U S 41	OSW 1	--	--	--	--	--	--
	OSW 2	--	--	--	--	--	--
Middle Estero	Cons./Ease./ Upland veg.	0.82	0.08	0.90	0.60	0.54	0.54

\* Alignments which bisect wetlands may be assessed upwards to 100%, if the resultant wetland function is significantly degraded.

\*\* No impact, but crossing assessed as if a direct impact. This impact may be mitigated by the removal of the existing Estero River Bridge as opposed to paying for offsite mitigation.

Pond	Impacted wetlands & OSW other	Direct Impacts (AC.)	Secondary Impacts (10-100%)	Total Impacts	LPI Analysis		Total Credits
					Functional Score	Credits (total impact x score)	
P1	Wetland 2	1.37	--	1.37	0.35	0.48	0.48
P2	Wetland 3	0.42	--	0.42	0.50	0.21	0.21
P3	--	--	--	--	--	--	--
P4	--	--	--	--	--	--	--
P5	--	--	--	--	--	--	--

## **Discussion**

The primary environmental impact to wetlands consists of impacts to wetlands through filling. No impacts to protected species are anticipated because none were found within the alignment during the preliminary assessment of the alignments. A formal protected species survey would be required prior to permitting.

## **Bonita Springs**

The East Railroad/Tuck Drive/Old U.S. 41 alignment has the greatest amount of impact. Table 6.11 shows typically applied standards for calculating mitigation needs, but since this alignment bisects Wetlands 3 & 4, the permitting agency may consider the wetland entirely impacted and consequently assess mitigation as if the entire wetland were directly impacted.

The West Railroad Alignment bisects an excavated borrow lake, an OSW. Although no wetland mitigation is likely to be required for impacting this water body, stormwater compensation may be required should the adjacent properties utilize it for stormwater detention. The balance of the alignments poses minor to no impact issues.

## **Estero**

The east alignment, despite impacting non-wetlands, passes through an area that is a proposed Lee County indigenous preserve. The significant issue here is that this alignment would remove nearly the only indigenous upland area on the affected property. The alignments (within the undeveloped portion of the Cascades) pass through a conservation easement placed as mitigation for a SFWMD permit condition. This would likely require the vacation of the easement and the modification of the SFWMD permit that was issued for the affected property. Once vacated, the impacted area would likely require mitigation. Note that the potential impact area within the conservation easement is non-wetland and would probably require upland mitigation.

The Railroad Alignment crosses the Estero River. Certain bridge designs may need to be utilized to lessen impacts to the river in order to minimize permitting issues that may arise. However, impacts were, for calculation purposes, assessed as a direct impact. The removal of the existing Estero River Bridge should more than adequately serve to mitigate any impacts to the Estero River due to the alignment. The wetland impacts listed in the prior table for the Railroad Alignment assumes that 100 percent of the wetland would be secondarily impacted. Because the alignment bisects the wetland, it is likely that SFWMD could consider the wetland as entirely impacted. Table 6.12 provides the cost to mitigate the impacts of the various alignments.

**Table 6.12 Impact Per Alignment Summary, Including Ponds**

Alignment/Pond	Credits/Notes	Cost to Mitigate at Little Pine Island at Lee County rate @\$27,720
Rodas	0.02	\$554
Red Robin	0.44 re-align OSW 1	\$12,196
East Railroad/Tuck Alignment	3.1	\$85,932
West Railroad	Stormwater compensation for impact to OSW	0
Production Circle	0	0
East Estero	Impacts to submitted D.O. Indigenous preserve – 0.45 credits	\$12,474
East Railroad/U.S. 41	–	0
Cascades	Vacate C.E. Impacts to upland preserve – 0.54	\$14,969
Pond 1	0.48	\$13,306
Pond 2	0.21	\$5,821
Pond 3	--	0
Pond 4	--	0
Pond 5	--	0

\* Little Pine Island = \$27,720/credit. Credits x cost per credit = mitigation.

***Bonita Springs - Old U.S. 41 to Pelican Colony Boulevard***

***Rodas Alignment (Not Recommended)***

This alignment is located in a predominately residential neighborhood, and will impact numerous residential lots. Traffic operations will be impacted due to the numerous driveways serving the residential neighborhood. Community cohesion will be impacted as the location of the alignment will divide a portion of the neighborhood.

A new railroad crossing will be required to make a connection between Strike Lane and Pelican Colony Boulevard.

***Red Robin Alignment (Not Recommended)***

The alignment is located in a residential neighborhood and it will have several residential impacts. Traffic operations will be impacted due to the numerous driveways serving the residential neighborhood. Community cohesion will be impacted as the location of the alignment will divide a portion of the neighborhood.

A new railroad crossing will be required to provide a connection between Old U.S. 41 and Pelican Colony Boulevard.

***Railroad Alignment to Tuck Drive, Old U.S. 41 (Not Recommended)***

This alignment connects at Bernwood Parkway (Signal Road) at Old U.S. 41. The alignment is intended to be compatible with the proposed roadway shown on the approved Master Plan Development "A" for The Villages of Bonita North. This alignment will have some residential



of the Cascades and this alignment will impact the preserve.

*Middle Alignment (Not Recommended)*

Due to the location of the alignment, some residential impacts will occur. This alignment also comes in close proximity to the award winning Mysore Fig tree located at the intersection of Sandy Lane and Broadway Street.

*West Alignment (Not Recommended)*

Due to the location of the alignment, some residential impacts will occur. Proximity to the existing railroad crossing on Broadway Street will require installation of advance railroad crossing signals.

*Railroad Alignment (Recommended)*

This alignment will require a new bridge over the Estero River west of the existing bridge. If residents agree, the existing bridge on Sandy Lane could be removed which would serve as mitigation for the construction of the new bridge. Due to the location of the alignment, minor residential impacts will occur. However, impacts to residents and the community are reduced by paralleling the railroad.

**San Carlos Park – Estero Parkway to Alico Road**

*Estero Parkway to Existing Oriole Road*

The developers of Bella Lago, Estero Golf Resort and the Reserve at Estero have reserved 100 feet of right-of-way for the extension of Sandy Lane to existing Oriole Road and this right-of-way should be acquired by Lee County for the future extension of Sandy Lane.

*Existing Oriole Road (Recommend further evaluation)*

The Oriole alignment would use existing Oriole Road until it terminates at Alico Road. Existing Oriole Road has hundreds of driveways that will affect traffic operations of the proposed Sandy Lane extension. The limited right-of-way, the excessive number of driveways and stop signs would degrade the quality of this segment as a viable alternative and may pose a safety issue for pedestrians. A more detailed discussion regarding this alternative is provided in the Recommended Alternative section.

**6.8.4 Recommended Alternative**

The final recommendation in Bonita Springs is the “Production Circle” Alignment, see Exhibit 6-9. This alignment is desirable geometrically, socially, environmentally and if access is limited from U.S. 41 then it is also desirable from a traffic operations perspective. The alignment proved to be the least disruptive to the community, where residential impacts were minimized. The commercial impacts were limited as well. The Production Circle corridor alignment was shifted slightly to the west to provide a more appropriate connection with Old U.S. 41 and to minimize impacts to a campus-style business located on Frontage Road.

In discussions with Bonita Springs City staff, it is possible that in the future Strike Lane could become a city owned east-west roadway connecting Three Oaks Parkway and U.S. 41 (at Strike Lane). The City staff believes that the Production Circle alignment of Sandy Lane is

AERIAL  
DEPARTMENT OF TRANSPORTATION

SANDY LANE EXTENSION CORRIDOR ALIGNMENT STUDY

CELLA  
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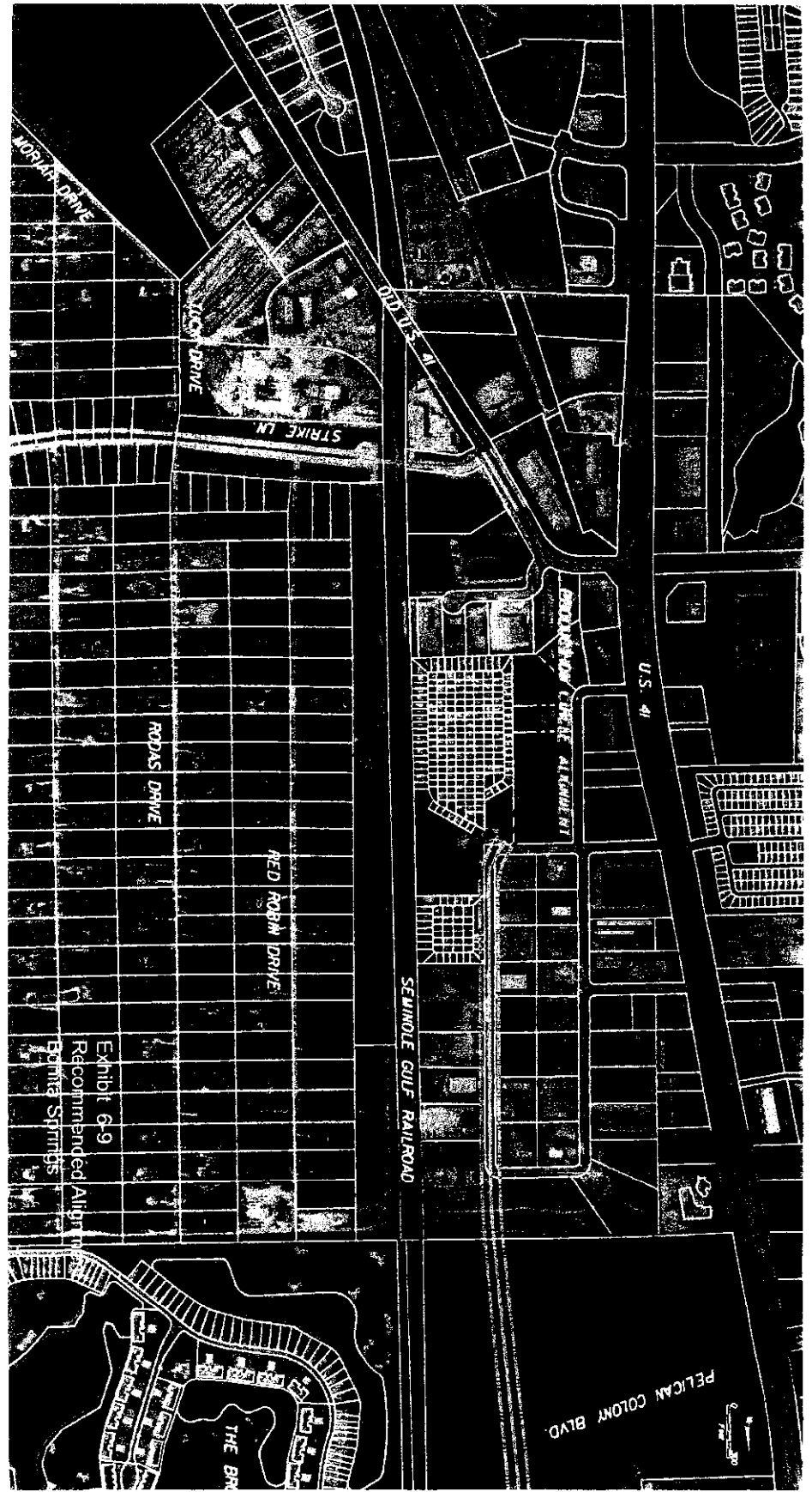


Exhibit 6-9  
Recommended Alignment  
Bonita Springs

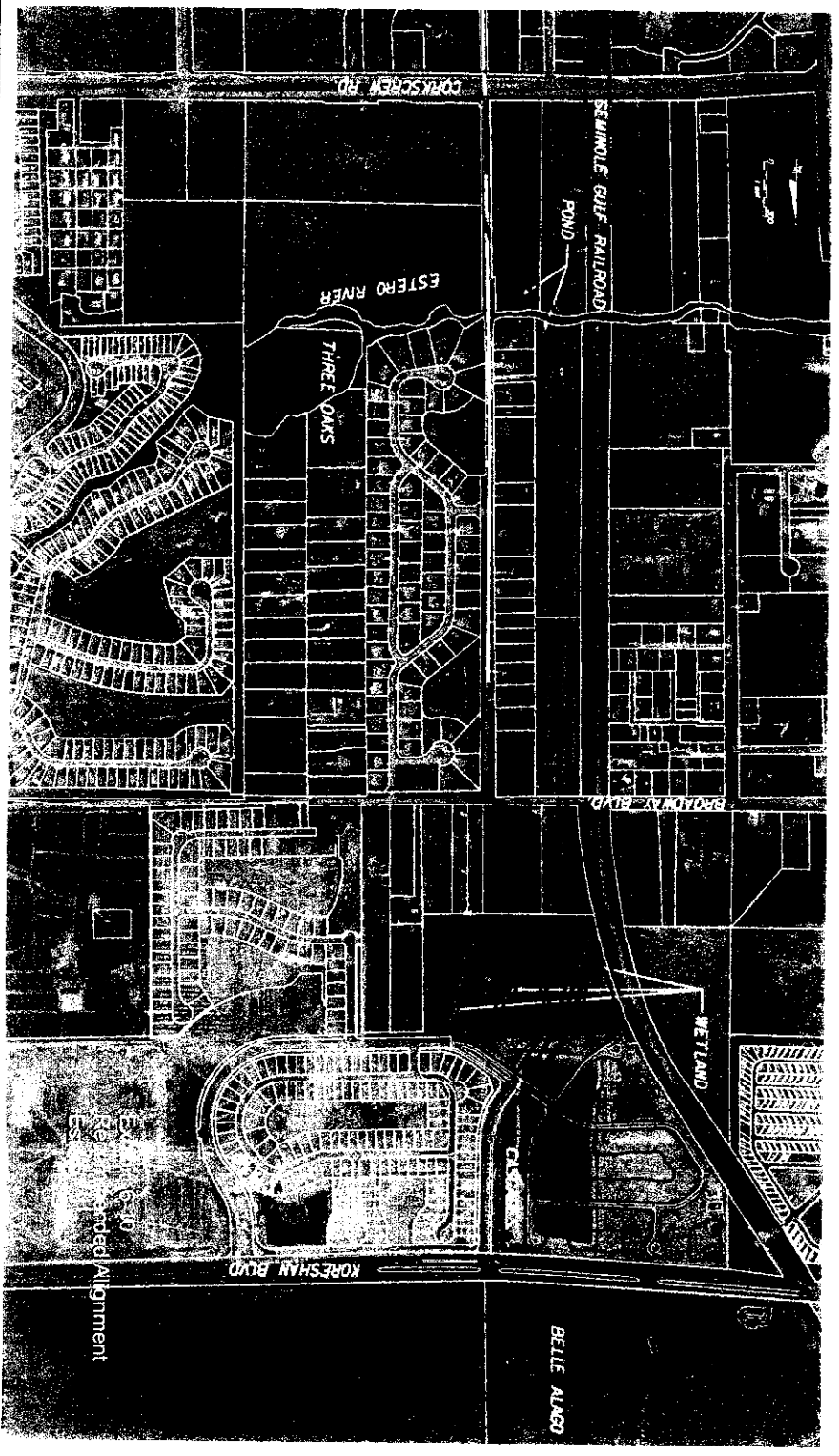
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the preferred alignment if Strike Lane is upgraded to an east-west connector (U.S. 41 to Three Oaks Parkway). The intersection of the "Production Circle" alignment at Old U.S. 41 and Frontage Road would be too close to the U.S. 41 intersection with Old U.S. 41 and would create degraded traffic operations. Therefore, it is recommended that Old U.S. 41 be closed at U.S. 41 and the existing signal at Old U.S. 41 and U.S. 41 be relocated to the intersection of U.S. 41 and Strike Lane. Sandy Lane would then become the extension of Old U.S. 41. It is recommended that the above alignment configuration be evaluated in the design phase to develop the most appropriate treatment of this intersection to maximize traffic operations. This alignment was adopted by the Bonita Springs City Council on August 4, 2004.

The recommended alignment for Sandy Lane between Corkscrew Road and Estero Parkway begins at Corkscrew Road and runs straight north along existing Sandy Lane for 370± feet, see Exhibit 6-10. The alignment curves to the west just before the Estero River. It continues straight as it crosses the Estero River over a new bridge in a new location. The alignment then curves to the north as it parallels the Seminole Gulf Railroad. After crossing Broadway Street, the alignment slightly curves to the west as it ties into the Cascades, which ultimately connects to Estero Parkway. This alignment is recommended because it reduces direct impacts to the residences along existing Sandy Lane and will accommodate drainage requirements and will provide for a four-lane section in the future. Existing Sandy Lane right-of-way width is only 50-feet-wide and would not accommodate a future four-laning without the need to purchase right-of-way on one or both sides in the future. Traffic impacts to the existing residences on Sandy Lane could be reduced by terminating Sandy Lane at the Estero River and only allow access to existing Sandy Lane from Broadway Street. An advanced railroad signal would be required on relocated Sandy Lane due to the proximity to the railroad crossing of this recommended alignment.

The extension of Sandy Lane from Estero Parkway north through San Carlos Park to Alico Road along Oriole Road was analyzed. The scope of work envisioned tying into Oriole Road with no major improvements or right-of-way acquisition. The traffic drops off to 10,000 vehicles per day at Estero Parkway (from 16,000). The limited right-of-way, the excessive number of driveways and stop signs would degrade the quality of this segment as a viable alternative and may pose a safety issue for pedestrians. After the widening of Three Oaks Parkway and U.S. 41, the traffic conditions should be reevaluated to determine when this segment may be needed. If the connection is made to Oriole Road, it is recommended that a detailed alignment evaluation study be conducted to evaluate the impacts of acquiring right-of-way to provide a roadway that provides the capacity, level-of-service and safety that is warranted by traffic demand. It is recommended that the County pursue the acquisition of the 100-foot right-of-way from Estero Parkway to the south end of Oriole Road.



DATE OF AERIAL: APRIL 2002

LEWIS COUNTY DEPARTMENT OF TRANSPORTATION

SANDY LANE EXTENSION CORRIDOR ALIGNMENT STUDY

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