

Alternative Alignment Evaluation

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 was developed utilizing aerial photography depicting the proposed right-of-way requirements for each alternative. As there were no alternative alignments developed for the San Carlos Park portion (Estero Parkway to Alico Road) of the project, a matrix was not developed for this section. The evaluation matrices for the Bonita Springs alternatives and the Estero alternatives are provided below.

Bonita Springs Rural Two-Lane Construction Draft Evaluation Matrix

Evaluation Measure	Rodas/Old 41	Red Robin/ Strike	East Railroad/ Tuck/Old 41	East Railroad to Old 41	West Railroad	Production Circle
Travel Service						
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)
Social/Cultural Impacts						
Impacts to Residential Improved	3	1	7	4		
Impacts to Residential Vacant	56	51	16	5	53 manufactured	7 manufactured
Potential Business Impacts	2	2	2	3	5	15
Neighborhood Impacts	High	High	Low	low	high	low
Natural Environment Impacts (in Acres)						
Wetland Habitat	0.05	0.93	2.45	0.42	OSW	DEP
Potential Flow ways	2	2	2	1	1	0
Physical Environment Impacts						
Potential Contamination Sites	1 high	1 high	1 high	2 high	1high	1 high, 1 low
Railroad	1	2	1	3	0	0
Project Cost						
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
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	\$2,000,000	\$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
TOTAL PROJECT COST	\$11,286,669	\$14,949,297	\$14,200,936	\$16,008,824	\$10,992,280	\$11,908,820

Estero Rural Two-Lane Construction Draft Evaluation Matrix

Evaluation Measure	Exist Sandy Lane (west)	Railroad	Railroad - Broadway Closed
Travel Service			
Future Year (2020) Travel Demand (Traffic Projections) LOS	Equal	Equal	Equal
Traffic Operations	Fair	Poor	Good
Social/Cultural Impacts			
Impacts to Residential Improved	2	3	3
Impacts to Residential Vacant	2	5	5
Potential Business Impacts	0	0	0
Neighborhood Impacts	Medium	Low	Low
Natural Environment Impacts (in Acres)			
Wetland Habitat		New Bridge	New Bridge
Upland Habitat	Indigenous Preserve	OFW	OFW
Potential Flow ways	1	1	1
Potential 100-year Base Floodplain	0	1	1
Physical Environment Impacts			
Potential Utility Relocations	10	8	8
Railroad	1	1	0
Project Cost (millions)			
⁽¹⁾ 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
⁽²⁾ Construction - Rural 2 lane road	\$1,322,088	\$3,002,928	\$3,002,928
Railroad Crossing or Advance Warning signals	\$20,000	\$20,000	
Environmental Mitigation	\$15,000	\$15,000	\$15,000
TOTAL PROJECT COST	\$3,633,039	\$8,018,982	\$7,998,982



Department of Transportation

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What's next?

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

QUESTIONS? NEED MORE PROJECT INFORMATION?

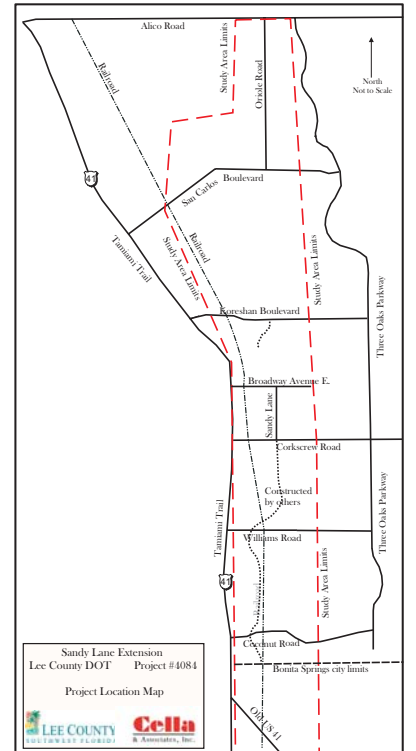
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SANDY LANE EXTENSION CORRIDOR ALIGNMENT STUDY

May 2004

The Lee County Department of Transportation (LC DOT) would like to welcome you to the Sandy Lane Extension Corridor Alignment Study public information workshop. 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 as shown on the project location map.

This meeting is being held to present the recommended alternative alignments identified by the consultants in the evaluation process. You are encouraged to view a continuously running slide show explaining the project and the recommended alignments. Members of the project team will be available to answer your questions. If you have concerns regarding your business or residence, please contact a project team member this evening. In addition, comment forms are provided with this handout and can be deposited in the comment boxes this evening or can be mailed to the address provided on the back of the form within 14 days.



Purpose of the Study

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.

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. In December 2000, the Sandy Lane Extension was added to the Metropolitan Planning Organization's (MPO) 2020 Financially Feasible Highway Plan as a two-lane undivided arterial from Old U.S. 41 in Bonita Springs to Alico Road in San Carlos Park. In February 2004, the MPO added the Sandy Lane Extension from Old U.S. 41 to Estero Parkway as a four-lane facility in the 2020 Needs Plan. The purpose of the proposed facility is to provide congestion relief to U.S. 41 and Three Oaks Parkway in southern Lee County.

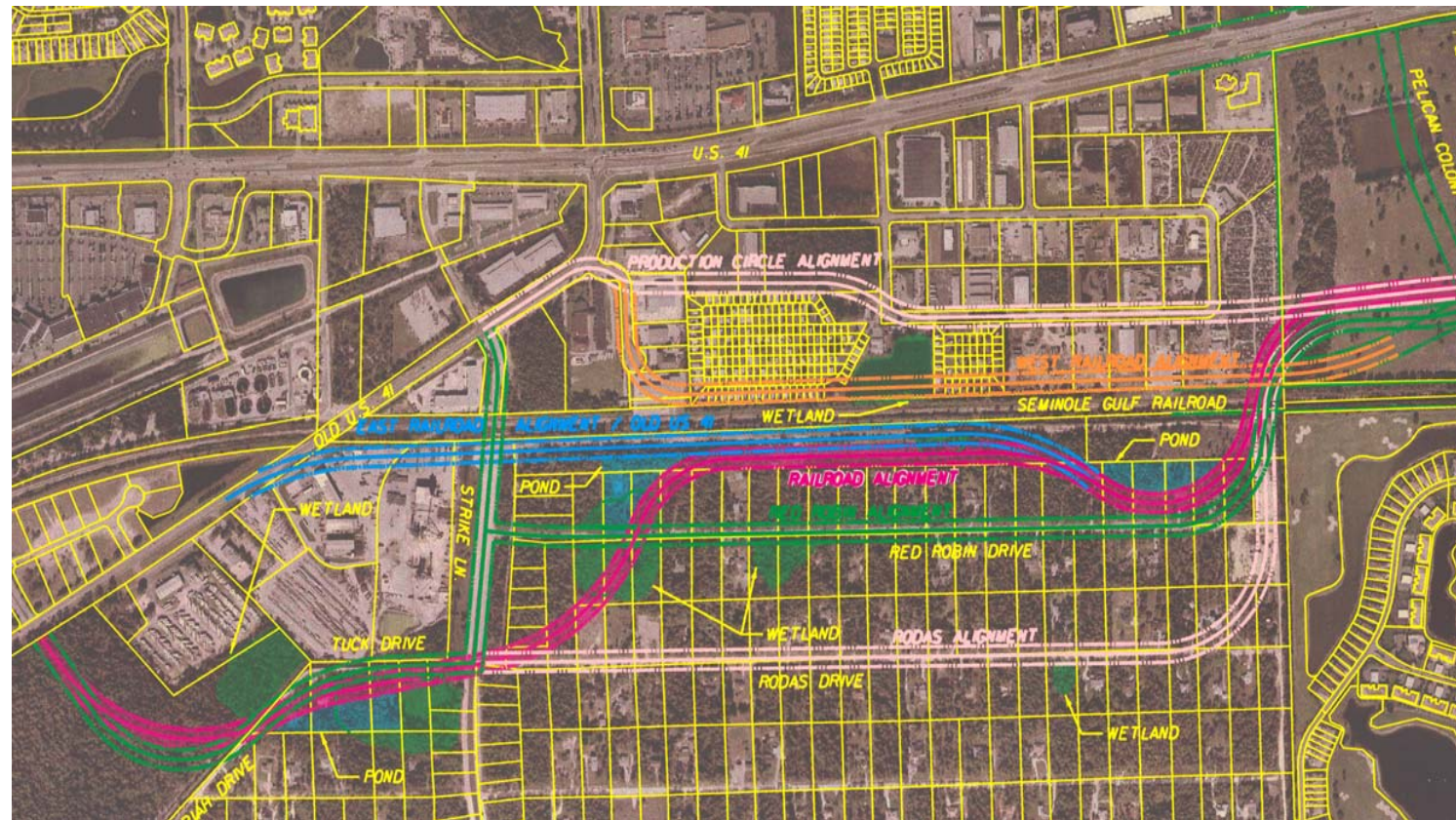
The traffic study concluded that the traffic volume reduction on U.S. 41 with the construction of Sandy Lane is projected to be as much as 10,000 vehicles per day (vpd) in certain locations. This is a significant reduction which will help ease the congestion on U.S. 41. Congestion relief on Three Oaks 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

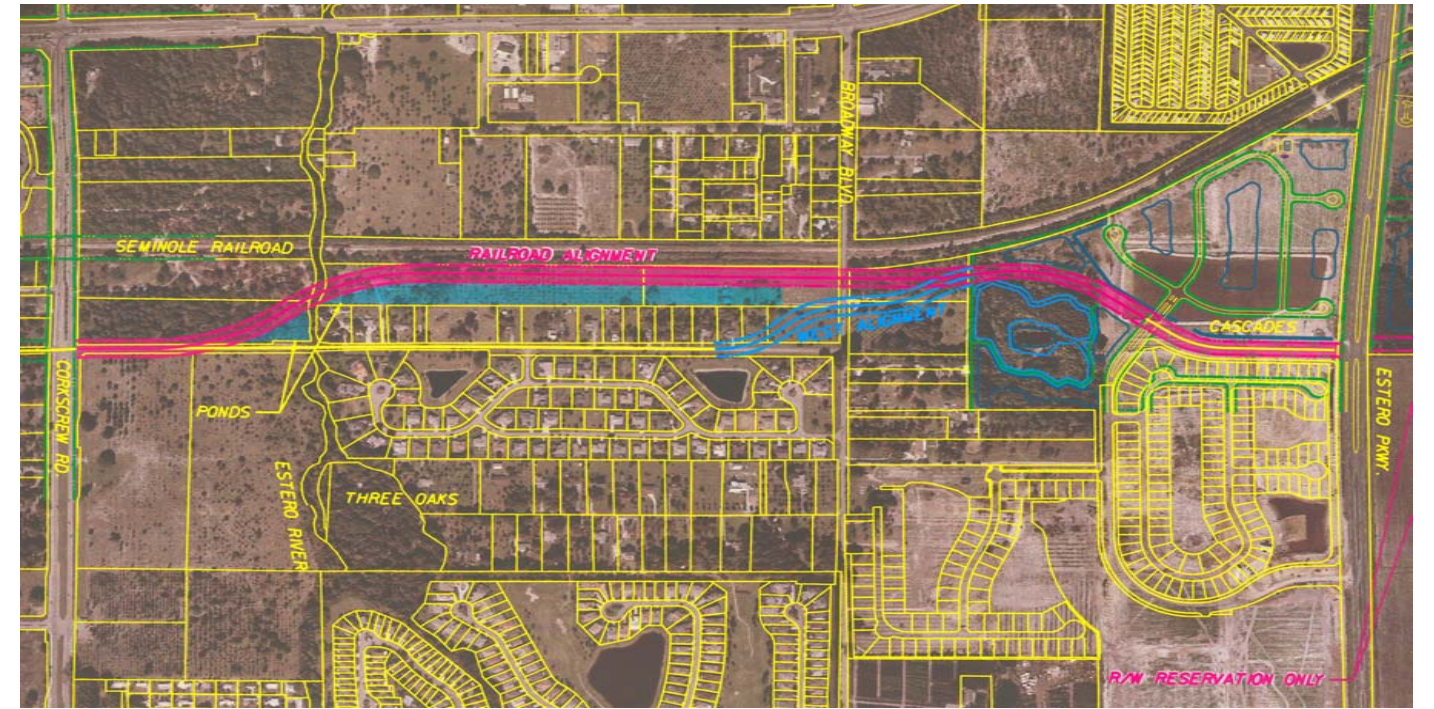
The consultants' final recommendation in Bonita Springs is the "Railroad/Tuck Drive/Old U.S. 41" Alignment, as shown below in bright pink. Of all the alternative alignments considered, this alignment was most desirable geometrically, socially, environmentally and from a traffic operations perspective. 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 alternative alignment may become the preferred alternative alignment 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.



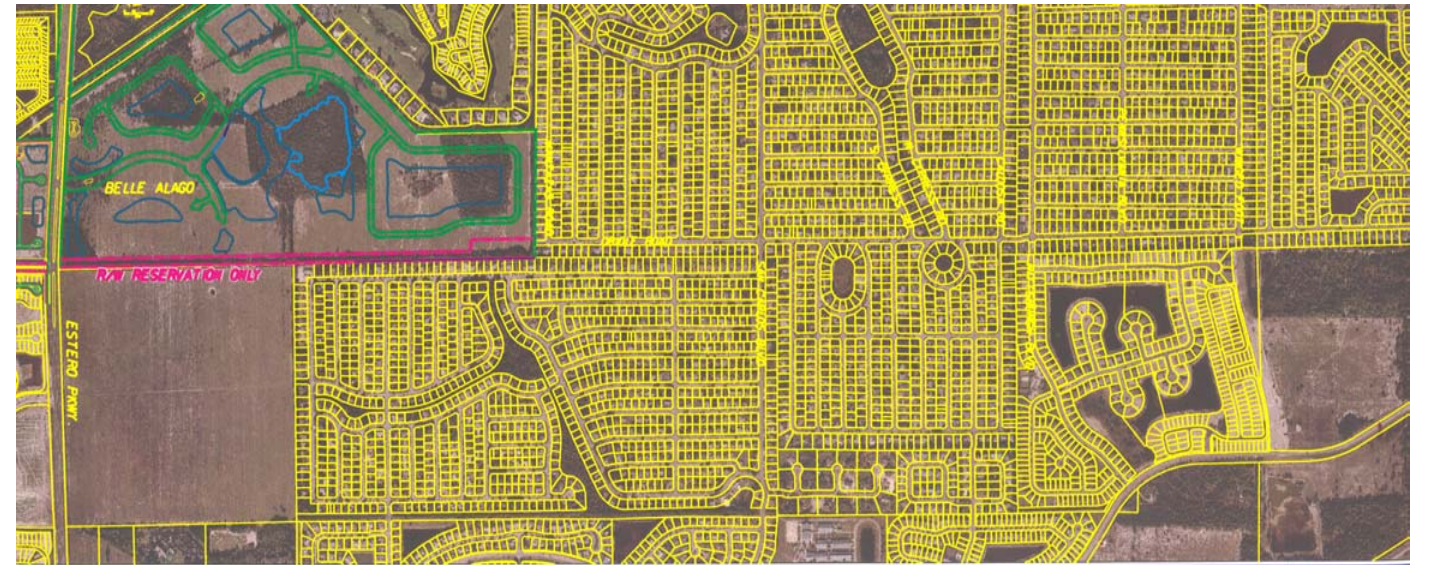
Estero

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 (Koreschan 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 future four-laning without the need to purchase right-of-way on one or both sides. 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 (Koreschan 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. The traffic volumes drop off to 10,000 vpd at Estero Parkway (Koreschan 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 could 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 (Koreschan Boulevard) to the south end of Oriole Road.



Recommendations

Below are the consultants' recommended alternative alignments 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 from Estero Parkway (Koreschan Boulevard) to the south end of Oriole Road and reevaluate the Oriole Road connection at a later date