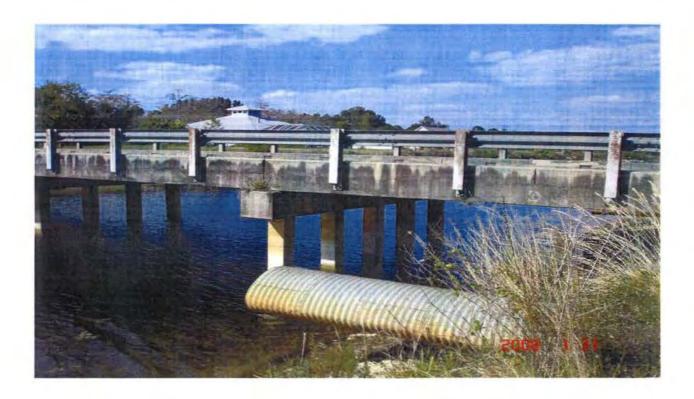


## **Transportation Services Division**

## EAST OF 951 HORIZON STUDY FOR BRIDGES AUGUST 2008



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### East of 951 "Build-Out" Horizon Study Bridge Component

### Purpose

The East of County Road 951 Infrastructure and Services Horizon Study is a project that identifies three levels of service options for public infrastructure and service outlays for the area east of CR 951. These areas include public utilities, schools, parks, law enforcement, emergency services, fire, libraries, storm water management and transportation.

Of the services and infrastructure discussed, transportation and public utilities are the keystone elements. The locations of other services and institutions such as emergency and fire services, schools, parks and libraries depend heavily on locations of roads, potable water and wastewater lines. Decisions on capital infrastructure and service provisions cannot be made in a vacuum, and an intensive public participation program for the area east of CR 951 has provided a vision from property owners, residents, and other affected parties regarding identified infrastructure and public services needs.

Through this process, the need for additional connectivity in the Estates was discussed and a recommendation was made that Transportation Services should work with other agencies to identify opportunities where additional connectivity could serve multiple purposes and agencies consistent with Objective 6.3 of the Golden Gate Area Master Plan approved as part of the Growth Management Plan which states:

"In planning and constructing road improvements within Golden Gate Estates and Golden Gate City, Collier County shall coordinate with local emergency services officials to ensure that the access needs of fire department, police and emergency management personnel and vehicles are met."

The Transportation Division's 5 year work program already identifies the need for bridge maintenance and contemplates new bridge construction. The Metropolitan Planning Organization's Long Range Transportation Plan update will include the information collected from this study and the priorities adopted by the Board of County Commissioners (BCC). The purpose of this bridge study is to identify, evaluate and prioritize new bridge locations that address emergency response time, mobility, service efficiency and public sentiment east of CR 951.

### Evaluation and Selection Process

The study included several key steps:

- Transportation staff identified potential new bridge connections from the existing roadway grid east of County Road 951 that was severed due to the canal system.
  - One approved bridge and seven possible locations for new bridges and three study areas were identified. A map was created depicting these bridges and study areas. It is important to note that Bridge 1 was shown as an approved bridge location as per the Growth Management Plan Golden Gate Area Master Plan and is not included in the ranking matrices.
- Staff contacted key stakeholders, including the public that would benefit from the connectivity and mobility provided by new bridges.
  - The stakeholders included: Big Corkscrew Island Fire Control and Rescue District (BCIFD), Collier County Emergency Management Services (EMS), Golden Gate Fire Rescue District (GGFD), Parks, Forestry Service, The Conservancy and Audubon Society, Public Utilities, Big Cypress Basin, Collier County School District, the Collier County Sheriff's Office and the public.
- The evaluation process was broken down into four categories and corresponding criteria:
  - Emergency Response (Fire, EMS, Sheriff and Forestry)
    - Change in Response Time
    - Proximity to Agency (Insurance Qualification)
  - Mobility and Evacuation (Transportation Services)
    - Increased evacuation options
    - Connection to existing or planned signalized intersections
    - Access to existing or planned arterials
    - Reduced trip length

- Service Efficiency (School District, Parks, Public Utilities and Big Cypress Basin)
  - School bus efficiency
  - Connectivity to existing or planned school sites
  - Connectivity to existing or planned park sites
  - · Potential utility crossings and control structures

### Public Sentiment

- All of the above
- Local knowledge
- Quality of life

The stakeholders were asked to evaluate and rank the seven bridge locations as well as determine the best bridge location in the study areas based on the above criteria. After all rankings were completed by the outside agencies, staff compiled and evaluated the data. The original study included three "Study Areas" in which the outside agencies were to review and determine the best location for a bridge within that area. Additionally, a new bridge was also recommended. Based upon those recommendations, a new map was created with eleven (11) potential bridge locations. The agencies were asked again to re-evaluate the potential bridge locations and re-rank them. A Public Information Meeting was then held July 2, 2008 to solicit input from the community with the benefit of the agency stakeholder recommendations and comments.

The four categories that were used in evaluating the potential bridge sites each have their own specific need and value to the community. The categories have been detailed below to provide more information on some of the considerations that were used in the evaluation. A detailed view of the rankings can be found in Appendix C.

#### Emergency Response

In providing the rankings for the eleven bridge locations the various agencies making up the "Emergency Response" category (Big Corkscrew Island Fire District, Golden Gate Fire District, Emergency Management Services, Forestry Service and Collier County Sheriff's Office) were centered primarily on two components: time and distance.

Decreasing response times can be a matter of life and death. The medical standard for response time is eight minutes as that is the time required in cases of cardiac arrest, if brain injury or death is to be avoided. For areas within the Estates that have a response time greater than 8 minutes, the addition of bridges is important to reduce those response times.

When fighting a fire, every second counts in trying to contain or extinguish a fire. In the US, every year hundreds of thousands of structural fires occur, causing billions in damages. According to the most recent data available by FEMA, a residential fire is reported every 80 seconds, and while statistical data shows a significant decrease in civilian fire deaths and injuries, the number of fires in the United States continues on a steady rise. Therefore, distance to the fire is an important issue. The fire districts use a 5-mile drive distance as their measurement. By adding bridges it is anticipated the Insurance Service Organization (ISO) rating will decrease thus homeowners could see a reduction in their homeowners insurance from 10-40% as the new bridges would decrease response time and mileage to some remote areas.

The ISO ranks properties on a scale from 1-10. If properties are within 5 driving miles of a fire station, the property is automatically ranked as a 9. If properties are outside a 5 mile driving distance, the property is classified a 10 which means there is no fire service protection and thus, those properties pay a much higher rate of insurance. Items which affect the ISO rating in reducing it from a 9, depends on staffing levels, staff training, apparatus, record keeping, etc. for the fire district. Currently properties within a 5 mile driving distance are ranked a 5 in the BCIFD's boundaries while properties within a 5 mile driving distance are ranked a 4 in the GGFD boundaries. Estates properties outside the 5 mile driving distance are ranked a 10.

Bridge 4 is the most important bridge for BCIFD as it would decrease response time by two minutes to some areas and would provide needed secondary egress for emergencies. This bridge also brings portions of areas on 20<sup>th</sup> Street and 22<sup>nd</sup> Street into the five road mile range thus giving those property owners fire protection and potentially decreasing their property owner Insurance. Bridge 11 and Bridge 8 were the most important for GGFD. Bridge 11 reduced their response time by twenty seconds to some areas and Bridge 8 reduced their response time by three and onehalf minutes to other areas with Vanderbilt Beach Road extension and connectivity to the north. Bridges 2 and 3 are ranked high for fire, emergency management and the sheriff as they would allow for a significant savings for mutual aid to the roadways off 16<sup>th</sup> St NE and 8<sup>th</sup> St. NE.

#### Mobility and Evacuation

While evaluating this category, staff considered existing roadways and signalized intersections as well as planned improvements. Staff also considered evacuation concerns that were evident from the recent and historical wildfires that have impacted areas east of CR-951. Bridges 2 and 3 located on 8<sup>th</sup> and 16<sup>th</sup> Street NE scored high based on their even spacing, existing connectivity to Golden Gate Boulevard and Randall Boulevard and their potential connection to Vanderbilt Beach Road Extension. They clearly establish a north south grid in the Estates connecting to three existing or proposed arterials.

Bridges 6 and 7 located on 18<sup>th</sup> Avenue NE also completed an evenly spaced east west road that ties into an existing bridge network, two schools and would connect from Wilson Boulevard all the way to the Big Cypress DRI. Bridges 4 and 5 located

on 47<sup>th</sup> Avenue NE and Wilson Boulevard (North of Immokalee) also complete the existing grid system.

Evacuation is a function of providing an alternative or faster route in response or anticipation of an event such as hurricane or wildfire. The bridges noted above would provide secondary evacuation routes and alternative direction evacuation routes.

#### Service Efficiency

Agency rankings comprised of the public services category included public utilities, school district, Big Cypress Basin, and parks. Adding more bridges to the Estates will provide for more efficient public services to the area.

The proposed construction of water and sewer plants, that provide sewer, potable water and raw water require collection and distribution lines to and from facilities and homes they service. They would have the ability to take advantage of new bridges to span the canals along the chosen corridors.

Bridges will also allow for better bus routes for schools resulting in increased zoning flexibility and bus transportation efficiency. Ultimately this translates into cost savings by reducing bus route mileage and potentially allowing for pedestrian access to schools.

#### Public Sentiment

The information gathered from staff and the outside agencies was presented to the public to consider and evaluate. The public was asked to consider emergency response and mobility while also considering how that would impact their quality of life. Local knowledge was also solicited and proved beneficial in the evaluation of Bridge 11 located on 14<sup>th</sup> Avenue SE. The public comments noted that there was an existing drainage control structure located on 20<sup>th</sup> Avenue SE that could be used in emergencies. It was also commented that a bridge on 10<sup>th</sup> or 12<sup>th</sup> Avenue SE might better serve the area with the existing and planned schools on the west side of Everglades Boulevard. There was also discussion that a bridge at 16<sup>th</sup> Avenue SE might prove useful since the Long Range Transportation Plan shows a future connection at that location. Comments from the public justified that location of Bridge 11 should revert back to a study area until such time that more information is available.

In reviewing the public sentiments (Appendix D) there were several common themes that were consistent in their responses.

- Support for better access, evacuation, emergency services, fire response and insurance relief
- · Concern for increased traffic, property values, and safety
- Site specific concerns versus overall benefit and need

### Public Involvement Plan (PIP)

A critical component of the Horizon Study is public involvement. It was decided that the value of the bridge component and the impacts to a more localized area would require its own PIP. A public meeting was held on July 2, 2008 at 7 p.m. at the Oakridge Middle School cafeteria with over 150 in attendance. Two weeks prior to the meeting over 1500 postcards were mailed to property owners on roadways where a potential bridge was identified. One week before the meeting, ads were placed in the Naples Daily News and Collier Citizen. Five days before the meeting, a variable message board sign was placed in the median on CR 951 and one was placed in the median on Golden Gate Boulevard announcing the meeting. News media also covered the meeting, with ABC-7 conducting an interview with staff and airing the story the day before the meeting as well as stories being printed in both the Naples Daily News and the Collier Citizen. Information regarding the bridge study was also posted on the Transportation Planning website along with a survey to gain public input. The input from the public information meeting as well as the survey information from the website were accumulated and are located in Appendix E.

As mentioned above, due to concerns raised at the public meeting regarding the location of Bridge 11 on 14<sup>th</sup> Avenue SE, it was decided to re-evaluate the location of that bridge and turn it back into a study area. An additional 1100 postcards were then mailed to property owners on 10<sup>th</sup> Avenue SE, 12<sup>th</sup> Avenue SE, 14<sup>th</sup> Avenue SE, 16<sup>th</sup> Avenue. SE, 18<sup>th</sup> Avenue SE and 20<sup>th</sup> Avenue SE notifying the property owners that Bridge 11 was going to revert back to a study area. This was done so that these residents would have the same benefit of notification as the prior mailing group.

A complete copy of the PIP documents and reporting can be found in Appendix E.

### **Costs Analysis**

A brief cost estimate was prepared using the FDOT Bridge Development Report (BDR) cost estimating guidelines and the following exceptions are to be noted:

- Estimating the bridge cost using the BDR guidelines is done after the completion
  of the preliminary design which includes member selection, member sizes and
  member reinforcing. No preliminary designs were available for these bridges.
- The FDOT estimating process develops a cost for the bridge superstructure and substructure from beginning to end bridge. Costs for all other items including but not limited to the following were excluded from the costs: mobilization, operations costs for existing bridges, walls, deck drainage systems, embankments, fenders approach, slabs, load test and bank stabilization.

The following assumptions were made for the type of proposed 2 lane rural and 4-lane rural structures provided in the study.

The bridge length was determined based on a typical canal bottom width of 30 feet and 2.1 embankment slopes between 6-foot wild life berm at each end bent. The assumed bridge length is 101 feet. It was also assumed that the bridges will be single spans at each crossing. For canals, that may provide utility crossing, an additional bent was added to the cost. All bridges were evaluated using the AASHTO Type IV beam. Pre-stressed concrete piles were assumed based on typical foundations in Florida

Proposed Bridge Type	Design Cost (\$)	CEI Cost (\$)	Deck Cost/sqft (\$)*	Est. Constr. Cost (\$)	Total Est. Cost (\$)
2-ln rural	135,608	77,504	135	775,035	988,147
4-ln rural	150,000	110,228	135	1,102,275	1,362,503
2-ln rural w/utility	145,608	77,504	135	775,035	998,147
4-ln rural w/utility	160,000	110,228	135	1,102,275	1,372,503

### BRIDGE COSTS

Complete cost estimate information can be found in Appendix F.

### FINAL RANKINGS

The public was asked to list the most important reason to add new bridges east of CR-951. They ranked their priorities in the following order:

- 1. Better evacuation and emergency response times for fire, EMS and sheriff
- 2. Better access and mobility
- 3. Better services for schools, parks and utilities

	EMERGENCY RESPONSE	MOBILITY	SERVICE EFFICIENCY	PUBLIC
Rank	(fire, ems, sheriff, forestry service)	(transportation)	(school district, parks, public utilities, big cypress basin)	(rankings provided at PIP 7/2/08 )
#1	Bridge 2 - response time reduced 2 minutes BCIFD	Bridge 3	≁ Bridge 5	Bridge 2
#2	Bridge 3 - response time reduced by 2 minutes BCIFD	Bridge 2	Bridge 8	Bridge 3
#3	Bridge 4 - response time reduced by 2 minutes BCIFD	Bridge 5	Bridge 6	Bridge 6
#4	Bridge 12 - critical for wildfires for BCIFD/Forestry	Bridge 11*	Bridge 4	Bridge 7
#5	Bridges 9 Forestry, EMS, GGFD	Bridges 4	Bridge 7	Bridge 8
#6	Bridge 6 - Sheriff	Bridge 7	Bridge 3	Bridge 9
#7	Bridges 7 (Sheriff) & 11*Sheriff/Forestry/GGFD	Bridge 6	Bridge 2	Bridge 4
#8	Bridges 8 &10- response time reduced by 3.5 minutes for Bridge 8 by GGFD (pending VBR extension and connectivity to the north)	Bridge 8	Bridge 9	Bridge 12
#9	Bridge 5 - response time reduced by 2 minutes BCIFD	Bridge 9	Bridge 12	Bridge 5
#10		Bridges 10	Bridge 10	Bridge 11*
#11		Bridge 12	Bridge 11*	Bridge 10

\*Based upon public comments at the public information meeting, Bridge 11 was reverted back to a study area until further research is completed to determine the best location for this bridge. The study area is shown on the attached map in Appendix A.

### RECOMMENDATIONS

Based on agency rankings, staff evaluation, public rankings and comments, Bridges 2 and 3 scored the highest. As such, it is recommended that these two are installed first and at the same time. By installing them together, it will disperse the traffic between the two adjacent facilities. Bridges 4, 5, 6 and 7 also ranked fairly high in all areas and should be considered the next logical locations for bridges as funding allows. Bridge 12 ranks high for emergency response but scores low in other areas. Staff would recommend that Bridge 12 is considered with the prior group as funding allows or seeks a modified design which may satisfy emergency response. Bridges 8, 9, and 10 would be recommended as new roadways and schools are constructed. Funding may be from alternative sources.

Bridge 1 is being constructed as part of the White Boulevard bridge replacement project. Bridge 1 was approved as per Policy 6.1.1 and Policy 7.3.1 of the Golden Gate Master Plan adopted into the Growth Management Plan December 2003.

Policy 6.1.1

In planning to increase the number of route alternatives through the Estates Area, the Collier County Transportation Division will prioritize the following routes over other alternatives:

- The extension of Vanderbilt Beach Road from its current terminus to DeSoto Boulevard.
- b. The development of a north-south connection from the eastern terminus of White Boulevard to Golden gate Boulevard.
- c. The development of a new east-west roadway crossing the Estates Area south of Golden gate Boulevard.
- Policy 7.3.1

By 2006, the Collier County Bureau of Emergency Services, the Collier County Transportation Division, Golden Gate Fire Control and Rescue District, and other appropriate Federal, State or local agencies, shall begin establishing one or more of the following routes for emergency evacuation purposes:

- a. An I-75 Interchange at Everglades Boulevard.
- b. Improved emergency access from Everglades Boulevard to I-75.
- c. Construction of a north-south bridge on 23<sup>rd</sup> Street, SW, between White Boulevard and Golden Gate Boulevard.

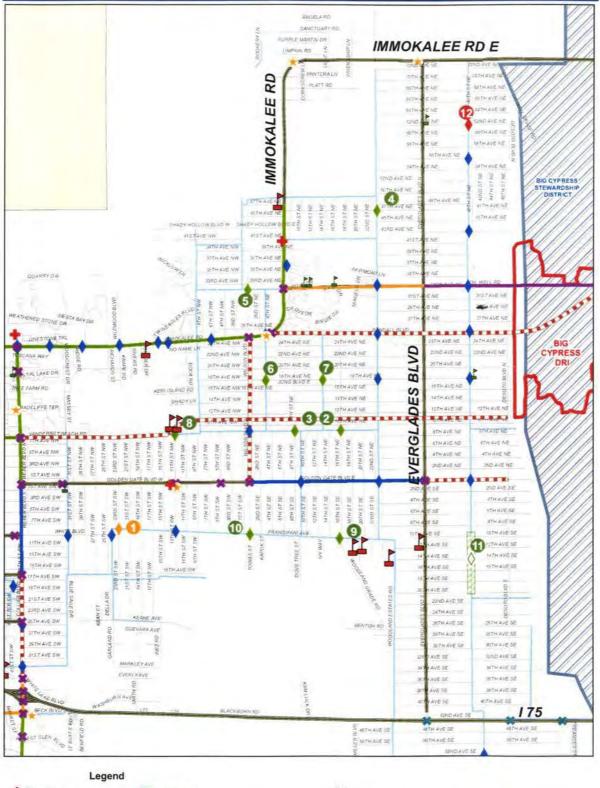
Construction of Bridge 1 is anticipated in 2010 subject to funding.

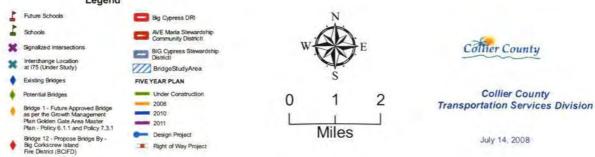
After receiving many comments about the location of Bridge 11, it was reverted back to a study area encompassing an area from 10<sup>th</sup> Avenue SE south to 20<sup>th</sup> Avenue SE. There was no clear consensus on the best location of that bridge. Until further study is completed, and funding becomes available, it is recommended that this bridge location remain a study area.

## **APPENDIX A**

MAP

## East of C.R. 951 Bridge Study

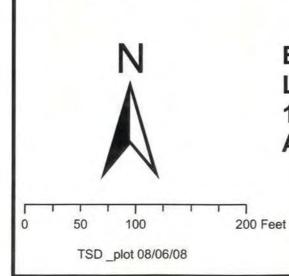




## APPENDIX B

## **AERIALS OF BRIDGE LOCATIONS**





BRIDGE 1 Location: 23rd St. SW 1 blk N of White Blvd Approx Canal Width: 110 ft







south of 10th Ave NE Approx Canal Width: 100 FT

Location: 16TH ST NE

**BRIDGE 2** 

350 Feet

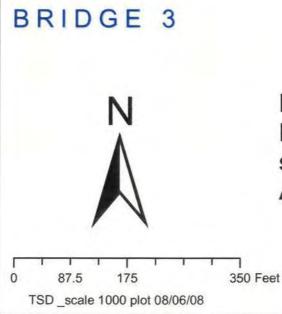
TSD \_plot 08/06/08

175

0

87.5

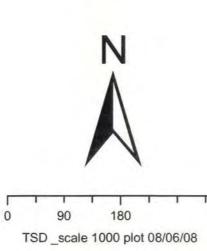




BRIDGE 3 Location: 8TH ST NE south of 10th Ave NE Approx Canal Width: 80 FT







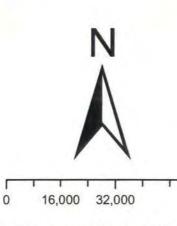
360 Feet

BRIDGE 4 Location: 47th Avenue NE Approx Canal Width: 110 FT

THE STAND



BRIDGE 5



BRIDGE 5 Location: Wilson Blvd south of 33rd Ave NE Approx Canal Width: 55-60 ft

TSD\_scale 1000 plot 08/06/08

64,000 Feet



BRIDGE 6 Location: 18TH AVE NE (between Wilson Ave N & 8th St NE) Approx Canal Width: 60 FT

0 95 190 380 Feet TSD\_scale 1000 plot 08/06/08



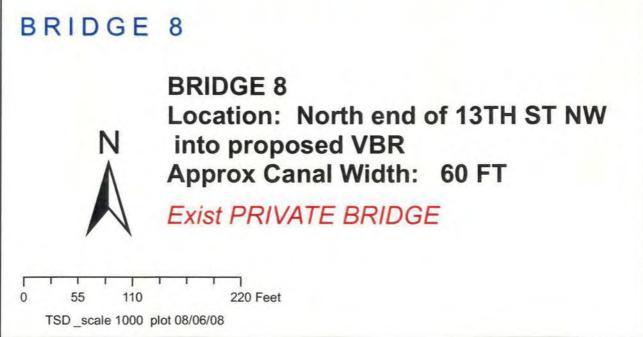




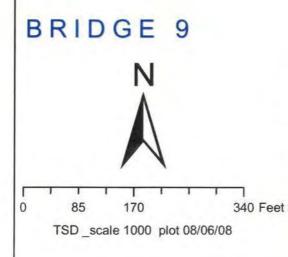
BRIDGE 7 Location: 18TH AVE NE (Between 8th St NE and16th St NE) Approx Canal Width: 140 FT

0 100 200 400 Feet TSD\_scale 1000 plot 08/06/08









BRIDGE 9 Location: 16TH ST SE at the south end Approx Canal Width: 25 FT

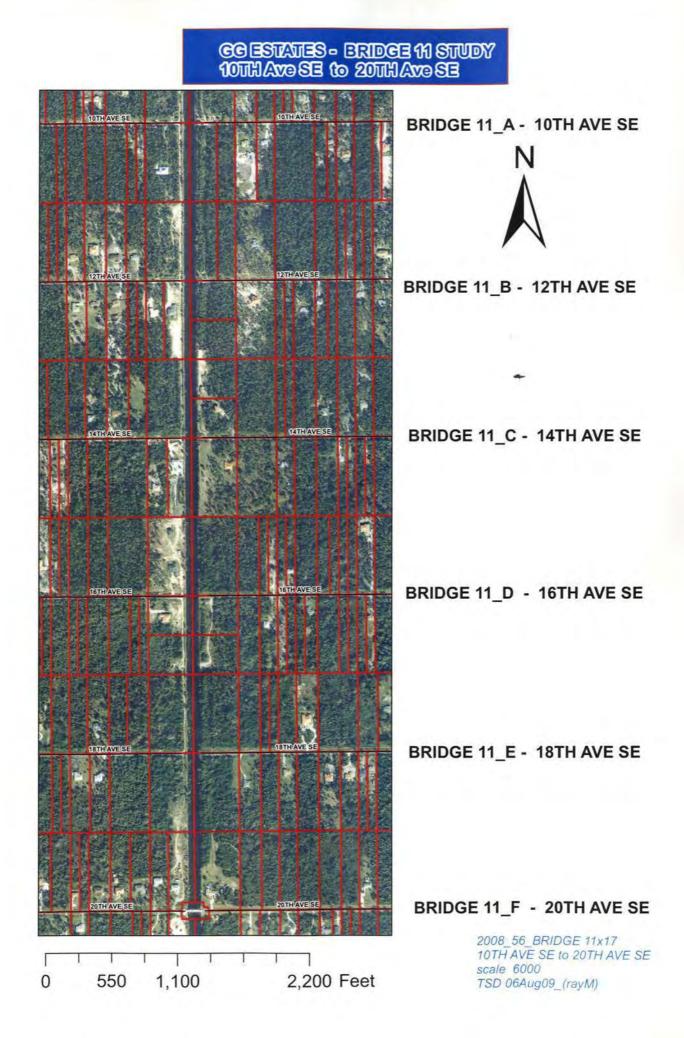


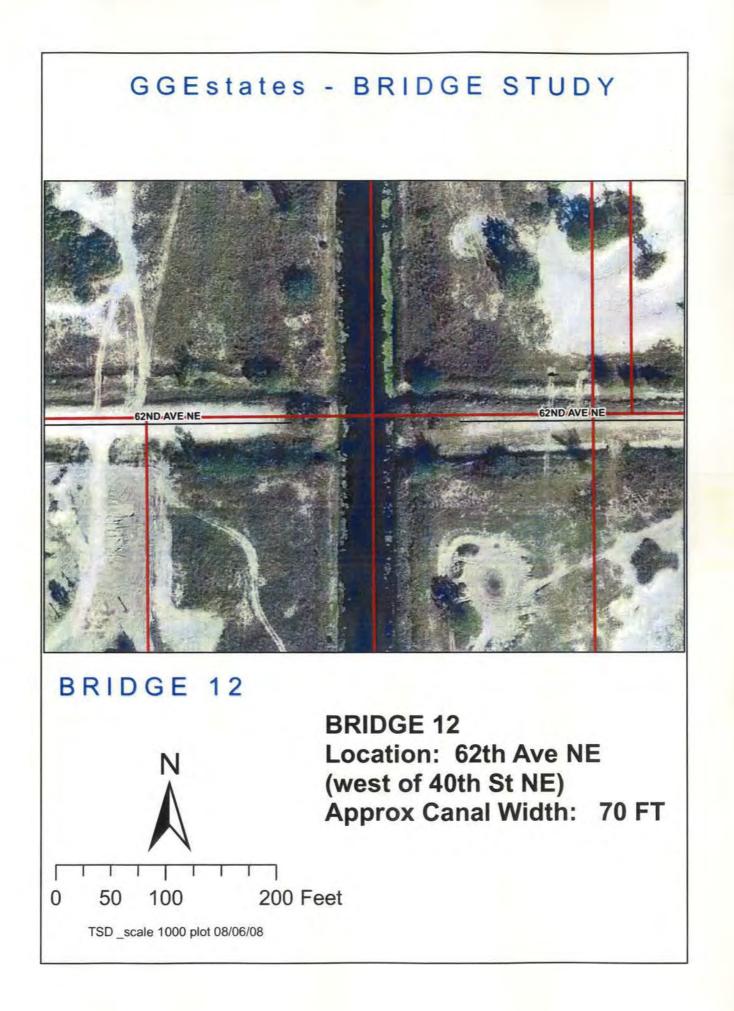
## BRIDGE 10

N

## BRIDGE 10 Location: Wilson Blvd S Approx Canal Width: 130 FT

0 50 100 200 Feet TSD\_scale 1000 plot 08/06/08





## APPENDIX C

## **RANKING MATRICES**

East of CR 951 Bridge Report

### FINAL RANKINGS

Public was asked the most important reason to add new bridges to the Estates Number 1 reason was for better evacuation and emergency response times for fire, ems, sheriff Number 2 reason was for better access/mobility

Number 3 reason was for better services for scholls, parks and utilities

	EMERGENCY RESPONSE	MOBILITY	SERVICE EFFICIENCY	PUBLIC
Rank	(fire, ems, sheriff, forestry service)	(transportation)	(school district, parks, public utilities, big cypress basin)	(rankings provided at PIP 7/2/08 )
#1	Bridge 2 - response time reduced 2 minutes BCIFD	Bridge 3	Bridge 5	_Bridge 2
#2	Bridge 3 - response time reduced by 2 minutes BCIFD	Bridge 2	Bridge 8	Bridge 3
#3	Bridge 4 - response time reduced by 2 minutes BCIFD	Bridge 5	Bridge 6	Bridge 6
#4	Bridge 12 - critical for wildfires for BCIFD/Forestry	Bridge 11	Bridge 4	Bridge 7
#5	Bridges 9 Forestry, EMS, GGFD	Bridges 4	Bridge 7	Bridge 8
#6	Bridge 6 - Sheriff	Bridge 7	Bridge 3	Bridge 9
#7	Bridges 7 (Sheriff) & 11 Sheriff/Forestry/GGFD	Bridge 6	Bridge 2	Bridge 4
#8	Bridges 8 &10- response time reduced by 3.5 minutes for Bridge 8 by GGFD (pending VBR extension and connectivity to the north)	Bridge 8	Bridge 9	Bridge 12
#9	Bridge 5 - response time reduced by 2 minutes BCIFD	Bridge 9	Bridge 12	Bridge 5
#10		Bridges 10	Bridge 10	Bridge 11
#11		Bridge 12	Bridge 11	Bridge 10

### BRIDGE STUDY EVALUATION MATRIX- EMERGENCY RESPONSE

	NEW BCIFD Ranking	NEW GGFD Ranking	Emergency Services	Forestry Division	Sheriff	TOTALS
Bridge 2	4	3	2	11	1	21
Bridge 3	5	4	2	11	1	23
Bridge 4	1	7	1	11	11	31
Bridge 5	3	9	9	11	11	43
Bridge 6	6	10	7	11	1	35
Bridge 7	7	11	7	11	1	37
Bridge 8	11	1	4	11	11	38
Bridge 9	11	5	4	3	11	34
Bridge 10	11	6	6	4	11	38
Bridge 11	11	2	11	2	11	37
Bridge 12	2	8	11	1	11	33
***NOTE: Bride	ge 1 not ranked	already app	proved location	on/ Ranked	#1 for She	riff
	Rankings 1- i	s best; 12 is I	east importa	nt		
7/2/2008	Bridge 2	21				
	Bridge 3	23				
	Bridge 4	31				
	Bridge 12	33	1. The second	C. Common		
	Bridges 9	34				
	Bridge 6	35		1	1	
	Bridge 7 & 11	37	1			
	Bridge 8 & 10	38				
	Bridge 5	43				
ems ranking rec	eived 7/2/08					

## BRIDGE STUDY EVALUATION MATRIX- MOBILITY

	Current Connectivity	Future Connect	Conn to Sign Inter	Chng in Trip Length	TOTALS
Bridge 2	2	1	1	3	7
Bridge 3	2	1	1	1	5
Bridge 4	1	3	11	4	19
Bridge 5	4	4	4	4	16
Bridge 6	6	8	4	4	22
Bridge 7	5	7	4	4	20
Bridge 8	11	5	3	11	30
Bridge 9	11	10	4	11	. 36
Bridge 10	11	11	4	11	37
Bridge 11	7	6	4	2	19
Bridge 12	8	9	11	10	38
	Bridge 1 was not	ranked al	ready approve	d location	
	Rankings 1-				
	Bridge3		5		
	Bridge 2		7		
	Bridge 5	1	6		
	Bridge 5 Bridge 11	1			
			9		
	Bridge 11	1	9		
	Bridge 11 Bridge 4	1: 1:	9 9 0		
	Bridge 11 Bridge 4 Bridge 7	1 1 2 2 3	9 9 0 2 0		
	Bridge 11 Bridge 4 Bridge 7 Bridge 6 Bridge 8 Bridge 9	1: 1: 2: 2: 3: 3: 3:	9 9 0 2 0 6		
	Bridge 11 Bridge 4 Bridge 7 Bridge 6 Bridge 8	1 1 2 2 3	9 9 0 2 0 6 7		

### BRIDGE STUDY EVALUATION MATRIX-SERVICE EFFICIENCY

	New School Rating	Public Utilities	Parks	Big Cypress Basin	TOTALS
Bridge 2	7	11	5	5	28
Bridge 3	7	11	4	4	26
Bridge 4	2	4	10	1	17
Bridge 5	1	3	1	1	6
Bridge 6	3	2	6	5	16
Bridge 7	3	5	7	9	24
Bridge 8	5	1	1	8	15
Bridge 9	6	11	1	11	29
Bridge 10	11	11	8	10	40
Bridge 11	9	11	11	11	42
	44	44	9	5	36
Bridge12 ***** NOTE			already an	approved bridg	(C.C.)
	: Bridge 1 not	tranked -	already an	approved bridg	(C.C.)
	: Bridge 1 not Rankings 1	tranked -	already an	approved bridg	(C.C.)
	: Bridge 1 not Rankings 1 Bridge 5	t ranked - - is best; 1	already an 1 is least ir	approved bridg	(C.C.)
	: Bridge 1 not Rankings 1 Bridge 5 Bridge 8	t ranked - - is best; 1 6	already an 1 is least ir	approved bridg	(C.C.)
	: Bridge 1 not Rankings 1 Bridge 5 Bridge 8 Bridge 6	t ranked - - is best; 1 6 15	already an 1 is least ir	approved bridg	(C.C.)
	: Bridge 1 not Rankings 1 Bridge 5 Bridge 8 Bridge 6 Bridge 4	t ranked - - is best; 1 6 15 16	already an 1 is least ir	approved bridg	(C.C.)
	: Bridge 1 not Rankings 1 Bridge 5 Bridge 8 Bridge 6	t ranked - - is best; 1 6 15 16 17	already an 1 is least ir	approved bridg	(C.C.)
	: Bridge 1 not Rankings 1 Bridge 5 Bridge 8 Bridge 6 Bridge 4 Bridge 7 Bridge 3	t ranked - - is best; 1 6 15 16 17 24	already an 1 is least in	approved bridg	(C.C.)
	: Bridge 1 not Rankings 1 Bridge 5 Bridge 8 Bridge 6 Bridge 4 Bridge 7	t ranked - - is best; 1 6 15 16 17 24 26	already an 1 is least ir	approved bridg	(C.C.)
	: Bridge 1 not Rankings 1 Bridge 5 Bridge 8 Bridge 6 Bridge 4 Bridge 7 Bridge 3 Bridge 2 Bridge 9	t ranked - - is best; 1 6 15 16 17 24 26 28	already an 1 is least ir	approved bridg	(C.C.)
	: Bridge 1 not Rankings 1 Bridge 5 Bridge 8 Bridge 6 Bridge 4 Bridge 7 Bridge 3 Bridge 2	t ranked - - is best; 1 6 15 16 17 24 26 28 29	already an 1 is least ir	approved bridg	(C.C.)

	Mark Burchin	john sullivan	glenda beardsley	michael frye	judy frye	dlucas	maryjo Weicie chows ki	toni Wojeicho wski	Robert Falcone	scott falcone	C Hessa
Bridge 1	7	2	12	44	12	12	12	12	12	42	
Bridge 2	2	1	8	1	12	1	12	2	6	6	
Bridge 3	1	3	9	2	6	12	12	3	3	3	
Bridge 4	3	12	7	7	5	12	12	12	12	12	
Bridge 5	8	12	10	10	3	2	12	12	7	7	
Bridge 6	4	12	2	5	1	12	12	12	4	4	
Bridge 7	5	12	1	6	1	12	12	12	5	5	
Bridge 8	9	12	2	11	12	12	12	12	2	2	
Bridge 9	11	12	3	7	12	12	11	11	12	12	
Bridge 10	10	12	4	9	4	12	12	12	12	12	
Bridge 11	6	12	5	4	12	12	1	1	12	12	
Bridge 12	12	12	11	3	12	3	12	10	12	12	
										** #1 was a	access to 175
Evacuation	1	2	2	1	1	1	1	1	1	2	2
access/mobility	3	1	3	3	3	3	2	2	2	1	1
Service	2	3	1	3	3	2	3	3	3	3	3
							+				

### BRIDGE STUDY EVALUATION MATRIX- PUBLIC RANKING

itivers Kim Ellis Martin M	iller Joe Rivera	Lourdes Pilotz	Mr. Piloto	Karen Hokanso n	Aaron Hkanson	Barbara Murdock	Pat Hesser	Gerald Ladue
12 12	12	6	6	10	10	10		
11 12	1	9	9	2	2	2	_	
10 12	3	8	8	1	1	1		
9 12	12	2	2	3	3	3		
8 12	12	3	3	12	12	12		
3 12	12	10	10	4	4	4		
4 12	12	11	11	5	5	5		
2 12	2	7	7	6	6	6		
6 1	12	4	4	7	7	7		
5 12	12	12	12	11	11	11		
7 12	12	5	5	9	9	9		
1 12	12	1	1	8	8	8		
1 1 1	1	1	1	1	1	1	1	3
	2	3	3	3	3	3	3	1
	3	2	2	2	3	3	3	3
				+				
					*	*	*	*

batrick Lson	david lefort	Doug Rankin	John Weaver	Judy Bradshaw	Robert Kidder	Bob Izzo	David Farmer	James & Linda Fox	William Meurer	TOTALS	
12	3			12	10	10	7		12	259	
12	2			1	12	9	1		1	146	
12	5			2	12	11	2		2	154	
12	11			6	1	7	8		8	195	
4	4			7	6	8	6		4	199	
12	7			3	3	5	3		6	174	
12	6			4	9	6	4		7	191	
12	8			12	6	1	5		11	195	
1	9			5	3	3	10		9	196	
2	1			8	1	10	9		10	230	
3	12			11	6	12	11		5	217	
5	10			9	3	4	12		3	197	
1	1	1	1	1	1	1	1	1	1	1	10
2	3	3	3	2	2	2	2	3	3	1	24
3	3	2	2	3	3	2	3	2	3	3	89
								+			

## APPENDIX D

## **PUBLIC COMMENTS**

#### EAST OF CR 951 BRIDGE STUDY COMMENTS/CONCERNS TRACKING

	A	С	F
1	Contact Person	Address/Zip Code	Comments / Concerns
2			
3	Nicole Ryan	Conservancy of SW FL	Supports improving roadway network with new bridges - less environmental impact than new roadways; supports traffic calming;
4	Mike Deruntz	2289 Piccadilly Circus, Naples FL 34112	
5	Dorothy Jo and Steven	14th Ave	Doesn't want bridge 11 to be located at 14th Avenue due to congestion on Everglades at 10th ; concerns about noise if bridge is on 14th ; need additional evacuation to the south for people on Desoto
6	Dr. Sparks Lunney	PO Box 9647, Naples, FL 34101	health impacts; increase traffic volume;air quality
7	Bob Harlan		doesn't like location of bridge 5; increased traffic on Wilson; criminal activity will increase with open roadway; have Bonita Beach Road extend to Immokalee Road
8	Victoria Nicklos		doesn't like bridge 5; likes dead end streets; wants kids to be safe
9	Sylvia Dillon	2861 Wilson Blvd N	doesn't like bridge 5; school buses speed; no thru trucks
10	Mark Burchin		Bridge 11 should be on 10th Ave; coordinant bridge design to work with SFWM weir on 20th Ave
11	margaret kemp	2179 47th Ave NE	no bridges; increased traffic, criminal traffic
12	beardsleys	2360 19th St SW	use military type temporary bridges; address e nvironmental consequences
13	Michael Frye	4165 27th Ave NE	increased traffic;safety for children
14	Judy Frye	4165 27th Ave NE	speeding
15	D Lucas		loss of property and increased property taxes
16	Mary Jo Weiciechowsk	4925 16th Ave SE	Bridge 11 should be further south- should be at 16th not 14th
	Tony Wojeiechowski	4925 16th Aven SE	Needs to be a bridge south of GGB - desoto is blocked
18	Robert Falcone	331 Golden Gate Blvd W	need access to and from 175 for evacuation
19	C Hessa	31368th Ave SE	need acces toa nd from i75 for evacuation; bridge 11 needs to be further south - maybe at 16th
	Dennis Vassey	4398 N. Longshore Way	water retention/detention; bridges will not be at 48feet long and 8-10feet high
	Jeff Stivers	691 22nd St. NE	bridges whould only be 1 lane and gated for emergency use only
22	Kim Ellis	530 Third St. SW	All bridges are need for all reasons - the more the better
23	Cassie Gones	610 18th Avenue NE	traffic concerns; noise
	Martin Miller PE	920 16th Street SE	no concerns - bridges are needed to improved EMS/fire rescue and reduce insurance rates.
_	Joe Rivera	550 8th St. NE	need speed controls
	Lourdes Piloto	3987 67 Ave NE	can't wait for them to be built
27	Mr. Piloto	3987 62 Ave NE	lets do it

#### EAST OF CR 951 BRIDGE STUDY COMMENTS/CONCERNS TRACKING

	A	C	F
28	Karen Hokanson	2740 Wilson Blvd N	crime; decrease in property values as no longer on a dead end street; gate and lock bridges for emergency use only
29	Aaron Hokanson	2740 Wilson Blvd N	roads are too narrown, they will collide on bridges, safety for children
30	Pat Hesser	3136 8th Ave SE	open everlades to I75; we need bridges
31	A. Rustay	3371 14th Ave SE	re-evaluate bridge 11. move to 10th or 12
32	Patrick Lson	540 12 Ave NW	only 5 bridges needed - the rest are not
33	David LeFort	184 Wilson Blvd S.	must connect everglades to 175; widen roads up to proposed bridges; one lane brides for ems
34	Doug Rankin	761 17th St. SW	plans looks great
35	John Weaver		need access to and from I75 for evacuation
36	Daniel Pellicane	1745 47th Av e NE	truck traffic and speeding
37	Judy Bradshaw	3833 14th Ave SE	bridge 11 should be moved to 10th or 12th Avenue; road improvements are more important than bridges; new I75 interchange is more important; speeding; crime
	Robert Kidder	226 16th St. NE	crime; loss of property value; speeding
39	Bob Izzo	3670 14th Ave SE	bridge 11 should be at 16th Ave or at 10th Ave; keep bridges closed for emergency personnell only
	David Farmer	240 17th St. SW	increased access for criminal theft; need more access to future VBR
41	Jams and Linda Fox	3011 Wilson Blvd N	Bridge 5 is unwanted, unneccessary and un acceptable;
42			
43			
-	Glenda Beardsly		Any bridge location would be good. They are all needed
_	Evelyn Almadova		Need a bridge in vacinity 10th- 20th Ave SE
	L M Johnson		bridges aren't needed - residents in Estates knew what they were moving into - leave it alone
47	Carol Ann Ritter	920 47th Aven NE	Bridge 4 ok for emergency use but not truck traffic
48	Nina Goins	2980 18th Ave SE	prevent houses from being burned and saving lives should be priority
49	Anonymous		Bridge 1 will increase traffic on street
50	Steve Peffers		Bridges are needed in our neighborhood. Build either bridges 2 and 3 or 6 and 7 but not all 4
51	Anonymous		We didn't move out here for a transportation grid
52	Joseph Hamberger	3461 Wilson Blvd N	Bridge 5 will add traffic to areamake bridge a one lane for emergency services only
53	Anonymous		bridges will add too much traffic causing safety issues for children
54	Jim Farlow	2020 Randall Blvd	roads should be upgraded to a ccomodate increased traffic; truck traffic should be restricted
55	Anonymous		Speeding
56	Karen Acquard	441 24th Ave NE	Canals should be bridged
57	Trudy B entley Rech	1491 25 St. SW	Bridge 6 is critical for fire/life safety, #7 close on its heels
58	Nancy Frye	361 14th St NE	Bridge 9 should be built by developer of woodland Estates; bridge 10 doesn't benefit anyone
	James Kuhar	1281 20th Avenue NE	speeding is a concern

#### EAST OF CR 951 BRIDGE STUDY COMMENTS/CONCERNS TRACKING

	A	С	F
60	Patricia Humphries	441 20th Ave NW	Bridge 10 will increase truck traffic from mines; Bridge 5 is useful tor esidents in that area
61	Tad Bartareau	1390 21 St. SW	Bridge 1 - concerns about traffic on White
62	Jeannine Bunch	4060 8th Ave SE	a bridge is needed between I75 and GGB
63	Anthony Wojciechiowsk	4925 18th Ave SE	Should look in to connecting 16th Aven across quarry.
64	Jose Abin	4040 16th Aven SE	don't want traffic on my street
65	Iris	1051 DeSoto	don't delay the process; bridges needed for better access in case of disaster
66	Marvin Steffen	3880 10th Aven SE	don't move Bridge 11
67	Judy Bradshawa	3833 14th Ave SE	Bridge isn't necessary on 14th - should be moved to 18th or 20th
68	Luke Marshall	4065 14th Aven SE	353-1427

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## **APPENDIX E**

## **PUBLIC INFORMATION PLAN**

Postcard sent in June for July 2 Public Information Meeting approximately 1500 sent

### EAST OF C.R. 951 BRIDGE STUDY PUBLIC MEETING Collier County Transportation Planning Department is holding a public information meeting to gain your input regarding potential new bridge locations in the Golden Gate Estates area. Oakridge Middle School 14975 Collier Blvd. Tuesday, July 1, 2008 7 p. m. You are receiving this notice because a proposed bridge could be built at the end of your street. Join us for a presentation about the study and view displays. We look forward to receiving your input. To view the potential bridge locations, visit www.colliergov.net/bridgestudy Call Lisa Koehler, Project Manager at 252-8192 or e-mail her at LisaKoehler@colliergov.net with questions.

### Postcard sent in July after Public Information Meeting approximately 1100 sent

### NOTICE OF BRIDGE STUDY AREA

As part of the East of CR 951 Infrastructure and Services Horizon Study the Collier County Transportation Planning Department is conducting a bridge study to identify, evaluate and prioritize various alternatives that address emergency response, disaster evacuation, access and mobility within Golden Gate Estates east of CR 951.

You are receiving this notice because a proposed bridge could be built at the end of your street. We are looking to add a bridge somewhere between 10th Avenue SE and 20th Avenue SE bridging the canal between Everglades Blvd. and DeSoto Blvd. We are currently in the planning stages to provide future bridges as part of the East of CR 951 Horizon Study. We are preparing our final report for the East of CR 951 Infrastructure and Services Horizon Study Committee and the Board of County Commissioners showing these roadways as a study area for a future bridge location. Please contact me with any questions or comments by Friday August 1, 2008. For more information about the bridge study, please visit www.colliergov.net/bridgestudy

Project Manager Lisa Koehler LisaKoehler@colliergov.net 239-252-8192

### Transportation Planning

#### East of CR 951 Bridge Study

#### EAST OF C.R. 951 BRIDGE STUDY

A study is in process to determine locations where bridges may be built in Golden Gate Estates to connect roads that will improve traffic mobility, improve services, allow for faster response times for emergency services and improve evacuation routes. Twelve sites have been suggested so far to the East of 951 Committee to be considered for potential bridges following input from agencies such as Collier County EMS, Corkscrew Island Fire District, Golden Gate Fire District, Collier County Parks and Recreation Department, Collier County Public Utilities Division, Collier County School District and the Collier County Sheriff's Office.

The Transportation Services Division's 5-Year Work Program and the Metropolitan Planning Organization's Long Range Transportation Plan recognize the need for bridge maintenance as well as new bridge construction. Locations deemed as potential sites for bridges at this point went through an evaluation and ranking process based on the following criteria:

- o Existing and future connectivity;
- o Change in response time for emergency services;
- o Impact on roadway network Level of Service (LOS);
- o Connection to planned or existing signalized intersections;
- o Change in trip length;
- o Impact to the roadway being connected to the bridge;
- o Access to existing and planned school sites; and
- o School bus efficiency.

After all rankings are completed by the outside agencies and the public, Transportation Planning Department staff will compile and evaluate the data, provide cost analysis as well as review the impact on the community.

A final report and recommendation will be made to the East of CR 951 Committee in August and then it will be included in the East of CR 951 Infrastructure and Services Horizon Study as well as provided to the Board of County Commissioners in September so they can adopt a priority list.

#### Click here to view map with proposed bridges.

If you have questions, please call Lisa Koehler at 252-8192 or email her at lisakoehler@colliergov.net

Updated July 25, 2008



# **Collier County Government**

Transportation Services Division Transportation Engineering and Construction Management Department 2885 S. Horseshoe Drive Naples, FL 34104

Contact:

Connie Deane Community Liaison 239-252-8192 or 8365

June 23, 2008

### FOR IMMEDIATE RELEASE

### PUBLIC INFORMATION MEETING

The public is invited to attend a brief presentation and review the displays for Collier County Transportation Planning Department's East of County Road (CR) 951 Bridge Study

Tuesday, July 1, 2008

7 p.m. Oakridge Middle School 14975 Collier Boulevard

#### Naples

- Staff members are conducting this bridge study to investigate possible north-south and east-west
  roadway connections to improve evacuation routes, decrease emergency response times for fire,
  emergency services and law enforcement, help improve traffic mobility and improve services to
  the area.
- After the brief presentation, staff will be available to answer any questions. All are welcome to
  review the study displays and talk with staff members.

Members of the Board of County Commissioners may be in attendance at this public information meeting.

For more information, call Principal Planner Lisa Koehler at the Collier County Transportation Services Division at 239-252-8192 or e-mail LisaKoehler@colliergov.net.

If you are a person with a disability who needs any accommodation in order to participate in this proceeding, you are entitled, at no cost to you, to the provision of certain assistance. Please contact the Collier County Facilities Management Department located at 3301 East Tamiami Trail, Naples, Florida, 34112, (239) 252-8380; assisted listening devices for the hearing impaired are available in the County Commissioners' Office.



# **Collier County Government**

Transportation Services Division Transportation Engineering and Construction Management Department 2885 S. Horseshoe Drive Naples, FL 34104 Contact: Con Con

Connie Deane Community Liaison 239-252-8192 or 8365

June 25, 2008

### FOR IMMEDIATE RELEASE

### East of 951 Bridge Study Requests Residents' and Visitors' Input at Public Information Meeting on July 1

A study is in process to determine locations where bridges may be built in Golden Gate Estates to connect roads that will improve traffic mobility, improve services, allow for faster response times for emergency services and improve evacuation routes. Twelve sites have been suggested so far to the East of 951 Committee to be considered for potential bridges following input from agencies such as Collier County EMS, Corkscrew Island Fire District, Golden Gate Fire District, Collier County Parks and Recreation Department, Collier County Public Utilities Division, Collier County School District and the Collier County Sheriff's Office. To gather further information a public information meeting will be held on Tuesday, July 1 at 7 p.m. at Oakridge Middle School, 14975 Collier Boulevard., Naples. There will be a brief presentation at 7 p.m. followed by the opportunity to review displays and discuss potential bridge sites with staff members. Residents and visitors are welcome to attend and encouraged to participate.

The Transportation Services Division's 5-Year Work Program and the Metropolitan Planning Organization's Long Range Transportation Plan recognize the need for bridge maintenance as well as new bridge construction. Locations deemed as potential sites for bridges at this point went through an evaluation and ranking process based on the following criteria:

- Existing and future connectivity;
- Change in response time for emergency services;
- o Impact on roadway network Level of Service (LOS);
- Connection to planned or existing signalized intersections;
- o Change in trip length;
- Impact to the roadway being connected to the bridge;
- Access to existing and planned school sites;
- o School bus efficiency; and
- o Cost.

East of 951 Bridge Study Requests Residents and Visitors Input at Public Information Meeting on July 1/Page 2 of 2

After all rankings are completed by the outside agencies and the public, Transportation Planning Department staff will compile and evaluate the data, provide cost analysis as well as review the impact on the community.

District 5 Commissioner Jim Coletta encourages community members to attend the meeting on July 1 in order to have a say in this important study.

"We appreciate the input we have received thus far from emergency service responders and other agencies," said Coletta. "Since so much of Golden Gate Estates includes dead end roads that stop at canals, there is a great need to bridge some of those canals to provide better emergency services as well as evacuation routes in case of fires like we saw only last month that created such havoc and devastation for so many."

A final report and recommendation will be made to the East of 951 Committee in August and then it will be provided to the Board of County Commissioners in September so they can adopt a priority list.

Members of the Board of County Commissioners may be in attendance at this informational public workshop.

If you are a person with a disability who needs any accommodation in order to participate in this proceeding, you are entitled, at no cost to you, to the provision of certain assistance. Please contact the Collier County Facilities Management Department located at 3301 East Tamiami Trail, Naples, Florida, 34112, (239) 252-8380; assisted listening devices for the hearing impaired are available in the County Commissioners' Office.

For further information please contact Transportation Planning Department Project Manager Lisa Koehler at 239-252-8192.

###

[News Media: If you have any questions, please contact Community Liaison Connie Deane at <u>conniedeane@colliergov.net</u> or either 239-252-8192 or 8365; or Public Information Specialist Eileen O'Grady at 213-5801 or <u>eileenogrady@colliergov.net</u>] Bridges not yet crossed : naplesnews.com

# naplesnews.com

### **Bridges not yet crossed**

By KENNETH COSTELLO Wednesday, July 9, 2008

Plans for 12 connector bridges in the Golden Gate Estates received mixed response, July 1, as nearly 150 people attended the East of 951 Bridge Study meeting at Oakridge Middle School. Objections ranged from lifestyle impacts to air quality concerns, while other residents urged officials to move ahead with the bridges as quickly as possible.

"This is the bridge that should be built first," Golden Gate Estates Area Civic Association member Peggy Whitbeck said of the connector proposed for the south end of Wilson Boulevard and Frangipani Avenue. That bridge is part of a corridor proposal that would connect Wilson south to Landfill Road.

The meeting was led by members of the Collier County Transportation Planning Department as part of the East of CR 951 Infrastructure and Services Horizon Study, which has been holding meetings over the last two years to secure public input on community service needs such as police, fire, EMT's, roads, bridges, schools, libraries and parks.

The bridges are proposed for 23rd Street SW over the Golden Gate Main Canal, the north end and the south of 16th Street NE, the west end of 45th Avenue NE, the north end of Wilson Boulevard, west end of Jung Boulevard, bridge connecting 16th Ave.nue NW to 16th Avenue NE, the north end of 13th Street NW, the south end of Wilson Boulevard, bridge over the main canal on 14th Avenue SE and a bridge proposed by the Big Corkscrew Fire & Rescue District at 62nd Avenue NE.

According to Nick Casalanguida, director of transportation planning, the purpose of the meeting was to obtain public feedback from residents. The 12 locations have already been evaluated by the Collier County Sheriff's Office, Division of Forestry, Emergency Medical Services, the school district, fire districts, public utilities, parks and recreation and Big Cypress Basin.

According to Casalanguida, there has never been a road grid in the Estates, primarily due to the number of canals. Most of the roads dead-end at the canal.

"First responders have said that response times are longer due to the lack of bridges," he said. "We would like to build multiple bridges, so one street will not have to bear the burden of increased traffic."

Proponents said the May 29 wildfire in the Estates highlighted the need for multiple connections to improve emergency response access.

Others, such as Jeff Stivers, also were opposed to building multiple bridges.

"We chose to live on a dead end street. We did not want through traffic. We wanted less traffic and less crime," he said. "I knew the limitations of the traffic system when I moved here, people's lack of planning to get a quart of milk or a loaf of bread should not require the county to build more bridges."

Stivers agreed that police and fire need better access and recommended that single lane bridges be built and gated for police and emergency access only.

Gates for emergency access only and speed bumps to slow traffic were discussed when the last major connector bridge was build on 13th Street SW in 2002. Both ideas were ultimately turned down. Emergency