



SPIKOWSKI PLANNING ASSOCIATES

MEMORANDUM

TO: Fort Myers Beach Town Council
FROM: Bill Spikowski
DATE: November 27, 2006
SUBJECT: Times Square Workshop — November 29th, 2006

On November 29th the Town Council has scheduled a second workshop to discuss redevelopment near Times Square.

Two documents are attached as additional background for this workshop:

- **Preliminary estimates of development capacity for the Meyers properties.**

These estimates are provided in two parts:

- (1) The maximum development capacity of the beachfront properties is presumed to be “building back” the pre-existing square footage of enclosed space and number of motel rooms. These estimates are based on official records of the town (for buildable land area), Lee County Property Appraiser (for square footage of existing enclosed space), and Florida’s Department of Business & Professional Regulation (for number of licensed motel rooms).
- (2) The maximum development capacity of the Seafarers/Helmerich properties is presumed to be the same as provided in the May 2005 development agreement for Seafarer’s Plaza. Please note that full realization of those development rights is contingent on the developer providing adequate parking in a location and form satisfactory to the town; the original proposal, which was for a parking garage that would have been visible to incoming traffic on the Sky Bridge, was rejected by the Town Council.

Through the rezoning process, the Town Council can authorize the reallocation of these development rights within the combined site.

- **Pages 23 through 38 of the town’s draft Evaluation/Appraisal Report**, which was dated August 1, 2006. These pages describe the town’s previous analysis of desirable redevelopment of the properties in question, including the results of a detailed analysis of alternate traffic patterns in the immediate area. (The final draft of this report will be available shortly.)

Development Capacity Estimates for the Meyers Properties near Times Square

BEACHFRONT PARCELS:

<u>Street Address:</u>	<u>Description:</u>	<u>Non-motel space in square feet</u>	<u>Motel space in square feet</u>	<u>Number of motel rooms</u>	<u>Average size of motel rooms</u>	<u>S-T-R-A-P NUMBER</u>	<u>Buildable acreage</u>
1080 Estero Blvd.	Sandman	-	3,102	9	345	24-46-23-W3- 00015.0000	0.2
1100 Estero Blvd.	Howard Johnsons	-	10,518	20	526	24-46-23-W3- 00014.0000	0.3
1130 Estero Blvd.	Days Inn	-	8,956	33	271	24-46-23-W3- 00013.0000	0.6
1130 Estero Blvd.	Jimmy B's	1,770	-	-	-	24-46-23-W3- 00013.0000	0.4
1160 Estero Blvd.	Ramada main bldg	-	20,067	61	329	24-46-23-W3- 00009.0000	0.2
1160 Estero Blvd.	Ramada beachfront	-	4,680	9	520	19-46-24-W4- 0140B.0070	0.2
1172/74 Estero Blvd.	shops	3,036	-	-	-	19-46-24-W4- 0140B.0020	0.1
1188/90 Estero Blvd.	shops	2,040	-	-	-	19-46-24-W4- 0140B.0010	0.1
231 Canal Street	detached house	822	-	-	-	19-46-24-W4- 0140B.0040	0.1
221 Canal Street	detached house	944	-	-	-	19-46-24-W4- 0140B.0050	0.1
		8,612	47,323	132	359		2.2

SEAFARER'S PARCELS:

<u>Component:</u>	<u>Existing non-motel space, in square feet</u>	<u>Future non-motel space, in square feet</u>	<u>Future motel space in square feet</u>	<u>Number of motel rooms</u>	<u>Average size of motel rooms</u>	<u>Buildable acreage</u>
Seafarer's hotel	-	-	56,828	65	874	
Seafarer's retail	34,000	6,592	-	-	-	3.6
Seafarer's office	-	13,065	-	-	-	
Seafarer's restaurants	25,800	6,465	-	-	-	
	59,800	26,122	56,828	65	874	3.6

TOTAL CAPACITY:

<u>Non-motel space in square feet</u>	<u>104,151</u>	<u>Number of motel rooms</u>	<u>197</u>	<u>Average size of motel rooms</u>	<u>529</u>	<u>Buildable acreage</u>	<u>5.8</u>
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POLICY 7-H-3 LEFT-TURNS AT TIMES SQUARE: Northbound traffic headed for Lynn Hall Park now turns left just past Times Square. These turns could interfere with traffic flow on Estero Boulevard; if so, alternatives using Crescent Street should be considered.

EVALUATION OF POLICY 7-H-3: Eliminating left turns for northbound traffic headed toward Lynn Hall Park would require those vehicles to instead travel north on Crescent Street, under the Sky Bridge, and south on Old San Carlos to reach their destinations. Unfamiliar drivers who miss the turn at Crescent Street would have no choice but to leave the island then circle back and return. These difficulties have to be balanced with any minor improvements in traffic flow that would occur by eliminating this left turn. As described beginning on page 30, new alternatives have been examined for this area that are more promising than the simple closure of the turn lane as described in Policy 7-H-3.

B. Community Design Ideas from Planning Charrette

All four major issues highlighted in this report were discussed at public workshops in March and April of 2005. However, the bulk of attention went to redesign ideas for the Times Square area, which is the heart of town for tourists, and increasingly so for seasonal and permanent residents as well.

Although this area has been extensively studied in the past, three factors led to this new attention. The first is the on-going efforts of the town's Traffic Mitigation Agency to quickly implement new ideas for moving traffic on and off the island; some of these efforts could change the pedestrian character of this area. The second is that Hurricane Charley destroyed the Sandman, Howard Johnson, and Days Inn beachfront motels in August 2004, making their replacement by new buildings imminent. Third, major consolidation of land ownership has taken place, with the three destroyed motels now sharing common ownership with the adjoining Ramada Inn and two large commercial parcels across Estero Boulevard (Seafarer's and Helmerich Plazas).

These factors led to the wide circulation of a drawing showing Estero Boulevard being relocated landward of its current alignment. This concept would expand the pedestrian-only zone at Times Square onto the existing alignment and might help traffic flow by reducing conflicts with pedestrian movements.

The realignment of Estero Boulevard had never been contemplated, partly because the town does not control this road and partly because the diverse property ownership would have made the idea impractical from the outset. With three beachfront motels about to be replaced in one form or another plus the new common ownership, the idea of realignment became worthy of serious study and in fact is an opportunity that is not likely ever to be repeated.

There are important federal and state regulatory programs that complicate all redevelopment plans in

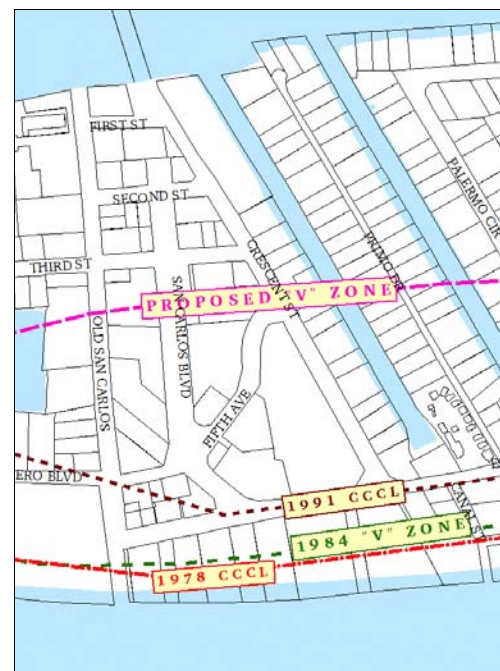


Figure 1, V zones and CCCL lines

this area. In the years since the original buildings were constructed, the federal government has established “velocity zones” (V-zones) and the state of Florida has established two “coastal construction control lines” (CCCL), all of which run roughly parallel to the beach. These lines demarcate areas that are subject to stringent rules designed to make future buildings less vulnerable to flooding. Figure 1 shows the location of these lines near Times Square, including a new V-zone boundary proposed by FEMA in September 2005; Figure 2 provides technical details on each program.

Technical Details on Flood Protection

In V-zones, buildings cannot have any permanent walls at ground level, even if the walls are “dry-floodproofed” to prevent the contents within the walls from flood damage. V-zones, established in 1984, run near enough to the beach that they have had little effect on commercial buildings along Estero Boulevard in this area. The original CCCL line was adopted in 1978; no buildings may be constructed seaward of that line. In 1991 the state established a new type of CCCL that in many cases reaches as far inland as Estero Boulevard itself. New buildings that are seaward of the 1991 CCCL are limited at ground level to enclosures by “permanent walls” of only 20% of the building’s width, thus precluding viable commercial space in the main structure. The purpose of this rule is that in the case of the strongest storms, “permanent walls” would be struck by breaking waves and might collapse in such a way as to endanger the upper floors of the structure.

There is an important strip of land about 30’ deep along Estero Boulevard where the 1991 CCCL requirements could preclude the very kind of pedestrian-oriented activities that the comprehensive plan and land development code so strongly favor; this strip is landward of the V-zone but seaward of the 1991 CCCL, mainly along the beach side, as shown in Figure 3.

Figure 2, technical details on flood protection

Design teams at the March 2005 planning charrette examined two approaches to minimizing the difficulties that these regulatory programs could cause to the redevelopment effort. One approach would be to move Estero Boulevard slightly away from the beach, thus putting both sides of the street outside the regulatory influence of the 1991 CCCL. This would allow both sides of the street to be rebuilt with doors, windows, and shopfront along wide sidewalks.



Figure 3, showing land that is landward of the V-zone but seaward of the 1991 CCCL

Figure 4 illustrates the character of a classic two-sided Main Street that could be ensured through this minor realignment. This new alignment is shown in site plan format in Figure 5; two versions are shown, one using a simple intersection at the foot of the Sky Bridge similar to what exists there today, the other using a roundabout at that location.

Streets & People

Streets don't have to be mere traffic channels. Streets can be also be attractive and recreational when citizens and government work together to fulfill public desires for pleasant and stimulating public places.



VIEW DOWN RELOCATED ESTERO BOULEVARD

Figure 4, classic two-sided Main Street

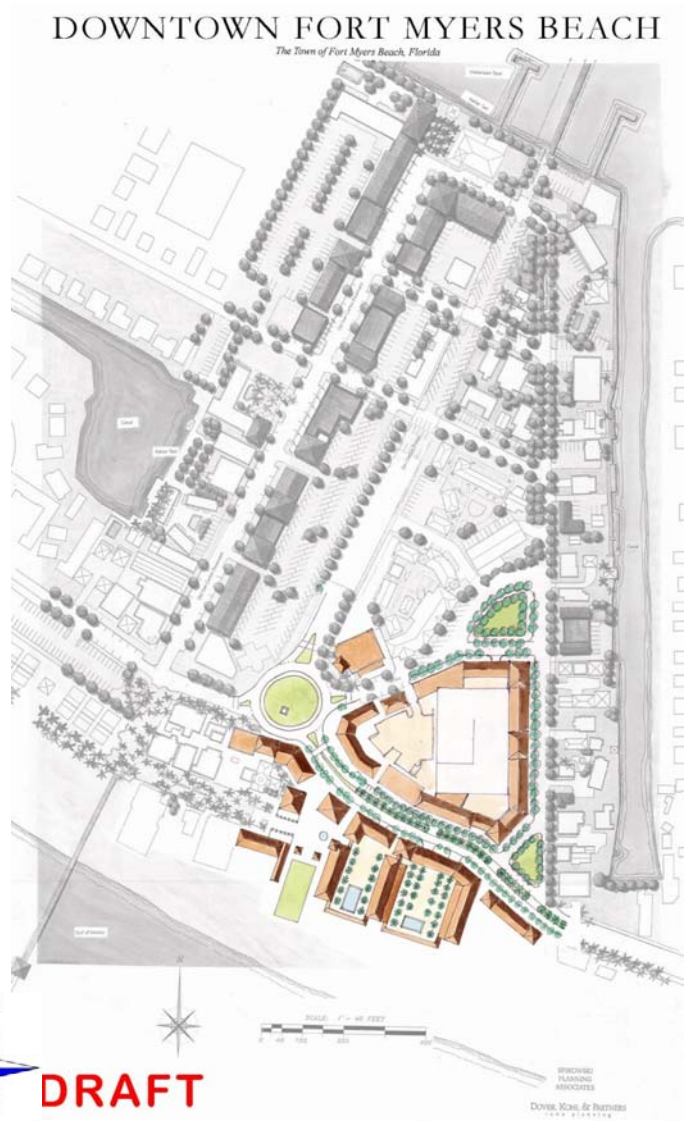
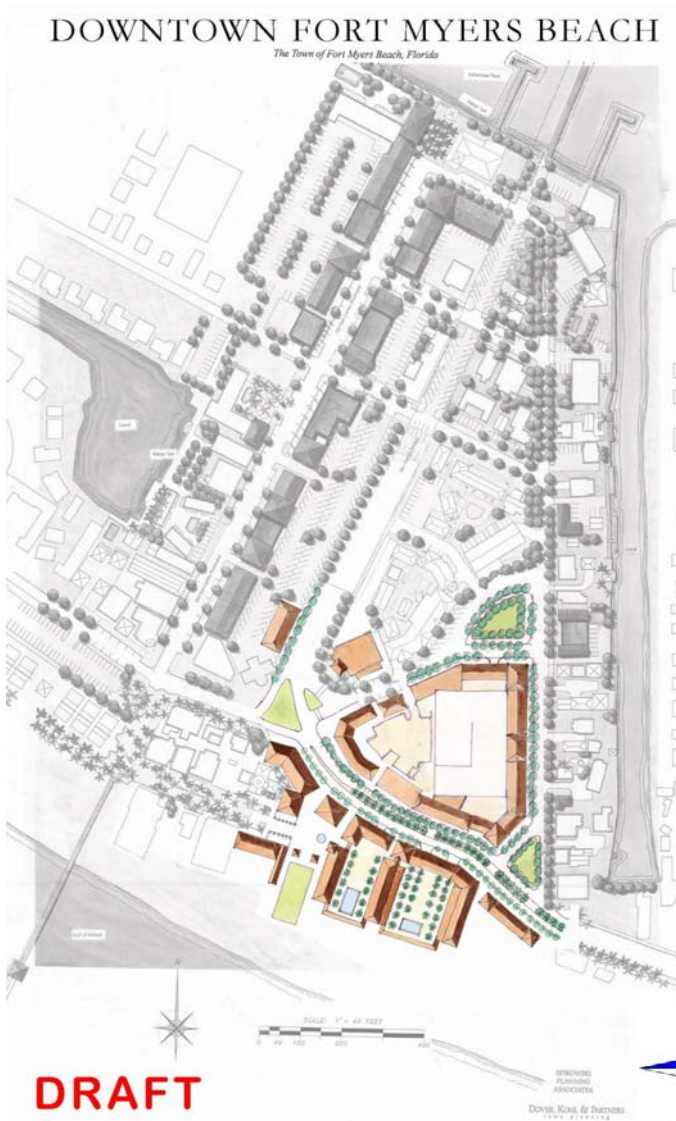
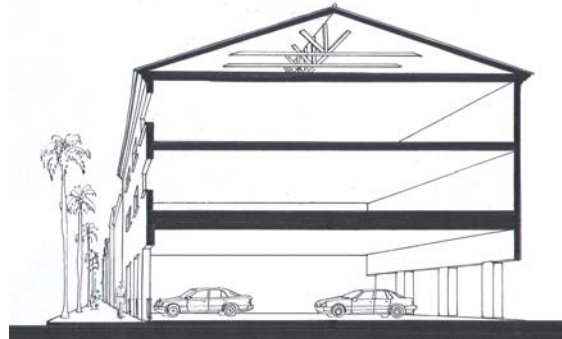


Figure 5, two versions of new alignment for Estero Boulevard

A second approach to the CCCL problem was also considered that would be far less expensive, in that Estero Boulevard would not need to be realigned. This alternative is illustrated in the three sketches in Figure 6 which show typical buildings that could replace the beachfront motels destroyed by Hurricane Charley:

- The top sketch shows the entire building elevated to meet all CCCL and V-zone requirements. The only uses at ground level would be parking and open storage. This is the prototypical building for coastal locations where protection from flooding is the major design criterion.



- The second sketch shows a solid wall built to “breakaway” standards that would separate the parked cars from the sidewalk. This wall would visually screen the parking, but may be nearly as unfriendly to pedestrians and motorists as a full view of the parking area.



- The third sketch shows a creative approach that includes shops at ground level. These shops must be shallow enough to avoid extending into the V-zone. Walls would have to be built to structural standards so they would withstand the forces of rising water yet collapse if confronted with breaking waves (to keep from harming the remainder of the building). If this can be done, the building may comply with current CCCL requirements.

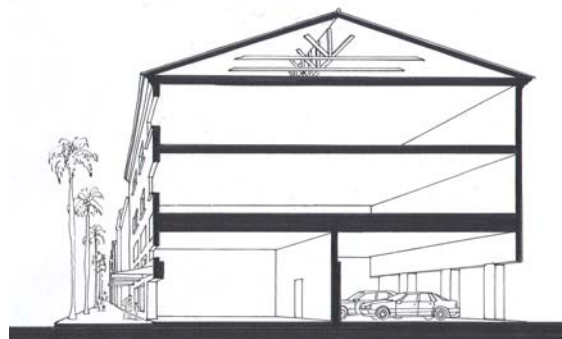


Figure 6, replacing damaged beachfront motels

In September of 2005 the town learned that the federal government was contemplating moving the V-zone boundary further inland (see Figure 1). If this change comes to pass, the approach shown in the third sketch would no longer be a viable solution. Pending this determination, further evaluation of this idea has been postponed.

For the same reason, further evaluation of the street realignment shown in Figure 5 has been postponed.

A quite different approach was also developed and evaluated during the charrette which offers greater promise for improving both traffic flow and livability. This approach would maintain the existing alignment of Estero Boulevard but would create a short new street running parallel to Estero Boulevard from Crescent Street to the foot of the Sky Bridge.

This new street could serve traffic in both directions, providing an alternate route for traffic coming off and on the bridge. With the traffic flow split onto two streets, the interference now caused by pedestrians crossing Estero would be less detrimental to overall traffic flow. A raised pedestrian island in Estero could further assist traffic by allowing pedestrians to cross more easily without stopping traffic. This approach is shown in Figure 7 with the same two variations from Figure 5: one uses a simple intersection at the foot of the Sky Bridge similar to what exists there today, the other uses a roundabout at that location. A major advantage of adding the roundabout is that it provides the traffic-splitting benefits in both directions instead of only for motorists leaving the island.

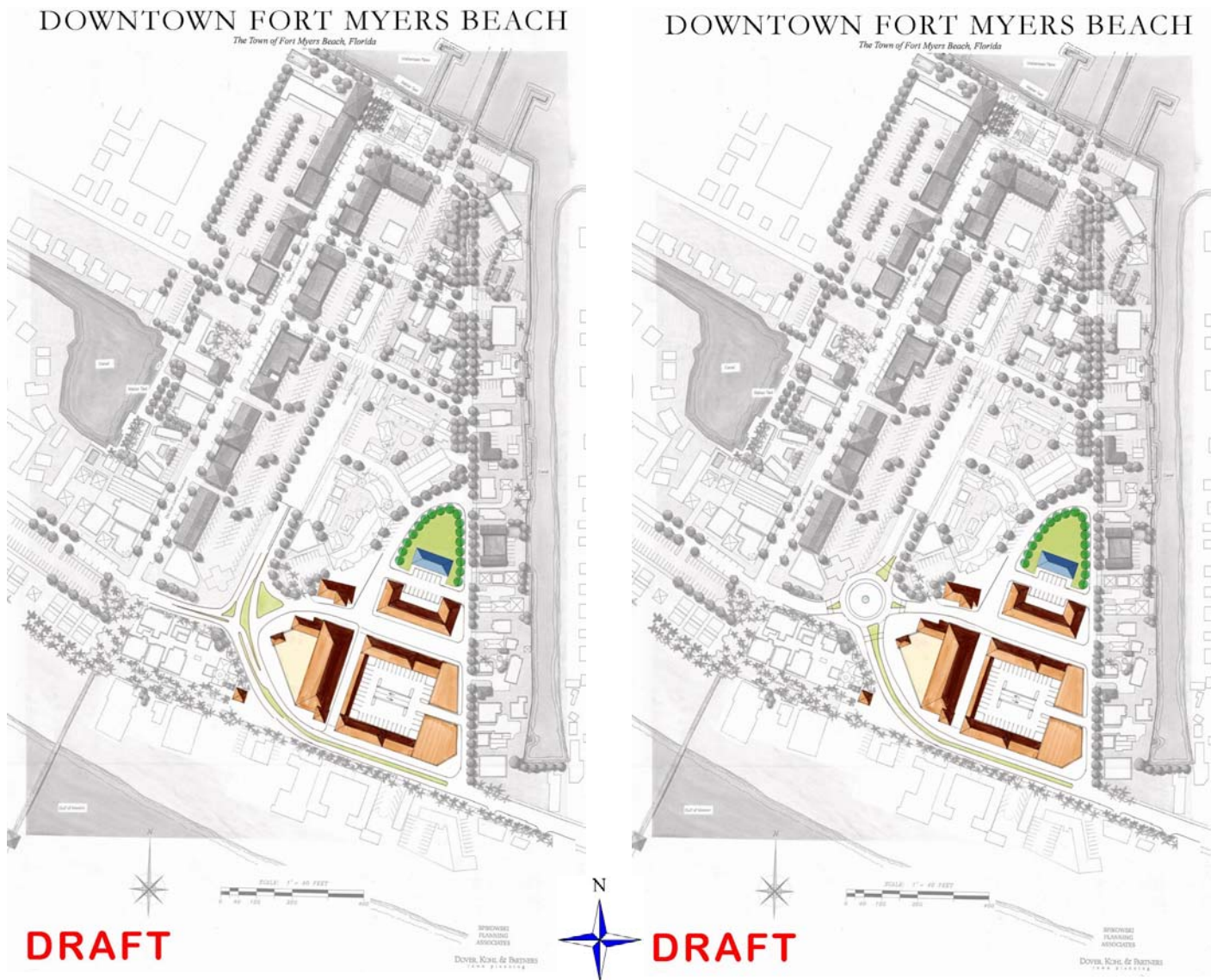


Figure 7, two versions of new street parallel to Estero Boulevard

One variation on these plans would move all traffic onto the new street, allowing the existing Estero to be converted into a pedestrian mall; pedestrians could move freely across the mall without any interference to through traffic. A second variation would allow vehicles to use both the existing Estero and the new street, but both streets would operate as one-way streets; a roundabout would not be needed with this travel pattern, but an alternating light could help the two southbound travel lanes merge back into one lane near Crescent Street. A third variation would reserve the existing Estero for trolleys, trams, pedestrians, emergency vehicles, and perhaps other permitted vehicles such as those with several occupants or for local residents or businesses.

All of these variations involve acquisition of right-of-way and redesign of adjoining buildings. The town should be able to acquire additional right-of-way at the same time to provide wider sidewalks, pedestrian median refuges, and trolley/tram lanes.

Great Streets

“There is magic to great streets. We are attracted to the best of them not because we have to go there but because we want to be there. The best are as joyful as they are utilitarian. They are entertaining and they are open to all. They permit anonymity at the same time as individual recognition. They are symbols of a community and of its history; they represent a public memory. They are places for escape and for romance, places to act and to dream. On a great street we are allowed to dream; to remember things that may never have happened and to look forward to things that, maybe, never will.”

— Great Streets,
by Allan B. Jacobs

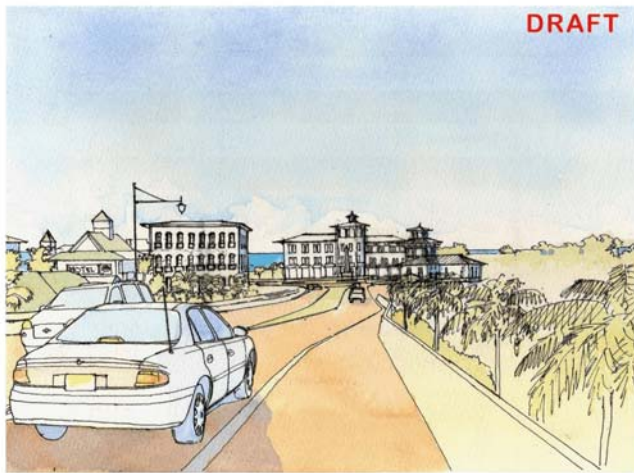
About five years ago a landscaped roundabout was proposed as a distinctive entry feature at the foot of the Sky Bridge. This idea never gained community support. A roundabout is worth reconsidering now because it would provide many traffic circulation benefits at this difficult location. At present, very few turns are allowed at this intersection, requiring many motorists to use circuitous routes to reach their destinations. These detours are confusing for visitors and add to the traffic congestion on nearby streets.

A properly designed roundabout would allow vehicles approaching from all four directions to select the most direct route for their own purposes. This choice of movement in every direction, including left turns, is available only with a roundabout; with other intersection designs, left turns often cause unacceptable delays to the flow of traffic and must be prohibited.

A roundabout would be particularly useful if the new street is constructed from this location directly to Crescent Street as shown in Figure 7. Some traffic coming onto the island would use this new street as an alternative to Estero Boulevard (mainly local residents who would understand its advantages, especially during congested periods). Visitors would tend to continue straight on Estero, the obvious and historic through-route. A traffic signal would be required at Crescent and Estero for optimal utilization of the parallel streets.

Reducing the traffic flow on this block of Estero, even slightly, would soften the impacts of heavy pedestrian usage there. The roundabout would also allow maximum flexibility to experiment with other traffic patterns in this area, as described beginning on page 30.

A roundabout could be heavily landscaped as previously proposed, or the design could be more formal with the visual emphasis being placed on the surrounding buildings. The latter approach is illustrated in Figure 8. The first rendering is from the Sky Bridge; the second is from the immediate approach to the roundabout, looking straight through onto Estero Boulevard.



APPROACH TO ROUNDABOUT



VIEW FROM ROUNDABOUT TO PARK

Figure 8, renderings of approach from Sky Bridge

New Intersection Design Concepts

“Modern roundabouts are increasingly being recognized as design alternatives to the use of traditional traffic signals for intersections for arterials. They improve both safety and efficiency for pedestrians and bicyclists, as well as motor vehicles. So far, roundabouts have been built in such states as California, Colorado, Maryland, Nevada, Florida, and Vermont. These roundabouts are different from rotary or traffic circles that have been used in the United States for a number of years to give entering traffic the right-of-way and encourage higher design speeds.

“The modern roundabout is designed to slow entering traffic and allow all the traffic to flow through the junction freely and safely. Unlike the older rotary design, entering vehicles must yield the right-of-way to vehicles already in the circle. A deflection at the entrance forces vehicles to slow down. Traffic signals are not used, and pedestrians cross the streets at marked crosswalks.

“The average delay at a roundabout is estimated to be less than half of that at a typical signalized intersection. Decreased delay may mean that fewer lanes are needed. Signalized intersections often require multiple approach lanes and multiple receiving lanes, which leads to a wider road.

“Perhaps the greatest advantages of roundabouts are their urban design and aesthetic aspects. Roundabouts eliminate the clutter of overhead wires and signal poles and allow signage to be reduced. They can be distinctive entry points into a community or mark a special place. The central island offers an opportunity for a variety of landscape designs, as well.”

— Flexibility in Highway Design,
published by the Federal Highway Administration,
U.S. Department of Transportation

Members of the public who attended the April 7, 2005, workshop were requested to give their opinion on six questions about the community design ideas which were presented that evening for the first time. The written responses that evening were as follows:

Question # 1: Do you think the idea of the beachfront park should be pursued further?			
<u>Yes</u> 56	<u>No</u> 3	<u>Not Sure</u> 12	<u>[no answer]</u> 2
Question # 2: Do you think the idea of relocating Estero near Times Square should be pursued further?			
<u>Yes</u> 30	<u>No</u> 17	<u>Not Sure</u> 17	<u>[no answer]</u> 9
Question # 3: Do you prefer the beach park or relocate Estero approach?			
<u>Beach Park</u> 44	<u>Relocate Estero</u> 17	<u>Neither</u> 4	<u>Not Sure</u> 8
Question # 4: Do you think enough drivers would use the new parallel street to provide relief on Estero Blvd?			
<u>Yes</u> 42	<u>No</u> 13	<u>Not Sure</u> 14	<u>[no answer]</u> 4
Question # 5: Do you think the pedestrian bridge over Estero Blvd should be pursued further?			
<u>Yes</u> 48	<u>No</u> 13	<u>Not Sure</u> 10	<u>[no answer]</u> 2
Question # 6: What is your reaction to a roundabout at the intersection of Estero Blvd and Fifth Street?			
<u>Love It</u> 33	<u>Hate It</u> 4	<u>Neutral</u> 7	<u>Want to Learn</u> 29

C. Analysis of Street Alternatives

Ten distinct options for improving Estero Boulevard between Crescent Street and the Sky Bridge were developed as a result of the 2005 planning charrette and ongoing work by the Traffic Mitigation Agency. All ten options were analyzed for traffic performance using the “Synchro” traffic simulation model and were ranked using professional judgment of the consulting team using a walkability/livability index and as to right-of-way and feasibility. This section describes the ten options and presents a comparative analysis of existing conditions and each option.

The first five options have one common aspect: they require the town to acquire right-of-way to build a short new street between Crescent and the foot of the bridge, as shown in Figure 7.

In Option 1, the new street would serve traffic in both directions, providing an alternate route for traffic coming off and on the bridge. With the traffic flow split onto two streets, the interference now caused by pedestrians crossing Estero would be less detrimental to overall traffic flow. A raised pedestrian island in Estero would further assist traffic by allowing pedestrians to cross more easily without stopping traffic. Option 1 includes a roundabout at the foot of the Sky Bridge so that the traffic-splitting benefits would be available for traffic traveling in both directions. A traffic signal would be needed at Crescent and Estero to balance traffic flow on both streets.

Option 2 would move all traffic onto the new street, allowing the existing Estero to be converted into a pedestrian mall. Pedestrians could move freely across the mall without any interference to through traffic. The roundabout is shown for Option 2 because without it, vehicles leaving the island from the north end would have to be routed along Old San Carlos, under the Sky Bridge, and then onto Crescent to reach the bridge. A similar arrangement for exiting traffic was tested during the winter and spring of 2005; it stopped performing well when traffic was at its heaviest, at which times those vehicles were unable to smoothly join the main traffic stream leaving the island.⁶ However, with the addition of a roundabout, this traffic could enter the bridge directly rather than first traveling under the bridge.

Option 3 would allow vehicles to use both the existing Estero and the new street, but both streets would operate as one-way streets. A roundabout is not needed with this travel pattern. Part of Estero would have a raised pedestrian island, possibly using an alternating light to help the two southbound travel lanes merge back into one lane near Crescent Street. (A similar traffic pattern was suggested in 2004 last year by a subcommittee of the Fort Myers Beach Civic Association.)

Option 4 would be physically similar to Option 1 but would reserve the existing Estero for trolleys, trams, pedestrians, emergency vehicles, and perhaps other permitted vehicles such as those with several occupants or for local residents or businesses.

Option 5 would be similar to Option 1 but would not use a roundabout. The traffic benefits of the new street would not be available to traffic entering the island from the Sky Bridge, but the cost of (and potential controversy over) the roundabout would be avoided. Option 5 could probably be converted to Option 1 at a future date if retrofitted with a roundabout.

Option 6 would realign Estero Boulevard using gently sloped curves typically used for highways, thus avoiding the sharper turns used in Options 1 through 5. This option would not need any traffic signals or a roundabout. Traffic on Estero Boulevard destined for the north end of the island would use Crescent, Third, and Old San Carlos in place of the current left-turn lane at the foot of the Sky Bridge.

Option 7 is similar to Option 6 but the main traffic flow at the foot of the Sky Bridge would be partially elevated to allow pedestrians to use an underpass to avoid interfering with traffic flow.

Options 8 and 9 assume that the center turn lane beyond Crescent would be converted to allow transit vehicles to use that lane (presumably in the direction of peak congestion). Options 8 and 9 would allow the continuation of the transit lane from Crescent to the foot of the Sky Bridge.

Option 8 uses existing streets only. A two-way trolley/tram lane would be provided on Estero Boulevard between Crescent and Fifth, replacing the existing travel lane on Estero furthest from the beach. Regular traffic heading north on Estero would turn right on Crescent; vehicles heading toward the Sky Bridge would then turn left on Fifth, while all others would continue on Crescent, then use Third and Old San Carlos to return to Lynn Hall Park and points further north.




Option 9 also uses existing streets only. Estero Boulevard between Crescent and Fifth would be widened to add a third lane, which would be used by transit vehicles only. The pedestrian signal at Times Square would be removed and replaced by a pair of regular traffic signals on Estero Boulevard, one at Fifth (at the foot of the bridge) and one at Crescent Street.

⁶ *The results of this test are presented in "Speed Delay Study Technical Memorandum" by CRSPE, Inc., July 2005*

Option 10 is similar to Option 7 except for three factors. First, traffic coming onto the island on the Sky Bridge would not return to ground level and then rise again, as in Option 7, but would remain elevated until it passes over a pedestrian underpass. Second, Estero Boulevard would be relocated northward slightly to follow the same path as the new street in Options 1 through 5, but its intersections with Crescent Street would use gentle curves rather than angled intersections. Third, Center Street would not be reopened.

Options 2, 5, 6, 7, 8 and 9 all include the reopening of Center Street to traffic from the Sky Bridge to Old San Carlos. However, the computer model was not able to measure whether this street opening would improve traffic flow. This issue became moot with the Town Council reviewed the cost of reopening Center Street and decided not to make this change.

The following pages present simple sketches of each option and a numerical ranking of 1 to 5 on three separate scales. For each scale, 1 is the least favorable ranking and 5 is the most favorable, as described in Table 1. Table 2 presents the analysis of each of ten transportation options, followed by a summary of the rankings for all options (plus existing conditions).

Table 1 — Scoring Key		
1 = <i>gridlock or poor local circulation</i>		5 = <i>acceptable traffic flow, minimal queuing, good local circulation</i>
A. Traffic Performance		
1 = <i>fast speeds, auto-oriented urban design and land use, low livability and sense of place</i>		5 = <i>moderate traffic speeds, pedestrian-supportive urban design and land use, strong sense of place</i>
B. Walkability/Livability		
1 = <i>high anticipated R-O-W cost, significant technical hurdles</i>		5 = <i>low anticipated R-O-W cost, few technical hurdles</i>
C. Right-of-Way/ Feasibility		

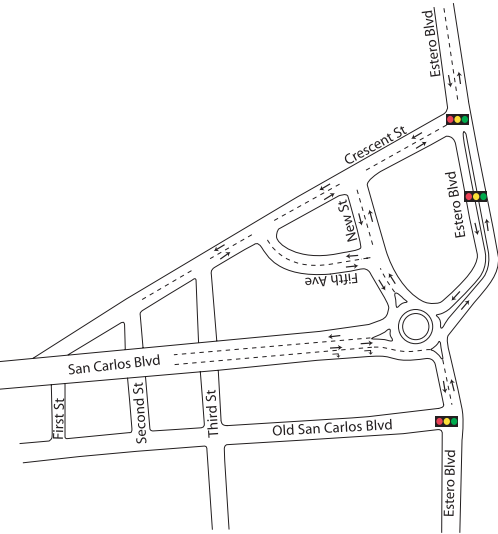
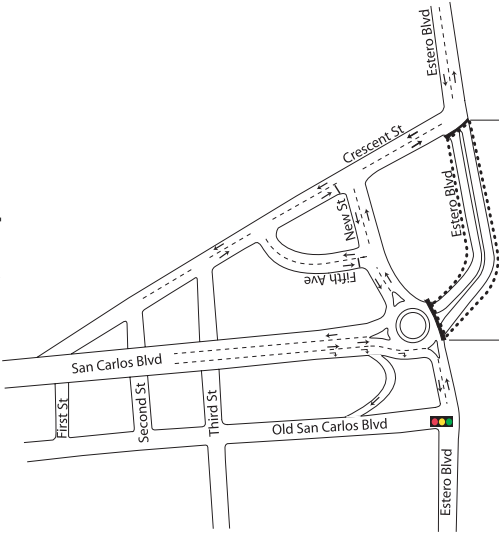
Option	Traffic Performance	Walkability/Livability	ROW/Feasibility
<p>Option 1 – Roundabout with full circulation</p>  <p style="text-align: center;">Option 1</p>	<p>1 2 3 4 5</p> <p><u>Through Traffic:</u> Moves traffic through area at a moderate pace. Occasional queues at some intersections.</p> <p><u>Local Traffic:</u> Allows traffic to move on and off the bridge as well as providing a full range of route choices for local trips.</p> <p><u>Through and Local Traffic:</u> As with all options, congested conditions beyond Crescent will continue to cause delays for incoming traffic and for local traffic.</p>	<p>1 2 3 4 5</p> <p>Highly walkable. Lower traffic speeds and frequent intersections provide a safe and attractive pedestrian environment and also allow pedestrian-scale development to line the streets. Strong potential to build upon and magnify the existing sense of place.</p>	<p>1 2 3 4 5</p> <p>Requires construction of "New Street", a parallel road to Estero between 5th and Crescent. As discussed in the design charrette, this street would be part of the redevelopment plan of the property and need not incur additional ROW costs. Some land may be needed for the roundabout, depending on final design.</p>
<p>Option 2 – Roundabout with Estero closed from 5th to Crescent; reopen Center Street</p>  <p style="text-align: center;">Option 2</p>	<p>1 2 3 4 5</p> <p><u>Through Traffic:</u> Putting all northbound traffic onto New Street unbalances the roundabout and exacerbates pedestrian crossing delays. Lack of gaps in the roundabout for traffic and concentration of pedestrian crossings on New Street create extensive queuing on all legs of the roundabout.</p> <p><u>Local Traffic:</u> One-way movement on Center Street (exiting the bridge) might provide a convenient trolley transfer point.</p> <p><u>Through and Local Traffic:</u> This option is not optimal for either traffic movement or pedestrian movement.</p>	<p>1 2 3 4 5</p> <p>Highly walkable. Traffic speeds are frequently reduced to zero due to queuing problems -- crossings at the roundabout will be easily accomplished between the static vehicles. Lower traffic speeds and frequent intersections provide a safe and attractive pedestrian environment and also allow pedestrian-scale development to line the streets. Strong potential to build upon and magnify the existing sense of place; however, the very poor traffic performance limits the desirability for either local or through traffic.</p>	<p>1 2 3 4 5</p> <p>Requires construction of "New Street", a parallel road to Estero between 5th and Crescent. As discussed in the design charrette, this street would be part of the redevelopment plan of the property and need not incur additional ROW costs. Some land may be needed for the roundabout, depending on final design.</p>

Table 2 -- Transportation Analysis Options Matrix

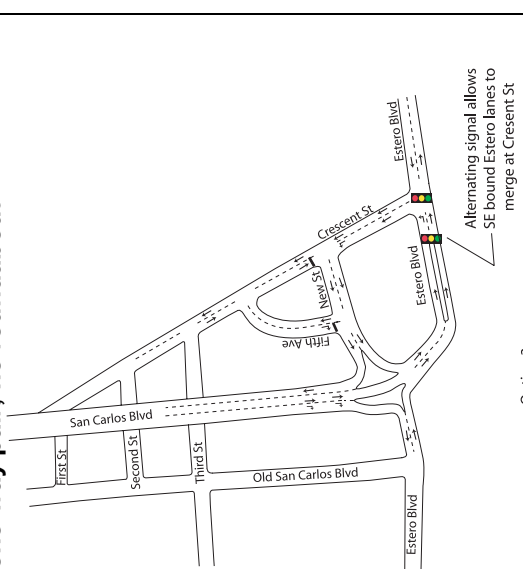
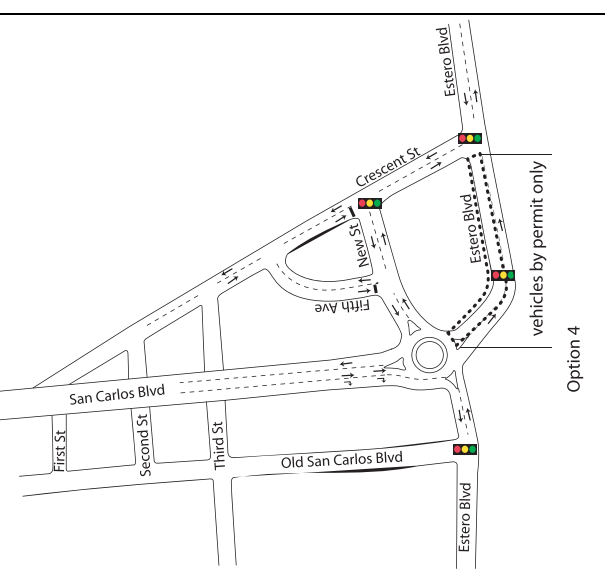
Option	Traffic Performance	Walkability/Livability	ROW/Feasibility
<p>Option 3 – Estero/New Street one-way pair; no roundabout</p>  <p>Option 3</p>	<p>1 2 3 4 5</p> <p>Through Traffic: Southbound traffic coming over the bridge is forced down Estero, due to no left turn onto New Street. With this volume of traffic, the pedestrian signal on Estero creates queuing onto the bridge, but it clears with the signal change and does not create a permanent queue on the bridge.</p> <p><u>Local Traffic:</u> Traffic pattern could allow for left turns from New St. onto Estero, but heavy volumes coming over the bridge would create serious queuing.</p> <p>Through and Local Traffic: This option is suboptimal for either local or through traffic movement.</p>	<p>1 2 3 4 5</p> <p>Minimally walkable. The unrestricted flow over the bridge creates a less walkable condition that is offset somewhat by the pedestrian signal. However, the pedestrian signal neither prevents nor mitigates the undesirable effects of the higher speeds in the area upstream of the signal. Pedestrian crossing to the beach is restricted to the pedestrian signal and the signal at Estero and Crescent (this is the alternating lane signal). Potential for urban development is more limited than in Options 1, 2 and 4 due to the higher speed of traffic during off-peak periods.</p>	<p>1 2 3 4 5</p> <p>Requires construction of “New Street”, a parallel road to Estero between 5th and Crescent. As discussed in the design charrette, this street would be part of the redevelopment plan of the property and need not incur additional ROW costs. This option does not include a roundabout, so there is no roundabout ROW cost. This option could be constructed within existing ROW, except for New Street.</p>
<p>Option 4 – Roundabout with northbound Estero between Crescent and 5th reserved for transit and emergency services</p>  <p>Option 4</p>	<p>1 2 3 4 5</p> <p>Through Traffic: Only transit and emergency vehicles would be allowed on Estero northbound between Crescent and New Street, but all traffic would be allowed southbound on the same section. Performance is similar to Option 1, but the direction of all NB traffic from Estero onto Crescent and New Street creates some imbalance in the roundabout and queuing along New Street, Crescent, and Estero. A signal at Crescent and New Street reduces (but does not eliminate) the delay. Works well for transit.</p> <p><u>Local Traffic:</u> Roundabout provides all options for local circulation except for restricted NB traffic on Estero. Imbalance noted for through traffic also affects local traffic circulation.</p>	<p>1 2 3 4 5</p> <p>Highly walkable. As with Option 1, lower traffic speeds and frequent intersections provide a safe and attractive pedestrian environment and also allow pedestrian-scale development to line the streets. Strong potential to build upon and magnify the existing sense of place.</p> <p>In addition, the transit way option provides a foundation for greater use of transit as a part of a more balanced transportation system.</p>	<p>1 2 3 4 5</p> <p>Requires construction of “New Street”, a parallel road to Estero between 5th and Crescent. As discussed in the design charrette, this street would be part of the redevelopment plan of the property and need not incur additional ROW costs. Some land may be needed for the roundabout, depending on final design.</p>

Table 2 -- Transportation Analysis Options Matrix

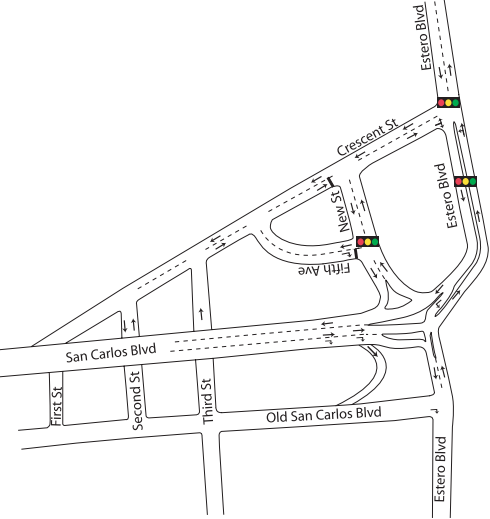
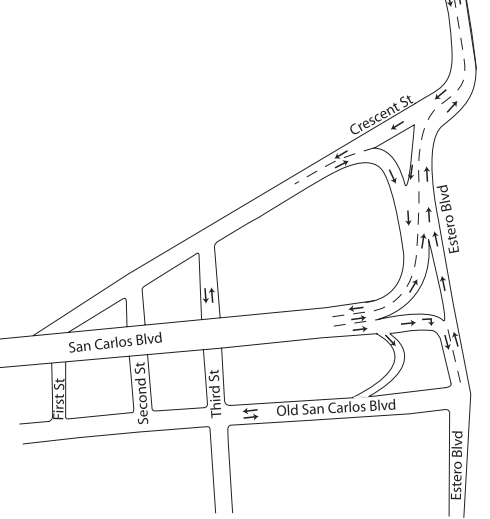
Option	Traffic Performance	Walkability/Livability	ROW/Feasibility
<p>Option 5 – Addition of New Street with unsignalized intersection (no roundabout)</p>  <p style="text-align: right;">Option 5</p>	<p>1 2 3 4 5</p> <p><u>Through Traffic:</u> Provides a range of route choices through two-way design of all streets. Left turns from North Estero onto the bridge are prohibited as they are today. This option provides good vehicle access on and off the island. Synchro model runs of this option did not display significant queuing.</p> <p><u>Local Traffic:</u> Local traffic circulation is constrained – left turns are not possible onto or off of the bridge. Local traffic that is west of the bridge will have to travel under the bridge in order to reach the bridge using New Street.</p>	<p>1 2 3 4 5</p> <p>Speeding during non-peak periods is a primary concern, as cars coming over the bridge have no reason to slow down until reaching either a pedestrian signal or the signal at the intersection of Crescent and Estero. These higher speeds would decrease pedestrian comfort and safety. However, the two-way operation of the streets and the frequent intersections still provide a walkable environment appropriate for urban scale development. This option does not preclude creating a sense of place in the local area.</p>	<p>1 2 3 4 5</p> <p>Requires construction of “New Street,” a parallel road to Estero between 5th and Crescent. As discussed in the design charrette, this street would be part of the redevelopment plan of the property and need not incur additional ROW costs. This option does not include a roundabout, so roundabout ROW is not a factor. This option could be constructed within existing ROW, except for New Street.</p>
<p>Option 6 – Highway-geometry reconstruction of Estero Blvd.</p>  <p style="text-align: right;">Option 6</p>	<p>1 2 3 4 5</p> <p><u>Through Traffic:</u> This option reconstructs portions of Crescent and Estero to create a road designed for high speeds at the foot of the bridge. This option provides efficient travel through the area and onto or off of the bridge.</p> <p><u>Local Traffic:</u> This option provides for very limited local circulation onto or off of Estero.</p>	<p>1 2 3 4 5</p> <p>Not walkable. Road designs of this type are suburban in nature, and experience since the 1950’s has shown that these road designs tend to blight to the areas through which they pass. Attempts to improve the character of the local community would be severely hampered by a design of this type. The high speed design (45 mph) would provide a dangerous pedestrian crossing obstruction. This design will curtail access to the waterfront and change the character away from its small-town roots.</p>	<p>1 2 3 4 5</p> <p>The high speed geometry of this design requires the realignment of Estero and Crescent Streets, limiting adjoining redevelopment to more highway-oriented uses. The setbacks and design requirements for this type of road would reduce the developable area of the site. The property owner’s willingness to donate the property is not known; all ROW may have to be purchased. Alternatively, if Estero is abandoned, a land swap might be arranged with the land owner for the new alignment.</p>

Table 2 -- Transportation Analysis Options Matrix

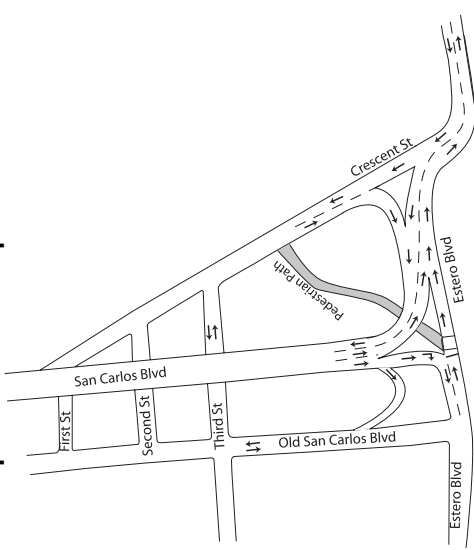
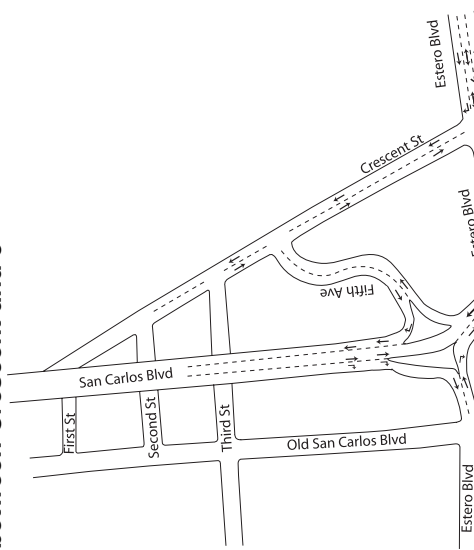
Option	Traffic Performance	Walkability/Livability	ROW/Feasibility
<p>Option 7 – Highway-geometry reconstruction of Estero Blvd. with a pedestrian underpass</p>  <p style="text-align: center;">Option 7</p>	<p>1 2 3 4 5</p> <p><u>Through Traffic:</u> This design is similar to Option 6, except that Estero Blvd. would remain elevated as it enters and exits the bridge and would pass over a pedestrian path before returning to grade. Traffic benefits are expected from the pedestrian underpass but could not be quantified by the model. Due to the complete channelization of the road, traffic would move well through the area onto and off of the bridge.</p> <p><u>Local Traffic:</u> This option provides for very limited local circulation onto or off of Estero.</p>	<p>1 2 3 4 5</p> <p>Not walkable. The pedestrian underpass would provide grade-separated access beneath a “Great Wall of China” barrier of Estero Blvd., but the previously walkable areas nearby would be degraded. The suburban highway geometry design precludes pedestrian-oriented development, so that even if sidewalks and pedestrian connections are provided, they will be less usable for pedestrians.</p>	<p>1 2 3 4 5</p> <p>This option will require at least as much ROW as Option 6, plus additional ROW for the on ramp from Estero to west. The feasibility of this design is in question. A preliminary design hasn’t been attempted, but rudimentary calculations of the area required to construct the pedestrian overpass and related elevated facilities indicate the physical space may be too constrained for this option. In addition, the expense of constructing elevated facilities is far in excess of that required for the at-grade facilities in the other options.</p>
<p>Option 8 – Existing street geometry with transit lane on Estero between Crescent and 5th</p>  <p style="text-align: center;">Option 8</p>	<p>1 2 3 4 5</p> <p><u>Through Traffic:</u> Queues form on the bridge southbound when the pedestrian signal is activated, but queues are not permanent and traffic flows over the bridge in both directions.</p> <p><u>Local Traffic:</u> Left turns from North Estero onto the bridge are prohibited as they are today; left turns onto North Estero would also be prohibited by this design. Southbound traffic on the bridge would continue to have only one convenient opportunity to enter the local traffic pattern (right turn at foot of bridge). Transit lane would not have left turn at the foot of the bridge. Northbound traffic on Estero would have to turn onto Crescent and 5th to reach the bridge.</p>	<p>1 2 3 4 5</p> <p>Continuous right-turns from Estero onto Crescent and from 5th onto the bridge will create difficulty for pedestrian crossing. The longer block of Crescent without the new street may discourage vehicles from using this bypass or create higher speeds that are detrimental to safe and comfortable walking conditions.</p>	<p>1 2 3 4 5</p> <p>This option uses existing ROW and street geometry, so no additional ROW is required.</p>

Table 2 -- Transportation Analysis Options Matrix

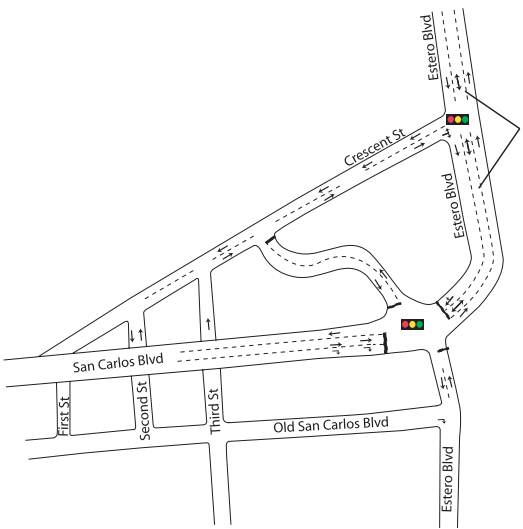
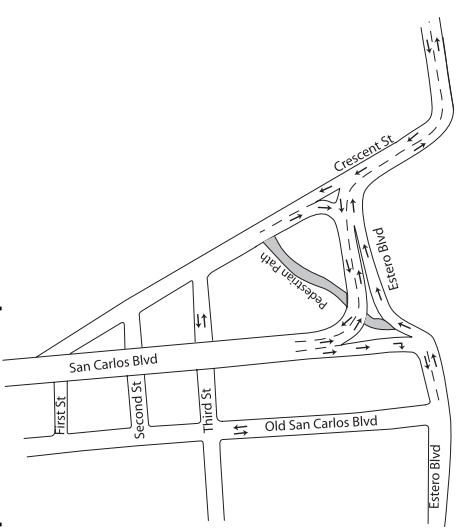
Option	Traffic Performance	Walkability/Livability	ROW/Feasibility
<p>Option 9 – Existing street geometry; signal at 5th /Estero and Estero/Crescent; no pedestrian signal on Estero; transit lane</p>  <p style="text-align: center;">Option 9</p>	<p>1 2 3 4 5</p> <p><u>Through Traffic:</u> Some queuing on the bridge southbound, but cars clear within a few cycles. Northbound traffic moves fine.</p> <p><u>Local Traffic:</u> In order to get LOS D at the intersection of Estero and 5th, left turning movements had to be eliminated, which hampers local traffic circulation. Also, as at present, no east-west through movements would be allowed at this intersection. The transit lane on Estero can be added with a permitted northbound left turn at Estero and 5th and still allow the intersection to operate at LOS D.</p>	<p>1 2 3 4 5</p> <p>Removing the pedestrian signal on Estero creates a long block (>600') encouraging mid-block crossings. The increased through-traffic along Estero, in addition to higher speeds during off-peak periods, are two factors making mid-block crossings less safe.</p> <p>Also creates situation of an arterial road optimized for through traffic separating two pedestrian-oriented locations. Intersection cycle lengths of 90 seconds (Estero/5th) and 100 seconds (Estero/Crescent) are longer than desirable for good walkability, encouraging crossing against the light. Transit lane may require reducing sidewalk width, reducing walkability.</p>	<p>1 2 3 4 5</p> <p>Addition of transit lane will require additional ROW along Estero between Crescent and 5th, unless sidewalks are narrowed.</p>
<p>Option 10 – Alternate highway-geometry reconstruction of Estero Blvd. with a pedestrian underpass</p>  <p style="text-align: center;">Option 10</p>	<p>1 2 3 4 5</p> <p><u>Through Traffic:</u> This design is similar to Option 7, except that Estero Blvd. would be shifted northward to a new alignment matching Options 1 through 5. Traffic benefits are expected from the pedestrian underpass but could not be quantified by the model. Due to the complete channelization of the road, traffic would move well through the area onto and off of the bridge.</p> <p><u>Local Traffic:</u> This option provides for very limited local circulation onto or off of Estero.</p>	<p>1 2 3 4 5</p> <p>Not walkable. Just as with Option 7, the pedestrian underpass would provide grade-separated access beneath a "Great Wall of China" barrier of Estero Blvd., but the previously walkable areas nearby would be degraded. The suburban highway geometry design discourages pedestrian-oriented development, so that even if sidewalks and pedestrian connections are provided, they will be less usable for pedestrians.</p>	<p>1 2 3 4 5</p> <p>This option will require at least as much ROW as Option 7, plus additional ROW for the on-ramp from Estero to the west, plus a complete realignment of Estero. The northward shift of Estero would cause less damage to private property than Options 6 or 7. The new elevated road would return to ground level just before it reaches Crescent St. The expense of constructing elevated facilities is far in excess of that required for the at-grade facilities in the other options.</p>

Table 2 -- Transportation Analysis Options Matrix

Option	Traffic Performance	Walkability/Livability	ROW/Feasibility
<p>Existing Conditions – Existing streets with no changes</p>  <p style="text-align: right; font-size: small;">Existing</p>	<p>1 2 3 4 5</p> <p><u>Through Traffic:</u> Extensive peak-hour queuing on bridge.</p> <p><u>Local Traffic:</u> Limited left turns at intersection of 5th and Estero force local traffic to circulate under the San Carlos bridge. Local circulation pattern wastes vehicle miles of travel and provides limited opportunities for local business access.</p>	<p>1 2 3 4 5</p> <p>Slow traffic speeds and buildings to back of sidewalk create a comfortable pedestrian environment despite the inadequate sidewalks. However, lack of extensive pedestrian-friendly development fails to capitalize on these “good bones” of design. Poor traffic circulation creates a “pedestrians versus cars” mentality that is detrimental to all sides. Additional pedestrian-oriented development requires better traffic circulation for greater livability.</p>	<p>1 2 3 4 5</p> <p>Existing conditions use existing ROW.</p>

SUMMARY OF OPTIONS:	Traffic Performance	Walkability/Livability	ROW/Feasibility
Option 1 – Roundabout with full circulation	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Option 2 – Roundabout; Estero closed from 5 th to Crescent; reopen Center St	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Option 3 – Estero/New Street one-way pair; no roundabout	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Option 4 – Roundabout with northbound Estero reserved for transit and emergency	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Option 5 – Addition of New Street with unsignalized intersection (no RBT)	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Option 6 – Highway-geometry reconstruction of Estero Blvd.	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Option 7 – Highway-geometry reconstruction with pedestrian underpass	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Option 8 – Existing street geometry with transit lane on Estero	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Option 9 – Existing street geometry; move signals to 5 th & Crescent; add transit lane	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Option 10 – Alternate highway-geometry reconstruction of Estero w/ped underpass	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Existing Conditions – Existing streets with no changes	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

Table 2 -- Transportation Analysis Options Matrix