

FLU DATA AND ANALYSIS APPENDIX E
Burnt Store Area Plan

BURNT STORE AREA PLAN

A PUBLIC / PRIVATE PARTNERSHIP

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I. EXECUTIVE SUMMARY

The Burnt Store Area Plan is the result of a cooperative effort to plan future improvements to transportation, utilities, environmental linkages, water management and land use along the Burnt Store corridor and throughout the surrounding area. The area studied includes land bordered on the south by the Charlotte/Lee County line, on the east by US 41 and on the north by Tuckers Grade.

The planning process included six months of meetings with elected officials, county staff members, governmental agency representatives, environmental leaders, the South Charlotte County Coalition, directors of homeowners associations and interested citizens. Two public meetings were held and attended by a total of more than 400 Charlotte County residents. This Area Plan reflects the input received from all interested stakeholders.

TRANSPORTATION

The top priority expressed by the majority of stakeholders was improvements to Burnt Store Road and east/west connector roads. Residents and community leaders voiced concerns about safety, and they strongly encouraged the county to four-lane Burnt Store Road as soon as possible for improved safety, hurricane evacuation, economic development and quality of life.

The county is planning to complete the following improvements within the next year: safety improvements to Burnt Store Road, the paving of Zemel Road and the installation of a traffic signal at Tuckers Grade. According to the county's current plans, the four-laning of Burnt Store Road is not planned until 2015.

The transportation improvements proposed in this Area Plan will fast-track the four-laning of Burnt Store Road by five years and create a new east/west access road extending Tuckers Grade to Burnt Store Road. By 2020, the Plan also recommends building a parallel north/south road east of Burnt Store Road. The Plan also includes updates to Charlotte County's comprehensive plan to show planned traffic improvements and a financial feasibility plan for those improvements.

INFRASTRUCTURE

The general consensus among residents is that the infrastructure throughout the Burnt Store corridor has been overlooked by the county in the past. Residents expressed concern about the lack of EMS service in the area, the absence of commercial areas within the corridor and the need for a vision/identity for the area, including an enhanced entry, and consistent landscaping and architectural guidelines.

The Area Plan proposes the siting of commercial nodes within the corridor to eliminate the need for residents to travel long distances to Punta Gorda or Cape Coral to access general commercial services.

In terms of utilities, the county has planned improvements for the area; however, the Plan will ensure that utilities are master-planned for greater efficiencies. The Plan also

includes updates to Charlotte County’s comprehensive plan to show planned utility improvements and a financial feasibility plan for those improvements.

WATER MANAGEMENT

Residents also expressed concern about flooding problems and the current drainage system. The general consensus was that new development should restore natural systems and alleviate flooding problems.

The Area Plan identified the lack of existing data on the stormwater systems throughout the corridor. The Plan recommends a complete inventory of existing facilities and the creation of a maintenance program. This watershed study will recommend specific improvements, identify potential storage sites and develop a system to treat run-off to Outstanding Florida Waters standards.

ENVIRONMENTAL

A significant portion of the Study Area is under public ownership. The Area Plan recommends that these areas be linked by a wildlife corridor – Clark’s Canal – designed for specific wildlife species. In addition, green spaces are recommended to offer opportunities for enhanced public enjoyment of the corridor.

LAND USE

This study proposes amendments to the Charlotte County Comprehensive Plan. Several new policies are added to the Future Land Use Element and changes are proposed to the county’s Future Land Use Map that would provide form and structure to future development as well as ensure that services become available for the existing development as well as future development.

FISCAL IMPACT

An analysis of Charlotte County revenues and proposed expenditures as a result of planned development in the corridor was completed. The fiscal impact study illustrates that future proposed development within the corridor will result in a positive net fiscal benefit for Charlotte County of \$348 million over a 30-year period, with a positive net fiscal benefit of \$120 million for the county’s school system during the same time frame.

CONCLUSION

The Study Area is surrounded on all sides by existing or permitted development. Development interest in the corridor has been increasing, placing additional pressure on a limited

infrastructure network. The county has three options: (1) Do nothing and allow the existing platted subdivisions along Burnt Store Road, both in Cape Coral and Charlotte County, to place additional burdens on the existing road and infrastructure network; (2) Allow the area to continue to be developed with a piecemeal approach as individual land owners submit isolated development plans; (3) Create an overall plan of development for the Study Area that enables the county to complete the four-laning of Burnt Store Road five years earlier than currently planned, creates enhanced water management systems, establishes regional wildlife corridors, provides a community vision with quality commercial and residential development and provides a net positive fiscal impact to the county.

The members of the Burnt Store Improvement Initiative would like to express their appreciation to all of the county staff members, government officials, environmental stakeholders, community leaders and citizens who contributed to this Area Plan.

II. CHRONOLOGY

June 9, 2004	Initial Meeting of the Burnt Store Improvement Initiative to Brainstorm Joint-Planning
August 2, 2004	Initial Commissioner/Staff Meetings to Explore Joint-Planning
August 23, 2004	BSII/Staff Kick-Off Meeting
September 2, 2004	Meeting with Burnt Store Lakes HOA
September 20, 2005	Meeting with Pirate Harbor HOA
September 22, 2004	Meeting with Tropical Gulf Acres HOA
September 23, 2004	Meeting with South Charlotte Coalition
October 5, 2004	Meeting with Burnt Store Marina HOA
October 23, 2004	Meeting with Burnt Store Colony HOA
October 26, 2004	First public workshop
November 1, 2004	Initial draft of report sections submitted
November 16, 2004	Meeting with HOA presidents to review initial findings
November 22, 2004	Second public workshop
January 7, 2005	Update meeting with HOA presidents
January 11, 2005	Initial copy of report submitted
January 25, 2005	BSII Web site for Report on-line
February 4, 2005	First Addendum to Report Submitted
February 25, 2005	Meeting with South Charlotte Coalition leadership
March 16, 2005	Update meeting with HOA presidents - Second Addendum Submitted
March 18, 2005	Joint Punta Gorda/Charlotte Commission meeting held - Planning & Zoning Board meeting
April 7, 2005	Revised copy of report submitted
April 15, 2005	County Commission hearing postponed -- lack of quorum
April 22, 2005	Meeting with South Charlotte Coalition leadership
May 4, 2005	Addendum to Report Submitted
May 10, 2005	County Commission Transmittal Hearing
August 12, 2005	The Department of Community Affairs issues objections, recommendations, comments report
October 10, 2005	Planning and Zoning Board Hearing
November 1, 2005	Final Plan Submittal

IV. BACKGROUND

PURPOSE

This study has been created in response to building development pressure along the Burnt Store Corridor. Over the last 18 months, Charlotte County has been receiving inquiries and proposals for zoning or comprehensive plan amendments from individual property owners in the area, and development permitting in existing platted areas is increasing. This report is designed to assist Charlotte County by providing an area-wide plan that anticipates development in the area, addresses the cumulative impacts of that growth, and plans ahead so that infrastructure and services will be available.

This report also goes beyond simply planning for growth. The report examines how Charlotte County can enhance the quality of development in the Burnt Store area. The Burnt Store community provides a significant opportunity to create residential and commercial development that improves the community image, creates a community vision and provides a net increase to Charlotte County's tax base. This report examines how future development can be in harmony with the County's fiscal and planning goals, as well as the environment through the preservation of natural features, creation of wildlife corridors and alleviation of existing water management problems, while expediting the widening of Burnt Store Road.

Specifically, the purpose of this report is to undertake a comprehensive approach to planning future improvements to transportation, utilities and other public infrastructure along the corridor and throughout the surrounding area, while creating critical environmental linkages, hurricane evacuation routes, conservation lands and an enhanced entry to Charlotte County. The study is intended to help expedite and facilitate the widening of Burnt Store Road and the improvement and completion of additional east-west connector roads.



Burnt Store Aerial

HISTORY

Burnt Store – the name stirs images of a history-rich area with roots that reach back to times when identifying features and significant events served as markers for travelers. The trails and rustic roadways always led past and to important destinations. Over time, the rudimentary routes attracted settlers, grew and improved to keep pace with need and population growth, and the markers that served the early travelers became the names that appear on regional maps.

Burnt Store Road has been a model of that evolutionary process, a descendant of a simple path that was worn smooth long before the event that gave the route its name. Thousands of years before Juan Ponce de Leon discovered Charlotte Harbor in 1513, the Calusa tribes that inhabited many of Florida's coastal and waterside regions had settlements in Charlotte County. Some historians believe the route that eventually grew to serve settlers began as a footpath that knit Calusa villages to each other.

History and legend come together to define the origin of the road's name. History contributes the obvious – that a store burned down. Legend furnishes two versions of how it may have happened.

One story that has survived time pivots on a small settlement of German immigrants who lived at the tip of a trail, far removed from other settlers who had also discovered the bounty of the land. Eventually, a small general store became a thread in the fabric of the community, a source of staples and a gathering place for social exchanges. One night, a fire – origin unknown – destroyed the little store, and the trail earned the name Burnt Store Road.

The second and more engaging account places responsibility for the fire on Billy Bowlegs, a Seminole chief and leader of a small group of tribal members who had settled in the area. They lived apart from others, making friends with just one settler known by the name Old Salty. The peaceful co-existence disintegrated, however, when an army lieutenant named Hartstuff ignored the respected boundaries. Despite Old Salty's attempt to educate the lieutenant, the behavior continued. Billy Bowlegs chose to defend the land the Seminoles believed was in jeopardy, and he led a band of Seminole night raiders who burned the trading post to the ground in 1848.

For a century, Charlotte County – indeed, Southwest Florida – remained quaint, quiet and essentially undiscovered. During the 1950s, grand-scale land development put Florida retirement within reach of tens of thousands of prospective newcomers. It also became the welcome mat for the uninterrupted population surge that started in the 1960s.

The areas surrounding Charlotte Harbor became magnets for growth and development. Punta Gorda Isles, one of the earliest of the mega-developments, was born in 1958 on land dominated by mangroves near the Peace River delta. By 1969, the subdivision claimed more than 3,500 acres, with dredge-and-fill homesites along 65 miles of finger canals. Simultaneously, the Gulf American Land Corporation was paving 1,700



Burnt Store Aerial

miles of roadway and platting homesites in Cape Coral to the south, a subdivision created by dredging 400 miles of saltwater and freshwater canals over more than 100 square miles.

Pinched in between, along the two-lane Burnt Store Road, was more development that reshaped environmentally sensitive lands. Burnt Store Marina, with luxury resort accommodations and amenities, was unfolding, seeding the community's residential development and condominium construction. Burnt Store Isles, Burnt Store Lakes, Burnt Store Village and other communities were introduced, adding to the intensifying pressure on infrastructure, public services and already dwindling water supplies.

Driven by the continued growth, Burnt Store Road began its accelerated evolution into a significant north-south route that emerges on US 41. Burnt Store Road is becoming a significant transportation corridor – a gateway to Charlotte County – that provides additional hurricane evacuation links, serves businesses and residential communities, and now has the opportunity to better serve this function while preserving the integrity of the environment.

Over the last year, the Burnt Store Corridor started receiving significant development pressure on the large undeveloped properties north of the Charlotte/Lee County line. In an effort to allow a more comprehensive and coordinated approach to development along Burnt Store Road and throughout Charlotte County, the Board of County Commissioners directed county staff to undertake a planning effort to address cumulative impacts and needs of the area. To expedite the study, a group of large property owners in the area formed a partnership – The Burnt Store Improvement Initiative – to create an Area Plan for the Burnt Store Corridor. The partnership's mission is to address comprehensive issues of concern to the Burnt Store Corridor as well as the surrounding area, roughly bounded by the Charlotte/Lee County line to the south, US 41 to the east and Tuckers Grade to the north. Charlotte County then formed a public/private partnership with the Burnt Store Improvement Initiative to oversee the Area Plan.

The cooperative effort is designed to undertake a comprehensive approach to planning future improvements to transportation, utilities and the natural environment along the corridor and throughout the surrounding area. The Burnt Store Road Area Plan presents an opportunity to meet the needs of today while preparing for tomorrow, and do it in a way that protects the area's natural assets.

V. COMMUNITY VISIONING

Having a well-executed process is essential to creating a successful community plan. It is important, when planning an area with existing development and future growth considerations, to incorporate technical data provided by a consultant team and experiential and anecdotal data provided by key stakeholders in order to establish planning options and priorities. For this reason, the planning process was coordinated using two parallel tracks to gather data and produce the recommendations in this report.

The first track of the data-gathering process was to compile technical data from each field of initial concern directed by Charlotte County staff and commissioners. Consultants were hired to gather information on the environment and wildlife habitat, transportation impacts and road corridor options, area water management and utility infrastructure.

Concurrent with the gathering of technical data, the Burnt Store Improvement Initiative/Charlotte County team initiated the visioning process by interviewing a series of community leaders, Homeowners Association board members, government officials and large property owners. Small group meetings provided an opportunity to understand the major issues of concern to Charlotte County community leaders and Burnt Store area residents. Every Homeowners Association in the area was contacted for an initial meeting, and each received follow-up correspondence to keep them informed as the plan developed. Additionally, a series of meetings with members of the South Charlotte County Coalition helped ensure that the visioning process included representatives from a diverse cross-section of the community that went beyond the exact geographic boundaries of the study.

The primary issues of concern expressed by the stakeholders were as follows:

-- **Transportation.** The current condition of Burnt Store Road was identified as the most critical issue facing the stakeholders. Residents expressed concern about the unsafe condition of the current road and the need to expand the road for hurricane evacuation, economic development and general quality of life. The general consensus is that the road needs to be expanded and improved as quickly as possible. It was strongly suggested that although the ultimate goal is an expedited four-laning of Burnt Store Road, the safety improvements are needed right away and without delay. Other transportation issues expressed included the improvement and establishment of east-west connectors to provide enhanced access to US 41 and I-75.

-- **Water Management.** Stakeholders voiced concerns about flooding issues in the area and the perception that this regional problem could be alleviated through better water management practices for new development, the restoration of natural systems and better land management practices for preserve areas.



Burnt Store Road - Lee/Charlotte County Line



Commercial on US 41 at Burnt Store Road

-- Environmental. Green space, wetland preservation and the creation of wildlife corridors were identified as issues of importance to be considered in the planning study. Stakeholders expressed interest in creating a contiguous wildlife corridor linking the eventual Babcock preserve and Cecil Webb wildlife refuge to Charlotte Harbor. This corridor would be one of the last remaining lines in a green belt that extends from Charlotte Harbor to Lake Okeechobee.

-- Commercial Uses. Residents expressed the need for general commercial services within the corridor to avoid long trips to Punta Gorda and Cape Coral. Several residents expressed a desire to have convenience retail uses in close proximity to where they live. Creating nodes as an alternative to strip commercial development was also discussed.

-- Planning Considerations. Stakeholders fully supported the concept of a comprehensive area plan to direct the 20-year development of the Burnt Store Road Corridor. The general consensus was that the plan should address infrastructure improvements, an enhanced entry to Charlotte County, well-planned buffers, the establishment of commercial nodes, planning of residential development and environmental considerations.

-- Priority Perceptions. There was a general perception among several active residents and homeowners associations that this area of Charlotte County was neglected in terms of priority for infrastructure funding and services. This perception has led to a growing frustration with Charlotte County government and the development community, and a disbelief that improvements to the corridor will happen.

Following the small group meetings, public workshops were held on October 27 and November 22, 2004. The workshops were promoted in numerous articles in the *The Charlotte Sun* and *The Charlotte Herald-Tribune*, and Charlotte County mailed 6,000 postcards to affected property owners. More than 200 individuals attended the first workshop that consisted of a two-hour discussion. The second workshop was attended by approximately 100 individuals and included a PowerPoint presentation and additional public input. The workshops identified general issues of concern and provided an opportunity for individuals to provide specific input into the area plan. The public workshops reiterated many of the comments that were expressed in the meetings with the Homeowners Associations.

An initial Burnt Store Corridor Area Plan draft report was created and distributed to all stakeholders for review and comment.



November 22, 2004 Public Workshop

VI. SITE CHARACTERISTICS

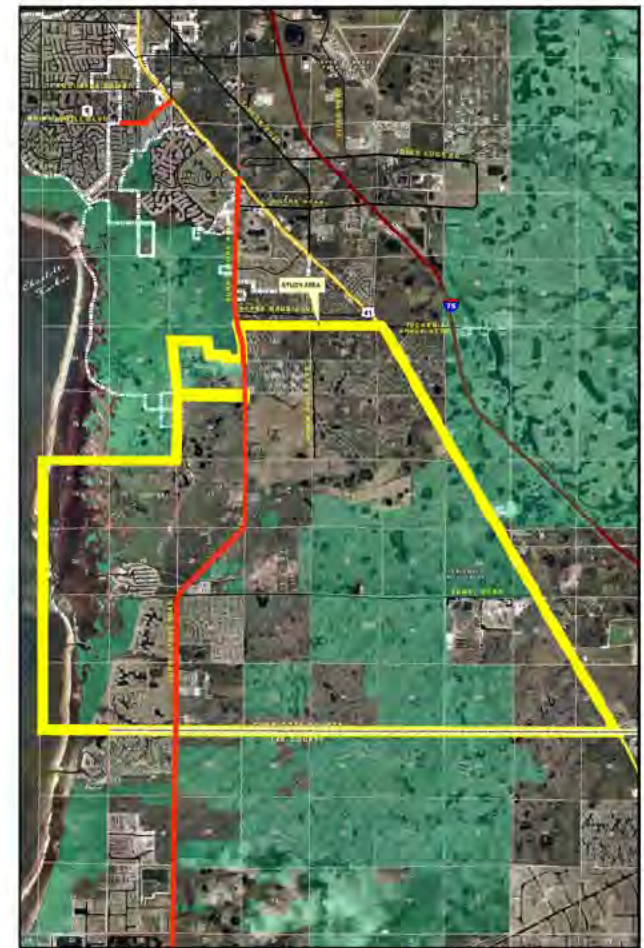
The area in this study extends from the Lee/Charlotte County line on the south to Tuckers Grade on the north, and the Charlotte Harbor on the west to US 41 on the east. The planning area boundary was originally created to encompass only those properties along the Burnt Store Road corridor, but was later expanded to analyze the larger issues of east-west connector roads and wildlife corridors (Map 1).

The Study Area is primarily serviced by two major roadways, with limited connectivity between the two roads – US 41 on the east, and Burnt Store Road on the west. As a result, the two corridors have developed quite separately with little commonality. US 41 contains a mixture of residential development and strip commercial areas with limited industrial zoning. The Burnt Store Road corridor was established as a primarily residential corridor by Punta Gorda Isles Inc., and it has continued to attract residential development with limited strip commercial retail and office uses. The Study Area contains a mix of zoning categories (Map 2). The existing residential development has zoning at varying densities and includes commercial zoning categories at the intersection of Zemel Road and Burnt Store Road. The majority of the non-developed areas are designated in the AE (Agriculture) land use category, defined by agriculturally zoned areas that are within the urban service area or in proximity to existing development.

The Study Area is surrounded on all sides by existing or permitted development. To the south along Burnt Store Road is the gated residential community, Burnt Store Marina. South of Burnt Store Marina is an abundance of existing platted residential lots in North Cape Coral. To the north of the Study Area is a mix of single-family and mobile home residential development along both Burnt Store Road and US 41. To the east is Tropical Gulf Acres (an older platted community), as well as newer development that has recently been permitted at the Tucker’s Grade Interchange. Most of the property east of US 41 and I-75 is under conservation easements as part of the state-owned Cecil Webb Wildlife Refuge.

Development pressure along Burnt Store Road has been increasing due to direct access to two arterial roads, the Tucker’s Grade/I-75 interchange, the opportunity to provide public utilities, and the significant opportunity the area has to provide for quality residential and commercial development and the limited development potential for large parcels due to the abundance of proximate preserve areas and platted lots. With increased connectivity from Burnt Store Road to Tucker’s Grade, access from the area to regional destinations and transportation hubs, such as the Southwest Florida International Airport, would be excellent.

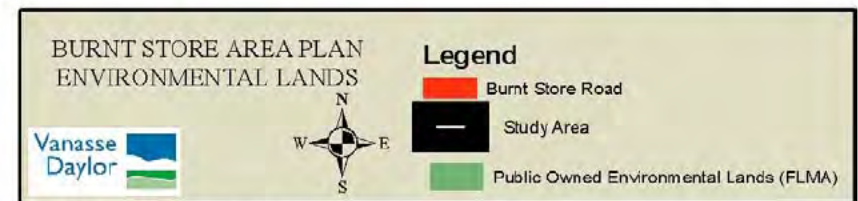
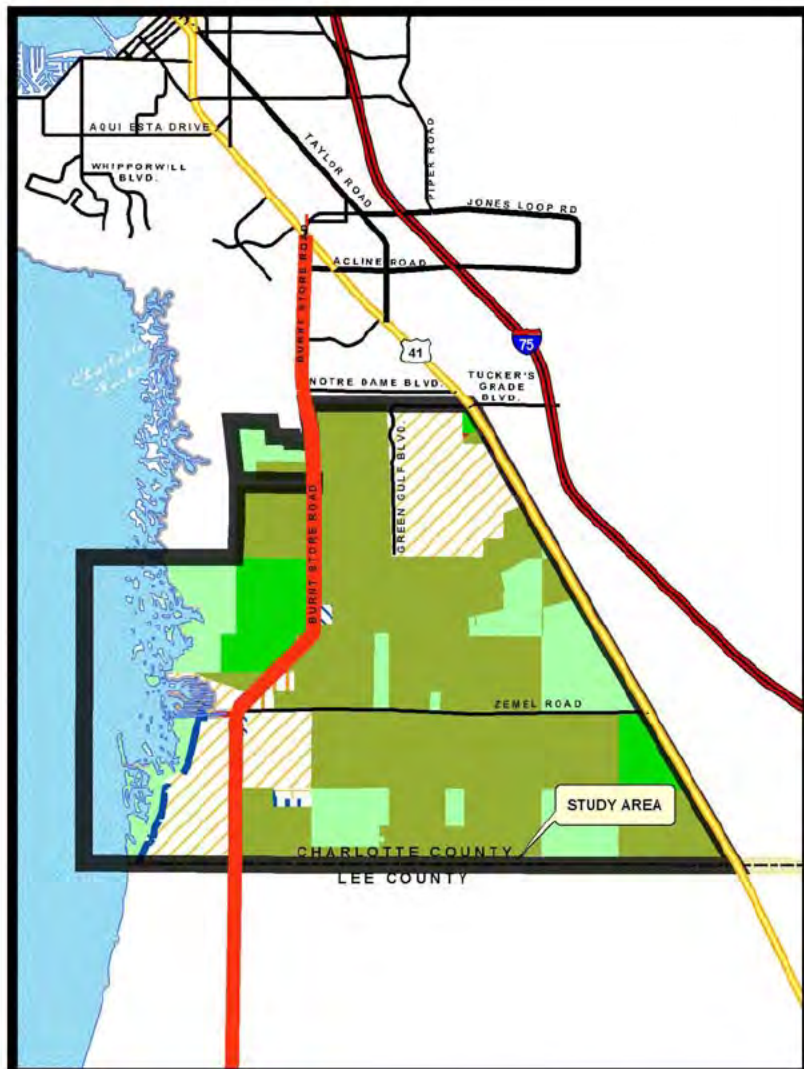
The planning area also contains significant levels of publicly owned land. The municipal landfill is located along Zemel Road, between US 41 and Burnt Store Road; the school board owns property west of Tropical Gulf Acres; the recently purchased Charlotte County Utilities water and sewer plant is located along Burnt Store Road at the county line; and the planning area contains over 8,500 acres of conservation lands. These



BURNT STORE AREA PLAN
PUBLIC OWNED ENVIRONMENTAL LANDS
Legend
Burnt Store Road
City of Punta Gorda
Public Owned Environmental Lands (ELM)
Study Area

SEE FULL SIZE MAP - PAGE 153

Map 1 - Aerial of Study Area with environmental lands identified



Map 2 - Existing Zoning

Map 3 - Environmental Lands

properties would not be considered potential areas for development at any level. Map 3 shows the planning area with publicly owned conservation lands highlighted. It is important to note, that although the planning area appears large in size, a significant portion of the area is already set aside for conservation, which clearly establishes a green belt through the area and on the southern edge of the planning area.

In addition to the conservation lands, the Study Area also contains passive and active recreational opportunities with the Charlotte Harbor Environmental Center and the Charlotte Harbor. Communities such as Pirate Harbor and Burnt Store Marina have direct access to Charlotte Harbor. The planning area is also part of the Charlotte County Blueways Trails System throughout the corridor.

The availability of large tracts of vacant land amongst existing residential development, rapid growth to the north and south of the Study Area, and the potential for excellent road access and nearby recreational amenities combine to create an emerging growth corridor. With the abundance of large platted antiquated subdivisions in Charlotte County, the Burnt Store area provides an opportunity to diversify the available housing alternative in Charlotte County and create development that provides a net positive fiscal impact to the county. The availability of large tracts of land provides the opportunity to create better connected water management systems, establish regional wildlife corridors, provide limited access along major roadways and enhance the quality of life for current and future residents.

The availability of large un-entitled lands also provides an opportunity for Charlotte County to create a density receiving area of sufficient size to have a meaningful role in the planned conversion of platted lots to a more desired development pattern. If created, this area would provide the opportunity to transfer a significant number of units and achieve the goals of the county's Transfer of Development Units ordinance. The opportunity would be created to deplat the equivalent of two Murdock Villages, without government intervention, or provide over \$25 million in funding for the acquisition of environmentally sensitive lands. The shifting of density provides Charlotte County with the opportunity to create quality development and resolve the complex issue of antiquated platted subdivisions.



Charlotte Harbor State Buffer Preserve



Landfill on Zemel Road

VII. OPTIONS

In examining the nature of growth along a corridor or in an area, and analyzing how this growth pressure should be approached, it is necessary to examine all options. Every choice has a consequence, whether that choice is to take no action, delay taking action or take action to guide or manage growth pressures.

OPTION #1 – DO NOTHING

The “do nothing” option is inherently different from the “nothing happens” scenario. “Nothing happens” assumes that there is a constant set of external forces influencing development. In the “nothing happens” scenario, the following occur:

1. Development pressure ceases to exist;
2. No new homes get built within the area or farther south in Cape Coral; and
3. Existing residents and the county are satisfied with the current state of Burnt Store Road, storm water run off, and conservation lands.

None of these assumptions are viable. New homes will be built in the existing platted subdivisions along Burnt Store Road in both Cape Coral and Charlotte County. Development pressure along the Burnt Store Road corridor has increased dramatically in the last few years, and will likely continue to increase. Prices for undeveloped land along Burnt Store Road have increased over the last year, as have prices for land countywide. We understand from our visioning process that even with the current level of development along Burnt Store Road, stakeholders are not happy with the nature of development in the area and have expressed a desire for better planning and aesthetic controls. Environmental groups are concerned with wildlife and flow way issues, and existing residents are concerned with traffic safety, hurricane evacuation, flooding and the lack of shopping opportunities. Even if no new houses are constructed in and around the Burnt Store area, the current state of affairs is undesirable from both an environmental and a quality of life perspective.

The population in Charlotte County is continuing to increase at a steady rate, faster than the statewide rate of increase. Table 1 below shows the 2002 Population Projections from the Bureau of Economic and Business Research at the University of Florida. As the table demonstrates, by the year 2030, the population of Charlotte County will increase by over 75,000 people. It is important to note that although the Department of Community Affairs in Tallahassee generally follows the mid-range BEBR projections for planning purposes, Lee and Collier counties have demonstrated growth patterns along the lines of the high-range projections, which would nearly double the population by 2030. Existing platted areas already



Existing Platted Subdivisions

have the capacity to absorb this population; the question is whether or not that is the desired form of development. Charlotte County has clearly stated in their comprehensive plan (policies 1.4.3 and 1.4.5) and the recent amendment of the Transfer of Development Units ordinance (adopted December 13, 2005) that directing growth to the existing antiquated plats is undesirable.

Table 1. BEBR Population Projections - Charlotte County

	2003	2005	2010	2015	2020	2025	2030
Low	151,994	151,000	157,800	163,100	166,600	168,200	167,700
Medium	151,994	158,900	174,700	190,600	206,600	220,800	234,200
High	151,994	166,900	192,800	220,700	249,900	280,300	311,400

Source: Projections of Florida Population by County, 2003-2030, Vol. 37, No. 2, Bulletin 138, February 2004

Burnt Store Road, in particular, faces increased development pressure. According to the Florida Gulf Coast Group (FGCG), a Fort Myers-based real estate consulting firm, the corridor’s location between two rapidly emerging cities, Cape Coral and Punta Gorda, makes it a major growth area for Southwest Florida. FGCG projects that this corridor will experience a 20 percent growth rate over the next five years, a growth rate significantly higher than Lee County and double the growth rate of Charlotte County (SW Florida Profile, June 2004).

Understanding these issues, the “do nothing” option suggests that the existing comprehensive plan is sufficient to improve upon the current set of problems. The current comprehensive plan allows for certain development – very low density residential, very limited commercial, the build out of the platted subdivisions. With existing development rights in the platted areas and on 10-acre lots, there is no requirement or incentive to improve upon the existing drainage problems, no incentive to implement better planned communities with a higher standard of aesthetic control, no incentive or requirement to create a wildlife corridor, a limited market for commercial uses, and the ability to develop in all areas that are not currently government owned. Most importantly, however, from the visioning process, there is significantly less funding for the widening of Burnt Store Road and the improvement of east-west connections that will be necessary for traffic distribution, and a lack of right-of-way to widen or create roads.

Finally, the “do nothing” option fails to allow the county to address the platted lands dilemma faced countywide. Without significant receiving areas that are appropriate for development, there will not be an opportunity to send development rights from environmentally sensitive platted lands. Properties within the urban service area already are entitled for development of some sort, and therefore have a limited need for receiving units. This is, in part, why a relatively small number of units have so far been transferred during the life of the ordinance. The natural conclusion of this approach is actually the discouragement of the implementation of new planning principles, integration of uses, improvement of infrastructure, and the encouragement of continued development in substandard, platted lots with minimal infrastructure.



Existing Platted Subdivisions

The “do nothing” approach suggests that Charlotte County does not want to create a new sending area to transfer units from existing development. This option, in essence, is a relinquishing of our ability to plan for growth. It does not lead to a halt to growth, but simply acquiescence to unplanned growth.

Drawing from the understanding that the “do nothing” option – the build out scenario of the current comprehensive plan – does not represent the stated interests of Charlotte County or the Burnt Store residents, it is necessary to explore options that do represent the stated intent of the community. From the public outreach meetings, we heard the following main themes and desires:

1. Four-lane Burnt Store Road;
2. Provide a connected system of roadway corridors;
3. Enhance water management systems to control flooding;
4. Preserve and create wildlife corridors;
5. Provide for commercial areas closer to where people live; and
6. Increase property values while incentivizing the reduction or relocation of vested units in substandard platted areas.

OPTION #2 – INDIVIDUAL PRIVATELY INITIATED PLANS OF DEVELOPMENT

This option may address certain issues, primarily issues 1 and 3, depending on negotiations with Charlotte County through the development process, but this option does not allow the county to explore and address the larger issues presented in points 2, 4, 5 and 6. The negative impacts of piecemeal development and the inability for Charlotte County to examine the cumulative impacts of development through the entire area will still be an issue.

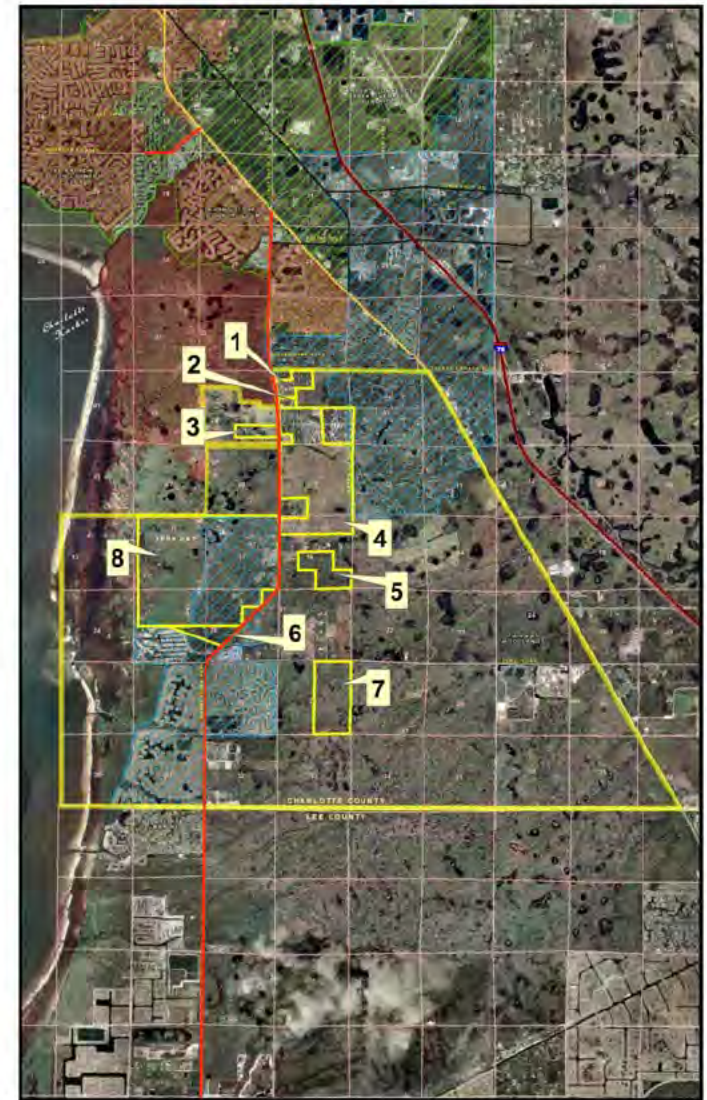
Option #2 is the current mode of operation in Charlotte County with respect to the Burnt Store Corridor. As recently as the county’s last cycle of amendments to the comprehensive plan, an amendment was transmitted along Burnt Store Road to permit a new residential community. Continuing to permit new development without a comprehensive approach to developing the infrastructure to service that development will have consequences, such as reduced opportunities to address open space and wildlife crossings, loss of opportunity to coordinate access points on Burnt Store Road, and a reduced ability to balance density with the need for open space, commercial opportunities and reduction of housing in the high hazard area.

OPTION #3 – CREATE AN OVERALL PLAN OF DEVELOPMENT FOR THE STUDY AREA

The mandate for this study came through a realization on the part of Charlotte County that the first two options would not provide the county with sufficient means for growth management. Option #3 is the basis for this study and addresses the points raised in the visioning process.

Understanding the preferable option to be an overall plan of development for the Burnt Store Area, it was then necessary to establish a vision for likely development parameters. Although the visioning process is ongoing, as described in the visioning section of this report, we were able to establish a working set of criteria. This was done through meetings with community organizations to get their sense of what they would like to see in the area, as well as meetings with the large property owners to get a sense of what they see as the development desires and potential for their properties.

The assumptions we used in this report were then derived using the likely development scenarios for the properties in the Burnt Store Improvement Initiative (including Tern Bay and Greg Eagle), with an added growth rate for all other properties. This growth rate encompasses all other properties, including construction on the existing platted developments in the area. While it is technically desirable to do our analysis on a worst case build out scenario, it is entirely unrealistic to assume that the build out will occur in the planning time frame of the comprehensive plan and that approvals for development will greatly exceed the existing average density along the corridor.



Aerial with Future Development Properties Identified

	Property Owner	Acres	Dwelling Units	Density – DU/Acre	Commercial Area
1	Bryan Paul	165	500	3.0	125,000
2	Burnt Store Ranch	79	390	4.9	
3	Burnt Store Land Group	80	250	3.1	
4	The Bonita Bay Group	940	2,500	2.7	150,000
5	Saundry	161	500	3.1	
6	Greg Eagle	94	228	2.4	
7	Lindner	320	960	3.0	
8	Tern Bay	1,800	1,810	1.0	170,000 250 Hotel Rooms
	Total	3,639	7,138	2.0	445,000 250 Hotel Rooms

VIII. LAND USE RECOMMENDATION

The key in establishing an overall plan for the Burnt Store Area is in locating a full mix of uses desired by the county, the community and the property owners. In this regard, it is necessary to consider factors that attract or repel the location of certain uses. This applies to conservation lands as well as developable lands. Studies were conducted by environmental and transportation consultants to assist in establishing the land use recommendation of this report. Analyses were also conducted by fiscal and engineering consultants to then identify the plan for providing adequate services for both the existing and future residents of the Burnt Store area. Individual consultant reports are attached as appendices.

ENVIRONMENTAL

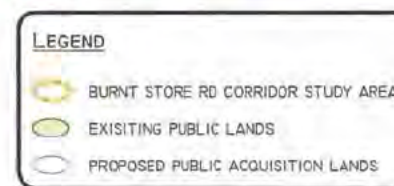
Creating wildlife corridors has been an issue of concern for Charlotte County throughout this planning process. The significance of an environmental corridor has been discussed at length by various environmental agencies. Properties in the Burnt Store area are generally thought of as the last link of a potential wildlife corridor that would extend from lake Okeechobee to the Charlotte Harbor. Although there is currently a link to the Charlotte Harbor provided through the Yucca Pens Unit just south of the county line in the City of Cape Coral, an additional corridor would reduce habitat fragmentation, benefit wildlife movement and aid in reducing wildlife road mortality.

In identifying a wildlife corridor, it is necessary to first conduct an analysis of the existing habitats and potential species present in the region. Once habitat and species have been determined, it is possible to determine the appropriate type of wildlife crossing needed as Burnt Store Road is improved.

In discussing this issue with the National Estuaries Program, the Florida Fish and Wildlife Conservation Commission and Charlotte County staff, it became apparent that there are several overlapping areas of interest in creating corridors of preserve. The three main areas of interest are:

1. Creating a wildlife corridor;
2. Pedestrian greenway; and
3. Restoring hydrology.

Based on these objectives, three general areas were recommended for consideration, the most significant being an area located along the Clark's Canal to serve as the wildlife corridor. The area along Clark's Canal also corresponds to the lands proposed for potential future acquisition on the Florida Natural Areas Inventory map (See the description of the program in Appendix D, Environmental Analysis). A comprehensive review of the planning area reveals appropriate areas to avoid habitat fragmentation and have the potential for county acquisition. The county is negotiating a wildlife corridor and/or examining the purchase of the Greg Eagle property. It is recommended that Charlotte County continue its acquisition efforts that would then extend from the Greg Eagle property, which could be an important component of the wildlife corridor, combined with the parcels already under conservation on the east side of Burnt Store Road and future acquisition along Clark's Canal. In widening Burnt Store Road, it is recommended that a wildlife crossing be constructed of a sufficient size to accommodate small- to medium-size animals.



Map 1 - Florida Natural Inventory Map. The “Proposed Public Acquisition Areas” are prepared by the Florida Forever Lands Program.

Two additional corridors were identified to the north of Clark’s Canal. The “greenways” that are shown are intended to link up to the “wildlife utilization areas” proposed by Tern Bay, directly to the west of Burnt Store Road. The “blueway” shown at the north end of the site is in response to public concern in Tropical Gulf Acres that blocked water flow from this system causes water management problems on their properties. While this issue needs further study, this report recommends that a blueway be created comprising restored natural areas, lakes and water management features, such as drainage crossings, to help alleviate water management problems that may exist.

TRANSPORTATION

In discussions with area residents and county staff, transportation was clearly the most significant issue. At the two workshops, transportation issues and transportation-related issues occupied the majority of discussion time. For the purpose of this study, transportation can be generally divided into three categories: current conditions and improvements in the area; impacts of anticipated development on the road infrastructure; and roadway options to facilitate other desired uses, such as commercial nodes, public facilities and other community destinations.

The current state of Burnt Store Road is clearly unacceptable to the local residents. The road currently consists of two 10-foot travel lanes and no shoulder. For several years, the South Charlotte County Coalition, an umbrella organization comprising many Home Owners Associations in South Charlotte, has been advocating for the widening of Burnt Store Road and for an advancement of money to be used to create safety improvements. Through use of monies generated in a countywide sales tax, the funding is currently in place to upgrade Burnt Store Road from the Lee/Charlotte line to US 41. The upgrades would provide a widening with paved shoulders. As listed in the transportation analysis, there are several other road improvements in the area that are scheduled, including the paving of Zemel Road, which will provide a needed east-west corridor linking Burnt Store Road to US 41 for the southern portion of the Study Area.

Charlotte County is currently collaborating with Lee County and the City of Cape Coral on a bi-county study, conducted by Post, Buckley, Schuh & Jernigan (PBSJ), to examine future roadway needs for Burnt Store Road-Veteran’s Parkway-Colonial Boulevard corridors. The attached transportation analysis lists new road improvements that will be necessary and road improvements that are currently planned and deemed financially feasible, but that will need to be expedited. The roadway plan is shown in five-year increments based on the anticipated market absorption of residential units in the Study Area. The transportation study recommends Burnt Store Road be widened to four lanes by 2010; Tuckers Grade be extended to connect US 41 to Burnt Store Road by 2015; and an alternate north/south road connecting Zemel Road to the Tucker’s Grade extension be constructed prior to 2020.

Although it is recognized by the attached transportation study and the work of the bi-county transportation study conducted by PBS&J, the alignment of the Tuckers Grade extension should be designed in order to facilitate multiple community interests. One of those community needs is the establishment of a viable commercial node along the Burnt Store Road corridor to create as much of a self-contained community



Map 2 - Florida Natural Inventory Map with proposed blue-way, greenway and wildlife corridors

as possible. In establishing a viable commercial node, there are two primary factors that need to be considered:

1. Access – This issue is important from both a transportation and an economic perspective. Locating commercial nodes at the intersection of two major roadways is necessary to better distribute traffic, allowing multiple means of entering and exiting the area. Commercial centers that are isolated on a single road, if successful, will create traffic problems that are not in the best interest of surrounding communities. From a retail developer perspective, any significant level of retail commercial activity will need to be located at the intersection of two or more major roadways. Passerby trips and the number of surrounding residential units are essential for retail viability.

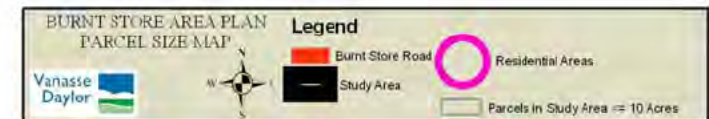
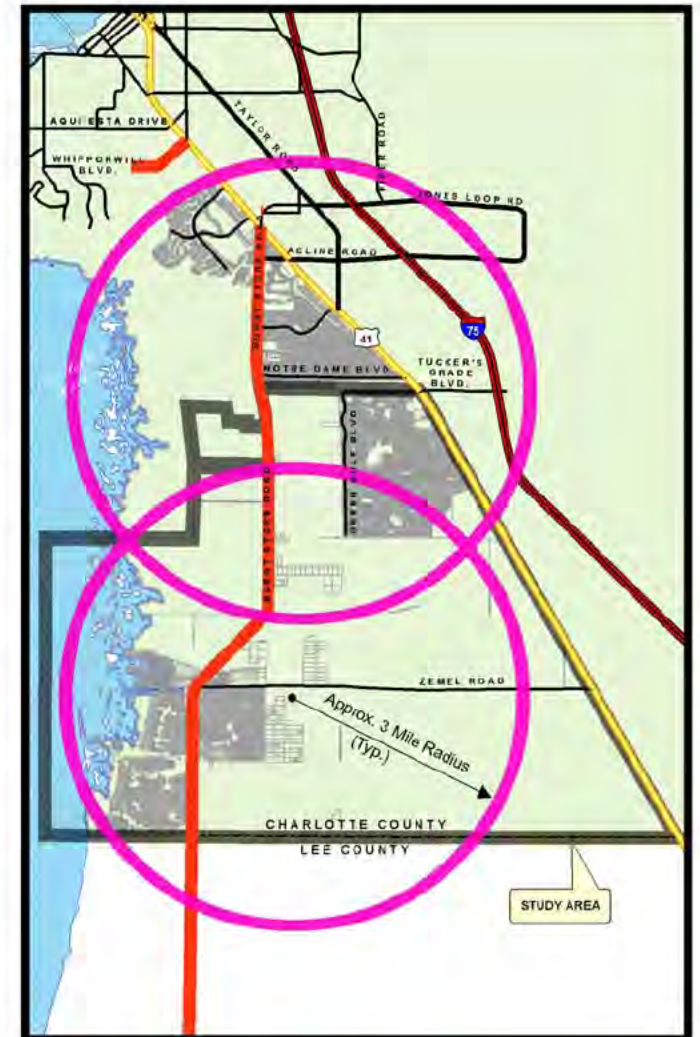
2. Parcel size – Although small areas of strip development can be located on small parcels with limited depth, a commercial node that is intended to service several local neighborhoods will typically need to be between 10 to 25 acres in size.

Since Burnt Store Road is seven miles in length, it is reasonable to plan for more than one commercial node to serve the area. As Map 3 demonstrates, there are essentially two major residential areas along Burnt Store Road that could support the development of commercial areas. The southern area extends from Burnt Store Marina in Lee County to Tern Bay, and the northern area extends from Tern Bay to north of the intersection of Burnt Store Road and US 41.

Map 3 shows parcel sizes along Burnt Store Road and highlights those parcels that are less than 10 acres in size. Although it is technically possible to aggregate several small lots to a single development with sufficient parcel depth to become a viable retail node, it is both impractical and unlikely. Further, in areas that have been platted for residential use, conversion to commercial, and more specifically, retail use should be avoided to protect existing homes. Without aggregating individual lots, parcel size combined with the need to be located at a major intersection provides a significant limitation on the location of commercial nodes, especially in the southern area. In the northern area, this limitation can be mitigated for if the eventual intersection of the proposed Tucker's Grade extension is moved south along Burnt Store Road to an area not yet platted for residential use.

Options are more limited in the southern area. However, given the level of existing permitted commercial development at the intersection of Burnt Store Road and Zemel Road, designating this area for a smaller commercial center and the development of a future commercial node is appropriate. Map 4 shows the location of commercial nodes along the corridor.

In conjunction with establishing the commercial nodes, the consultant team created a possible east-west alignment for the Tucker's Grade extension to allow for the commercial node and sufficient traffic distribution. Map 6 shows the proposed future land use map for the subject area. The new roadway network has been added to the appropriate maps in the Capitol Improvements of the Comprehensive Plan.



SEE FULL SIZE MAP - PAGE 158

Map 3 - Parcel Size

FISCAL IMPACTS

Concurrent with establishing the development program, it is also necessary to analyze where that development will go, how it will take shape and the services necessary for additional development to happen. It is clear from the analysis on existing conditions that there are already thousands of lots permitted and ready for development, existing deficiencies along the corridor that the existing permitted development will likely serve only to exacerbate, and regional desires to improve transportation infrastructure, preserve natural areas and restore water flows. In essence, this report needs to address not only how new development will not adversely impact the existing quality of life, but also how new development will enhance the future quality of life in South Charlotte County.

It is important to understand whether development will be a drain on the budget, requiring more in services than paid in tax revenue, or whether development will create a surplus of revenue, allowing the county to spend monies to enhance the quality of life in other areas or lower taxes countywide.

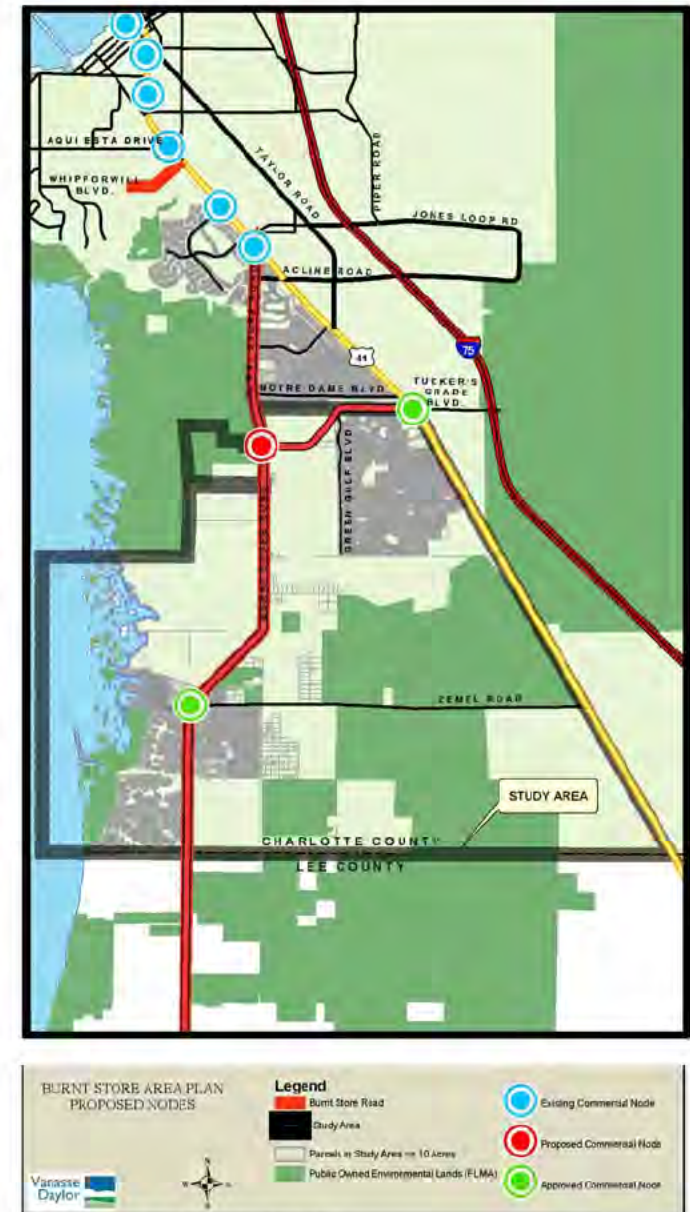
Different types of development, at different price points, will have different impacts to the county's budget. In conducting the fiscal impact analysis, price points of residential and commercial development were established using comparable development in Lee and Charlotte counties. In analyzing the tax revenue generated from this type of development, compared to the expenditures necessitated, the fiscal impact study found that new development would generate a positive net benefit of \$348 million over the next 30 years for Charlotte County and \$120 million for the Charlotte County School Board. The present value of this net benefit (net present value) after inflation is accounted for, translates to a total benefit of \$112 million for Charlotte County and \$37 million for the School Board.

These figures account for the net benefit when considering the expense of all services provided by Charlotte County and the Charlotte County School Board, as well as capital facilities for the Charlotte County School system. However, there are additional capital facilities that will be necessary as a result of this development, which will need to be paid for out of the \$112 million benefit being shown by the fiscal impact study. Impacts to roads and to Fire and Emergency Medical Service are two areas that were specifically identified as areas of concern by the community.

ROADWAY FINANCIAL FEASIBILITY

The next step in understanding the impact to the county budget is to plan for the funding sources for the roadway improvements. Since the widening of Burnt Store Road is already planned by Charlotte County as financially feasible in 2015, the fiscal impact study conducted four scenarios for road improvements based on road improvement costs projected in the traffic impact study.

The first two scenarios (Scenarios 1 and 2) assume that the four-laning of Burnt Store Road will occur and be paid for by Charlotte County, as shown in the County's Financially Feasible Plan. These first two scenarios analyze only those impacts generated specifically by increased development along the corridor. The second two scenarios (Scenarios 1A and 2A) demonstrate how revenues from the anticipated development can also expedite the availability of funds to widen Burnt Store Road. The analyses are



SEE FULL SIZE MAP - PAGE 160

Map 4 - Proposed Commercial Nodes

based on financing road improvements using 30-year bonds and impact fees.

In the most expensive scenario, the development assumed in this report would easily generate enough revenues to pay off the bonds and leave the county with a total positive net present value income of over \$100 million. It is important to note that Scenarios 1A and 2A and the transportation revenue analysis assume that the projected development pays for the expedited (2010) four-laning of Burnt Store Road without other countywide revenues being factored in. Understanding that the county currently has the four-laning projected as financially feasible based on other county revenues, this money can potentially either be saved and then used for other county projects, or used to further expedite the widening of Burnt Store Road by 2008.

In discussions with various departments, funding for new capital facilities, whether they be roads, parks, or other infrastructure has been discussed. As is apparent through the fiscal impact study that has been conducted, over the next 20 years, the BSII properties will generate over \$300 million dollars in ad valorem revenues to Charlotte County, over and above the cost of services provided. These revenues will be far in excess of monies needed for capital facilities. There is clearly a very large net positive impact on the county's budget that proposed development will provide.

In order to establish up-front funding sources, bonds could be issued. The financial feasibility plan showed how bond issues can expedite the widening of Burnt Store Road, pay for additional road infrastructure and still leave Charlotte County with significant excess revenue over and above the cost of services. More importantly, the financial feasibility plan shows how the taxpayers of Charlotte County will not be burdened by the provision of infrastructure in this area. Future development will pay for the infrastructure. It is our understanding that bonding ad valorem revenues, even from the new development expected in the Burnt Store Area, is going to be a policy decision and a new direction for Charlotte County.

Public Works staff has indicated that if Charlotte County does not wish to use this mechanism to fund the widening of Burnt Store Road, impact fees and gas tax revenues will not be sufficient to pay for the existing and projected road improvements, and assistance is needed from BSII properties to expedite the widening of Burnt Store Road. We would strongly encourage Charlotte County to explore an equitable means of funding infrastructure improvements. Without a means of funding capital facilities that is spread equally over all new construction, the amount that Charlotte County may be able to exact from any individual developer or group of developers will be insignificant in comparison to the need that will be generated by population growth in existing permitted development. It will be impossible for a small group of developers to shoulder the responsibility of making up for an existing deficit and future needs while new development on the area's perimeter and in the City of Punta Gorda continues to be assessed at rates which do not cover their impacts to infrastructure. While the BSII properties can help alleviate some of the existing and proposed infrastructure needs in the Burnt Store Area, it is not a problem that is solvable without Charlotte County establishing a funding mechanism that assesses new construction for the actual impact.

In the absence of Charlotte County reevaluating its current impact fee schedule or adopting an alternate funding source to require new development to pay for their actual impacts, policy language has been added to create a bondable MSTU revenue source for the provision of road infrastructure.

It is important to note that similar to ad valorem revenues, existing Charlotte County residents will not have to shoulder the responsibility of providing road infrastructure in this area. New development will pay an assessment, or share of the infrastructure costs for this area. In adherence to the new growth management statutes an amendment to the county's Capitol Improvement Element and Capitol Improvements Plan is being proposed. The plan also adopts a funding plan for the widening of Burnt Store Road in the 5-year CIP, demonstrating financial feasibility.

IMPACTS ON HURRICANE EVACUATION

Through the Burnt Store Area Plan process, two analyses of hurricane evacuation were prepared, and are on file with Charlotte County. First, an assessment of hurricane evacuation was performed to evaluate the public benefit of providing specific roadway improvements to transportation routes in southern Charlotte County. The methodology used to determine the effect that any road improvement would have on evacuation clearance times was made possible through the use of the Southwest Florida Regional Planning Council Regional Hurricane Evacuation Plan (RHEP) (2001). The analysis performed compared hurricane evacuation clearance times (i.e., the time needed for evacuees to seek shelter or leave the County) with and without the transportation improvements proposed in this plan.

The analysis found that under current conditions the Burnt Store Road corridor has clearance times that approach 17.3 hours during peak season of a Category 3 hurricane. Widening Burnt Store Road to four lanes and/or providing additional east-west routes along Burnt Store Road would significantly relieve hurricane evacuation clearance time in the area. The magnitude of the clearance time reduction is estimated to be as much as 11.0 hours for a Category 3 hurricane during peak season under the four-laning scenario, and 4.6 hours with the proposed improvements to both Zemel Road and Notre Dame Boulevard/Green Gulf Boulevard Extension to US Highway 41.

A second analysis was the conducted to determine how the Burnt Store area compares to other Coastal High Hazard areas of Charlotte County. The Coastal High Hazard Area (CHHA) is defined in the Charlotte County Comprehensive Plan as locations requiring evacuation in a Category 1 hurricane. The RHEP identifies six (6) hurricane zones that fall under this storm category. Out of the six evacuation zones in Charlotte County susceptible to flooding in a Category 1 hurricane, the Burnt Store evacuation zone requires the least amount of time to clear. This is in part due to the proximity of this area to major evacuation routes (US 41 and I-75) and the rapidly increasing elevations in the area moving from the west side of Burnt Store Road to the east side of the road. This review illustrates the effectiveness of the Burnt Store evacuation zone to clear vehicle trips relative to other low lying coastal areas in Charlotte County, and provides justification for this area as a location to "receive" density that would be transferred from more at-risk areas in Charlotte County, providing an overall net benefit for hurricane evacuation.

FIRE/EMS IMPACTS AND FINANCIAL FEASIBILITY

Level of Service for Fire and Emergency Medical Service is generally calculated based on response time and distance from existing facilities and is also factored into the justification for building new facilities



SEE FULL SIZE MAP - PAGE 159
Map 5 - Fire/EMS Stations

or expanding existing facilities. Although there are ratios based on population or units used for schools and other capital facilities, the Charlotte County Fire and EMS Department plans for construction of new facilities based on their ISO rating and insurance standards that look for each service building to be located within five miles of a fire EMS facility. The Charlotte County Fire EMS Department therefore aims to establish stations to service a two-and-one-half mile area. Service times are projected by a rule of thumb of two minutes travel time per mile and the county aims for an average of four to six minutes.

Currently, there are two facilities along the Burnt Store Corridor. The City of Punta Gorda has a facility near the intersection of US 41 and Burnt Store Road, and the County Fire EMS Department has a facility on Notre Dame Boulevard. Using the county’s travel time rule of thumb, travel times to the units on the county line currently would exceed the four-to-six minute desired response time. Although travel times are above desired times, according to Charlotte County, the number of calls are not sufficient enough to justify a new facility. Over the last year, only 68 calls were reported from the communities at the south end of the corridor.

This type of situation is not uncommon in areas with leapfrog development. This planning study aims to fill in the development area that will in turn provide service to the communities at the southern end of Burnt Store Road. As part of the Tern Bay DRI Development Order, the county has acquired land for a new fire/EMS facility in the DRI’s commercial property. When call volumes start increasing to the point where operation of a new facility is justifiable, a new station will be constructed on that property. New development will create demand for construction of the new facility at Tern Bay, which will enhance service to the communities at the southern end of the corridor and also decrease their insurance payments.

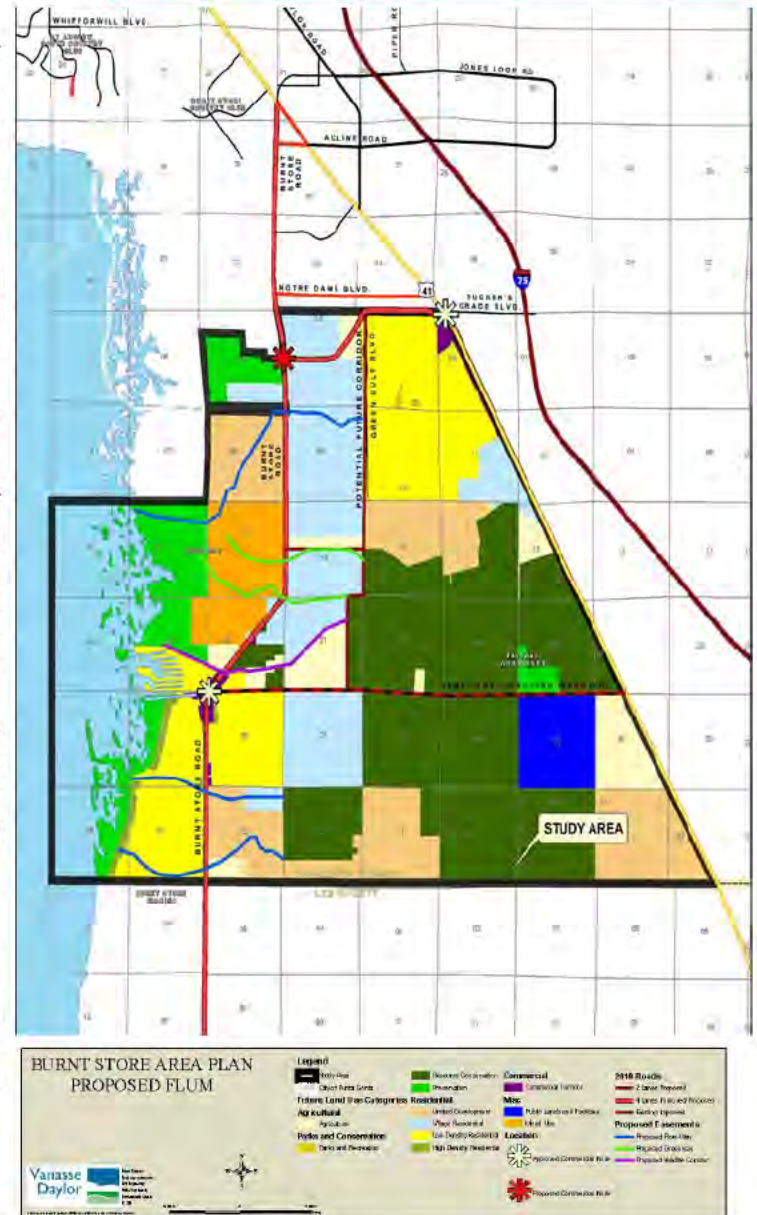
Sufficient funds will be available for the construction of the new facility based both on the newly increased county fire assessment fee (\$122 per residential unit per year, and \$.15 per square foot of commercial building area per year), and the over \$100,000,000 (the fees NPV) generated by development. The cost of a new facility and all capital expenditures for that facility is approximately \$1.5 million – insignificant in comparison to the monies anticipated through development.

SCHOOL IMPACTS AND FINANCIAL FEASIBILITY

In conducting a level of service analysis for demand on public schools in the Burnt Store area, certain assumptions need to be made as to the type of residential development that is anticipated for this community and the demographic trends present in the area. Typically, large planned communities, such as those anticipated in the area, do not generate a significant impact to the school system.

However, if we assume current demographic trends remain, regardless of the type of community created, a public school impact generation rate can be derived from census 2000 data. According to the census bureau, the total number of housing units in Charlotte County in 2000 was 80,114, and the total number of students attending public schools, nursery through high school, was 17,347. This creates a public school generation rate of 0.2 students per dwelling unit.

If we assume the following absorption, as was assumed in the transportation analysis, we can derive a projected student generation table. For school planning purposes, it is important to note that the student



SEE FULL SIZE MAP - PAGE 149
Map 6 - Proposed FLUM

numbers will not be new projected student populations for the school district, but rather a potential relocation in the geography of facility location. With Charlotte County's Transfer of Development Units ordinance in effect, and the proposed text amendment to the comprehensive plan, any development will simply transfer the expected student population from one area to another.

Assuming the level of new development (Tern Bay and Greg Eagle have existing approvals) of 5,100 units, the potential impact for schools shifting to this area is 1,020 students. According to the Charlotte County School Board, an elementary school contains between 720 and 904 students, a middle school between 1,100 and 1,200 students and a high school between 1,800 to 2,100 students. The Charlotte County school board currently owns approximately 40 acres at the northeast end of the Study Area, which would be of more than adequate size for both a middle and elementary school. The impacts of future development would equate to the cost of a middle school, projected by Charlotte County at \$25 to \$30 million, comfortably less than the amount of revenues that are projected to be generated by new development.

PARKS AND RECREATION NEEDS ANALYSIS

Level of service for park facilities is generally calculated based on population and typical rule of thumb planning needs for residential areas. As with the level of service analysis for schools, this study derives assumptions of demographics in Charlotte County from Census 2000 data to establish a projected population, and examines the need for additional facilities based on existing facilities and projected demand generated by additional development. By the request of the Department of Parks and Recreation, we have also conducted a separate analysis to determine the projected build out need of the area.

According to the Census 2000 information, this analysis assumes there will be an average of 2.05 people per dwelling unit. This number is derived through dividing the total population for Charlotte County by the total number of units. To get a peak season generation rate, we subtracted from the total unit figure the number of "seasonal, recreational, occasional use" units. This is necessary to establish a like ratio between population and units (population does not account for seasonal population). This is a very conservative approach as seasonal and occasional use units will generally generate a significantly smaller population than year around residents.

Although the Census data shows that the average household size and average family size will be higher (2.18 and 2.56 respectively) it is important to note, as the census data indicates, that the occupancy rate of dwelling units will be significantly lower than 100 percent, which is very typical. Therefore, the ratio of dwelling units to total population is the more accurate indication of the projected population generated by a dwelling unit.

For the level of service analysis in this report, the assumed number of additional units is 5,100. As indicated under the School impact analysis, this figure is derived from the table on page 15 of the report and subtracting Tern Bay and Greg Eagle, two properties that have existing development approvals and are not impacted by this area plan. The proposed additional developments will therefore generate approximately 10,251 new residents that will need access to park facilities.

According to the Department of Parks and Recreation, existing and future demand for passive recreational

activities will be met through the existing environmental lands under county and state ownership, including the Charlotte Harbor Environmental Center (CHEC) located at the northern section of the Study Area west of Burnt Store Road. Similarly, the new demand generated for facilities such as pools, tennis courts and club facilities are likely to be provided on-site within private or semi private developments. However, there is now and will likely need to be additional facilities for active recreation including soccer fields, baseball fields and similar activities that are common in public parks, but not typically found within planned communities.

According to the Charlotte County Comprehensive Plan, Table 5.10, South Charlotte County is projected to have an existing surplus of 13 acres of active park facilities by the year 2005, using the county's level of service standard of 3.0 acres per 1,000 people. Therefore, when potential future needs are examined, it is safe to base future need on impact of the additional 5,100 units likely to develop. Using the county's LOS standard, the potential need for an additional 30.75 acres of land will be generated by development. Co-locating these facilities with the future schools will be preferable if possible to save land and cost for both the Charlotte County School Board and Charlotte County.

For planning purposes, we can also estimate the total build out of the planning area to establish recreational needs for this area. There are approximately 3,906 acres in the Study Area that are currently approved for residential development. If it is assumed that on average these lands will develop at a gross density of 3 dwelling units per acre, the current form of development, a build out unit amount for existing permitted development is estimated at approximately 11,718 units. Using the population generation rate of 2.05 people per unit, this will equate to a total of 23,436. This number includes both Tern Bay and the Greg Eagle property. With the addition of the BSII properties, the total population would be estimated at 33,687 people, creating a need for approx. 90 acres of active recreational park area.

It is very important to note that this build out population figure is a theoretical estimate only. There are many factors that will influence the actual build out either positively or negatively such as demographic changes, market forces, public acquisition, etc.

To offset some of the passive and active recreational, and cultural needs of future residents, the Department of Parks, Recreation and cultural Resources has suggested policies to the Overlay which would provide for certain types of recreational activities. These policies encourage the provision of neighborhood parks, private or public, within residential areas, the construction of bike lanes on new major roadway corridors, more emphasis on public passive recreational use of the greenway corridors and the establishment of an area wide trail system that links up with the conservation lands within the Study Area, and the establishment of a library check-in-check-out area. A requirement to conduct a study for archeological sites has also been added, as archeological sites have been found in the area.

FUTURE LAND USE MAP AND POLICIES

After establishing the commercial nodes and the roadway network, an overlay was created for this area with future land use categories and policies to be adopted into the Charlotte County Comprehensive Plan. The intent of creating the overlay is to provide a more detailed analysis of the sub areas within the planning area, while not assigning specific planning entitlements to individual parcels. The following

text policies correspond to the Burnt Store Area as defined by the legal description in Appendix G, and which should be adopted into the comprehensive plan. Generally six sub-areas were identified: existing permitted development; preservation lands owned by a public entity; public facility lands; areas that are presently ready for development; future commercial/mixed use nodes; and areas that may in the future be ready for development but could not develop today due to site constraints. The Future Land Use Map therefore shows the county's existing Future Land Use Map with the commercial/mixed use nodes, areas for new development and conceptual public road alignments.

It is necessary to create a new land use category to allow for flexibility in the exact boundaries of the commercial nodes. Unlike regularly privately initiated plan amendments, the exact boundaries of the commercial areas are not presently known, but rather general areas have been identified. Therefore, it is necessary to create a flexible mixed-use land use category and provide for the framework that will require the commercial uses in very specific locations, without specifying their exact configuration or parcel boundaries on the map.

The density for residential uses was determined through evaluating the existing residential uses along the corridor and compatibility with those uses, and through creating realistic projections for individual properties. This information was compiled to establish a need for the range allowed in the current Residential-Low Density land use category of the Comprehensive Plan. However, it is not the intent of this amendment to allow an increase in density by right, especially one that would require the transfer of density units for property owners that may not ever want to increase their density. Therefore, the density is written as a range – one unit per 10 acres by right (the current entitlement), up to five units per acre if rezoned through a planned development process.

There are two primary mechanisms used to promote the sound planning of large contiguous areas of land and move away from piecemeal development, ideas that were expressed throughout this process. First, Policy 2.5.10 requires a property to exceed 20 acres in area to be eligible as a receiving area for the transfer of development units at a greater density than one dwelling unit per acre. This will limit the ability of small properties to individually rezone with significant unit counts, resulting in individual access points along roadways, individual water management systems, fewer contiguous preserve areas and a decreased ability for the county to evaluate cumulative impacts. The second provision is the requirement for both residential and commercial development to be rezoned through a planned development process. This gives the county the ability to conduct a more detailed review of the proposed project, and provides the developer an opportunity to be more creative in the design. The following is the proposed Village Residential land use category text:

IX. APPENDICES

A. TRAFFIC ASSESSMENT

INTRODUCTION

The Burnt Store Improvement Initiative, which is a coalition of six Charlotte County property owners representing over 2,000 acres along Burnt Store Road, is developing a comprehensive corridor study to identify needed improvements to public infrastructure along the corridor. This study is being done in close coordination with Charlotte County.

This is the transportation element of that comprehensive corridor study. Currently scheduled and planned improvements have been identified. Traffic conditions with the proposed development have been projected through 2020. The road improvements needed to accommodate general growth in the area and the development of the seven properties have been identified, and a staging plan (in five-year increments) has been developed for those needed improvements.

It should be noted that the BSII originally included a seventh property owner (Greg Eagle) who has since withdrawn from participation in the BSII. Yet, this study was done with his property included among the BSII properties. This impact assessment, therefore, reflects the development of the remaining six BSII properties plus the Eagle property.

COORDINATION WITH CHARLOTTE COUNTY STAFF AND OTHERS

This traffic assessment has benefited from close coordination with Charlotte County officials and staff. DPA has also coordinated with the consultants working on the on-going Burnt Store Road-Veteran's Parkway-Colonial Boulevard Bi-County Corridor Study. Valuable input has also been received from the general public through several small group meetings with community leaders and during two large, well-attended public meetings.

DPA participated in a number of coordination meetings with the Charlotte County staff and representatives of the Charlotte County Metropolitan Planning Organization (MPO). First, traffic issues were discussed during the August 23, 2004, meeting with the Charlotte County Administrator and his staff. Then, more detailed discussions of transportation issues were held during meetings with Charlotte County transportation staff and MPO staff on September 23, 2004, November 19, 2004, March 15, 2005, July 18, 2005, July 28, 2005, and September 9, 2005. Finally, DPA discussed scheduled road and intersection improvements in the study area with individual members of the Charlotte County Public Works staff.

DPA also coordinated with Post Buckley Shuh & Jernigan (PBS&J), the consultants for the on-going Burnt Store Road-Veteran's Parkway-Colonial Boulevard Bi-County Corridor Study. DPA met with PBS&J during the morning on October 29, 2004, to obtain information about this study. PBS&J subsequently provided DPA with the socioeconomic data projections used for the Bi-County Corridor Study. DPA then attended a presentation by PBS&J to Charlotte County and Lee County representatives during the afternoon on October 7, 2004.

Finally, DPA and other members of the team attended several small group meetings with community leaders. The general public also provided comments and suggestions regarding transportation in the Burnt Store Road area during two large, well-attended public meetings on October 26, 2004, and November 22, 2004. During these meetings, many persons stressed the need for immediate improvements to Burnt Store Road.

DRAFT REPORT FOR REVIEW AND COMMENT

DPA prepared a draft report dated October 28, 2004, which reflected the comments received prior to that date. The draft report was delivered to the County and MPO staffs for review and comment via e-mail on November 1, 2004. The first draft report was then presented to the County and MPO staffs in person during a meeting held on November 19, 2004. The conclusions of the Traffic Assessment were also presented to the public during the large public meeting on November 22, 2004.

In response to comments received from a variety of sources, a second draft report of the Traffic Assessment was prepared and dated January 4, 2005. This second draft was submitted for review and comment as part of the Burnt Store Area Plan.

The Charlotte County transportation staff reviewed the Burnt Store Area Plan and provided comments to Martina Kuche in an e-mail dated March 4, 2005, from Mr. Tom O’Kane, Director of the Department of Public Works. Subsequently, Mr. Dan DeLisi of the Bonita Bay Group and Mr. Ronald Talone of David Plummer & Associates (DPA) met with Mr. Brian Barnes and Mr. Wes Millard of the Public Works Division on March 15, 2005, to review and discuss the staff comments regarding the Traffic Assessment.

In response to the staff comments, DPA prepared a report titled Response to Charlotte County Transportation Staff Comments Regarding the Burnt Store Area Plan. This report, which was e-mailed to Martina Kuche on March 29, 2005, addressed each of the staff’s comments and included updates to Exhibits 9-18 in the Traffic Assessment. A new version of the Traffic Assessment (dated March 30, 2005) that incorporated all of the changes described in detail in the Response to Charlotte County Transportation Staff Comments Regarding the Burnt Store Area Plan was prepared and submitted as part of the Burnt Store Area Plan dated Revised April 2005.

After further meetings with the County staff, a few additional changes were made to the Traffic Assessment. First, DPA’s cost estimates were updated to reflect more recent FDOT average cost per mile estimates and higher right-of-way acquisition costs. Second, the northernmost section of the new North-South Road was removed from the plan due to concerns regarding neighborhood impacts. The 2020 travel model assignment was re-run without this section of the North-South Road to confirm that no level of service problems resulted from its removal (Exhibit 8-Updated). These changes have been incorporated in this latest version of the Traffic Assessment dated Revised September 23, 2005.

EXISTING ROADWAY NETWORK

The transportation network in the area is limited to Burnt Store Road and a couple of east-west roads connecting Burnt Store Road with US 41. The existing road network in the study area is shown in Exhibit 1.

Burnt Store Road is a two-lane, north-south road that functions as minor arterial road and connects Pine Island Road (SR 78) in Cape Coral with US 41 in Punta Gorda. Burnt Store Road in Charlotte County is currently a narrow road with 10 foot travel lanes and no shoulders. During the public workshop on October 26, 2004, several residents stressed the need to upgrade Burnt Store Road, primarily due to safety concerns.

US 41 is a major four-lane, divided arterial connecting Punta Gorda and Port Charlotte to the northwest with Ft. Myers and Cape Coral to the southeast. Most businesses in the area are located along US 41.

Motorists traveling to and from the north on Burnt Store Road can use Jones Loop Road to reach I-75. Jones Loop Road is a four-lane, divided road between US 41 and I-75, except for a short two-lane section where it crosses the railroad tracks immediately north and east of US 41.

Motorists traveling to the east can use Notre Dame Boulevard and Tuckers Grade to get to US 41 and I-75. Notre Dame Boulevard is an existing two-lane road that connects Burnt Store Road to US 41 just north of Tuckers Grade Road. Tuckers Grade Road is a four-lane, divided road connecting US 41 to I-75. However, this route is inefficient for a number of reasons.

First, Notre Dame Boulevard passes through an existing residential neighborhood. Heavy through volumes should be discouraged, not encouraged by improvements to this road.

Second, Notre Dame Boulevard was not designed to carry heavy thru volumes. There is no access control and, as a result, the road is lined by several dozen lots that have direct driveway access to the road. Heavy thru volumes are undesirable because thru traffic would conflict with cars turning into and backing out of driveways along the road.

Third, the US 41 intersections for Notre Dame Boulevard (west of US 41) and Tuckers Grade (east of US 41) are offset by a few hundred feet. It would be necessary to realign these two roads at a single intersection to improve traffic operations between the two.

There is another east-west road much further south. Zemel Road, which is located about two miles north of the Charlotte/Lee County line, is an unpaved road connecting Burnt Store Road with US 41. A landfill has access to Zemel Road about one mile west of US 41.

In Lee County, the major east-west road is Pine Island Road (SR 78), which is a two- to four-lane arterial connecting Pine Island and Cape Coral with US 41 and I-75 to the east. There are several other north-south and east-west roads in Cape Coral.

SCHEDULED ROAD IMPROVEMENTS

DPA reviewed the Capital Improvement Programs (CIPs) of Charlotte County and Lee County and the FDOT Adopted Work Program to identify road and intersection improvements scheduled for construction in the next five years. DPA also discussed scheduled improvements with the Charlotte County Public Works staff.

As shown in Exhibit 2, there are a number of scheduled road and intersection improvements that will benefit residents of the study area in the near future.

- Charlotte County has recently spent approximately \$1.5 million to construct 4-foot paved shoulders on Burnt Store Road from US 41 to the Charlotte/Lee County line. The paved shoulders are intended to enhance the safety on Burnt Store Road until the four-laning of Burnt Store Road is completed.
- The county intends to pave two-lane Zemel Road in the Summer of 2005. The easternmost section of Zemel Road has already been paved and widened to provide an additional westbound left-turn lane into the landfill just west of US 41. The remaining sections of Zemel Road will be paved in the Summer of 2005.
- The county also intends to install a traffic signal at the US 41/Tuckers Grade intersection in the Summer of 2006. The county has most of the materials on hand and is waiting for approved design plans from FDOT. The completion of the design plans have been delayed somewhat due to the need to reconstruct several other signals further north following Hurricane Charley.
- The county also intends to repave and widen the two-lane section of Jones Loop Road across the railroad tracks just north and east of US 41 in the Summer of 2005.
- Lee County has scheduled design (FY 05) and right-of-way acquisition (FY 08-09) for the four-laning of Burnt Store Road from Pine Island Road (SR 78) to Van Buren Parkway, but has not yet scheduled construction of the four-laning.

Finally, Charlotte County officials have approved an agreement with representatives of the Tern Bay development (formerly known as the Caliente Springs DRI) regarding the traffic mitigation for that development. The agreement requires Tern Bay to provide 60 feet of right-of-way on the west side of Burnt Store Road for 1.77 miles along the frontage of Tern Bay and to construct two lanes within that right-of-way to form a four-lane cross-section. The construction of this improvement should begin by the end of 2005.

PLANNED ROAD IMPROVEMENTS

The Charlotte County MPO's website provides a link to the current Charlotte County-Punta Gorda 2025 Long Range Transportation Plan Update, which was adopted on May 13, 2002, and amended on August 18, 2003. The four-laning of Burnt Store Road is included on Map 2.37, 2025 Cost Feasible Projects, and Map 2.04, 2015 Cost Feasible Projects. It is understood that a study is now underway to update the MPO travel simulation model and the long-range transportation plan for the County. However, until the new plan is adopted, the current plan remains in effect.

Exhibit 3 shows planned road improvements that are included in the Charlotte County 2015 and 2025 Cost-Feasible Plans and in the Lee County 2010 and 2020 Financially-Feasible Plans.

Exhibit 4 shows additional improvements that are included in the Charlotte and Lee County Needs Assessments. The Cost-Feasible and Financially-Feasible Plans include those improvements that are both needed and affordable, given revenues projections. The Needs Assessments include those improvements that are needed, whether or not they are affordable.

The widening of Burnt Store Road to four lanes is included in the Charlotte County 2015 Cost-Feasible Plan. Although the widening of Burnt Store Road to four lanes is not included in the Lee County 2010 Financially-Feasible Plan, it is found in Lee County's 2020 Financially-Feasible Plan. It's important to note that, although Lee County's 2010 Financially-Feasible Plan doesn't include the four-laning of Burnt Store Road, Lee County has funded and scheduled design and right-of-way acquisition for part of the four-laning.

The widening of US 41 to six lanes from Carmalita Street in Punta Gorda to Tuckers Grade Road is included in the Charlotte County 2025 Cost-Feasible Plan. The Lee County 2020 Financially-Feasible Plan does not include the six-laning of US 41, but the 2020 Needs Assessment includes the four-laning of US 41 from the Del Prado Extension in North Ft. Myers to just south of the Charlotte/Lee County line.

No improvements are planned for Notre Dame Boulevard. At this time, projected volumes don't warrant the widening of this road. The widening of this road to four lanes, if it becomes necessary, would be complicated by the fact that there are many residential lots that have driveway access to this road.

BURNT STORE ROAD-VETERAN'S PARKWAY-COLONIAL BOULEVARD BI-COUNTY CORRIDOR STUDY

Lee County, in cooperation with Charlotte County, is conducting a two-year study of the Burnt Store Road-Veterans Parkway-Colonial Boulevard corridor. The study extends from the I-75/Colonial Boulevard interchange in Lee County to the I-75/Jones Loop Road interchange in Charlotte County. The purpose of this study, which is referred to as the Bi-County Corridor Study, is to determine the "ultimate" design concept for this corridor. Expressway alternatives are being considered.

Preliminary conclusions from this study were presented to the Elected Officials Task Force on February 24, 2005. Among these were the following.

Burnt Store Road from US 41 to Notre Dame Boulevard

- Four-laning would be needed by 2015.
- Six-laning may be needed after 2030, if Tuckers Grade Extension is not constructed.
- Option A would provide a four-lane urban cross section within 90-100 feet of right-of-way. Additional right-of-way required.
- Option B would provide a six-lane urban cross section within 124-144 feet of right-of-way. Additional right-of-way required.

Burnt Store Road from Notre Dame Boulevard to Lee/Charlotte County Line

- Four-laning would be needed by 2015.
- Six-laning may be needed after 2030.
- Recommendation is for a six-lane rural/suburban cross section within 200 feet of right-of-way. Additional right-of-way required.

Burnt Store Road from Lee/Charlotte County Line to Van Buren Parkway

- Four-laning would be needed by 2015.
- Six-laning may be needed after 2030.
- Recommendation is for a six-lane rural/suburban cross section within existing 200 feet of right-of-way plus two-lane frontage roads within 80 feet of right-of-way on both sides of road. Additional right-of-way required.

Burnt Store Road from Van Buren Parkway to Pine Island Road (SR 78)

- Four-laning and residential access roads would be needed by 2015.
- Six-laning and residential access roads may be needed by 2040.
- Option A would provide a six-lane urban cross section plus two-lane urban access road on west side within 355 feet of right-of-way. Additional right-of-way required.
- Option B would provide a six-lane urban cross section plus two-lane urban access roads on both sides within 200 feet of right-of-way plus 30-foot easements on both sides of the road. Additional right-of-way required.

Based on the preliminary findings of the Bi-County Corridor Study, Burnt Store Road would not need to be widened to six lanes until after 2030. However, the study recommends road cross sections for an eventual six lanes, even if the initial construction is limited to four lanes. This is prudent, because the cost of obtaining the additional right-of-way needed for six lanes at some time in the distant future may be cost-prohibitive, once the corridor has been developed.

EXISTING, APPROVED AND PROPOSED DEVELOPMENTS IN THE STUDY AREA

There are a number of existing developments in the study area. These include the Pirate Harbor and Burnt Store Lakes developments on the west side of Burnt Store Road and the Burnt Store Colony and Burnt Store Village developments on the east side of Burnt Store Road. Tropical Gulf Acres, Burnt Store Meadows and South Punta Gorda Heights are residential developments along the west side of US 41.

The Caliente Springs DRI on side of Burnt Store Road was given conditional approval in the early 1990's. The approved land uses include 1,810 residential units, 250 hotel rooms, 140,000 sq. ft. of commercial/retail development, and 30,000 sq. ft. of office development.

On May 25, 1999, the Board of County Commissioners extended the Caliente Springs DRI Phase I buildout date from 2000 to 2005 and the Phase II buildout date from 2005 to 2010. After many years of inactivity, this development, now known as Tern Bay, is moving forward with development plans.

Five of the six properties associated with the Burnt Store Improvement Initiative are located on the east side of Burnt Store Road. All will have direct or indirect access to Burnt Store Road.

As noted in the Introduction, Greg Eagle has recently withdrawn from participation in the BSII. However, the units in this development on the west side of Burnt Store Road were already included in this traffic assessment.

The proposed number of units at the six BSII properties and the Greg Eagle property have not been determined at this time. However, for purposes of this traffic assessment, the following development parameters were assumed.

Table.	<u>Owner</u>	<u>Residential Units</u>	<u>Commercial Sq. Ft.</u>
	Greg Eagle	228	
	Lindner	960	
	The Bonita Bay Group	2,500	150,000
	BSLG	250	
	Bryan Paul	504	125,000
	Burnt Store Ranch	390	
	<u>Saundry</u>	<u>500</u>	
	<hr/> Total	5,332	275,000

It was assumed that 70 percent of the units would be single-family units and 30 percent would be multifamily units.

The commercial development at Tern Bay and at the Bonita Bay Group and Bryan Paul properties will provide near-by shopping opportunities for the residents of the area. Residents will no longer have to travel long distances to satisfy everyday shopping needs.

During the March 15, 2005 meeting with the Public Works staff, it was pointed out that there are plans to develop a Super Wal-Mart near the Jones Loop Road/Taylor Road intersection. This new commercial development is reflected in the updated analysis for 2020 (Exhibit 8 – Updated).

LEVEL OF SERVICE STANDARDS

Roadway level of service (LOS) standards are adopted in the Charlotte County Comprehensive Plan. The level of service standard on all roads in Charlotte County is LOS “C”. This LOS standard is more stringent than in neighboring Lee County, where most roads, including Burnt Store Road, have a standard of LOS “E”.

Although US 41 is a State highway, it is not on the Florida Intrastate Highway System (FIHS). Therefore, the Charlotte County standard of LOS “C” applies, not FDOT standards.

EXISTING TRAFFIC CONDITIONS

DPA relied on a concurrency spreadsheet obtained from the Charlotte County Community Development Department to determine existing conditions on Charlotte County roads. The spreadsheet is updated on a monthly basis, so that it incorporates the latest traffic counts conducted by the County. Traffic counts on US 41 were obtained from the Florida Department of Transportation (FDOT).

FDOT service volumes were used for US 41 and Burnt Store Road. For other roads in the study area, the roadway service volumes used were those in the Charlotte County concurrency spreadsheet.

The results of the analysis of existing conditions are shown in Exhibit 5. This spreadsheet provides existing volumes and levels of service on roads in the study area. As shown in Exhibit 5, all roads in the study area currently operate at or better than the County’s adopted standard of LOS “C”.

The only road segment that is close to exceeding the LOS “C” standard is the northernmost segment of Burnt Store Road from Acline Road north to US 41. This segment has a volume-to-capacity (V/C) ratio of 0.98.

FUTURE TRAFFIC CONDITIONS

During a meeting with the Charlotte County staff and MPO staff on September 23, 2004, DPA was advised that the staff did not have a great deal of confidence in the current Charlotte County travel model. Also, the new Charlotte County model that is currently under development was not yet available for use in this study.

For these reasons, DPA produced traffic projections for 2010, 2015 and 2020 using the current adopted Lee County travel simulation model, which covers southern Charlotte County north to the Peace River and has a horizon year of 2020. The growth projected in the Lee County MPO model database was increased substantially to account for the development of Tern Bay and the seven properties in the Burnt Store Improvement Initiative.

The resultant traffic projections assume full development of Tern Bay, the six properties in the BSII, and the Greg Eagle property by 2020, but only partial development through 2010 and 2015. In sum, it was assumed that one-third of the Burnt Store Ranch, Bryan Paul, BSLG, BBG and Saundry units and none of the Greg Eagle and Linder units would be in place by 2010. It was also assumed that one-half of the BBG commercial space and none of the Bryan Paul commercial space would be in place by 2010. For the Tern Bay development, it was assumed that Phase 1 development would be completed by 2010.

These projected volumes were input into spreadsheets for estimating levels of service on roads in the study area. FDOT service volumes were used for US 41 and Burnt Store Road. For other roads in the study area, the roadway service volumes used were those in the Charlotte County concurrency spreadsheet.

Traffic Projections through 2010

Traffic projections were produced for 2010, both with and without the proposed development at the six BSII properties and the Greg Eagle property. These projections confirm that four lanes will be needed on Burnt Store Road by 2010, whether or not these seven properties are developed.

Exhibit 6 provides future traffic conditions in 2010 with Burnt Store Road at four lanes. No other road improvements beyond those already scheduled by Charlotte County are assumed in this analysis. As shown in Exhibit 6, all roads in the study area will operate at an acceptable level of service in 2010 with Burnt Store Road at four lanes.

As shown in Exhibit 6, the 2010 traffic projections indicate that the segment of Jones Loop Road between Taylor Road and I-75 will have a V/C ratio of 0.95. Thus, this road will be approaching the maximum service volume at the County's LOS "C" standard in 2010.

By interpolating between existing counts and the projected 2010 volumes, DPA has concluded that the northernmost section of Burnt Store Road north of Acline Road should be four-laned first. The section of Burnt Store Road between Acline Road and the Tern Bay development should be four-laned next. All sections of Burnt Store Road, including the southernmost section of Burnt Store Road from the Tern Bay development south to the County line, should be four-laned by 2010, if possible, given production or financial constraints.

Traffic Projections through 2015

As noted above, the 2010 traffic projections indicate that the segment of Jones Loop Road between Taylor Road and I-75 will be approaching the maximum service volume at the County's LOS "C" standard in 2010. For this reason, the 2015 travel model assignment was run with a two-lane Tuckers Grade Extension from US 41 to Burnt Store Road.

The Tuckers Grade Extension will provide an alternative route to I-75 for traffic in the Burnt Store Road area trying to reach the interstate. This alternative route will help divert traffic off of Burnt Store Road north of the extension and off of Jones Loop Road.

The Tuckers Grade Extension should operate more efficiently than existing Notre Dame Boulevard because: (a) unlike Notre Dame Boulevard, it will have a direct connection with Tuckers Grade; and (b) it will be constructed as a minor arterial or major collector road without driveways along the road. In addition, the Tuckers Grade Extension will divert through traffic off of Notre Dame Boulevard, thus reducing the amount of traffic that passes through that residential neighborhood.

Exhibit 7 provides future traffic conditions in 2015 with Burnt Store Road at four lanes and the two-lane Tuckers Grade Extension. No other road improvements beyond those already scheduled by Charlotte County are assumed in this analysis. As shown in Exhibit 7, with one exception, all roads in the study area will operate at or better than the County's LOS "C" standard.

The exception is the segment of Jones Loop Road between Taylor Road and I-75, which is expected to have a V/C ratio of 1.03. While the V/C ratio indicates that this segment may slightly exceed the County's LOS "C" standard, major commercial development near the Jones Loop Road/Taylor Road intersection may cause actual conditions to be worse than indicated here. For this reason, this level of service deficiency is addressed in the updated Staged Improvement Plan for 2015.

Traffic Projections through 2020

The 2020 traffic projections indicate that four-lane Burnt Store Road should continue to operate at an acceptable level of service (LOS “C” or better) through 2020 for most of its length. The exception is the section of Burnt Store Road between Tern Bay and the new Tuckers Grade Extension. This section is expected to operate at LOS “F” at four-lanes.

This deficiency could be rectified by six-laning Burnt Store Road between Tern Bay and the new Tuckers Grade Extension. Exhibit 8 provides future traffic conditions in 2020 with Burnt Store Road at four lanes for most of its length, the two-lane Tuckers Grade Extension, and six lanes on Burnt Store Road between Tern Bay and the Tuckers Grade Extension. This analysis also assumes the six-laning of US 41 south to Tuckers Grade as shown in Charlotte County’s 2025 Financially-Feasible Plan.

As shown in Exhibit 8, with one exception, all roads in the study area will operate at or better than the County’s LOS “C” standard. The one exception is again the segment of Jones Loop Road between Taylor Road and I-75, which is expected to have a V/C ratio of 1.23.

However, the Charlotte County staff does not consider the six-laning of Burnt Store Road to be an acceptable alternative. Therefore, at the direction of the Public Works Director, the six-laning of Burnt Store Road is not considered to be an acceptable alternative in 2020.

As an alternative to six-laning this section of Burnt Store Road, a parallel two-lane road should be constructed about one mile east of Burnt Store Road along the north-south section line at the eastern boundary of four of the six BSII properties. This road would connect Zemel Road to the south with the new Tuckers Grade Extension to the north.

The initial travel model assignment performed for future 2020 traffic conditions (which was reported in Exhibit 8) has been updated to include the new, two-lane North-South Road between Zemel Road and the Tuckers Grade Extension, instead of the six-laning of Burnt Store Road between Tern Bay and the Tuckers Grade Extension, and the six-laning of Jones Loop Road between Taylor Road and I-75. In addition, the new commercial development near the Jones loop Road/Taylor Road intersection was reflected in the assignment.

The results of this updated assignment are presented in Exhibit 8 – Updated. As shown in Exhibit 8 – Updated, all road segments in the study area are expected to operate at or better than the adopted LOS standard in 2020.

STAGED IMPROVEMENT PLAN

Based on the traffic projections through 2020, DPA has developed a proposed Staged Improvement Plan for needed road improvements in the study area. The Plan is presented in five-year increments, which allow the improvements to be made over time as funds become available and ensure that improvements are in place when they are needed.

Most of the improvements in the Staged Improvement Plan are already either scheduled by Charlotte County in the current CIP or are included in the current Charlotte County 2015 and 2025 Cost-Feasible Plans.

The only proposed improvements that are not now in the County's CIP or 2015 and 2025 Cost-Feasible Plans are the construction of a new two-lane north-south road east of and parallel to Burnt Store Road, which is needed as an alternative to six-laning Burnt Store Road, and the Tuckers Grade Extension. The additional revenues generated by general growth in the area will cover the additional costs associated with these two improvements. This is discussed in further detail below in the Section titled Cost-Feasible Improvements.

The staging plan is presented in Exhibits 9 through 12, which show five-year stages ending in 2005-6, 2010, 2015 and 2020, respectively. Exhibit 13 compares the proposed plan with the adopted 2025 Cost Feasible Plan. A brief summary of each stage is provided below.

Stage 1: 2005

The first stage in 2005-6 includes four improvements that are already funded and scheduled for construction in the next year: (1) the recently-completed safety improvements that upgraded Burnt Store Road as a two-lane facility; (2) the four-lane paving of Jones Loop Road across the railroad tracks just north and east of US 41; (3) the two-lane paving of Zemel Road; and, (4) the installation of a signal at the US 41/Tuckers Grade intersection. These improvements, which are shown in Exhibit 9, are discussed in greater detail above under Scheduled Road Improvements.

Stage 2: 2010

The four-laning of Burnt Store Road should be scheduled by 2010, if possible, given production or financial constraints. This improvement constitutes Stage 2 of the Plan ending in 2010, as shown in Exhibit 10.

The costs for widening Burnt Store Road to four lanes have been estimated in Exhibits 14/15 and 16. DPA continues to believe that it would be prudent for the County to acquire sufficient right-of-way for an eventual six lanes, so that the six-laning of Burnt Store Road is not precluded, if it becomes necessary at some time in the future. However, at the direction of the Public Works Director, this study assumes that Burnt Store Road will not be widened to six lanes and right-of-way will not be acquired for an eventual six lanes on Burnt Store Road.

Construction and right-of-way acquisition costs for the four-laning of Burnt Store Road are estimated in Exhibit 14/15. These cost estimates include the costs for four-laning Burnt Store Road along Tern Bay's frontage, even though Tern Bay has entered into an agreement with the County to provide 60 feet of right-of-way and construct the portion of the four-laning along its frontage.

Construction cost per mile estimates were derived from the FDOT report titled 2004 Transportation Costs (March 2005).

As suggested by the County staff in the March 15, 2005 meeting with the staff, it is assumed that Burnt Store Road south of Notre Dame Boulevard will be widened within 120 feet of right-of-way, with necessary slope easements. The right-of-way width on the constrained section of Burnt Store Road north of Notre Dame Boulevard was assumed to be 90-100 feet, as recommended by the Bi-County Corridor Study.

As shown in Exhibit 16, it is estimated that the total cost for widening Burnt Store Road to four lanes from US 41 to the County line will be approximately \$37.8 million. This figure includes the costs for design and construction engineering inspection, as well as construction and right-of-way acquisition.

The four-laning of Burnt Store Road is included in the current Charlotte County's 2015 and 2025 Cost-Feasible Plans. Therefore, this improvement has been found to be affordable and financially-feasible, given revenues projections. Although the MPO plans are currently being updated, the current plans, which were last amended on August 18, 2003, remain in effect until the new plans are adopted.

The public and private sectors should work together to ensure that the four-laning of Burnt Store Road is constructed as soon as possible.

Stage 3: 2015

As shown in Exhibit 11, Stage 3 includes the construction of a two-lane Tuckers Grade Extension from US 41 to Burnt Store Road. Although the traffic projections do not indicate that four lanes will be needed on the Tuckers Grade Extension, it is recommended that the two-lane road be constructed within a right-of-way and cross section for four lanes. This would allow for expansion to four lanes, if it becomes necessary at some time in the future.

As shown in Exhibits 17 and 18, this improvement is estimated to cost approximately \$7.6 million. This assumes that 120 feet of right-of-way will be acquired.

The four-laning of Jones Loop Road between Taylor Road and I-75 has been added to Stage 3 in 2015 primarily because of anticipated commercial development near the Jones Loop Road/Taylor Road intersection.

As shown in Exhibit 13, these two road improvements are not currently found in the County's 2015 and 2025 Cost-Feasible Plans. Therefore, they would be funded, in part, by additional revenues produced by new development in the Burnt Store Road and Jones Loop Road corridors.

Stage 4: 2020

As shown in Exhibit 12, Stage 4 in 2020 includes the construction of a new north-south road east of and parallel to Burnt Store Road from Zemel Road to the Tuckers Grade Extension, instead of the six-laning of Burnt Store Road between the Tuckers Grade Extension and the Tern Bay development. Stage 4 also includes the previously planned six-laning of US 41 south to Tuckers Grade Road.

Although the traffic projections indicate that two lanes on the new north-south road would be sufficient to provide relief to traffic congestion on four-lane Burnt Store Road, it is recommended that this two-lane road be constructed within a right-of-way and cross section for four lanes. This would allow for expansion to four lanes, if it becomes necessary at some time in the future.

As shown in Exhibits 17 and 18, the new north-south road between the Tuckers Grade Extension and Zemel Road has been estimated to cost approximately \$12.3 million. This cost estimate assumes that 120 feet of right-of-way would be acquired for the new north-south road.

As shown in Exhibit 13, the six-laning of US 41 is already included in Charlotte County's 2015 and 2020 Financially-Feasible Plans. Therefore, this improvement has been found to be affordable and financially-feasible, given revenues projections.

However, the new north-south road is not included in the current 2015 and 2025 Cost Feasible Plans. Therefore, it would be funded, in part, by additional revenues produced by new development in the Burnt Store Road corridor.

ESTIMATED ROAD IMPACT FEES FOR NEW DEVELOPMENT

Based on the current Charlotte County road impact fee schedule, the six properties associated with the Burnt Store Improvement Initiative plus the Greg Eagle property would generate an estimated \$9.3 million in road impact fees. This estimate is based on the assumed development parameters for these properties. The actual development parameters have yet to be determined.

Furthermore, the Tern Bay development would normally generate an estimated \$3.2 million in additional road impact fees, based on the current fee schedule. However, as noted above in the section titled Scheduled Road Improvements, Tern Bay is required to provide 60 feet of right-of-way and construct a portion of the additional two lanes needed on Burnt Store Road instead of paying road impact fees.

As reported in the Charlotte Sun-Herald on December 20, 2004:

“Charlotte County commissioners have approved a \$5.65 million agreement with Tern Bay Development Co. LLC to widen 1.77 miles of Burnt Store Road to a four-lane highway.

Tern Bay will finance the project as part of the impact fees required in a development contract approved by county commissioners in September.”

Finally, DPA has estimated that other development in the Burnt Store Road corridor will generate approximately \$5.9 million, based on the current fee schedule.

Charlotte County is now in the process of updating the road impact fees, which haven’t been updated in several years. A study has been conducted to ensure that the updated fees reflect the current costs for right-of-way and construction. It is anticipated that the updated fees will be approximately double the current fees.

OTHER REVENUES GENERATED BY NEW DEVELOPMENT

These road impact fee estimates, of course, do not include other future transportation revenues that will be produced by these properties as they develop. These additional revenues would include those from ad valorem taxes, motor fuel taxes, user fees, and the like.

For example, based on the credits against road impact fees given for gas taxes paid per unit of development, the seven developments associated with the Burnt Store Improvement Initiative would generate nearly \$5 million in gas tax revenues.

These additional revenues were projected in greater detail in the report titled Fiscal Impact Analysis for the Burnt Store Road Corridor, Charlotte County, Florida that was prepared by Robert Charles Lesser & Co., LLC.

COST-FEASIBLE IMPROVEMENTS

The road impact fees and additional funds from other sources generated by the BSII properties can be used to fund the road improvements identified in the 2015 and 2025 Cost-Feasible Plans and the additional improvements identified in this report. Of course, revenues from other developments in the area, including major commercial development

in the vicinity of the Jones Loop Road/Taylor Road intersection, should also be used to fund these improvements, since the improvements are needed to accommodate general growth in the area.

The improvements determined to be financially-feasible in the 2015 and 2025 Cost-Feasible Plans include the four-laning of Burnt Store Road and the six-laning of sections of US 41 and I-75. The improvements in Stage 1, which are currently scheduled in the County's CIP are also financially-feasible since they have already been funded.

As noted above in the section titled Staged Improvement Plan, the additional road improvements, beyond those found in the 2015 and 2025 Cost-Feasible Plans, that will be needed to accommodate future travel demand in the corridor, including that from the BSII properties, Tern Bay and general growth in the area, are as follows.

- The construction of a two-lane Tuckers Grade Extension from US 41 to Burnt Store Road, estimated to cost approximately \$7.3 million in 2004 dollars.
- The construction of a new two-lane north-south road from the Tuckers Grade Extension to Zemel Road, estimated to cost approximately \$12.3 million in 2004 dollars.

The total cost of these improvements would be approximately \$19.9 million.

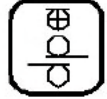
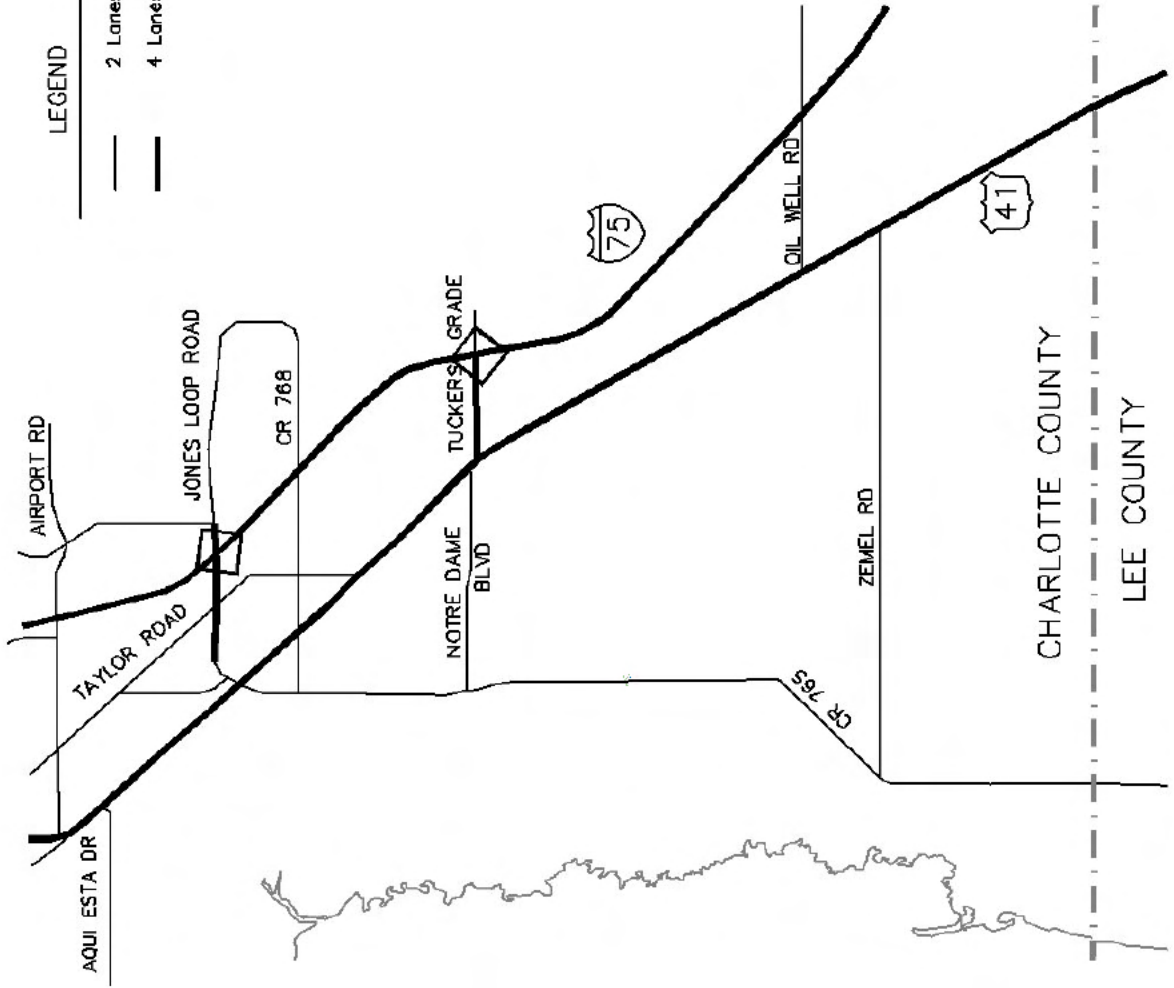
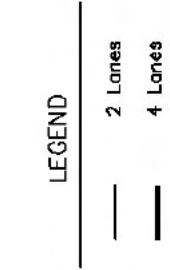
It is important to note that the need for these additional improvements is created by both growth in the area and increased through traffic from both Charlotte and Lee Counties. And, the growth in the area includes all residential and commercial development in the area, not just the seven properties evaluated in this study.

The fiscal impact analysis for the Burnt Store Road Corridor prepared by Robert Charles Lesser & Co., LLC, demonstrated that the BSII properties should generate sufficient revenues to cover the cost of these additional improvements. The revenues from other residential and commercial developments in the area should also be used to fund these improvements, since the improvements are needed to accommodate general growth in the area.

NEW REVENUE SOURCES

The BSII property owners are actively working with the area's legislative delegation to identify new revenue sources so that needed transportation improvements in the Burnt Store Road corridor can be advanced. There is reason to believe that these efforts will eventually be successful, since similar efforts by the Southwest Florida Transportation Initiative (SWFTI) have been highly successful.

Any new funds obtained through these efforts should be used to advance the improvements identified in this study. This would include both improvements previously identified in the 2015 and 2025 Financially-Feasible Plans and additional improvements found to be needed in this study.

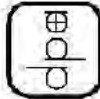
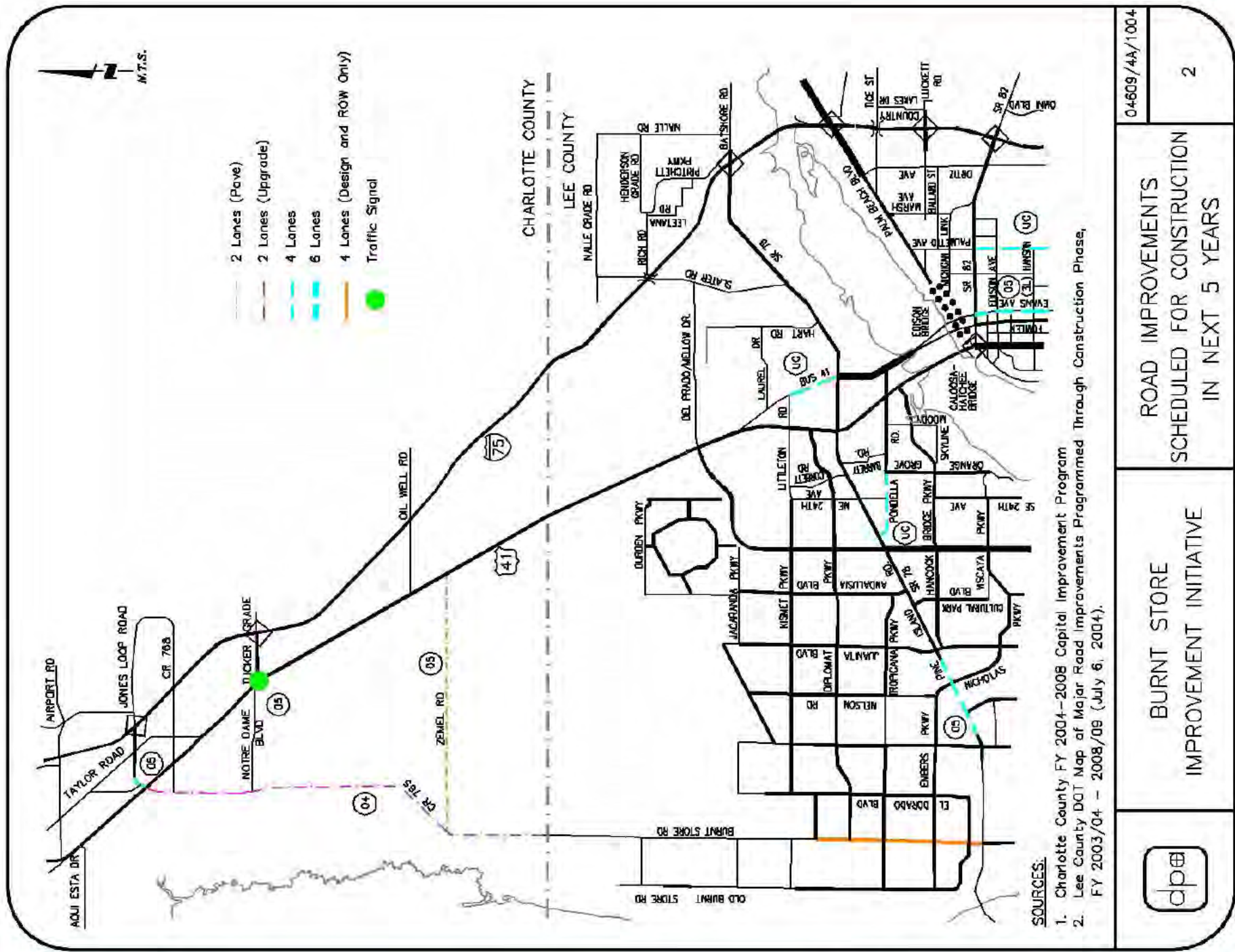


BURNT STORE
IMPROVEMENT INITIATIVE

EXISTING
ROAD NETWORK

04609/BA/1004

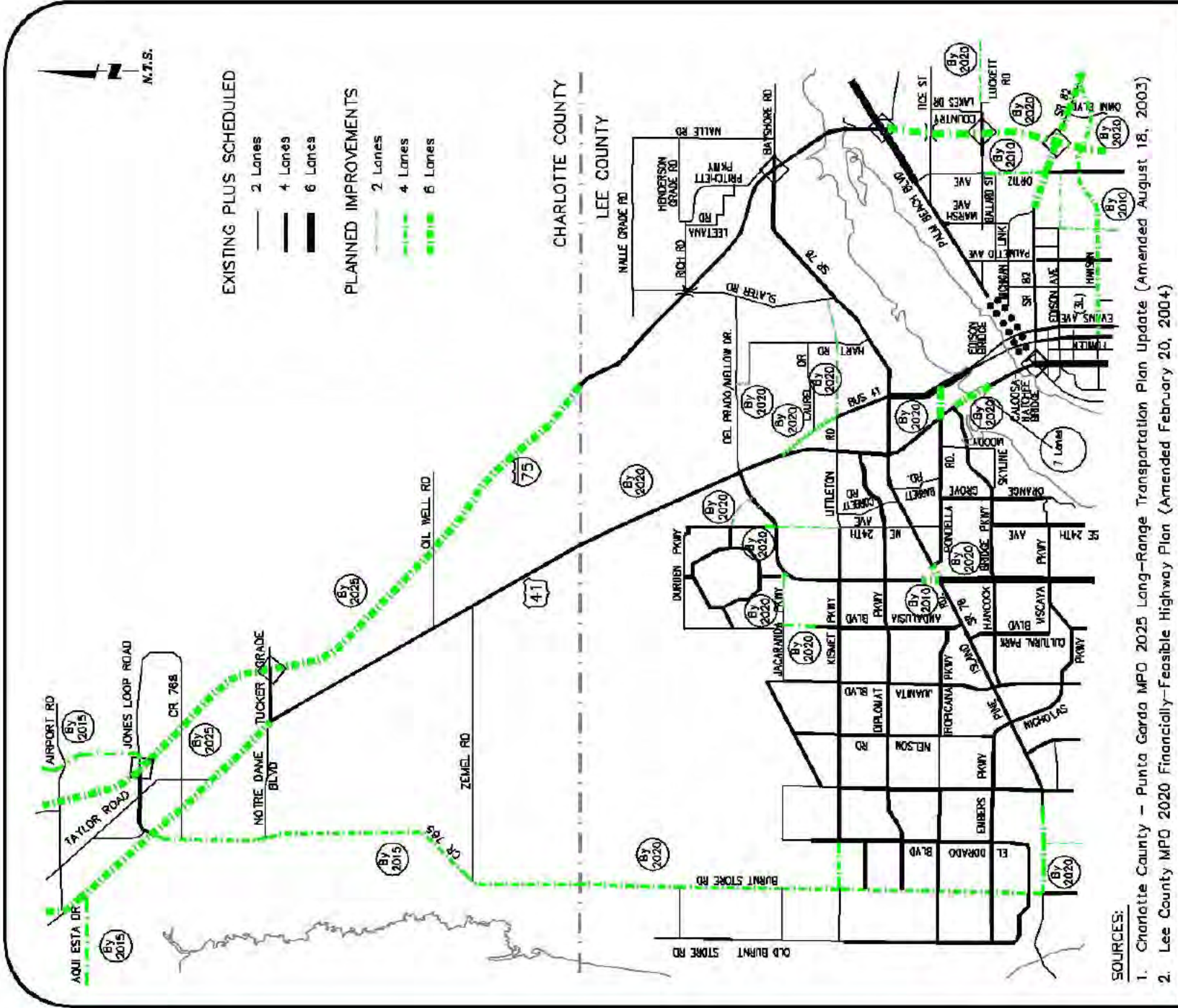
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BURNT STORE
IMPROVEMENT INITIATIVE

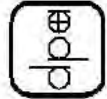
ROAD IMPROVEMENTS
SCHEDULED FOR CONSTRUCTION
IN NEXT 5 YEARS

04609/4A/1004



SOURCES:

1. Charlotte County - Punta Gorda MPO 2025 Long-Range Transportation Plan Update (Amended August 18, 2003)
2. Lee County MPO 2020 Financially-Feasible Highway Plan (Amended February 20, 2004)

	<p>BURNT STORE IMPROVEMENT INITIATIVE</p>	<p>LONG-RANGE FINANCIALLY-FEASIBLE TRANSPORTATION PLANS</p>	<p>04609/5A/1004</p>
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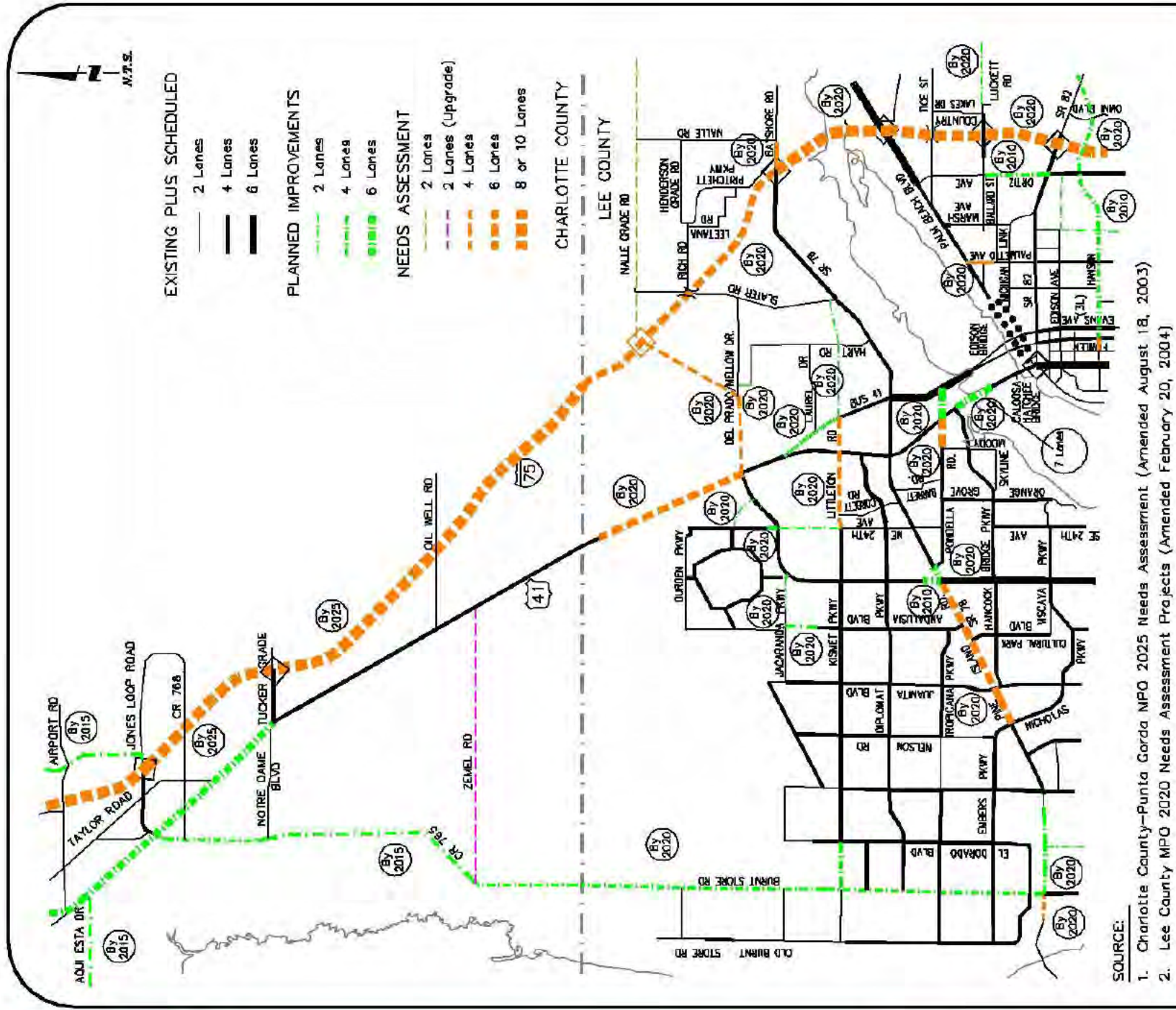


EXHIBIT 5
BURNT STORE IMPROVEMENT INITIATIVE #04609
EXISTING (2003) TRAFFIC CONDITIONS
TWO WAY, PEAK HOUR, PEAK SEASON (K100)

ROADWAY	FROM	TO	TOTAL TRAFFIC					SERVICE VOLUME ⁽⁵⁾								Exceed LOS STD
			(1) # of Lanes	(3) LDS Std	(2) AADT	(4) K100 Factor	Total Peak Hr Volume	@ LOS C	@ LOS D	@ LOS E	@ STD	V/C	LOS	STD		
US 41	County Line	Zemel Rd.	4LD	C	15,400	0.093	1,432	3,150	3,290	3,290	3,150	0.45	B	No		
	Zemel Rd.	Oil Well Rd.	4LD	C	15,400	0.093	1,432	3,160	3,290	3,290	3,150	0.46	B	No		
	Oil Well Rd.	Tuckers Grade	4LD	C	16,700	0.093	1,553	3,150	3,290	3,290	3,150	0.49	B	No		
	Tuckers Grade	Taylor St.	4LD	C	16,000	0.093	1,488	3,300	3,390	3,390	3,300	0.45	B	No		
	Taylor Rd.	Acline Rd.	4LD	C	16,000	0.093	1,488	3,300	3,390	3,390	3,300	0.45	B	No		
	Acline Rd.	Burnt Store Rd.	4LD	C	16,100	0.093	1,663	3,300	3,390	3,390	3,300	0.51	B	No		
	Burnt Store Rd.	Aqui Esta Dr.	4LD	C	25,500	0.093	2,372	3,300	3,390	3,390	3,300	0.72	B	No		
	Aqui Esta Dr.	Airport Rd.	4LD	C	25,500	0.093	2,372	3,300	3,390	3,390	3,300	0.72	B	No		
Airport Rd.	Henry St.	4LD	C	29,500	0.093	2,744	3,300	3,390	3,390	3,300	0.83	B	No			
BURNT STORE RD.	County Line	Zemel Rd.	2LU	C	9,694	0.093	930	1,260	1,490	1,560	1,260	0.42	C	No		
	Zemel Rd.	Terri Bay	2LU	C	7,795	0.093	725	1,260	1,490	1,560	1,260	0.58	C	No		
	Terri Bay	Tuckers Grade Ext.	2LU	C	7,795	0.093	725	1,260	1,490	1,560	1,260	0.58	C	No		
	Tuckers Grade Ext.	Notre Dame Blvd.	2LU	C	7,795	0.093	725	1,310	1,560	1,610	1,310	0.55	C	No		
	Notre Dame Blvd.	Royal Ponciana	2LU	C	7,795	0.093	725	1,310	1,560	1,610	1,310	0.55	C	No		
	Royal Ponciana	Acline Rd.	2LU	C	7,795	0.093	725	1,310	1,560	1,610	1,310	0.55	C	No		
N JONES LOOP RD.	Acline Rd.	US 41	2LU	C	13,804	0.093	1,284	1,310	1,560	1,610	1,310	0.98	C	No		
	US 41	Taylor Rd.	2LU	C	7,275	0.093	677	2,470	3,110	3,270	2,470	0.27	B	No		
NOTRE DAME BLVD.	Taylor Rd.	I - 75	4LD	C	10,422	0.093	969	2,470	3,110	3,270	2,470	0.39	B	No		
	Burnt Store Rd.	US 41	2LU	C	906	0.093	85	1,070	1,460	1,550	1,070	0.08	B	No		
TUCKERS GRADE	I - 75	US 41	4LD	C	8,544	0.093	795	2,470	3,110	3,270	2,470	0.32	B	No		
TUCKERS GRADE EXT.	US 41	Property #2/#4	2LU	C	N/A	0.093	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
	Property #2/#4	Burnt Store Rd.	2LU	C	N/A	0.093	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
ZEMEL RD.	US 41	Property #7	2LU	C	649	0.093	60	1,070	1,460	1,550	1,070	0.06	B	No		
	Property #7	Burnt Store Rd.	2LU	C	1,362	0.093	127	1,070	1,460	1,550	1,070	0.12	B	No		

FOOTNOTES:

- (1) Existing number of lanes
- (2) From Charlotte County DCD Concurrence Spreadsheet, except US 41 from FDOT
- (3) From Charlotte County DCD Concurrence Spreadsheet.
- (4) K(100) factors from Charlotte County DCD Concurrence Spreadsheet
- (5) Service volumes from FDOT service volume tables in 2002 Quality/Level of Service Handbook.

**EXHIBIT 6
BURNT STORE IMPROVEMENT INITIATIVE #04609
FUTURE (2010) TRAFFIC CONDITIONS WITH PROJECT
TWO WAY, PEAK HOUR, PEAK SEASON (K100)**

2010 WITH 4-LANE BURNT STORE ROAD

ROADWAY	FROM	TO	(1) (2) # of LOS Lanes Std		BACKGROUND TRAFFIC				TOTAL				(6) SERVICE VOLUME				Exceed LOS STD	
					(3) FSUTMS PSWDT	(4) PSWDT/ AADT		(5) K100 Factor	Peak Hr Volume	@ LOS C	@ LOS D	@ LOS E	@ STD	W/C	LOS			
						AADT	Factor									AADT		
US 41	Courty Line	Zemel Rd.	4LD	C	31,846	1.110	28,690	0.093	2,870	3,150	3,290	3,290	3,150	0.85	B	No		
	Zemel Rd.	Oil Well Rd.	4LD	C	30,267	1.110	27,290	0.093	2,540	3,150	3,290	3,290	3,150	0.81	B	No		
	Oil Well Rd.	Tuckers Grade	4LD	C	31,125	1.110	28,040	0.093	2,910	3,150	3,290	3,290	3,150	0.83	B	No		
	Tuckers Grade	Taylor St.	4LD	C	30,499	1.110	27,480	0.093	2,560	3,300	3,390	3,390	3,300	0.78	B	No		
	Taylor Rd.	Acline Rd.	4LD	C	20,608	1.110	18,570	0.093	1,710	3,300	3,390	3,390	3,300	0.52	B	No		
	Acline Rd.	Burnt Store Rd.	4LD	C	20,896	1.110	18,830	0.093	1,730	3,300	3,390	3,390	3,300	0.52	B	No		
	Burnt Store Rd	Aqui Esta Dr	4LD	C	36,315	1.110	32,720	0.093	3,010	3,300	3,390	3,390	3,300	0.91	C	No		
	Aqui Esta Dr.	Airport Rd.	4LD	C	27,318	1.110	24,610	0.093	2,260	3,300	3,390	3,390	3,300	0.68	B	No		
	Airport Rd.	Henry St.	4LD	C	25,235	1.110	23,640	0.093	2,200	3,300	3,390	3,390	3,300	0.67	B	No		
BURNT STORE RD.	Courty Line	Zemel Rd.	4LD	C	24,151	1.110	21,760	0.093	2,020	3,150	3,290	3,290	3,150	0.64	B	No		
	Zemel Rd.	Tem Bay	4LD	C	24,708	1.110	22,260	0.093	2,070	3,150	3,290	3,290	3,150	0.66	B	No		
	Tem Bay	Tuckers Grade Ext.	4LD	C	29,622	1.110	26,690	0.093	2,480	3,150	3,290	3,290	3,150	0.79	B	No		
	Tuckers Grade Ext.	Notre Dame Blvd.	4LD	C	30,416	1.110	27,400	0.093	2,550	3,300	3,390	3,390	3,300	0.77	B	No		
	Notre Dame Blvd.	Royal Poinciana	4LD	C	27,369	1.110	24,660	0.093	2,290	3,300	3,390	3,390	3,300	0.69	B	No		
	Royal Poinciana	Acline Rd	4LD	C	28,125	1.110	25,340	0.093	2,360	3,300	3,390	3,390	3,300	0.72	B	No		
N JONES LOOP RD	Acline Rd.	US 41	4LD	C	28,144	1.110	25,350	0.093	2,360	3,300	3,390	3,390	3,300	0.72	B	No		
	US 41	Taylor Rd.	4LD	C	12,700	1.110	11,440	0.093	1,060	2,470	3,110	3,270	2,470	0.43	B	No		
NOTRE DAME BLVD.	Taylor Rd.	I - 75	4LD	C	27,962	1.110	25,190	0.093	2,340	2,470	3,110	3,270	2,470	0.95	C	No		
	Burnt Store Rd.	US 41	2LU	C	3,450	1.110	3,110	0.093	290	1,070	1,460	1,550	1,070	0.27	B	No		
TUCKERS GRADE	I - 75	US 41	4LD	C	15,187	1.110	13,680	0.093	1,270	2,470	3,110	3,270	2,470	0.51	B	No		
TUCKERS GRADE EXT.	US 41	Property #2/#4	N/A	C	N/A	1.110	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
	Property #2/#4	Burnt Store Rd.	N/A	C	N/A	1.110	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
ZEMEL RD	US 41	Property #7	2LU	C	2,162	1.110	1,950	0.093	180	1,070	1,460	1,550	1,070	0.17	B	No		
	Property #7	Burnt Store Rd.	2LU	C	2,111	1.110	1,900	0.093	180	1,070	1,460	1,550	1,070	0.17	B	No		

FOOTNOTES:

- (1) Existing number of lanes plus 4 lanes on Burnt Store Road.
- (2) From Charlotte County DCD Concurrency Spreadsheet.
- (3) Peak season traffic volumes based on FSUTMS travel model assignment.
- (4) PSADT/AADT factor based on FDOT Charlotte County countywide MOCF data.
- (5) K(100) factors from Charlotte County DCD Concurrency Spreadsheet.
- (6) Service volumes from FDOT service volume tables in 2002 Quality/Level of Service Handbook.

**EXHIBIT 7
 BURNT STORE IMPROVEMENT INITIATIVE #04600
 FUTURE (2015) TRAFFIC CONDITIONS WITH PROJECT
 TWO WAY, PEAK HOUR, PEAK SEASON (K100)**

2015 WITH 4-LANE BURNT STORE ROAD AND 2-LANE TUCKERS GRADE EXT.

ROADWAY	FROM	TO	BACKGROUND TRAFFIC							TOTAL				SERVICE VOLUME (6)				V/C	LOS	Exceed LOS STD
			(1) (2)		(3)	(4)		(5)		@ LOS C	@ LOS D	@ LOS E	@ STD							
			# of Lanes	LOS		FSUTMS PSWDT	PSWDT/ AADT Factor	AADT	K100 Factor					Peak Hr Volume						
US 41	County Line	Zemel Rd.	4LD	C	32,364	1.110	28,190	0.093	2,710	3,190	3,290	3,290	3,190	0.66	C	No				
	Zemel Rd.	Oil Well Rd.	4LD	C	30,136	1.110	27,150	0.093	2,520	3,150	3,290	3,290	3,150	0.80	B	No				
	Oil Well Rd.	Tuckers Grade	4LD	C	31,274	1.110	28,170	0.093	2,620	3,150	3,290	3,290	3,150	0.63	B	No				
	Tuckers Grade	Taylor St.	4LD	C	31,336	1.110	28,230	0.093	2,630	3,300	3,390	3,390	3,300	0.60	B	No				
	Taylor Rd.	Acline Rd.	4LD	C	20,196	1.110	18,190	0.093	1,670	3,300	3,390	3,390	3,300	0.51	B	No				
	Acline Rd.	Burnt Store Rd.	4LD	C	20,439	1.110	18,410	0.093	1,690	3,300	3,390	3,390	3,300	0.51	B	No				
	Burnt Store Rd.	Aqui Esta Dr.	4LD	C	36,678	1.110	33,040	0.093	3,040	3,300	3,390	3,390	3,300	0.92	C	No				
	Aqui Esta Dr.	Airport Rd.	4LD	C	27,134	1.110	24,450	0.093	2,250	3,300	3,390	3,390	3,300	0.68	B	No				
	Airport Rd.	Henry St.	4LD	C	25,637	1.110	23,100	0.093	2,190	3,300	3,390	3,390	3,300	0.65	B	No				
BURNT STORE RD.	County Line	Zemel Rd.	4LD	C	27,084	1.110	24,400	0.093	2,270	3,150	3,290	3,290	3,150	0.72	B	No				
	Zemel Rd.	Tern Bay	4LD	C	28,373	1.110	25,560	0.093	2,380	3,150	3,290	3,290	3,150	0.76	B	No				
	Tern Bay	Tuckers Grade Ext.	4LD	C	34,823	1.110	31,370	0.093	2,920	3,150	3,290	3,290	3,150	0.63	C	No				
	Tuckers Grade Ext.	Notre Dame Blvd.	4LD	C	30,503	1.110	27,480	0.093	2,560	3,300	3,390	3,390	3,300	0.78	B	No				
	Notre Dame Blvd.	Royal Poinciana	4LD	C	30,096	1.110	27,110	0.093	2,520	3,300	3,390	3,390	3,300	0.76	B	No				
	Royal Poinciana	Acline Rd.	4LD	C	30,659	1.110	27,620	0.093	2,570	3,300	3,390	3,390	3,300	0.78	B	No				
N JONES LOOP RD.	Acline Rd.	US 41	4LD	C	30,405	1.110	27,390	0.093	2,550	3,300	3,390	3,390	3,300	0.77	B	No				
	US 41	Taylor Rd.	4LD	C	13,444	1.110	12,110	0.093	1,130	2,470	3,110	3,270	2,470	0.46	B	No				
	Taylor Rd.	I-75	4LD	C	30,450	1.110	27,430	0.093	2,550	2,470	3,110	3,270	2,470	1.03	D	Yes				
NOTRE DAME BLVD.	Burnt Store Rd.	US 41	2LU	C	691	1.110	620	0.093	80	1,070	1,460	1,550	1,070	0.06	B	No				
TUCKERS GRADE	I-75	US 41	4LD	C	18,738	1.110	16,880	0.093	1,570	2,470	3,110	3,270	2,470	0.64	C	No				
TUCKERS GRADE EXT.	US 41	Property #2/#4	2LU	C	6,317	1.110	5,690	0.093	530	1,070	1,460	1,550	1,070	0.50	C	No				
	Property #2/#4	Burnt Store Rd.	2LU	C	8,680	1.110	7,820	0.093	730	1,070	1,460	1,550	1,070	0.66	C	No				
ZEMEL RD.	US 41	Property #7	2LU	C	4,404	1.110	3,970	0.093	370	1,070	1,460	1,550	1,070	0.35	B	No				
	Property #7	Burnt Store Rd.	2LU	C	3,529	1.110	3,540	0.093	330	1,070	1,460	1,550	1,070	0.21	B	No				

FOOTNOTES:

- (1) Existing number of lanes plus 4 lanes on Burnt Store Road.
- (2) From Charlotte County DCD Concurrency Spreadsheet.
- (3) Peak season traffic volumes based on FSUTMS travel model assignment.
- (4) PSADT/AADT factor based on FDOT Charlotte County countywide MOCF data.
- (5) K(100) factors from Charlotte County DCD Concurrency Spreadsheet.
- (6) Service volumes from FDOT service volume tables in 2002 Quality/Level of Service Handbook.

EXHIBIT 8
 BURNT STORE IMPROVEMENT INITIATIVE #04609
 FUTURE (2020) TRAFFIC CONDITIONS WITH PROJECT
 TWO WAY, PEAK HOUR, PEAK SEASON (K100)

2020 WITH 4-6 LANE BURNT STORE ROAD AND 2-LANE TUCKERS GRADE EXT.

ROADWAY	FROM	TO	BACKGROUND TRAFFIC							TOTAL				SERVICE VOLUME (6)				V/C	LOS	Exceed LOS STD
			(1)	(2)	(3)	(4)		(5)	@ LOS C	@ LOS D	@ LOS E	@ STD								
			Lanes	Std	FSUTMS PSWDT	PSWDT/ Factor	AADT	K100 Peak Hr Volume												
US 41	County Line	Zemel Rd	4LD	C	35,713	1,110	32,170	0.093	2,990	3,150	3,290	3,290	3,150	0.95	C	No				
	Zemel Rd	Oil Well Rd.	4LD	C	33,034	1,110	29,760	0.093	2,770	3,150	3,290	3,290	3,150	0.88	C	No				
	Oil Well Rd.	Tuckers Grade	4LD	C	34,433	1,110	31,020	0.093	2,880	3,150	3,290	3,290	3,150	0.91	C	No				
	Tuckers Grade	Taylor St.	8LD	C	36,089	1,110	34,310	0.093	3,190	4,950	5,080	5,080	4,950	0.64	B	No				
	Taylor Rd.	Acline Rd.	8LD	C	20,037	1,110	18,050	0.093	1,560	4,950	5,080	5,080	4,950	0.34	B	No				
	Acline Rd.	Burnt Store Rd.	8LD	C	19,868	1,110	17,900	0.093	1,650	4,950	5,080	5,080	4,950	0.33	B	No				
	Burnt Store Rd.	Aqui Esta Dr.	8LD	C	37,908	1,110	34,150	0.093	3,140	4,950	5,080	5,080	4,950	0.63	B	No				
	Aqui Esta Dr.	Airport Rd.	8LD	C	29,913	1,110	26,950	0.093	2,460	4,950	5,080	5,080	4,950	0.50	B	No				
	Airport Rd.	Henry St.	8LD	C	28,576	1,110	25,740	0.093	2,390	4,950	5,080	5,080	4,950	0.48	B	No				
BURNT STORE RD	County Line	Zemel Rd	4LD	C	32,731	1,110	29,490	0.093	2,740	3,150	3,290	3,290	3,150	0.87	C	No				
	Zemel Rd	Tern Bay	4LD	C	34,824	1,110	31,370	0.093	2,920	3,150	3,290	3,290	3,150	0.93	C	No				
	Tern Bay	Tuckers Grade Ext	8LD	C	43,144	1,110	38,870	0.093	3,610	4,730	4,930	4,930	4,730	0.76	B	No				
	Tuckers Grade Ext.	Noire Dame Blvd.	4LD	C	37,663	1,110	33,930	0.093	3,160	3,300	3,390	3,390	3,300	0.96	C	No				
	Noire Dame Blvd.	Royal Poinciana	4LD	C	37,130	1,110	33,450	0.093	3,110	3,300	3,390	3,390	3,300	0.94	C	No				
	Royal Poinciana	Acline Rd.	4LD	C	37,306	1,110	33,610	0.093	3,130	3,300	3,390	3,390	3,300	0.95	C	No				
N JONES LOOP RD.	Acline Rd.	US 41	4LD	C	37,288	1,110	33,590	0.093	3,120	3,300	3,390	3,390	3,300	0.95	C	No				
	US 41	Taylor Rd	4LD	C	14,342	1,110	12,920	0.093	1,200	2,470	3,110	3,270	2,470	0.49	B	No				
Taylor Rd.	I - 75	4LD	C	36,275	1,110	32,680	0.093	3,040	2,470	3,110	3,270	2,470	1.23	D	Yes					
NOTRE DAME BLVD.	Burnt Store Rd.	US 41	2LU	C	783	1,110	710	0.093	70	1,070	1,460	1,550	1,070	0.07	B	No				
TUCKERS GRADE	I - 75	US 41	4LD	C	21,213	1,110	19,110	0.093	1,760	2,470	3,110	3,270	2,470	0.72	C	No				
TUCKERS GRADE EXT.	US 41	Property #2/#4	2LU	C	7,762	1,110	6,990	0.093	850	1,070	1,460	1,550	1,070	0.61	C	No				
	Property #2/#4	Burnt Store Rd.	2LU	C	11,160	1,110	10,050	0.093	930	1,070	1,460	1,550	1,070	0.87	C	No				
ZEMEL RD.	US 41	Property #7	2LU	C	6,627	1,110	5,970	0.093	560	1,070	1,460	1,550	1,070	0.52	C	No				
	Property #7	Burnt Store Rd.	2LU	C	6,061	1,110	5,480	0.093	510	1,070	1,460	1,550	1,070	0.48	C	No				

FOOTNOTES:

- (1) Existing and committed number of lanes plus 4 lanes on Burnt Store Road.
- (2) From Charlotte County DCD Concurrency Spreadsheet.
- (3) Peak season traffic volumes based on FSUTMS travel model assignment.
- (4) PSADT/AADT factor based on FDOT Charlotte County countywide MOCF data.
- (5) K(100) factors from Charlotte County DCD Concurrency Spreadsheet.
- (6) Service volumes from FDOT service volume tables in 2002 Quality/Level of Service Handbook.

EXHIBIT 8 - Updated

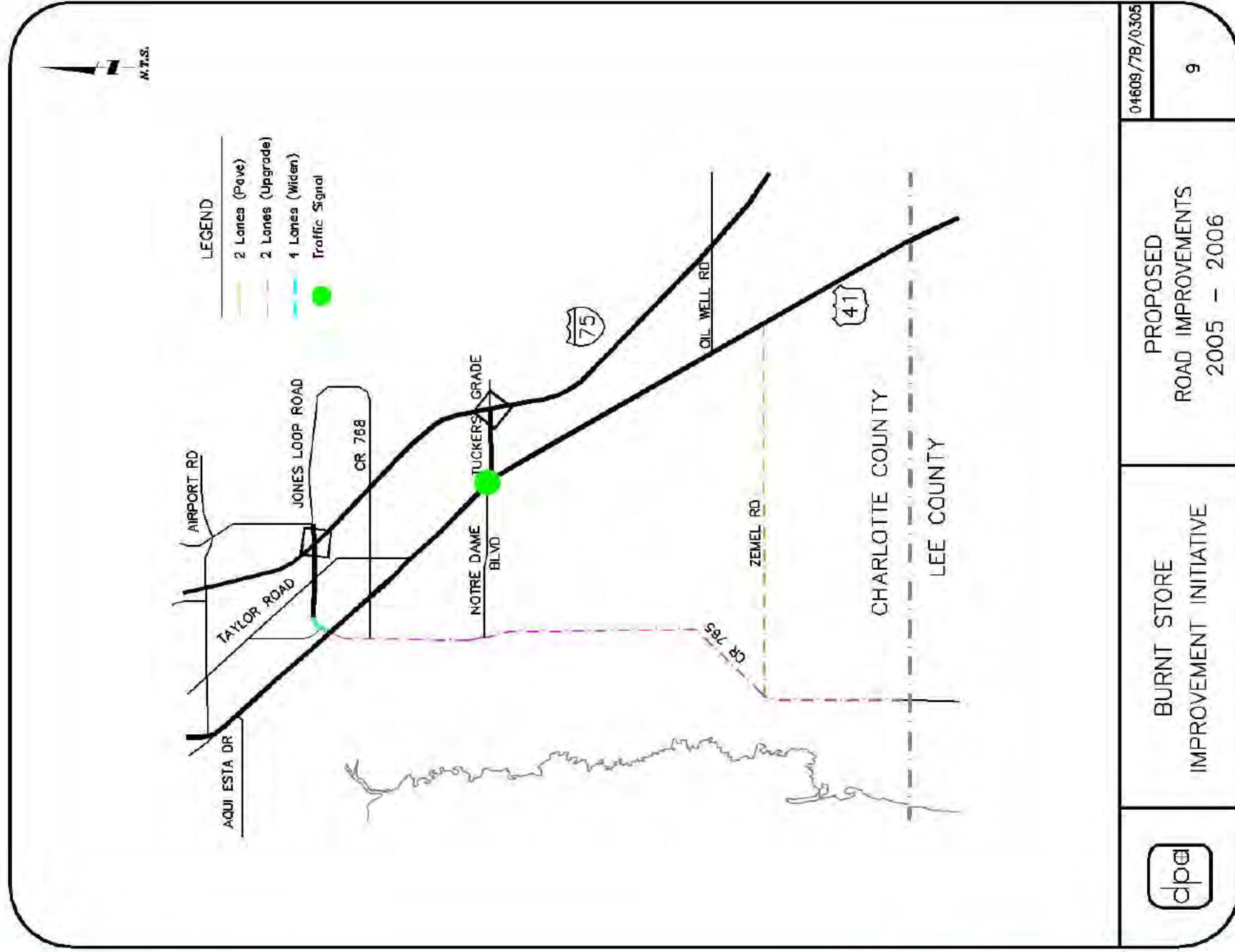
BURNT STORE IMPROVEMENT INITIATIVE #04609
 FUTURE (2020) TRAFFIC CONDITIONS WITH PROJECT
 TWO WAY, PEAK HOUR, PEAK SEASON (K100)

2020 WITH 4-LANE BURNT STORE ROAD, 2-LANE TUCKERS GRADE EXT AND NEW 2-LANE N-S ROAD

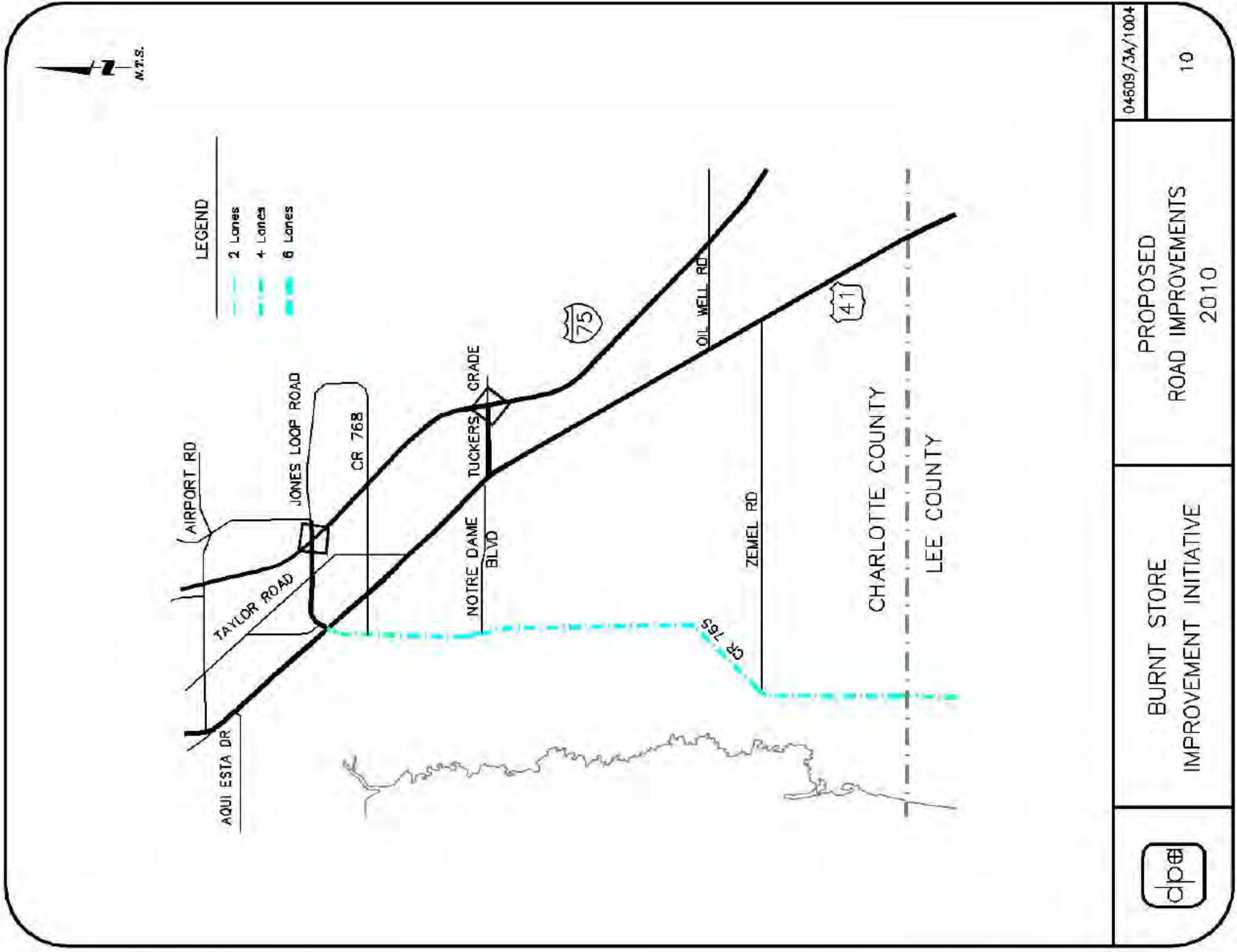
ROADWAY	FROM	TO	BACKGROUND TRAFFIC							TOTAL				SERVICE VOLUMES (6)				Volume/ Standard Ratio	Exceed LOS Standard?
			(1) (2) # of LOS Lanes Std		(3) FSUTMS PSWDT	(4) PSWDT/ AADT		(5) K100 Peak Hr	@ LOS C	@ LOS D	@ LOS E	@ STD							
			PSWDT	Factor	AADT	Factor	Volume												
US 41	County Line	Zemel Rd.	4LD	C	37,510	1.110	33,790	0.093	3,140	3,150	3,290	3,290	3,150	1.00	C	No			
		Zemel Rd.	4LD	C	32,925	1.110	29,690	0.093	2,760	3,150	3,290	3,290	3,150	0.88	C	No			
		Oil Well Rd.	Tuckers Grade	4LD	C	33,645	1.110	30,310	0.093	2,820	3,150	3,290	3,290	3,150	0.90	C	No		
		Tuckers Grade	Taylor St.	8LD	C	38,373	1.110	34,570	0.093	3,220	4,950	5,080	5,080	4,950	0.65	B	No		
		Taylor Rd.	Acline Rd.	6LD	C	33,669	1.110	30,330	0.093	2,790	4,950	5,080	5,080	4,950	0.56	B	No		
		Acline Rd.	Burnt Store Rd.	6LD	C	32,800	1.110	29,550	0.093	2,720	4,950	5,080	5,080	4,950	0.55	B	No		
		Burnt Store Rd.	Aqui Esta Dr.	6LD	C	47,634	1.110	42,910	0.093	3,950	4,950	5,080	5,080	4,950	0.80	B	No		
		Aqui Esta Dr.	Airport Rd.	6LD	C	38,537	1.110	34,720	0.093	3,190	4,950	5,080	5,080	4,950	0.64	B	No		
		Airport Rd.	Henry St.	6LD	C	35,819	1.110	32,270	0.093	3,000	4,950	5,080	5,080	4,950	0.61	B	No		
BURNT STORE RD	County Line	Zemel Rd.	4LD	C	32,022	1.110	28,850	0.093	2,680	3,150	3,290	3,290	3,150	0.85	B	No			
		Zemel Rd.	Tern Bay	4LD	C	30,501	1.110	27,430	0.093	2,560	3,150	3,290	3,290	3,150	0.81	B	No		
		Tern Bay	Tuckers Grade Ext.	4LD	C	38,021	1.110	32,450	0.093	3,020	3,150	3,290	3,290	3,150	0.95	C	No		
		Tuckers Grade Ext.	Notre Dame Blvd.	4LD	C	33,806	1.110	30,450	0.093	2,830	3,300	3,390	3,390	3,300	0.86	C	No		
		Notre Dame Blvd.	Royal Poinciana	4LD	C	33,912	1.110	30,550	0.093	2,840	3,300	3,390	3,390	3,300	0.86	C	No		
		Royal Poinciana	Acline Rd.	4LD	C	34,662	1.110	31,230	0.093	2,900	3,300	3,390	3,390	3,300	0.88	C	No		
	Acline Rd.	US 41	4LD	C	34,784	1.110	31,340	0.093	2,910	3,300	3,390	3,390	3,300	0.88	C	No			
N JONES LOOP RD.	US 41	Taylor Rd.	4LD	C	17,689	1.110	15,940	0.093	1,480	2,470	3,110	3,270	2,470	0.60	C	No			
		Taylor Rd.	I-75	6LD	C	35,825	1.110	32,270	0.093	3,000	3,830	4,680	4,620	3,830	0.78	C	No		
NOTRE DAME BLVD.	Burnt Store Rd.	US 41	2LU	C	860	1.110	770	0.093	70	1,070	1,460	1,550	1,070	0.07	B	No			
TUCKERS GRADE EXT.	US 41	New N-S Road	2LU	C	2,463	1.110	2,220	0.093	210	1,070	1,460	1,550	1,070	0.20	B	No			
		New N-S Road	Burnt Store Rd.	2LU	C	8,515	1.110	7,670	0.093	710	1,070	1,460	1,550	1,070	0.66	C	No		
ZEMEL RD.	US 41	New N-S Road	2LU	C	4,243	1.110	3,820	0.093	360	1,070	1,460	1,550	1,070	0.34	B	No			
		New N-S Road	Burnt Store Rd.	2LU	C	7,361	1.110	6,630	0.093	620	1,070	1,460	1,550	1,070	0.58	C	No		
TUCKERS GRADE	US 41	I-75	4LD	C	20,585	1.110	18,550	0.093	1,730	2,470	3,110	3,270	2,470	0.70	C	No			
EXISTING E-W ROAD	Burnt Store Rd.	New N-S Road	2LU	C	5,951	1.110	5,380	0.093	500	1,070	1,460	1,550	1,070	0.47	B	No			
NEW N-S ROAD	Zemel Rd.	Existing E-W Road	2LU	C	7,730	1.110	6,990	0.093	650	1,310	1,560	1,610	1,310	0.50	C	No			
		Existing E-W Road	Tuckers Grade Ext.	2LU	C	9,373	1.110	8,440	0.093	780	1,310	1,560	1,610	1,310	0.60	C	No		

FOOTNOTES:

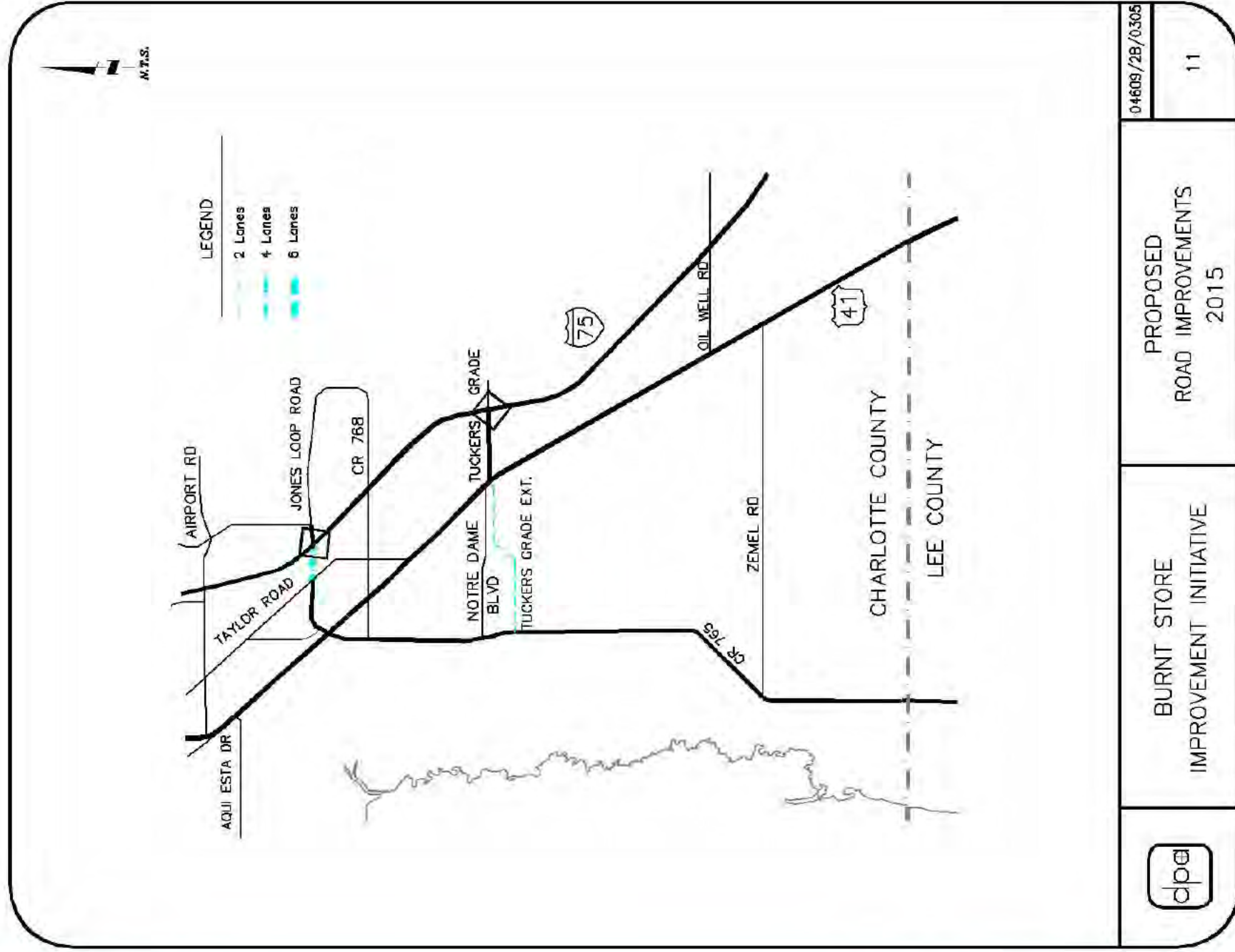
- (1) Existing and committed number of lanes plus 4 lanes on Burnt Store Road.
- (2) From Charlotte County DCD Concurrency Spreadsheet.
- (3) Peak season traffic volumes based on FSUTMS travel model assignment.
- (4) PSADT/AADT factor based on FDOT Charlotte County countywide MOCF data.
- (5) K(100) factors from Charlotte County DCD Concurrency Spreadsheet.
- (6) Service volumes from FDOT service volume tables in 2002 Quality/Level of Service Handbook.

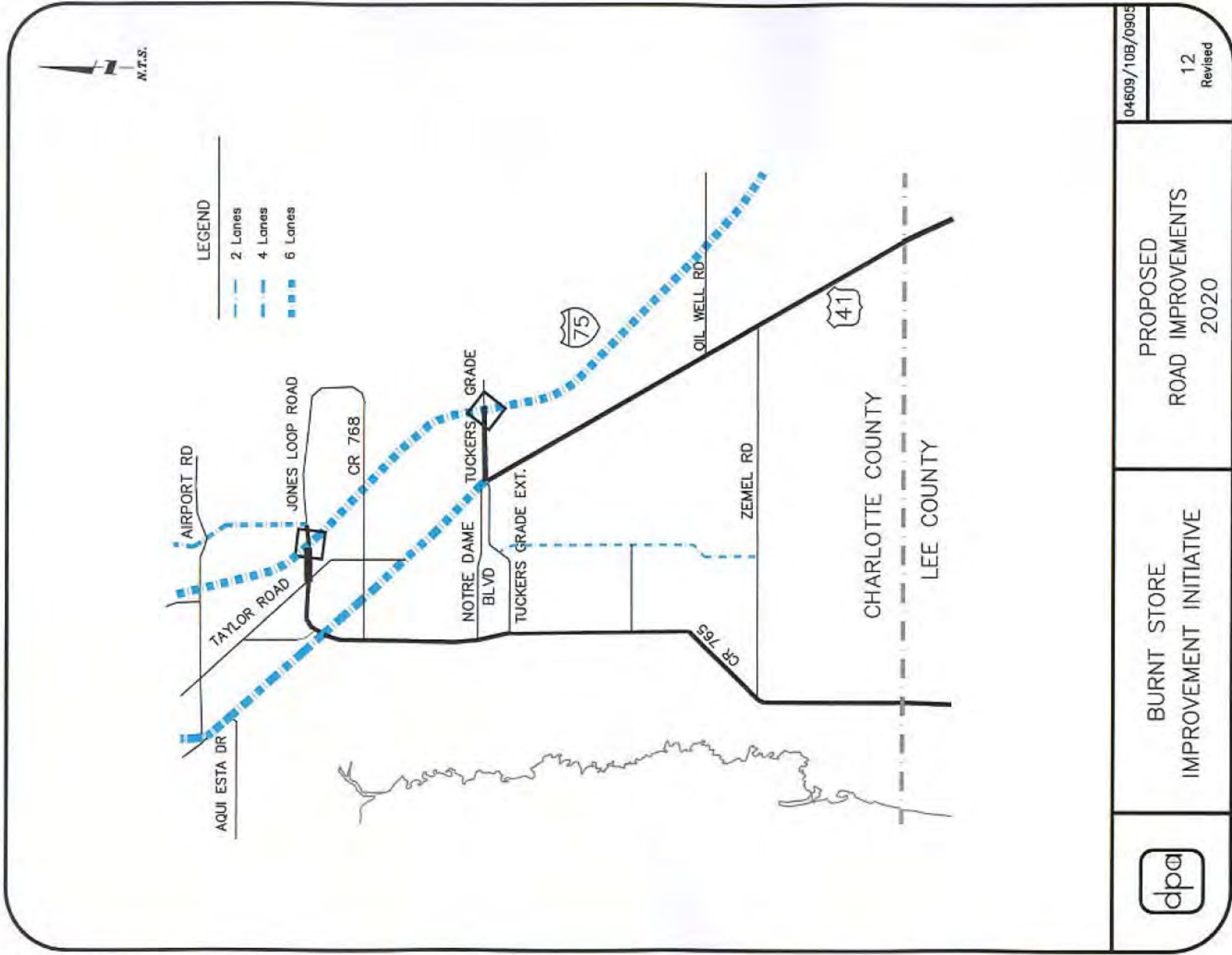


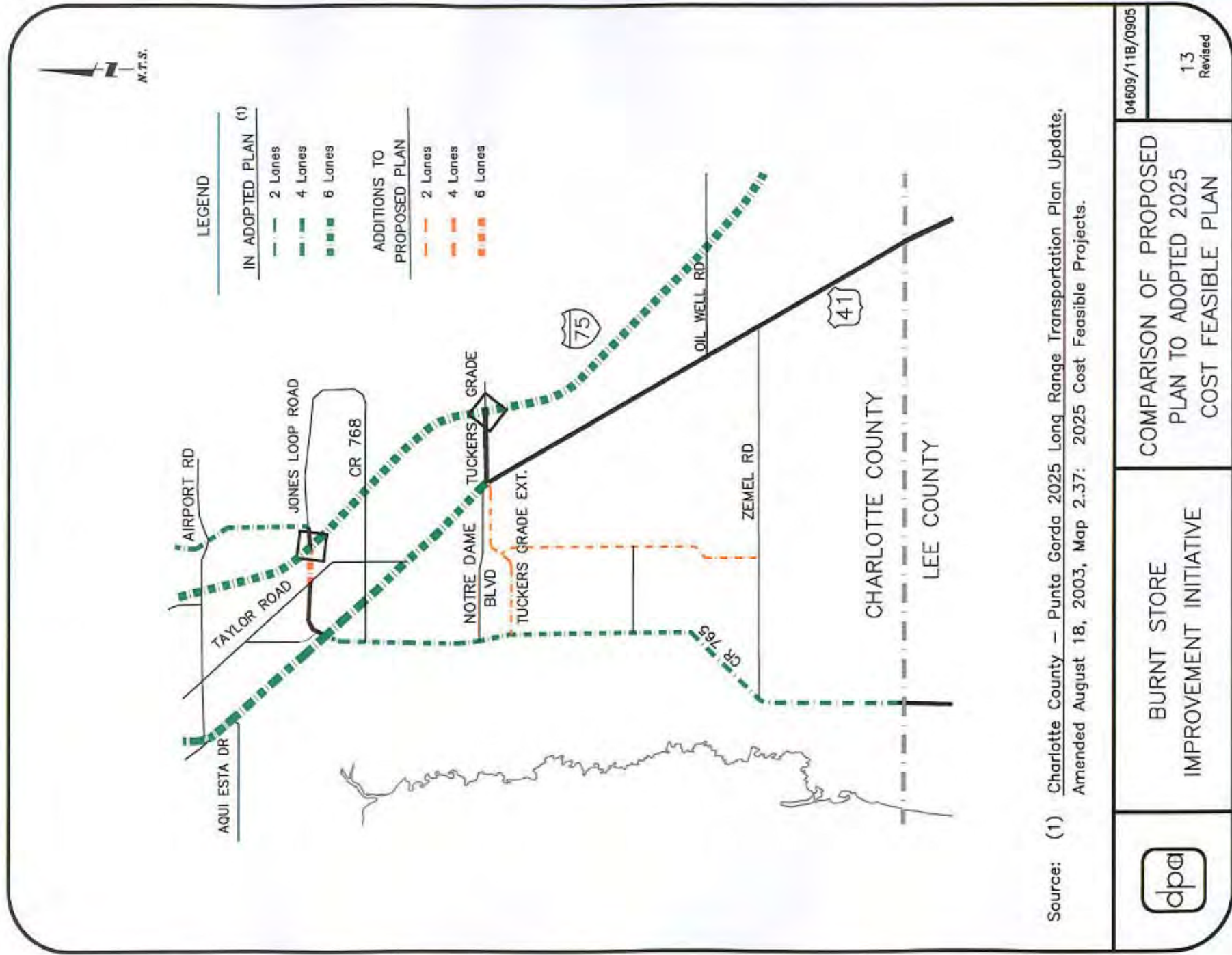
	BURNT STORE IMPROVEMENT INITIATIVE	PROPOSED ROAD IMPROVEMENTS 2005 - 2006	04609/78/0305
			9



	BURNT STORE IMPROVEMENT INITIATIVE	PROPOSED ROAD IMPROVEMENTS 2010	04509/3A/1004
			10







	BURNT STORE IMPROVEMENT INITIATIVE	COMPARISON OF PROPOSED PLAN TO ADOPTED 2025 COST FEASIBLE PLAN	04609/11B/0905
			13 Revised

BURNT STORE ROAD
CONSTRUCTION AND ROW COST ESTIMATES
FDOT 2004 COSTS

CONSTRUCTION COSTS (2 Lanes + 2 Lanes)		RIGHT OF WAY COSTS (2 Lanes + 2 Lanes)	
(1) US 41 to Aciline Road		(1) US 41 to Aciline Road	
Construction Cost / mile	0.44 miles	Proposed ROW	100 ft
Construction Cost	\$ 3,087,400	Available ROW	90 ft
Bridge Cost	\$ 1,388,456	Required ROW	10 ft
	\$ 1,100,000	Length of Road	0.44 Miles
		Area Required	Sq ft 23232
		\$300,000 per acre	0.53 acres
		Total ROW Cost	\$160,000
		Total ROW Cost-20% Acquisition/Condemnation	\$192,000
(2) Aciline Road to Notre Dame Blvd.		(2) Aciline Road to Notre Dame.	
Construction Cost / mile	1.59 miles	Proposed ROW	100 ft
Construction Cost	\$ 3,087,400	Available ROW	88 ft
	\$ 4,908,969	Required ROW	12 ft
		Length of Road	83,952 ft
		Miles	1.59
		Area Required	Sq ft 100742.4
		\$300,000 per acre	2.31 acres
		Total ROW Cost	\$664,000
		Total ROW Cost-20% Acquisition/Condemnation	\$833,000
(3) Notre Dame to Tuckers Ext.		(3) Notre Dame to Tuckers Ext.	
Construction Cost / mile	0.70 miles	Proposed ROW	120 ft
Construction Cost	\$ 2,554,000	Available ROW	90 ft
	\$ 1,787,800	Required ROW	30 ft
		Length of Road	3696 ft
		Miles	0.70
		Area Required	Sq ft 110880
		\$60,000 per acre	2.55 acres
		Total ROW Cost	\$153,000
		Total ROW Cost-20% Acquisition/Condemnation	\$184,000
(4) Tuckers Ext to N.Tern Bay Property Line.		(4) Tuckers Ext to N.Tern Bay Property Line.	
Construction Cost / mile	1.52 miles	Proposed ROW	120 ft
Construction Cost	\$ 2,554,000	Available ROW	77 ft
	\$ 3,692,080	Required ROW	43 ft
		Length of Road	8025.6 ft
		Miles	1.52
		Area Required	Sq ft 345100.8
		\$60,000 per acre	7.82 acres
		Total ROW Cost	\$475,000
		Total ROW Cost-20% Acquisition/Condemnation	\$670,000
(5) N.Tern Bay Property Line to S.Tern Bay Property Line.		(5) N.Tern Bay Property Line to S.Tern Bay Property Line.	
Construction Cost / mile	1.77 miles	Proposed ROW	120 ft
Construction Cost	\$ 2,554,000	Available ROW	83 ft
	\$4,520,560	Required ROW	37 ft
		Length of Road	5280 ft
		Miles	1.0
		Area Required	Sq ft 195360
		\$60,000 per acre	4.48 acres
		Total ROW Cost	\$268,000
		Total ROW Cost-20% Acquisition/Condemnation	\$332,000
(6) S.Tern Bay Property Line to Zemel Road.		(6) S.Tern Bay Property Line to Zemel Road.	
Construction Cost / mile	0.67 miles	Proposed ROW	120 ft
Construction Cost	\$ 2,554,000	Available ROW	95 ft
	\$ 1,711,160	Required ROW	25 ft
		Length of Road	7693.2 ft
		Miles	1.44
		Area Required	Sq ft 190080
		\$160,000 per acre	4.36 acres
		Total ROW Cost	\$785,000
		Total ROW Cost-20% Acquisition/Condemnation	\$942,000
(7) Zemel Road to County Line.		(7) Zemel Road to County Line.	
Construction Cost / mile	2.00 miles	Proposed ROW	120 ft
Construction Cost	\$ 2,554,000	Available ROW	85 ft
	\$ 5,108,000	Required ROW	35 ft
		Length of Road	10560 ft
		Miles	2.00
		Area Required	Sq ft 365840
		\$300,000 per acre	8.48 acres
		Total ROW Cost	\$2,645,000
		Total ROW Cost-20% Acquisition/Condemnation	\$3,054,000
TOTAL CONSTRUCTION COST \$ 24,377,000		RIGHT OF WAY COST \$5,081,000	
TOTAL CONSTRUCTION COST \$ 24,377,000		TOTAL ROW ACQUISITION/CONDEMNATION \$6,099,000	

Footnote:
(1) Construction costs per mile from FDOT report titled 2004 Transportation Costs, March 2005.

EXHIBIT 16 (REVISED)

**BURNT STORE ROAD FOUR-LANING
ESTIMATED COSTS
2004 DOLLARS**

	Segment Length (miles)	Proposed ROW (feet)	Urban/Rural c/s	Design Estimate (\$)	ROW Estimate (\$)	Construction Estimate (\$)	CEI Estimate (\$)	Total Project Cost (\$)
(Existing 2+ 2 lanes)								
(1) US 41 to Acline Road	0.44	100	Urban	\$ 402,000	\$192,000	\$2,458,000	\$ 246,000	\$3,388,000
(2) Acline to Notre Dame	1.59	100	Urban	\$ 982,000	\$833,000	\$4,909,000	\$ 491,000	\$7,215,000
Phase 1 Subtotal	2.03			\$1,474,000	\$1,025,000	\$7,367,000	\$737,000	\$10,603,000
(3) Notre Dame to Tuckers Grade Ext	0.70	120	Rural	\$ 358,000	\$184,000	\$1,788,000	\$ 179,000	\$2,509,000
(4) Tuckers Grade Ext to N Tern Bay Pty line	1.52	120	Rural	\$ 778,000	\$570,000	\$3,882,000	\$ 388,000	\$5,816,000
Phase 2 Subtotal	2.22			\$1,134,000	\$754,000	\$5,670,000	\$567,000	\$8,125,000
(5) N Tern Bay Pty line to S Tern Bay Pty line	1.77	120	Rural	\$ 904,000	\$323,000	\$4,521,000	\$ 452,000	\$6,200,000
Phase 3 Subtotal	1.77			\$904,000	\$323,000	\$4,521,000	\$452,000	\$6,200,000
(6) S Tern Bay Pty line to Zemel Road	0.67	120	Rural	\$ 342,000	\$942,000	\$1,711,000	\$ 171,000	\$3,166,000
Phase 4 Subtotal	0.67			\$342,000	\$942,000	\$1,711,000	\$171,000	\$3,166,000
(7) Zemel Road to County Line	2.00	120	Rural	\$ 1,022,000	\$3,054,000	\$5,108,000	\$ 511,000	\$9,695,000
Phase 5 Subtotal	2.00			\$1,022,000	\$3,054,000	\$5,108,000	\$511,000	\$9,695,000
TOTAL	8.69			\$4,876,000	\$6,098,000	\$24,377,000	\$2,438,000	\$37,789,000

#05617 Burrit Store Road Development Agreement

Summary, 10/19/2005

**BURNT STORE ROAD
CONSTRUCTION COST AND ROW ESTIMATES FOR OTHER ROADS**

<u>CONSTRUCTION COST ESTIMATES (FDOT 2004 COSTS (1))</u>		<u>RIGHT OF WAY COST ESTIMATES (2004 COSTS)</u>	
(1) Tuckers Grade Ext (Rural 2 Lane)			
Construction Cost / mile	2.40 miles	Proposed ROW	120 ft
Construction Cost	\$ 1,983,700	Available ROW	0 ft
	\$ 4,760,880	Required ROW	120 ft
		Length of Road	2.4 Miles
		Area Required	1520640 Sq.ft
		Total ROW Cost	\$1,396,000
			\$40,000 per acre
(2) North-South Parallel Road (Rural 2 Lane) (Tuckers Grade Extension to Zemel Road)			
Construction Cost / mile	3.90 miles	Proposed ROW	120 ft
Construction Cost	\$ 1,983,700	Available ROW	0 ft
	\$ 7,736,430	Required ROW	120 ft
		Length of Road	3.9 Miles
		Area Required	2471040 Sq.ft
		Total ROW Cost	\$2,269,000
			\$40,000 per acre
TOTAL CONSTRUCTION COST	\$12,497,000	TOTAL ROW COST	\$3,665,000

Footnote:

(1) Construction costs per mile from FDOT report titled 2004 Transportation Costs, March 2005 with 25% reduction to reflect lower costs for local vs State construction projects.

EXHIBIT 18 (REVISED)
BURNT STORE ROAD
SUMMARY OF OTHER ROAD PROJECT COSTS
2004 DOLLARS

	Segment Length (miles)	Proposed ROW (feet)	Design Estimate (\$)	ROW Estimate (\$)	Construction Estimate (\$)	Construction CEI (\$)	Total Project Cost (\$)
New Construction (2 Lanes)							
(1) Tuckers Grade Ext (Rural 2 Lane)	2.4	120	\$714,000	\$1,396,000	\$4,761,000	\$714,000	\$7,585,000
(2) North-South Parallel Road (Rural 2 Lane)	3.9	120	\$1,160,000	\$2,269,000	\$7,736,000	\$1,160,000	\$12,325,000
Total Miles	6.3		\$1,874,000	\$3,665,000	\$12,497,000	\$1,874,000	\$19,910,000

APPENDIX A
CHARLOTTE COUNTY
CAPITAL IMPROVEMENT PROGRAM, 2006
BURNT STORE ROAD



CHARLOTTE COUNTY
CAPITAL IMPROVEMENT PROGRAM
2006

FY2006 Capital Improvements Budget / FY 06-FY 10 Project Detail

Project No. c419901 (83903)

GENERAL PROJECT DATA:		COMPREHENSIVE PLAN INFORMATION:		PROJECT NEED CRITERIA		PROJECT SCHEDULE		FY06		FY07		FY08		FY09		FY10				
Project Title: Burnt Store Road (Safety Improvements from US 41 to the Lee Co		Project listed in CIE? Yes		Safety X		Design/Arch		1	2	3	4	1	2	3	4	1	2	3	4	
Functional Area: Traffic Circulation		Comp. Plan reference:		Mandate		Land/ROW														
Department: Public Works		LOS/Concurrency Related Yes		Replace		Construct														
Location: South				Grow/wh		Equip/mtl														
<p>PROJECT DESCRIPTION: The combination of Sales Tax Extension and FDOT Safety Grant funds will permit the construction of safety improvements in this corridor. The project limits are from just south of US 41 to the Lee County line, a distance of approximately 8.5 miles. The project includes the installation of 4' wide shoulders along both sides of the roadway to create a standard-width highway (the existing lane widths are 10'). Guardrail will be installed at various locations as needed and some drainage work will be required as well. In the future, funding is identified for widening. The estimate assumes a 4-lane divided roadway would be constructed with combined pedestrian/bike facilities. A rural design would be provided with open drainage and no curb and gutter. Because recent inspections have revealed that the existing bridge over Alligator Creek is approaching its useful lifetime, the design consultant has been tasked to prepare plans and specifications for the replacement. It is being designed as a 4-lane structure to meet future needs.</p>													<p>PROJECT RATIONALE: Burnt Store Road has narrow lane widths (10'), no paved shoulders, and relatively deep ditches along much of the corridor. While the posted speed limit is 65mph, vehicles generally travel at higher rates of speed. As a result, there is a history of a relatively high number of accidents along this corridor. It is important to note that Lee and Charlotte Counties have initiated a comprehensive study of this corridor to determine the timing and magnitude of the future improvements.</p>							
<p>OPERATING BUDGET IMPACT: Additional operating costs as a result of this safety improvement are not anticipated.</p>													<p>Total Length in Miles 8.5 Lane Miles Added 0 Lane Miles Rebuilt 8.5 New Intersections Signalized 0 New Intersections (Non-Signal) 0</p>							
<p>LOS INFORMATION Adopted LOS C</p>																				
	Prior Actual	Budget FY05	Est FY05	Carry over	FY06 NEW	Orig 06	FY06	FY07	FY08	FY09	FY10	FUTURE	Total							
EXPENDITURE PLAN (000'S)																				
Design/Arch/Eng	751	69		69	1,931		2,000						750	3,501						
Land (or ROW)					1,069		1,069						10,000	11,069						
Construction		6,104		6,104	-3,114		2,990						20,800	23,790						
Mitigation Land	45	125	5	120	-19		101						500	651						
Landscaping																				
Total Project Cost	797	6,298	5	6,293	-133		6,160						32,050	39,012						
FUNDING PLAN (000'S)																				
Gas Tax	303	2,174		2,174	-133		2,041						18,166	20,610						
Road Impact Fees	238	880		880			880						1,860	2,978						
Sales Tax Ext 2002	256	2,744	5	2,739			2,739						4,008	4,008						
Lee County Govt Contributions													4,008	4,008						
FDOT		500		500			500						4,008	4,508						
Total Funding	797	6,298	5	6,293	-133		6,160						32,050	39,012						
OPERATING BUDGET IMPACT (000'S)																				
Personal Svc.																				
Non-personal																				
Capital																				
Total Operating																				

INSERT MAP

B. WATER MANAGEMENT

OVERVIEW

The Study Area is a unique region in Charlotte County that has special challenges and opportunities with respect to drainage and stormwater management. The Study Area is a mix of state aquatic preserve waters in Charlotte Harbor, state lands including Charlotte Harbor State Park and Charlotte Harbor Flatwoods, agricultural concerns and low density residential developments. Although there are drainage problems in the Study Area, improvements are possible through analysis of the problems and opportunities for stormwater management facilities replacement, expansion and new facility siting.

HISTORICAL DRAINAGE CONDITIONS

Topography in the Study Area consists of three zones. The first zone is a flat, coastal marsh area made up of predominantly tidal mud flats, mangrove and grass marsh areas ranging in elevation from zero to five feet above mean sea level, west of Burnt Store Road. The second zone is a relatively steep transitional zone that varies in elevation from approximately five to 20 feet above sea level, from Burnt Store Road east approximately a mile. The third zone is a relatively flat inland area spanning two to six miles, which varies in elevation from approximately 20 to 25 feet above sea level.

Historical (pre-development) drainage followed predominantly overland sheet flow, with wetlands scattered throughout. Run-off is in a westerly direction from the CSX Railroad to Charlotte Harbor, an Outstanding Florida Water (OFW). The United States Geological Survey Quadrangle Map presents topography of the area in five-foot contours (Exhibit A).

Named natural tidal streams, creeks and reaches extend from Charlotte Harbor inland to Burnt Store Road, approximately one to two miles, and include the Hog Branch, Bear Branch, Winegourd Creek, Big Mound Creek and Whidden Branch.

Man-made canals and ditches associated with early agriculture and residential developments extended east from the natural reaches as much as five miles inland (to CSX Railroad). The man-made Pirate Canal begins at the harbor and extends east to the railroad, approximately five miles.

Several miles of man-made ditches were constructed in the tidally flooded wetland areas (salt marsh) in the coastal area just east of Charlotte Harbor for “mosquito control.”

EARLY DEVELOPMENT

Generally, agricultural interests and existing residential developments occurred prior to modern storm water management codes and practices. Little or no stormwater attenuation or treatment for developed runoff was provided. The early approach to drainage was “conveyance-oriented,” providing for the rapid discharge of storm water from the development area by open drainage channels and storm sewers. The goal was to minimize disruptive and possibly damaging surface ponding in streets, around residential structures and low-lying areas. The downstream impact was a significant increase in runoff quantity, stage and area of inundation, transmittal of suspended solids and other pollutants, as well as an increase of freshwater flow to the estuary.

In short, early development altered or interfered with the natural surface flow and flow way patterns in the Study Area.

DRAINAGE PROBLEMS

Localized and ill-defined flooding occurs in the Study Area. There is a lack of documentation however, either with the county or at Southwest Florida Water Management District (SWFWMD), of the specific locations or nature of the flooding problems.

Hydrologic alterations, adverse changes to amounts, locations and timing of freshwater hydrologic inflows into the harbor, are a problem identified by the Charlotte Harbor National Estuary Program (NEP).

Water quality degradation, stormwater pollution point source discharges from agricultural and urban run-off into Charlotte Harbor has been identified by the Charlotte Harbor NEP as a problem.

Maintenance of existing ditches is a problem. Charlotte County acknowledges a lack of easements and access to existing drainage channels. Difficult-to-maintain existing cross slopes are a problem for men and machinery. Lack of maintenance of existing private channels is also a problem.

REGULATIONS IN PLACE

Current stormwater management practices are “storage-oriented,” and include attenuation and treatment of run-off. Attenuation provides for the control of run-off rates to pre-development conditions. The exception to this requirement is when the outfall is tidal. Stormwater treatment provides for removal of greases, oils and other pollutants from the run-off prior to discharge into the conveyance system.

All new development is regulated by current storm water management regulations including the National Pollutant Discharge Elimination System, various Florida Statutes enforced by SWFWMD, Charlotte Harbor NEP, and the Charlotte County Administrative Codes and Ordinances.

The SWFWMD also has specific requirements for alterations to existing public roadway projects. The Environmental Resource Permit Basis of Review, Chapter 5, Section 5.8.b, states “The contributing area to be used in calculating the required treatment volume will be: for off-line treatment systems . . . use the area of new pavement.” Any Burnt Store Roadway improvements involving additional lanes will also require stormwater management, either within the right-of-way, or in ponds “off-site” on acquired properties. The County has indicated that it is not in favor of joint-use ponds for private development and county roadway drainage. Where outfall from the road is tidal, no attenuation is required.

In 1980, Swift Road in Sarasota County was widened from two lanes to four lanes within a narrow 74-foot right-of-way utilizing the off-line criteria above. Right-of-way was conserved by designing the slope of the pavement inward, thus eliminating outside peripheral drainage features and their space requirements. Pollution-control devices were constructed in the grass median, a long shallow grassy swale where the initial runoff is impounded, forcing the water to filter into the ground. A supplemental storm sewer system, also located in the median, accommodates heavy runoff from the heavy summer storms. The system has been very successful to date.

SWFWMD also requires that projects discharging directly into OFWs are required to provide an additional 50 percent of the required treatment volume. Charlotte Harbor is an OFW.

Charlotte County addresses stormwater management in the Future Land Use Element and the Infrastructure Element of the Comprehensive Plan. The Future Land Use Element identifies land in the county as Urban Service Area (made up of Infill and Suburban Area) or Rural Service Area. Levels of service (LOS) are driven by the land use designation. The Study Area contains both Suburban Area and Rural Service Area.

The Infill area represents the locations in which Charlotte County will actively pursue the provision of the highest levels of infrastructure and services. While Charlotte County will not actively provide the highest levels of infrastructure and service to Suburban Areas unless a public health, safety or welfare issue is present, the county may provide such at the request of landowners or through community planning efforts.

The Comprehensive Plan enumerates policies to implement its Service Area strategies. Policy 1.1.2 gives the guidelines for infrastructure and services implementation with respect to stormwater management. Charlotte County has established LOS standard criteria to evaluate drainage conditions for roadways and developments. The LOS standard for Burnt Store Road with respect to drainage/stormwater management is the same, no matter the Urban Service Area classification. For arterial and collector roadways, the lowest edge of pavement elevation should be flood-free during the 25-year flood. LOS standards have been established for subdivisions and local residential streets as well. New local residential streets shall be above the 5-year, 24-hour rainfall event. Further, the FDOT has established a LOS for major evacuation routes. They should be passable (water less than 1.0 feet deep at the roadway crown) during the 100-year flood.

The Stormwater Management section of the Infrastructure Element of the Charlotte County Comprehensive Plan is closely related to the Future Land Use Element. A product of the Stormwater Management section is the Charlotte County Master Stormwater Management Plan (MSMP). The MSMP identifies approximately nine major drainage watersheds in the Study Area (Exhibit B). These basins are classified as “low priority” basins with respect to inventory, analysis and improvement. However, the Infrastructure Element states that “Drainage basins or canal networks that do not meet Charlotte County level of service (LOS) guidelines will be targeted for stormwater management improvement projects. In the Charlotte County MSMP, problem area rankings and alternative improvement projects are directly related to LOS goals.”

The LOS standards have two major components: quantity of discharge and quality of discharge. The county’s approach to LOS for quality of discharge is consistent with the recommendations developed by the Charlotte Harbor NEP.

The Charlotte Harbor NEP Comprehensive Conservation and Management Plan identifies “Priority Actions and Related Projects” directly relating to the Study Area, such as Priority Action HA-M, which is to “prevent and/or reduce future hydrologic impacts of transportation projects within the Charlotte Harbor NEP and mitigate for past problems whenever possible,” and Priority Action FW-C, which is to “restore freshwater and estuarine wetland areas, especially those adversely impacted by ditching.” The Florida Department of Environmental Protection (FDEP) Alligator Creek Habitat Restoration Project addresses the FW-C priority action.

DRAINAGE AND STORMWATER MANAGEMENT NEEDS

One of the pressing needs in the Study Area is the inventory of existing stormwater management facilities. Stormwater management facilities are comprised of pipes, box culverts, open channels (ditches, canals, swales), water control structures, weirs, detention/retention ponds, natural streams, creeks, waterways, sumps, pumps and underdrain.

Data associated with stormwater management facilities include physical properties, whether tidal or freshwater, public or private, O & M responsibility of facility, geographic service area of facility, design capacity of facility, current demand on the facility capacity, and LOS provided by the facility.

Downstream of Burnt Store Road, most of the conveyances are tidal. County-maintained channels are shown on the Charlotte County Primary Ditch Systems Map (Exhibit C). Upstream of Burnt Store Road, some of the man-made drainage ways are county-maintained, but many are private.

Another need in the Study Area is a new Watershed Flood Study. There is an existing study for the north half of the Study Area, titled *Phase II Water Management Study*, prepared by Johnson Engineering, Inc. in November 1977. This study covered only the four watershed basins in the north half of the Study Area, and it is now out of date. The new study would quantify quantity and water quality discharges; quantify conveyance systems capacity and adequacy; identify existing LOS; recommend improvements; and specify the LOS after improvements.

Seven major watershed basins have been mapped by Charlotte County in the Study Area:

Alligator Creek (70), Whidden Branch (78), Unnamed Canal 1 (82), Big Mound Creek (85), Winegourd Creek (88), Pirate Canal (81), and Bear Branch (97) (Exhibit B).

There are approximately 32 drainage crossing locations under Burnt Store Road between US 41 and the Charlotte/Lee County line. Some basins have only one pipe crossing, such as Pirate Canal, while other basins have as many as 10 pipe crossings, such as the Whidden Branch.

The watersheds are made up of natural creeks and flow ways that generally reach from Charlotte Harbor inland up to Burnt Store Road, and then extend to the east as far as five miles (up to the CSX railroad) by man-made canals and ditches.

There is no current level-of-service data available for the existing roads and developments in the Study Area.

Another Drainage and Stormwater Management need is the identification of potential storage sites for improvements in treatment and attenuation of existing development stormwater, which would consider required size, ownership, position in watershed, suitable outlet and possibility of multiple uses, not only for Burnt Store Road, but also for the existing developments. These storage areas would provide for attenuation and treatment improvements to reach the LOS necessary for the Urban Service Area designation.

For Burnt Store Road widening, should the stormwater management be accomplished in deeper “wet” ponds, these would most likely be located off-site on adjacent properties that would need to be acquired. The identification of potential storage sites is also a need.

Another need concerns the maintenance of conveyance systems. The continuing operation of existing stormwater management systems requires periodic maintenance to remove siltation, debris and nuisance vegetation. Such maintenance by the county requires access to and along canals, ponds and lakes. In many cases, access is not available, principally because certain stormwater management systems were constructed prior to the establishment of regulations requiring the provision of adequate easements.

Maintenance entities need to be identified as public or private, and maintenance needs to be scheduled on a consistent basis. Also needed is the creation of Public Drainage Easements for the conveyance systems and the access to them. Some drainage ditches and canals have easements for the structure but not for maintenance access, making maintenance of these facilities difficult. In situations where there are no easements at all, facilities cannot be maintained by the county. Some facilities would need to be improved (cleaned, cross-slopes made less steep) for the county to take over maintenance.

Finally, there is always a need for funding of the other needs.

IMPROVEMENT METHODOLOGIES

There are several methods available to improve the existing conditions and deficiencies in the Study Area. Sediment sumps and basins can be utilized to minimize sedimentation into the harbor. Control structures can be added to existing ponds and canals to regulate flow to historical rates. Baffles and skimmers are utilized to minimize oils, grease and other pollutants from entering the harbor. Extended detention Alternate three treatment ponds would provide additional biological treatment. Filling of man-made ditches in wetlands where appropriate can restore historical flow ways or flow regimes. All the strategies are appropriate in the Study Area.

RECOMMENDATIONS

A watershed flood study is recommended for the Study Area, which would update the 1977 Johnson study for the northern watersheds and continue south to the county line. This

study should establish the non-tidal surge (freshwater) storm stages for the five-year, 25-year and 100-year events. The study would identify existing restrictions in the flow ways that contribute to the flooding in the subdivisions east of Burnt Store Road, that when improved would lower the flood stages for the entire watershed. The study would identify improvements with respect to the level of service standards established by the county for the Urban Service Area.

When Burnt Store Road is widened, the drainage design should provide for 150 percent of the required treatment volume due to the OFW status of Charlotte Harbor. It is recommended that the treatment volume should be provided for the directly connected impervious area off-line, i.e., in the median of an inverted roadway cross-section. The tidal/non-tidal status of the Burnt Store Road drainage outfall channels/waterways should be determined, which will establish the need for attenuation or not for that section of roadway.

It is recommended that restoration projects to improve the quality of existing run-off from the subdivisions east of Burnt Store Road be undertaken. Such projects include exotic vegetation removal and filling in existing ditches that were dug through wetlands on the west side of Burnt Store Road.

It is recommended that Municipal Services Benefit Units (MSBU) be created or, in cases of existing MSBUs, be expanded, to cover the cost of design and implementation to convert the existing conveyance drainage systems of the existing subdivisions to stormwater management systems that would provide attenuation and treatment of run-off prior to discharge from the development. The designed systems would not only improve the quality and quantity of discharge downstream to Charlotte Harbor, but also would improve the drainage and reduce flooding within the subdivisions. The system would be designed to meet the level of service standards established in the Comprehensive Plan.

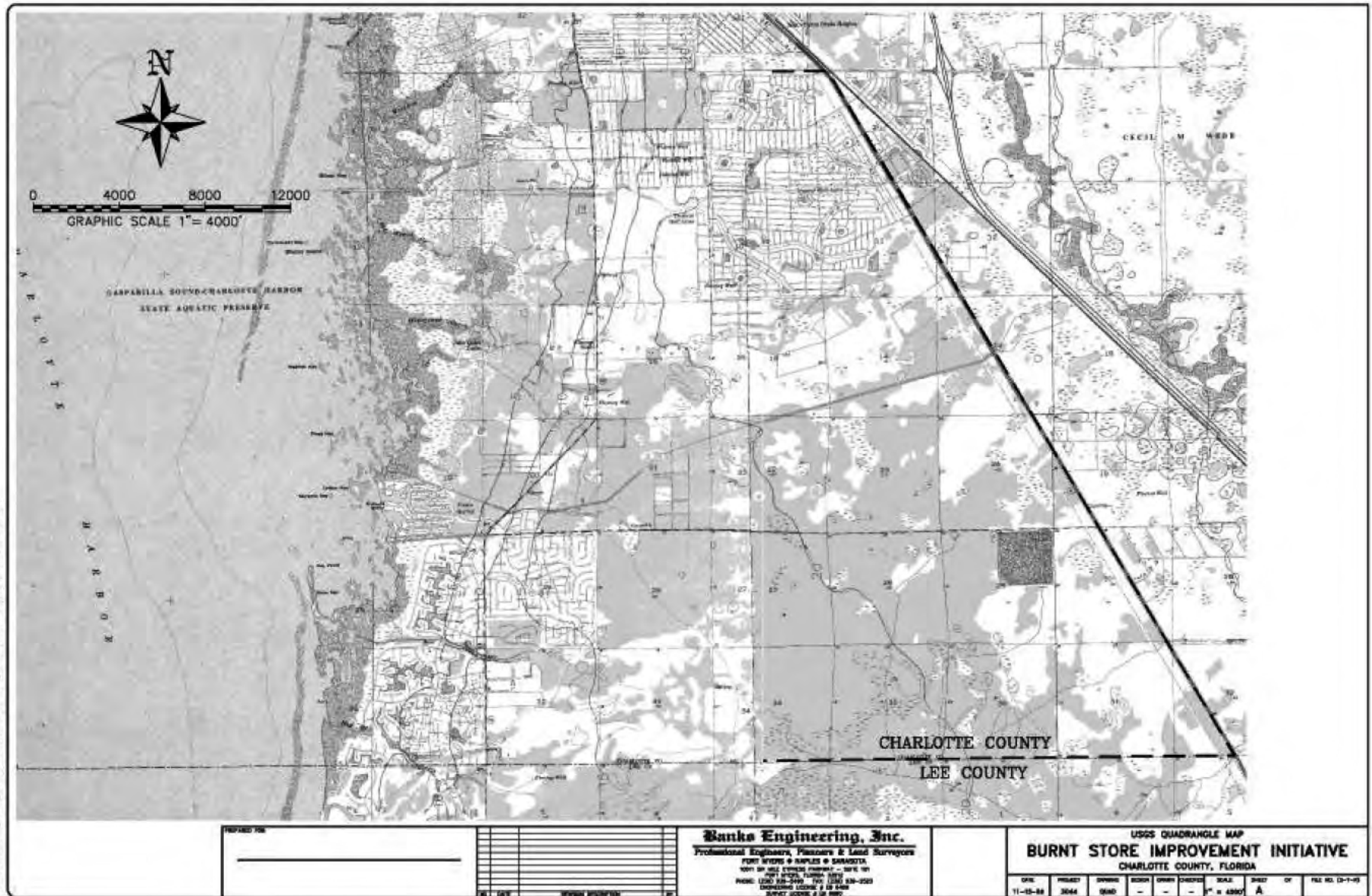
Other sources of monies that may be available include the state, through SWFWMD and the SWIM Program.

CONCLUSION

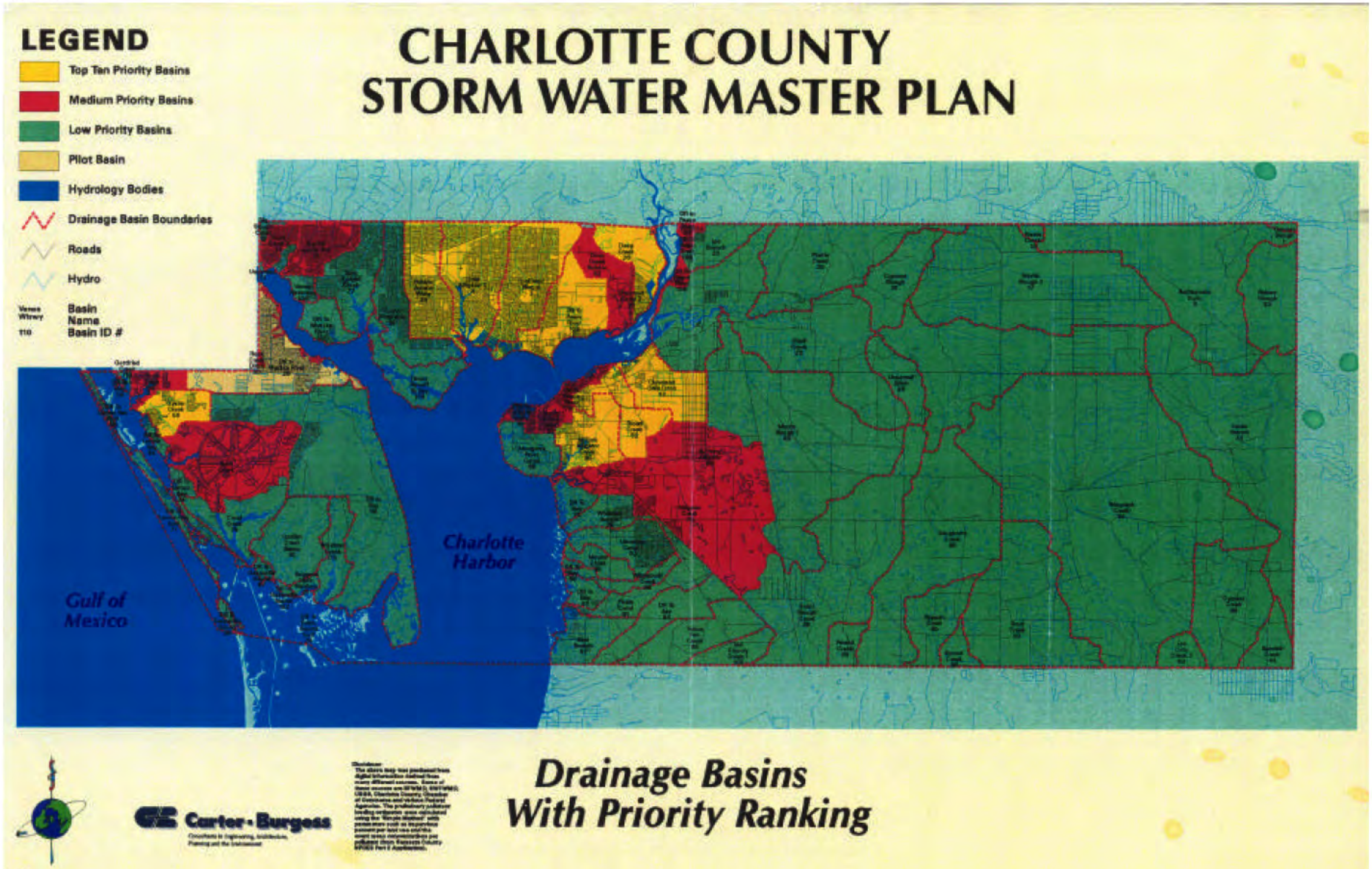
Implementing the strategies and recommendations in this Drainage Element of the study will not only prevent any new environmental impacts from occurring, but also will reduce existing adverse environmental impacts, and will restore and enhance the natural hydrologic and habitat conditions in the Study Area.

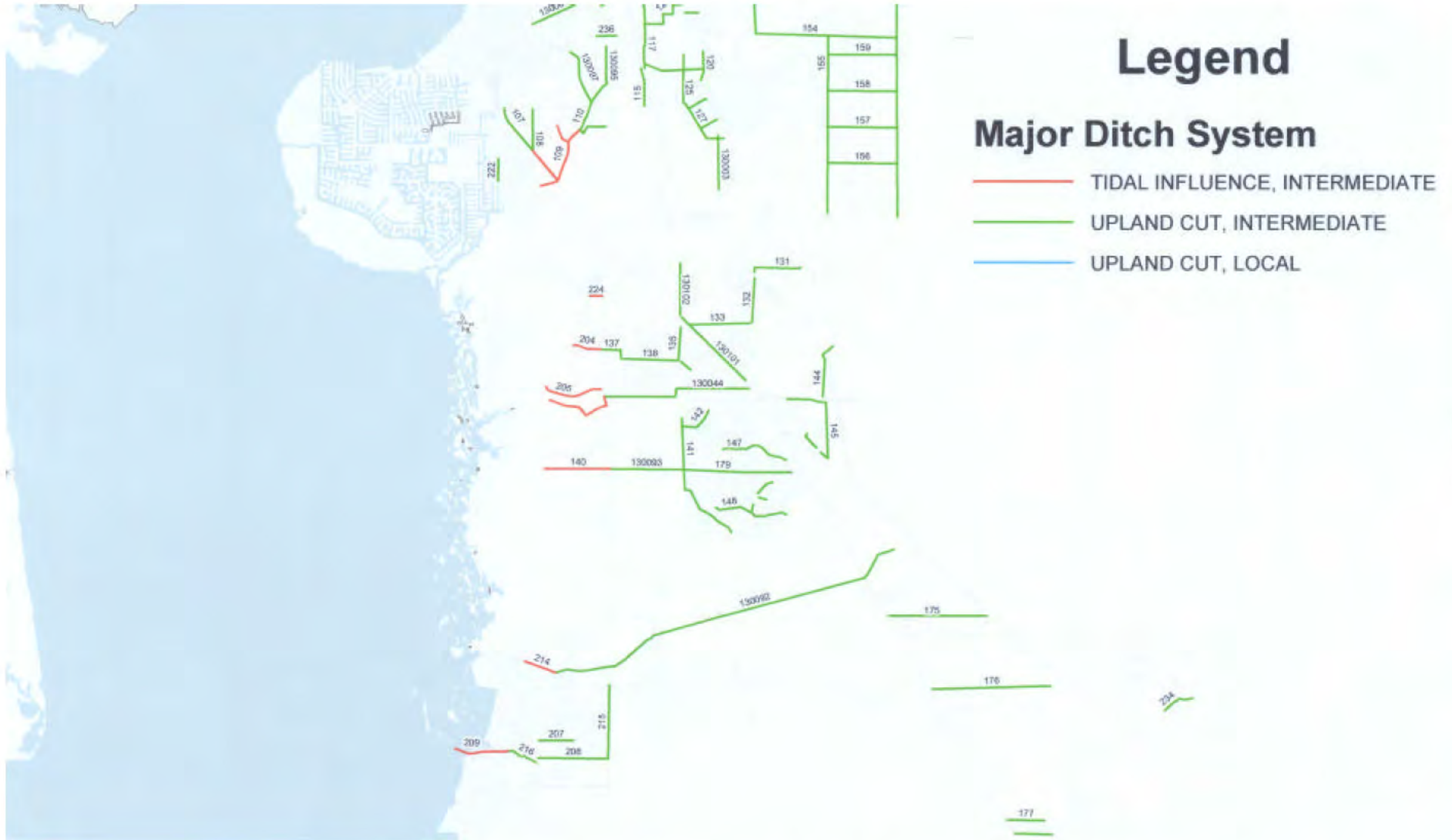
EXHIBITS

- Exhibit A USGS Quadrangle Map with Five Foot Contours
- Exhibit B Charlotte County Storm Water Master Plan (CCSWMP) Drainage Basins with Priority Ranking Map
- Exhibit C Charlotte County Primary Ditch Systems (maintained ditches map)



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Charlotte County Primary Ditch Systems
(Intermediate System)

C. UTILITIES

BACKGROUND

The Study Area is bounded by Charlotte Harbor to the west, single-family subdivisions to the south, single-family subdivisions within the City of Punta Gorda to the north and single-family platted lots and undeveloped land to the east. Central water and sewer service are provided to platted lots to the north by the City of Punta Gorda. Single-family subdivisions to the south are also provided with central water and sewer by facilities, previously owned and operated by Florida Water Services and currently owned and operated by Charlotte County Utilities (Map U1). The Study Area is situated so that expansion of existing facilities is a logical and proper use of existing facilities in the immediate area. Since the purchase of the Florida Water Services system by Charlotte County Utilities, several system expansion efforts have developed. Charlotte County Utilities has studied the area and projected growth and has developed a Burnt Store Road Corridor Proposed Watermains Map (Map U2). In addition, Charlotte County Utilities has recently completed an expansion of the existing wastewater treatment plant to a capacity to 0.5 MGD and is proceeding with a plan to increase the water treatment plant operating capacity from 0.75 MGD to 1.5 MGD within the next few years. It is important to note that as part of that expansion, Charlotte County Utilities has recently experienced raw water yields from new wells in excess of that which was anticipated. Charlotte County Utilities is also projecting long-term plant expansions to service the Study Area. On another front, the Tern Bay DRI project is currently proceeding with plans to extend water and sewer service from the south to serve the Tern Bay project (Map U3).

The Study Area is located outside of the Charlotte County Urban Service Area and within unincorporated Charlotte County. Charlotte County Utilities may therefore provide water and sanitary sewer service to this area.

EXISTING IMPROVEMENT PLANS

The most notable and imminent utility expansion along the corridor is that proposed by the Tern Bay Development. Construction plans have been completed and permits have been obtained by the developer. Although construction will be undertaken in two phases, the utility improvements ultimately will result in a 16" watermain from the water treatment plant at Wallaby Lane, then continuing north to the proposed north entrance of the Tern Bay project. From that point to the northwest corner of Tern Bay an 8" watermain is to be constructed. Phase two of these improvements will include replacement of the existing 8" watermain which begins at the existing water treatment plant and extends to the north to Yacht Club Boulevard, which currently serves single-family developments on both the east and west sides of Burnt Store Road. Similarly, a 12" forcemain is proposed by Tern Bay and will be extended to that project's south property line. This forcemain will extend a 12" forcemain that exists from the wastewater treatment plant to Cabana Road and will also replace a 4" forcemain, which extends from Cabana Road north to approximately 580 feet south of Rio Togas Road. A re-use water transmission main is also proposed from the existing wastewater treatment plant along Burnt Store Road north to the Tern Bay south property line.

The utility improvements associated with the Tern Bay project (*outside of the scope of this report*) are proposed to be constructed within the existing Burnt Store Road right-of-way except along the frontage of the Tern Bay project, where 60 feet of additional Burnt Store right-of-way is proposed along the Tern Bay frontage only. The construction plans propose the watermain 5 feet east of the existing and proposed Burnt Store Road west right-of-way, the re-use main 10 feet from the existing and proposed right-of-way and the forcemain 15 feet from the existing and proposed right-of-way. It is important to note that construction of these facilities, as planned, may be problematic relative to future widening of Burnt Store Road.

At the same time, and with the acquisition of the Florida Water Service Utility Facilities, Charlotte County Utilities has initiated a planning effort for the area to potentially be served by those utilities. Charlotte County Utilities has prepared the Burnt Store Road Corridor Proposed Watermains Map (Map U2). This plan is consistent with the improvements proposed by Tern Bay with the exception that the Charlotte County Utilities proposal includes a 24" watermain along Burnt Store Road from the existing water treatment plant to Zemel Road. From that point, Charlotte County Utilities proposes a 16" watermain along the Burnt Store Road corridor and a 16" watermain along Zemel Road to the east. It is apparent that additional coordination is required for improvements from the existing water treatment plant to Zemel Road, as well as from the Tern Bay north entrance to the north where an 8" watermain is to be constructed.

Finally, initial planning efforts are under way by owners of property located at the northeast quadrant of the U.S. 41/Tuckers Grade intersection to evaluate the feasibility of extending potable water from existing facilities along Burnt Store Road.

PROPOSED MASTER UTILITY PLAN

A study of the area which may potentially be served by the existing water and wastewater treatment plants of Charlotte County Utilities was conducted. The study considers existing facilities, the proposed Tern Bay project and the future development, which is the impetus of this study. In addition to existing development, the Tern Bay project proposes approximately 1,810 single-family/multi-family units, 140,000 square feet of retail space, 30,000 square feet of office space and 250 hotel rooms. The Burnt Store Road Improvement Initiative includes approximately 5,332 single-family residential units and 275,000 square feet of commercial area. Based on these parameters, the potable water demand for the initiative is estimated, based on 225 gallons per day per single-family unit and 0.1 gallons per day per square foot commercial/office. Potable water demands for the initiative area are estimated at 1.24 million gallons per day. The potable water demand for Tern Bay project is estimated at 0.44 million gallons per day. Sanitary flows for the area, based on 190 gallons per day per single family unit and 0.1 gallons per day per square foot of commercial/office area, are estimated at 1.04 MGD for the initiative and 0.35 MGD for the Tern Bay project.

Based on these parameters, a model has been developed to consider available information regarding utilities in the subject area. Based on that model, and in consideration of Charlotte County Utilities and Tern Bay plans, as well as plans along U.S. 41 such as that located at the northeast corner of the U.S. 41/Tuckers Grade intersection, an overall transmission main is proposed as shown on Map U4. This map includes a 24" potable watermain from the existing water treatment plant to Zemel Road, consistent with Charlotte County Utilities and a 16" watermain along Burnt Store Road also consistent with the Charlotte County Utilities proposal. The proposal, however, differs in that the study also calls for an east/west roadway connection from Burnt Store Road to the Tuckers Grade intersection. In, consideration of that, a 12" watermain is proposed along Zemel Road together with a 12" watermain along the east/west connector in order to loop the proposed system and provide redundancy in consideration of service and fire flow requirements. This loop is proposed in lieu of the proposed 16" watermain along Zemel Road. The proposed 12" forcemain along the Burnt Store Road corridor has also been verified by this study.

FUNDING SOURCES

Typically, utilities are funded by those who will directly benefit from improvements. In this case, the cost of planned improvements as well as those who will benefit from the improvements may be projected with a high level of confidence due to planning efforts. The Exhibit is an Order of Magnitude Cost Estimate for proposed potable water and sanitary sewer transmission mains (excluding plant expansion) to serve the Burnt Store Road Corridor only. Three potential funding mechanisms are proposed and include:

- 1.) Special and particular utility impact fees for the Burnt Store Road service area;
- 2.) Rebatable agreements with private developers;
- 3.) Interlocal agreements with the Tern Bay Community Development District.

Considering planned expansions of the system by the Tern Bay project, the future developers may also extend utilities to their respective project, thereby expanding the system for use by other developments. Potentially the first developers will design and construct expansions with an agreement in place, which will provide future developers who benefit from those expansions to pay for the portion of those improvements, which they will utilize. Typically, these Rebatable Agreements pro-rated are based upon total cost of improvements and benefit considering capacity of improvements and requirement of each particular development.

The Tern Bay Community Development District is currently negotiating an Interlocal Agreement with Charlotte County to four-lane Burnt Store Road along the frontage of the Tern Bay Resort. The potential exists for other Interlocal Agreements, which would provide for the Community Development District to expand the currently programmed utility expansions and would require those who benefit to contribute to the cost of improvements. This mechanism provides a funding source and benefits to all parties of the Agreement.

POSSIBLE OBJECTIVE/POLICIES

Coordinate utility infrastructure to provide the public health, safety and welfare by the provision of central potable water and sanitary collection service and to ensure the cost of providing facilities for supply of utilities are born by those whose benefit from them.

- . Charlotte County will ensure the provision of acceptable levels of utilities by the expansion of the Charlotte County Utilities Service Area Policy to provide a supply and treatment capacity of 225 gallons per day and 190 gallons per day, for potable water and sanitary sewer, respectively, per equivalent residential connection and a fire flow of 750 GPM and 20 psi residual pressure.

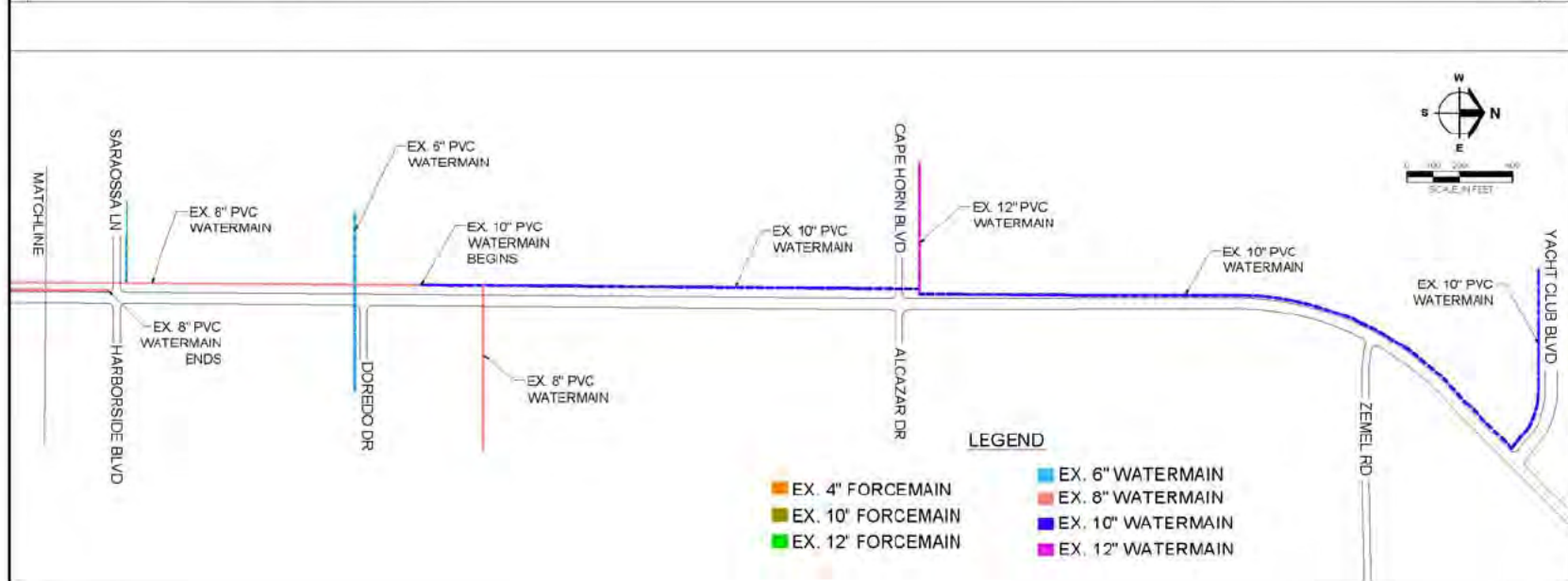
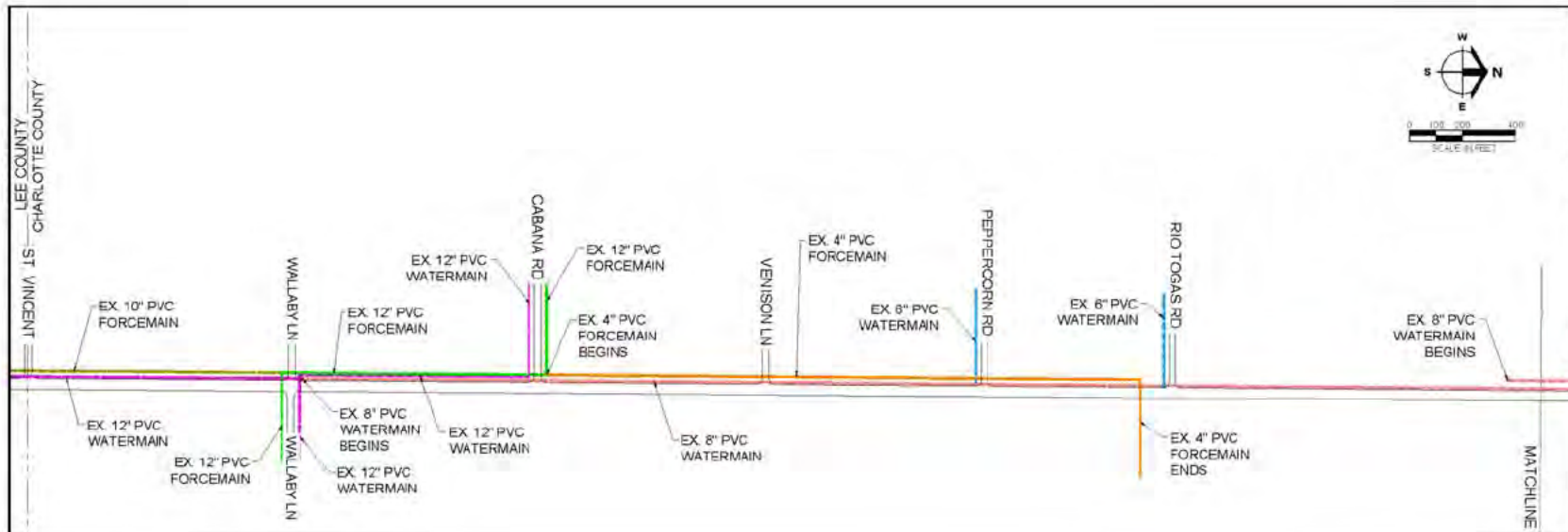
- . No County development approval will be granted unless utility service at acceptable levels of service is available at the property line will or will be made available by the developer.

- . The county will encourage construction of water transmission mains along Burnt Store Road, Zemel Road and the proposed East/West Connector Road to U.S. 41 (Tucker Grade Extension). The cost of the transmission mains will be born by those who benefit from the improvements. Rebatable agreements may be used to facilitate utility extensions.

- . The county will encourage construction of sanitary transmission mains along Burnt Store Road, to U.S. 41. The cost of the transmission mains will be born by those who benefit from the improvements. Rebatable agreements may be used to facilitate utility extensions.

- . New development will pay through impact fees to be determined by Charlotte County Utilities based on the cost of utility infrastructure to support the number of units proposed to be served by the utility.

- . Development within the initiative area will be required to accept reuse water if the utility is prepared to supply reuse water to meet all or a portion of the irrigation needs of the proposed development in accordance with Charlotte County Utilities Standard Agreement for Reclaimed Water.



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PHONE: (305) 391-3115
FAX: (305) 461-3105

FLORIDA CERTIFICATE OF AUTHORITY FOR
CIVIL ENGINEERING: 54606
LAND SURVEYING: 14500

PROJECT NO. 1111

BURNT STORE IMPROVEMENT INITIATIVE

1500 ROYAL PALM SHORE BLVD
FT MITER, FLORIDA 33503

PROJECT INFORMATION

DATE:	11/14/11
SCALE:	AS SHOWN
DRAWN BY:	J. HARRIS
CHECKED BY:	A. HARRIS
DATE:	11/14/11

THIS PLAN IS PRELIMINARY AND INTENDED FOR CONCEPTUAL PURPOSES ONLY. SITE LAYOUT AND LAND USE ACTIVITIES OR CONDITIONS MAY CHANGE. CONSULTANTS, ENGINEERS, AND REGULATORY AGENCIES MUST OBTAIN NECESSARY PERMITS AND APPROVALS PRIOR TO CONSTRUCTION.

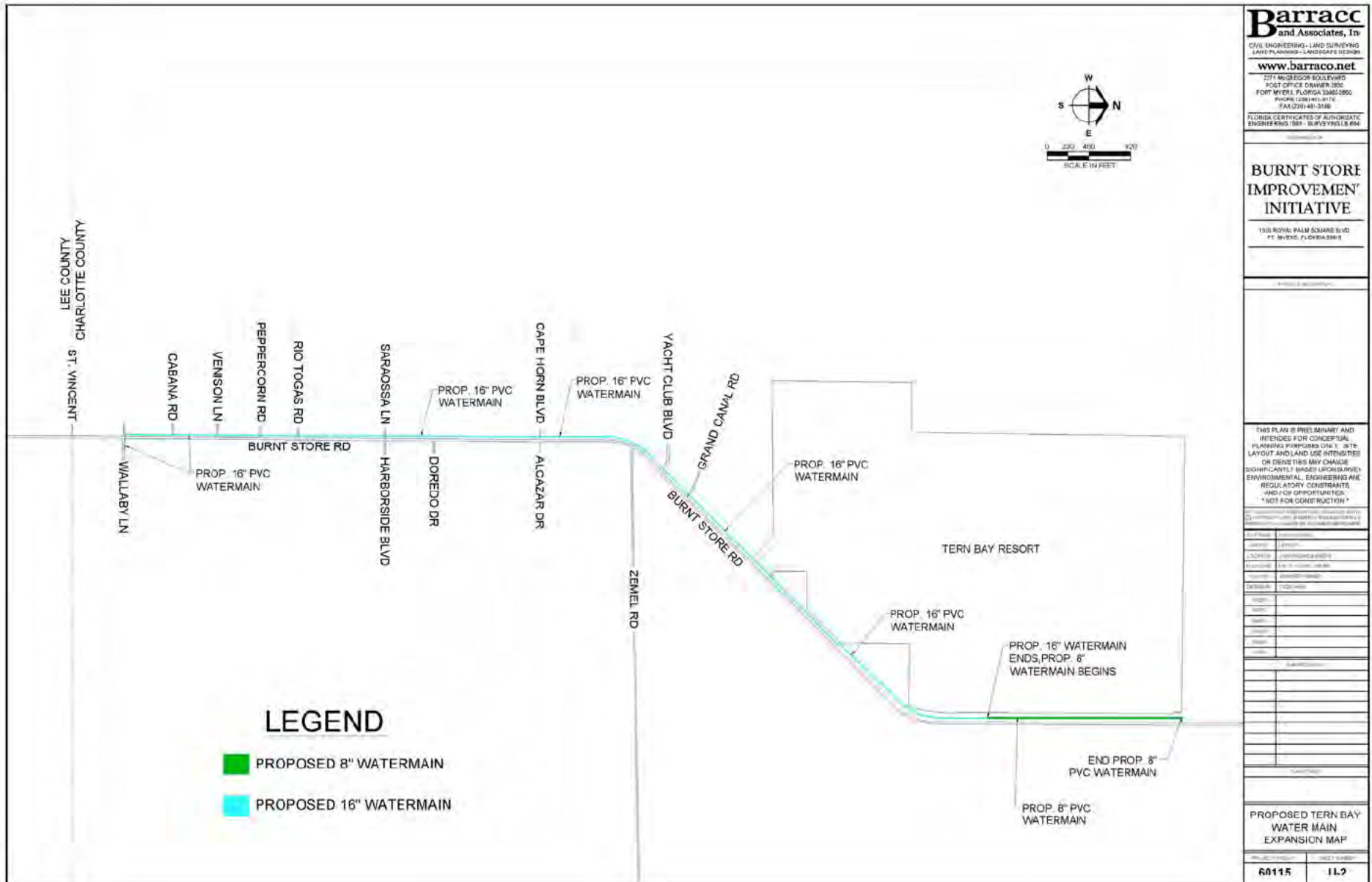
FILE NAME: 1111-DWGN

DATE	DESCRIPTION
11/14/11	ISSUED FOR PERMITS
11/14/11	ISSUED FOR PERMITS
11/14/11	ISSUED FOR PERMITS
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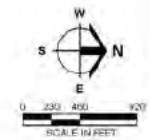
PLANNING

EXISTING UTILITIES MAP

PROJECT NUMBER:	60115
SHEET NUMBER:	11-1



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PHONE (239) 481-5176
FAX (239) 481-5186
FLORIDA CERTIFICATE OF AUTHORITY
ENGINEERING: 1097 SURVEYING: 6364



BURNT STORE IMPROVEMENT INITIATIVE

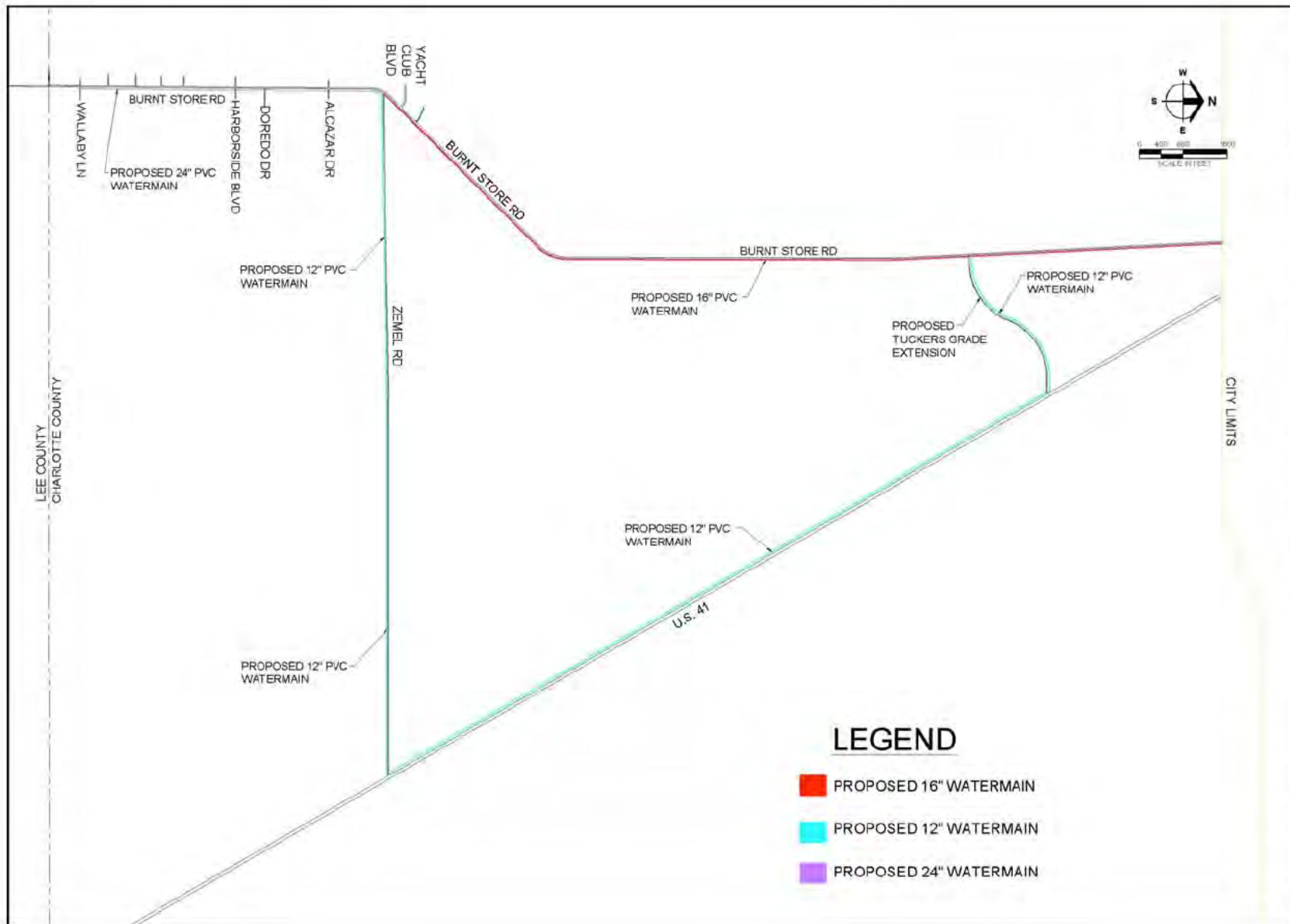
1500 ROYAL PALM SQUARE BLVD
4TH FLOOR, FORT MYERS, FL 33909

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NOT FOR CONSTRUCTION

DATE:	05/20/2015
PROJECT:	
LOCATION:	UNDEVELOPED PLOTS
CLIENT:	LEE COUNTY
DESIGNER:	BARRACO
SCALE:	
DATE:	
PROJECT:	
LOCATION:	
CLIENT:	
DESIGNER:	
SCALE:	
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CLIENT:	
DESIGNER:	
SCALE:	
DATE:	

PROPOSED TERN BAY WATER MAIN EXPANSION MAP

PROJECT NO.	60115
SHEET NO.	112



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PHONE: (888) 481-1170
FAX: (239) 461-1310
FLORIDA CERTIFICATE OF AUTHORITY:
ENGINEER NO. 28261, SURVEYOR NO. 4364

PROJECT NO. 11-001

**BURNT STORE
IMPROVEMENT
INITIATIVE**
1000 ROYAL PALM SQUARE BLVD.
Ft. Myers, FL 33902-3331

DATE: 08/01/2011

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OR IDENTITIES MAY CHANGE
SIGNIFICANTLY BASED UPON OTHER
ENVIRONMENTAL, ENGINEERING AND
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ALL INFORMATION IS FOR GENERAL INFORMATION AND IS
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PROFESSIONAL OPINION OF THE ENGINEER.

FILE NAME:	08/01/2011
LAYOUT:	LAYOUT
LOCATION:	08/01/2011
PROJECT NO.:	11-001
TITLE:	08/01/2011
DATE:	08/01/2011
BY:	
APP'D:	
DATE:	
BY:	
DATE:	

PROJECT NO. 11-001

PROJECT NAME: 11-001

DATE: 08/01/2011

**PROPOSED
COORDINATED
UTILITY MAP**

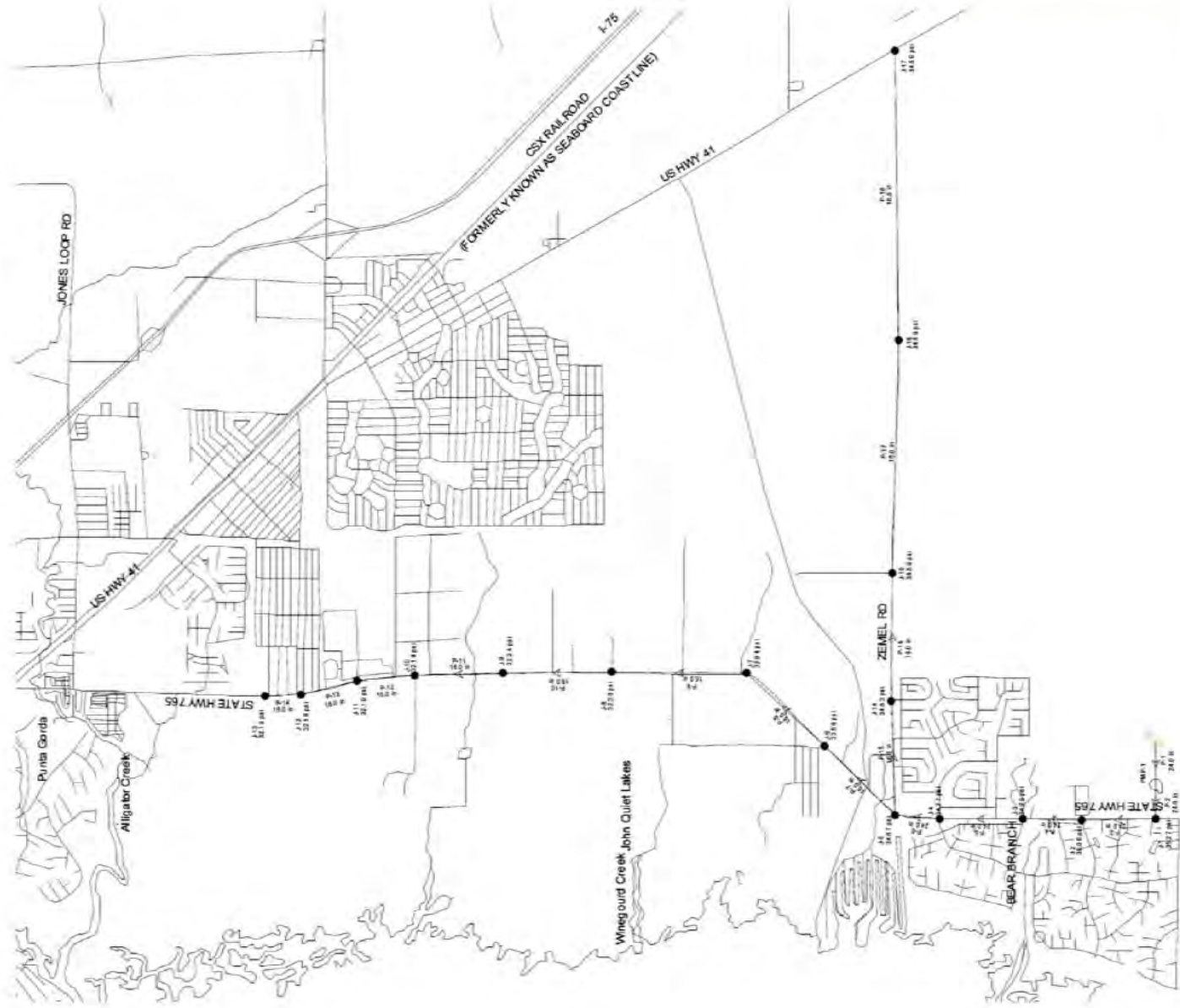
PROJECT NO.:	11-001
DATE:	08/01/2011

ORDER OF MAGNITUDE ESTIMATE
for the construction of
BURNT STORE UTILITY IMPROVEMENTS

Exhibit UE1

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
I. POTABLE WATER - BURNT STORE					
A.	16" Water Main	23,850	LF	45.00	1,073,250.00
B.	Connection to Existing	2	LS	6,000.00	12,000.00
C.	16" Gate Valve	23	EA	4,500.00	103,500.00
D.	Restoration	1	LS	100,000.00	100,000.00
SUB TOTAL					\$1,288,750.00
15% CONTINGENCY					\$193,312.50
Total					\$1,482,062.50
II. POTABLE WATER - TUCKERS GRADE EXTENSION					
A.	12" Water Main	5,500	LF	38.00	209,000.00
B.	Connection to Existing	2	EA	4,000.00	8,000.00
C.	12" Gate Valve	5	EA	3,200.00	16,000.00
D.	Restoration	1	LS	25,000.00	25,000.00
SUB TOTAL					\$258,000.00
15% CONTINGENCY					\$38,700.00
Total					\$296,700.00
III. FORCE MAIN - BURNT STORE					
A.	12" Force Main	25,700	LF	40.00	1,028,000.00
B.	Connection to Existing	2	LS	4,500.00	9,000.00
C.	12" Plug Valve	12	EA	5,500.00	66,000.00
D.	Restoration	1	LS	100,000.00	100,000.00
SUB TOTAL					\$1,203,000.00
15% CONTINGENCY					\$1,383,450.00
Total					\$2,586,450.00
GRAND TOTAL					\$3,162,212.50

Scenario: AVG-DAY



Title: BURNT STORE RD master utilities
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01/03/05 02:59:43 PM © Haestad Methods, Inc.

Barraco and Associates, Inc.
37 Brookside Road Waterbury, CT 06708 USA +1-203-755-1666

Project Engineer: Matt Jones
WaterCAD v8.5 [6.5120]
Page 1 of 1

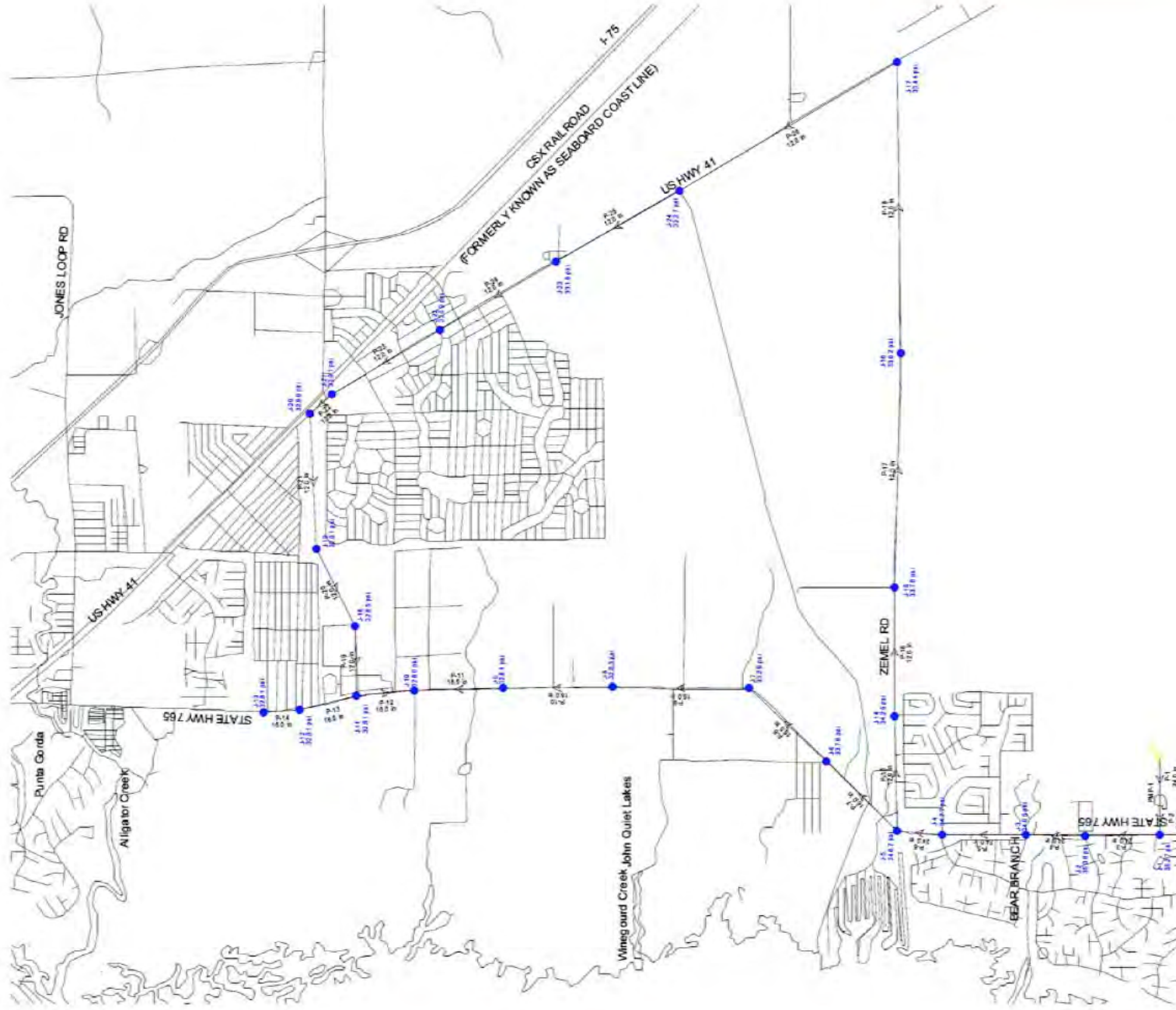
Scenario: AVG-DAY
Steady State Analysis
Junction Report

Label	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-11	Demand	0.00	0.00	74.39	32.19
J-12	Demand	0.00	0.00	74.39	32.19
J-9	Demand	0.00	0.00	74.51	32.24
J-10	Demand	211.62	211.62	74.39	32.19
J-13	Demand	0.00	0.00	74.39	32.19
J-16	Demand	0.00	0.00	79.94	34.59
J-17	Demand	0.00	0.00	79.94	34.59
J-14	Demand	0.00	0.00	80.05	34.63
J-15	Demand	166.67	166.67	79.94	34.59
J-8	Demand	449.66	449.66	74.65	32.30
J-1	Demand	625.00	625.00	81.51	35.27
J-2	Demand	106.00	106.00	81.08	35.08
J-3	Demand	0.00	0.00	80.78	34.95
J-6	Demand	311.17	311.17	77.57	33.56
J-7	Demand	86.81	86.81	76.12	32.94
J-4	Demand	0.00	0.00	80.36	34.77
J-5	Demand	39.60	39.60	80.14	34.67

Scenario: AVG-DAY
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Material	Hazen-Williams C	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-1	1,596.00	24.0	Ductile Iron	130.0	1,996.53	0.00	-0.50	0.50	0.31
P-2	1,298.00	24.0	Ductile Iron	130.0	1,996.53	81.92	81.51	0.40	0.31
P-3	2,789.00	24.0	Ductile Iron	130.0	1,371.53	81.51	81.08	0.43	0.16
P-4	2,210.00	24.0	Ductile Iron	130.0	1,265.53	81.08	80.78	0.30	0.13
P-5	3,122.00	24.0	Ductile Iron	130.0	1,265.53	80.78	80.36	0.42	0.13
P-6	1,656.00	24.0	Ductile Iron	130.0	1,265.53	80.36	80.14	0.22	0.13
P-7	3,709.00	16.0	Ductile Iron	130.0	1,059.26	80.14	77.57	2.58	0.69
P-8	3,959.00	16.0	Ductile Iron	130.0	748.09	77.57	76.12	1.44	0.36
P-9	5,069.00	16.0	Ductile Iron	130.0	661.28	76.12	74.65	1.47	0.29
P-10	4,070.00	16.0	Ductile Iron	130.0	211.62	74.65	74.51	0.14	0.04
P-11	3,281.00	16.0	Ductile Iron	130.0	211.62	74.51	74.39	0.12	0.04
P-12	2,166.00	16.0	Ductile Iron	130.0	0.00	74.39	74.39	0.00	0.00
P-13	2,170.00	16.0	Ductile Iron	130.0	0.00	74.39	74.39	0.00	0.00
P-14	1,352.00	16.0	Ductile Iron	130.0	0.00	74.39	74.39	0.00	0.00
P-15	4,259.00	16.0	Ductile Iron	130.0	166.67	80.14	80.05	0.10	0.02
P-16	4,799.00	16.0	Ductile Iron	130.0	166.67	80.05	79.94	0.11	0.02
P-17	8,713.00	16.0	Ductile Iron	130.0	0.00	79.94	79.94	0.00	0.00
P-18	10,832.00	16.0	Ductile Iron	130.0	0.00	79.94	79.94	0.00	0.00

Scenario: AVG-DAY (with loop)



Title: BURNT STORE RD master utilities
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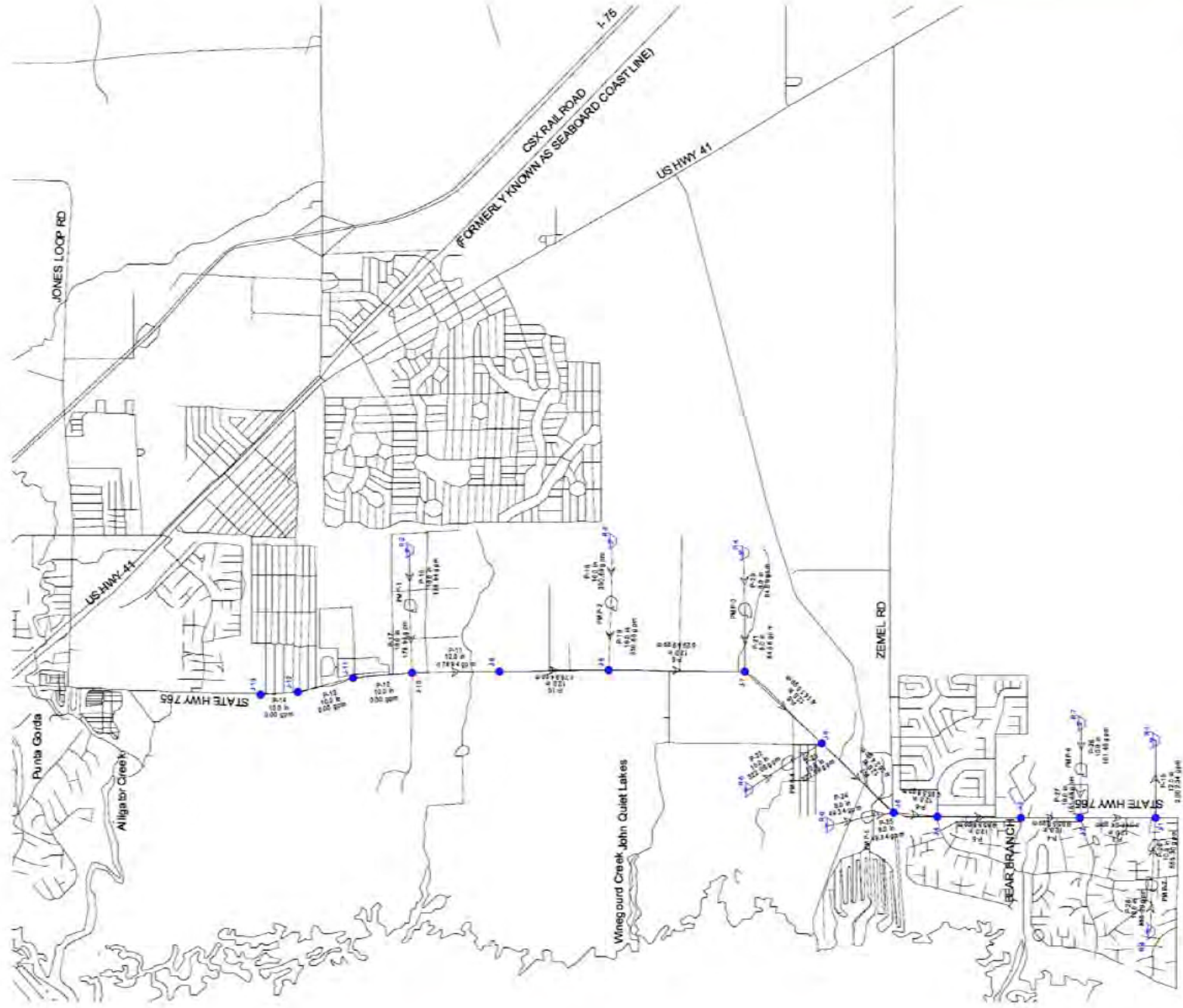
Barraco and Associates, Inc.
37 Brookside Road Waterbury, CT 06708 USA +1-203-755-1666

Project Engineer: Matt Jones
WaterCAD v6.5 [6.5120]
Page 1 of 1

Scenario: AVG-DAY (with loop)
Steady State Analysis
Junction Report

Label	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-15	Demand	166.67	166.67	78.07	33.78
J-16	Demand	0.00	0.00	77.72	33.62
J-17	Demand	0.00	0.00	77.28	33.44
J-12	Demand	0.00	0.00	75.83	32.81
J-13	Demand	0.00	0.00	75.83	32.81
J-14	Demand	0.00	0.00	79.17	34.25
J-18	Demand	0.00	0.00	75.93	32.85
J-22	Demand	0.00	0.00	76.49	33.09
J-23	Demand	0.00	0.00	76.69	33.18
J-24	Demand	0.00	0.00	76.90	33.27
J-19	Demand	0.00	0.00	76.06	32.91
J-20	Demand	0.00	0.00	76.26	32.99
J-21	Demand	0.00	0.00	76.30	33.01
J-2	Demand	106.00	106.00	81.08	35.08
J-3	Demand	0.00	0.00	80.78	34.95
J-4	Demand	0.00	0.00	80.36	34.77
J-1	Demand	625.00	625.00	81.51	35.27
J-5	Demand	39.60	39.60	80.14	34.67
J-9	Demand	0.00	0.00	75.84	32.81
J-10	Demand	211.62	211.62	75.81	32.80
J-11	Demand	0.00	0.00	75.83	32.81
J-6	Demand	311.17	311.17	78.03	33.76
J-7	Demand	86.81	86.81	76.94	33.29
J-8	Demand	449.66	449.66	75.88	32.83

Scenario: AVG-DAY (sewer)



Title: BURNT STORE RD master utilities
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Project Engineer: Matt Jones
 WaterCAD v6.5 [6.5120]
 Page 1 of 1

Scenario: AVG-DAY (sewer)
Steady State Analysis
Junction Report

Label	Type	Base Flow (gpm)	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-4	Demand	0.00	0.00	48.81	21.12
J-5	Demand	0.00	0.00	52.89	22.88
J-6	Demand	0.00	0.00	61.21	26.48
J-3	Demand	0.00	0.00	41.10	17.78
J-1	Demand	0.00	0.00	26.54	11.48
J-2	Demand	0.00	0.00	35.85	15.42
J-11	Demand	0.00	0.00	70.01	30.29
J-12	Demand	0.00	0.00	70.01	30.29
J-13	Demand	0.00	0.00	70.01	30.29
J-10	Demand	0.00	0.00	70.01	30.29
J-7	Demand	0.00	0.00	65.28	28.24
J-8	Demand	0.00	0.00	69.24	29.96
J-9	Demand	0.00	0.00	69.87	30.14

Scenario: AVG-DAY (sewer)
Steady State Analysis
Pipe Report

Label	Length (ft)	Diameter (in)	Material	Hazen-Williams C	Discharge (gpm)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Pressure Pipe Headloss (ft)	Headloss Gradient (ft/1000ft)
P-3	2,789.00	12.0	Ductile Iron	130.0	-1,147.04	26.54	35.65	9.11	3.27
P-4	2,210.00	12.0	Ductile Iron	130.0	-985.58	35.65	41.10	5.45	2.47
P-5	3,122.00	12.0	Ductile Iron	130.0	-985.58	41.10	48.81	7.70	2.47
P-6	1,656.00	12.0	Ductile Iron	130.0	-985.58	48.81	52.89	4.09	2.47
P-7	3,709.00	12.0	Ductile Iron	130.0	-936.24	52.89	61.21	8.32	2.24
P-8	3,959.00	12.0	Ductile Iron	130.0	-614.15	61.21	65.28	4.07	1.03
P-9	5,069.00	12.0	Ductile Iron	130.0	-529.59	65.28	69.24	3.96	0.78
P-10	4,070.00	12.0	Ductile Iron	130.0	-178.94	69.24	69.67	0.43	0.10
P-11	3,281.00	12.0	Ductile Iron	130.0	-178.94	69.67	70.01	0.34	0.10
P-12	2,166.00	10.0	Ductile Iron	130.0	0.00	70.01	70.01	0.00	0.00
P-13	2,170.00	10.0	Ductile Iron	130.0	0.00	70.01	70.01	0.00	0.00
P-14	1,952.00	10.0	Ductile Iron	130.0	0.00	70.01	70.01	0.00	0.00
P-15	2,894.00	12.0	Ductile Iron	130.0	2,002.34	26.54	0.00	26.54	9.17
P-16	2,030.00	10.0	Ductile Iron	130.0	178.94	0.00	-0.52	0.52	0.25
P-17	2,549.00	10.0	Ductile Iron	130.0	178.94	70.66	70.01	0.65	0.25
P-18	2,282.00	10.0	Ductile Iron	130.0	350.65	0.00	-2.02	2.02	0.88
P-19	2,525.00	10.0	Ductile Iron	130.0	350.65	71.47	69.24	2.23	0.88
P-20	2,091.00	8.0	Ductile Iron	130.0	84.56	0.00	-0.39	0.39	0.19
P-21	2,303.00	8.0	Ductile Iron	130.0	84.56	65.71	65.28	0.43	0.19
P-22	1,736.00	10.0	Ductile Iron	130.0	322.09	0.00	-1.10	1.31	0.76
P-23	1,508.00	10.0	Ductile Iron	130.0	322.09	62.35	61.21	1.14	0.76
P-24	1,464.00	8.0	Ductile Iron	130.0	49.34	0.00	-0.07	0.10	0.07
P-25	969.00	8.0	Ductile Iron	130.0	49.34	52.96	52.89	0.07	0.07
P-26	1,698.00	10.0	Ductile Iron	130.0	161.46	0.00	-0.36	0.36	0.21
P-27	1,844.00	10.0	Ductile Iron	130.0	161.46	36.04	35.65	0.39	0.21
P-28	1,713.00	10.0	Ductile Iron	130.0	855.30	0.00	-7.90	7.90	4.61
P-29	2,527.00	10.0	Ductile Iron	130.0	855.30	38.19	26.54	11.65	4.61

D. ENVIRONMENTAL ANALYSIS

INTRODUCTION

The Burnt Store Road Corridor Study Area is bounded by the Lee County line to the south, U.S. 41 (Tamiami Trail) to the east, Tuckers Grade to the north, and Charlotte Harbor to the west (Figure 1). The following is a discussion of the existing conditions and the potential for a wildlife corridor and other landscape corridors in the Study Area.

STUDY AREA EXISTING CONDITIONS

The vegetation and land use mapping for the Study Area was conducted using 2002 rectified (scale 1" = 2,400') color aerials and Southwest Florida Water Management District (SWFWMD) Geographic Information System (GIS) District Lands Map Viewer. Mapping was done utilizing the Florida Land Use, Cover and Forms Classification System¹ (FLUCFCS), Level II and Level III. The mapping was done from aerials and has not been field verified. Existing land cover and use in the Study Area includes low and medium density residential, cropland and pasture, upland coniferous forest, canal, mangrove swamps, stream swamps, wetland coniferous forest, freshwater marsh, saltwater marsh, disturbed land, and a landfill (Figure 2).

The Study Area is located within the Charlotte Harbor Basin. Historic flow of water in this region is from the northeast to the southwest. Sheet flow of water in the Study Area appears to follow that pattern. However, man-made barriers such as Interstate 75, U.S. 41, Burnt Store Road, agricultural activities, and residential development have altered the historic flow ways. In addition, a large drainage canal (Zemel/Clark's Canal) bisects the majority of the Study Area.

Public lands occur within and surrounding the Study Area (Figure 3). The northern portion of the Yucca Pens Unit occurs in the southeast portion of the Study Area. Yucca Pens Unit (14,577 acres) continues south into Lee County and is included in and managed as part of the Fred C. Babcock-Cecil M. Webb Wildlife Management Area (Babcock-Webb WMA) by the Florida Fish and Wildlife Conservation Commission (FWCC). According to the Florida Natural Areas Inventory, this property contains the largest and highest-quality slash pine flatwoods remaining in Southwest Florida². Charlotte Flatwoods is adjacent and to the east of the Yucca Pens Unit, west of U.S. 41, and north of Zemel Road. The Charlotte Flatwoods (486 acres) is owned and managed by Charlotte County.

Portions of the Charlotte Harbor Preserve State Park occur in the northwest and southwest portion of the Study Area west of Burnt Store Road. The park totals 40,564 acres and is owned by the Trustees of the Internal Improvement Trust Fund and SWFWMD and managed by the Florida Department of Environmental Protection, Division of Recreation and Parks. The Charlotte Harbor Preserve State Park contains uplands and estuaries along the banks of the Caloosahatchee, Peace, and Myakka Rivers, plus large tracts bordering Charlotte Harbor.

Adjacent and northeast of the Study Area is the 80,335-acre Babcock-Webb WMA. This wildlife management area contains a large area of South Florida slash pine flatwoods with active red-cockaded woodpecker (RCW) (*Picoides borealis*) colonies². This area also supports other listed species such as the Florida black bear (*Ursus americanus floridanus*), Audubon's crested caracara (*Polybours plancus audubonii*), a wading bird rookery, and the largest known population of beautiful pawpaw (*Deeringothammus pulchellus*)².

Proposed public lands also occur within the Study Area (Figure 3). Anyone may nominate a project for state purchase by the Division of State Lands (within the Florida Department of Environmental Protection) under the Florida Forever Lands program. Federal, state, and local government agencies; conservation organizations; or private citizens are project sponsors.

Upon approval by the governor and cabinet, the Division of State Lands negotiates with owners and buys lands on behalf of the people of Florida. The Division uses independent property appraisals as a basis for negotiations, but it cannot act without the consent of the governor and cabinet. The governor and cabinet oversee the entire program by approving the list of projects recommended each year by the Acquisitions and Restoration Council and by approving specific purchases. Title to these lands is vested in the Board of Trustees of the Internal Improvement Trust Fund, which is comprised of the governor and cabinet.

Non-profit organizations (e.g., The Nature Conservancy, the Trust for Public Land, The Conservation Fund, and the Land Trust Alliance) may play a role in helping the Division acquire land for conservation. These organizations can assist private landowners interested in offering their land for acquisition under Florida Forever. Land acquisition by the Florida Forever program is almost exclusively voluntary. The state prefers to work with willing sellers to avoid resorting to the power of eminent domain.

¹ Florida Department of Transportation. 1999. *Florida Land Use, Cover and Forms Classification System*. Procedure No. 550-010-001-a. Third Edition.

² Florida Natural Areas Inventory website. <http://www.fnai.org>

LISTED SPECIES

Listed species have been documented by the FWCC in and adjacent to the Study Area (Figure 4). Three bald eagle (*Haliaeetus leucocephalus*) nests (ID# CH-034, CH-037, and CH-043) have been recorded in the Study Area as being active as of the 2001-2002 nesting season. Other bald eagle nests occur to the south, east, and north of the Study Area. A wading bird rookery (No. 615321) is recorded on a mangrove island on the west side of the Study Area in Township 42 South, Range 23 East. This rookery was last recorded active and occupied by great egrets (*Casmerodius albus*) and great blue herons (*Ardea herodias*) in 1989. As mentioned previously, active RCW colonies occur at the Babcock-Webb WMA to the northeast of the Study Area. RCW's have also been recorded to the south and north of the Study Area on non-public land. Florida scrub jays (*Aphelocoma coerulescens coerulescens*) have been recorded to the north and south of the Study Area.

Listed species with the potential to occur in the Study Area based on the habitat types (FLUCFCS) is shown in Table 1. The list of potential species is based on experience within this region, the Florida Natural Areas Inventory, and personal communication with FWCC staff.

Table. Potential Listed Species by Habitat Type

FLUCFCS Code and Description		Potential Protected Species
210	Cropland and Pasture	Florida Sandhill Crane (<i>Grus canadensis pratensis</i>)
		Florida Panther (<i>Felis concolor coryi</i>)
		Gopher Tortoise (<i>Gopherus polyphemus</i>)
410	Upland Coniferous Forest	Eastern Indigo Snake (<i>Drymarchon corais couperi</i>)
		Gopher Tortoise (<i>Gopherus polyphemus</i>)
		Gopher Frog (<i>Rana areolata</i>)
		Southeastern American Kestrel (<i>Falco sparverius paulus</i>)
		Red-Cockaded Woodpecker (<i>Picoides borealis</i>)
		Florida Scrub Jay (<i>Aphelocoma coerulescens coerulescens</i>)
		Florida Panther (<i>Felis concolor coryi</i>)
		Sherman's Fox Squirrel (<i>Sciurus niger shermani</i>)
		Florida Black Bear (<i>Ursus americanus floridanus</i>)
		Fakahatchee Burmannia (<i>Burmannia flava</i>)
		Satinleaf (<i>Chrysophyllum divaeforme</i>)
		Beautiful Pawpaw (<i>Deeringothamnus pulchellus</i>)
		Florida Coontie (<i>Zamia floridana</i>)

FLUCFCS Code and Description		Potential Protected Species
421	Xeric Oak	Eastern Indigo Snake (<i>Drymarchon corais couperi</i>) Gopher Tortoise (<i>Gopherus polyphemus</i>) Gopher Frog (<i>Rana areolata</i>) Florida Scrub Jay (<i>Aphelocoma coerulescens coerulescens</i>) Florida Coontie (<i>Zamia floridana</i>)
426	Tropical Hammock	Eastern Indigo Snake (<i>Drymarchon corais couperi</i>) Gopher Tortoise (<i>Gopherus polyphemus</i>) Gopher Frog (<i>Rana areolata</i>) Prickly-apple (<i>Cereus gracilis</i>) Satinleaf (<i>Chrysophyllum dioeciforme</i>) Florida Coontie (<i>Zamia floridana</i>)
510	Canal and Ditch	American Alligator (<i>Alligator mississippiensis</i>) Little Blue Heron (<i>Egretta caerulea</i>) Snowy Egret (<i>Egretta thula</i>) Tricolored Heron (<i>Egretta tricolor</i>)
612	Mangrove Swamps	American Alligator (<i>Alligator mississippiensis</i>) American Crocodile (<i>Crocodylus acutus</i>) Reddish Egret (<i>Egretta rufescens</i>) Wood Stork (<i>Mycteria americana</i>) Roseate Spoonbill (<i>Ajaia ajaja</i>) Brown Pelican (<i>Pelecanus occidentalis</i>) Florida Black Bear (<i>Ursus americanus floridanus</i>) Prickly-apple (<i>Cereus gracilis</i>)
615	Stream Swamps	American Alligator (<i>Alligator mississippiensis</i>) Little Blue Heron (<i>Egretta caerulea</i>) Snowy Egret (<i>Egretta thula</i>) Tricolored Heron (<i>Egretta tricolor</i>) White Ibis (<i>Eudocimus albus</i>) Wood Stork (<i>Mycteria americana</i>) Sherman's Fox Squirrel (<i>Sciurus niger shermani</i>)
620	Wetland Coniferous Forest	Gopher Frog (<i>Rana areolata</i>) American Alligator (<i>Alligator mississippiensis</i>) Arctic Peregrine Falcon (<i>Falco peregrinus tundrius</i>) Little Blue Heron (<i>Egretta caerulea</i>) Snowy Egret (<i>Egretta thula</i>) Tricolored Heron (<i>Egretta tricolor</i>) White Ibis (<i>Eudocimus albus</i>) Limpkin (<i>Aramus guarauna</i>) Wood Stork (<i>Mycteria americana</i>) Florida Black Bear (<i>Ursus americanus floridanus</i>) Sherman's Fox Squirrel (<i>Sciurus niger shermani</i>) Florida Panther (<i>Felis concolor coryi</i>)
641	Freshwater Marsh	American Alligator (<i>Alligator mississippiensis</i>) Little Blue Heron (<i>Egretta caerulea</i>) Snowy Egret (<i>Egretta thula</i>) Tricolored Heron (<i>Egretta tricolor</i>) White Ibis (<i>Eudocimus albus</i>) Florida Sandhill Crane (<i>Grus canadensis pratensis</i>) Snail Kite (<i>Rosphanus sociabilis</i>) Wood Stork (<i>Mycteria americana</i>)
642	Saltwater Marsh	American Crocodile (<i>Crocodylus acutus</i>) Little Blue Heron (<i>Egretta caerulea</i>) Snowy Egret (<i>Egretta thula</i>) Tricolored Heron (<i>Egretta tricolor</i>) White Ibis (<i>Eudocimus albus</i>) Roseate Spoonbill (<i>Ajaia ajaja</i>) Wood Stork (<i>Mycteria americana</i>) Reddish Egret (<i>Egretta rufescens</i>)
740	Disturbed Land	Gopher Tortoise (<i>Gopherus polyphemus</i>)

WILDLIFE CORRIDORS

Wildlife corridors are generally strips of habitat that connect isolated patches of habitat. They can help to reduce or moderate some of the adverse effects of habitat fragmentation by facilitating dispersal of wildlife between substantive patches of remaining habitat¹. Wildlife corridors have been found to have beneficial effects beyond the area they add. Studies suggest that increased plant and animal movement through corridors will have positive impacts on plant populations and community interactions in fragmented landscapes².

Wildlife need to move across large areas searching for food, nesting sites, and mates. Corridors of vegetation linking areas are valuable as they allow movement of wildlife and also provide useful habitat in themselves. Corridors are often used by young animals moving out seeking new territories. This helps to increase the gene flows between the individual habitats, which improves the fitness of species. This also avoids overcrowding of existing habitats and allows re-colonization of areas from which animals have disappeared.

One issue with wildlife corridors is they are susceptible to the edge effect, which means that certain species do not prosper near the edges of an ecosystem. An edge effect is the effect on an ecosystem to a contrasting environment. When an edge is created to any natural ecosystem, and the area outside the boundary is a disturbed or unnatural system, the natural ecosystem is seriously affected for some distance in from the edge. In the case of a forest where the adjacent land has been cut, creating an openland/forest boundary, sunlight and wind penetrate to a much greater extent, drying out the interior of the forest close to the edge and encouraging rampant growth of opportunistic species at the edge.

The term edge effect is used in conjunction with the boundary between wild land, especially forest, and disturbed or developed land. Wildlife corridors sometimes cause controversy if they affect the human population, such as when they cause inconveniences or affect the use of private land.

Wildlife corridors are used to protect wildlife, so they should be designed to limit the impact of man. This requires either distance, or compliance, and the latter is difficult to achieve. Wildlife corridors should be as wide as possible and where possible established in natural forest, which has preferably not been subject to severe disturbance. Where existing corridors do not exist they can be established by plantings.

Beier and Loe⁵ outlined a six-step “checklist” for designing and monitoring the effectiveness of wildlife corridors, which are described below.

- Step 1: Identify the habitat areas the corridor is designed to connect.
- Step 2: Select several target species for the design of the corridor (i.e., select “umbrella species”).
- Step 3: Evaluate the relevant needs of each target species.
- Step 4: For each potential corridor, evaluate how the area will accommodate movement by each target species.
- Step 5: Draw the corridor on a map.
- Step 6: Design a monitoring program.

Evaluating how the potential corridor will accommodate movement by each species (Step 4) is an important step in the process³. It is necessary to consider how likely the animal will encounter the entrance to the corridor, actually enter the corridor, and follow it to the end. In addition, it is important to note whether there is sufficient concealing cover, food, and water within the corridor for the animal to reach the full length of the corridor, or whether such elements need to be created and maintained³. Lastly, specific barriers to movement within the potential corridor must be assessed, including topography, roads and type of road crossing, fences, outdoor lighting, domestic pets, noise from vehicle traffic or nearby buildings, and other human impacts³.

Beyond the use of the corridors by wildlife, they can serve as greenways. Greenways go beyond physical connections and include visual linkages. Greenways mostly connect recreational, natural, cultural, and/or historic areas, but can also serve to provide aesthetic beauty.

A “blueway” or flow way is another type of corridor that can provide movement and habitat for wildlife, especially for aquatic species and wading birds. In addition, flow ways have been proposed in Southwest Florida to serve as hydrologic and water quality enhancement features.

³ Bond, Monica. 2003. *Principles of Wildlife Corridor Design*. Center for Biological Diversity.

⁴ Joshua J. Tewksbury, et al. 2002. *Corridors affect plants, animals, and their interactions in fragmented landscapes*. *Proc Natl Acad Sci U S A*. 2002 October; 99(20): 12923–12926. Published online 2002 September 18.

⁵ Beier, P. and S. Loe. 1992. *A checklist for evaluating impacts to wildlife movement corridors*. *Wildlife Society Bulletin* 20:434-440.

PROPOSED WILDLIFE CORRIDOR

As discussed above, six steps should be followed in the designing and monitoring of the effectiveness of wildlife corridors. The first step is to identify the habitat areas the corridor is designed to connect. The study area presents potential corridors based on its existing conditions. A significant portion of the study area is under public ownership and managed for wildlife by state and local agencies (Figure 3). These areas can be linked via a wildlife corridor. Habitat types that can be linked via the corridor are Upland Coniferous Forest (FLUCFCS Code 410), Mangrove Swamps (FLUCFCS Code 612), Wetland Coniferous Forest (FLUCFCS Code 620), and Freshwater Marsh (FLUCFCS Code 641) in the study area (Figure 2). Linking these habitat types could be accomplished, but it is important first to target which wildlife species the corridors would benefit.

For the study area, an analysis was conducted to determine target species for the wildlife corridor. As previously described, this included analyzing listed species occurrences that are available from the FWCC and local governments within and adjacent to the study area. The FWCC has databases that include species such as the Florida scrub jay, red-cockaded woodpecker, bald eagle, Florida black bear, as well as wading bird rookeries. The FWCC also has a database current through 2004 for Florida panther telemetry. Charlotte County has records for Florida scrub jay habitat and occurrences. Charlotte and Lee County both have records for bald eagle nests. A review of these databases identified no occurrences for Florida black bear and Florida panther within the study area. As such, movement through the study area by large mammals such as the Florida panther is not likely to occur. It should be noted that movement through the study area by Florida panther is currently restricted by I-75 and U.S. 41 to the east of the Plan Area. Potential target wildlife species that utilize the habitat types that could be linked by a corridor in the study area include the Big Cypress fox squirrel (*Sciurus niger avicennia*), American alligator (*Alligator mississippiensis*), red-cockaded woodpecker, wood stork (*Mycteria americana*), and other listed wading birds (i.e., little blue heron, snowy egret, tri-colored heron).

Based on literature research, public and government agency input, and site specific conditions, one wildlife corridor is recommended for the study area. The proposed alignment for the corridor and its potential function are shown on Figure 5. This corridor takes advantage of the existing corridor created by Zemel/Clark’s Canal to create a riparian type wildlife corridor. The corridor would run along the north side of the existing Zemel/Clark’s Canal from existing public lands on the east side of Burnt Store Road to mangrove wetlands to the west of the Burnt Store Road. The proposed width of the wildlife corridor is 100 feet to accommodate the identified wildlife species.

Zemel/Clark’s Canal currently contains spoil berms on either side of it. One way to enhance the wildlife corridor would be to remove the berms and create littoral shelf areas along the canal to provide foraging areas for wading birds. The littoral areas could also serve as water quality enhancement for the stormwater that enters the canal.

In addition to the proposed wildlife corridor, three flow-ways or “blueways” and two greenways are proposed.

With respect to the flow-ways, the northern most flow-way is proposed in response to stormwater drainage concerns raised by the residences of Tropical Gulf Acres. The

cause of the drainage issues has not yet been determined and would require a water management study. One potential reason for the drainage issues is that existing residential developments in the study area occurred prior to modern storm water management codes and practices. A restored or created flow-way could serve to alleviate stormwater drainage issues. The proposed flow-way could connect surface water management lakes and on-site wetlands. Littoral shelves could be planted along the proposed flow-way to provide water quality treatment. The littoral shelves could also provide foraging areas for wading birds. If roads are to be constructed where the flow-way is proposed, the hydrological integrity of the flow-way can be maintained through drainage crossings. The southern two flow-ways are recommended by FWCC staff and follow existing natural and man-made drainage systems.

Two greenways are proposed for the study area and are shown on Figure 5. According to Charlotte County staff, the Tern Bay Development Company LLC is proposing greenways as part of its project.¹ The Tern Bay project is located on the west side of Burnt Store Road approximately 2.5 miles north of the Lee/Charlotte County line. Due to the narrow widths of the proposed corridors at Tern Bay they would be significantly limited as wildlife corridors. However, they could serve as greenways to provide visual linkages and possibly serve small to medium size mammals if crossings were constructed under Burnt Store Road. The two proposed greenways shown on Figure 5 incorporate the two Tern Bay corridors and potential greenways to the east of Burnt Store Road. Please note that the alignment of the greenway is approximate and should be revised to follow the Tern Bay final site plans.

¹ Personal communication with Susie Derheimer, Charlotte County Community Development. December 14, 2004.

GUIDELINES FOR WILDLIFE CORRIDOR, FLOW-WAY AND GREENWAY DESIGN

The following guidelines are intended to assist in the design of the flow-ways, greenway, and the wildlife corridor. More detailed design criteria may be developed based on site specific conditions at time of local development approval.

1. Human development along the edge of a corridor should form as straight an edge as possible to avoid the potential to trap animals or direct them out of the corridor network where conflict with humans may result.
2. Corridors proposed for wildlife use should be as wide as possible.
3. Maximize land uses adjacent to the corridor that reduce human impacts to the corridor.
4. If a corridor incorporates a trail for passive recreational use, the trail should be designed per Charlotte County Parks and Recreation standards and the alignment chosen to minimize impacts to native vegetation.
5. Corridors should incorporate as much existing native vegetation as possible. If feasible, disturbed areas along the corridor should be planted with native trees, shrubs, and ground cover to provide food and cover for wildlife.
6. Corridor design may have to include buffer zones to reduce undesirable human activities.
7. Flow-ways will be designed to meander as much as feasible and include wider areas for settling zones and filtering vegetation.
8. At the time of local government approval for projects that abut or include identified flow-ways, maintenance and/or access easements may be required to ensure the County's ability to maintain the waterways for surface water management conveyance.

The following additional guidelines are proposed for the designated wildlife corridor:

1. A 25-foot buffer will be established between the corridor and proposed development activities. The buffer will consist of native habitats where these native habitats currently exists. In areas where native vegetation does not currently exist, native vegetation plantings will be conducted within the 25-foot buffer.

2. Directional lighting will be utilized within development areas within 50 feet of the corridor. Lighting within 50 feet of the corridor will be shielded and directed away from the corridor.
3. A conservation easement (or similar binding document) will be required at time of local development approval to ensure the protection in perpetuity of the 25-foot buffer and corridor. The conservation easement will limit human access to the corridor by prohibiting uses such as structures (gazebos, docks, etc.) within the 25-foot buffer, corridor, and adjacent canal. Passive recreational uses such as nature trails are acceptable uses within the 25-foot buffer and corridor.
4. A habitat management plan for the 25-foot buffer and corridor will be required at time of local development order approval. The habitat management plan will include details regarding exotic vegetation removal, native vegetation plantings, and maintenance of the 25-foot buffer and corridor.

WILDLIFE CROSSINGS

A wildlife crossing under Burnt Store Road would be required for the proposed wildlife corridor. The FWCC has guidelines that are useful in designing wildlife crossings under roadways and are described in the paragraphs below.¹² The objectives in designing effective wildlife crossings are to:

1. Provide sufficient air or head clearance
2. Provide sufficient width to make the crossing a more attractive route for the animal than crossing the road elsewhere
3. Avoid the tunnel effect caused by a passage too narrow for the target species to comfortably use
4. Provide sufficient barriers to direct animals to the crossing as the path of least resistance to their travel

Roadway wildlife crossings generally fall into three categories: aquatic crossings, small terrestrial animal crossings, and large terrestrial animal crossings. The proposed wildlife corridor would require a small terrestrial animal crossing.

Two types of small terrestrial animal crossings exist as undercrossings associated with wetlands and aquatic systems and undercrossings in upland areas. According to the FWCC, the clearance above grade of either type of crossing should be a minimum of three feet, with four to five feet clearance strongly recommended if small mammals are included as target species. The width of the undercrossing associated with wetland and aquatic systems should be equal to either the width of the wetland area, plus a 15-foot buffer on each side, or equal to the width of the intersected roadway grade from toe of slope to toe of slope, whichever is greater. The width of the crossing associated with uplands should be equal to either the width of the natural upland habitat utilized by the target species and traversed by the roadway or equal to the width of the intersected roadway grade from toe of slope to toe of slope divided by 10, whichever is less. For example, a 120-foot wide roadway would have a 12-foot wide undercrossing.

Natural wetland and upland substrate should be retained throughout the profile of the crossing. If a culvert is used, the bottom should be buried in and covered with natural soils and vegetation. Natural vegetation should also be retained on both sides of the undercrossing.

For small terrestrial animal crossings, the FWCC recommends that fencing, a minimum of five feet in height, should be erected parallel to the roadway at the toe of the roadway slope for the width of the habitat utilized by the target species and traversed by the road.

CORRIDOR MANAGEMENT AND MAINTENANCE

Development of management and maintenance programs for the corridors are essential to ensure the corridor's success. Responsible entities must be established to implement

the management and maintenance of the corridors. The responsible entity may be a public agency, such as the Charlotte County Parks and Recreation Department, or a public and private partnership. Funding sources must be determined for the short- and long-term management and maintenance of the corridor and could come from private developers for mitigation of their project, grants, or private and public partnerships.

Restrictions on corridor use and activities that may affect the corridor should be developed. Some restrictions on use can include prohibiting use by humans or limit the type of use (i.e., pedestrian only, no hunting, etc.). If recreational trails are incorporated into the corridor, seasonal or temporal (i.e., time of day) trail closures could be implemented when wildlife are most sensitive to human disturbance. Limits on domestic animal use could be incorporated in the corridor management, such as keeping dogs on leashes at all times on trails and remaining on designated trails.

Public involvement in the management and maintenance of the corridor should be encouraged to assist in the long-term success of the corridors. Landowners adjacent to corridors should be educated about any restrictions associated with corridors and recruited in monitoring the corridors for trespass. Pamphlets can be developed and distributed and meetings held to educate the public on the importance of the corridor and volunteer opportunities to maintain and manage the corridor. In appropriate locations, educational signage could be installed regarding the purpose of the corridor, any use restrictions, and wildlife species that potentially use the corridor.

RECOMMENDATIONS

Site specific studies should be conducted along the proposed flow way, greenway/corridor, and wildlife corridor to determining the feasibility of these alignments. It is important to determine the current and future impediments to the use of these alignments for a flow way, greenway/corridor, and wildlife corridor.

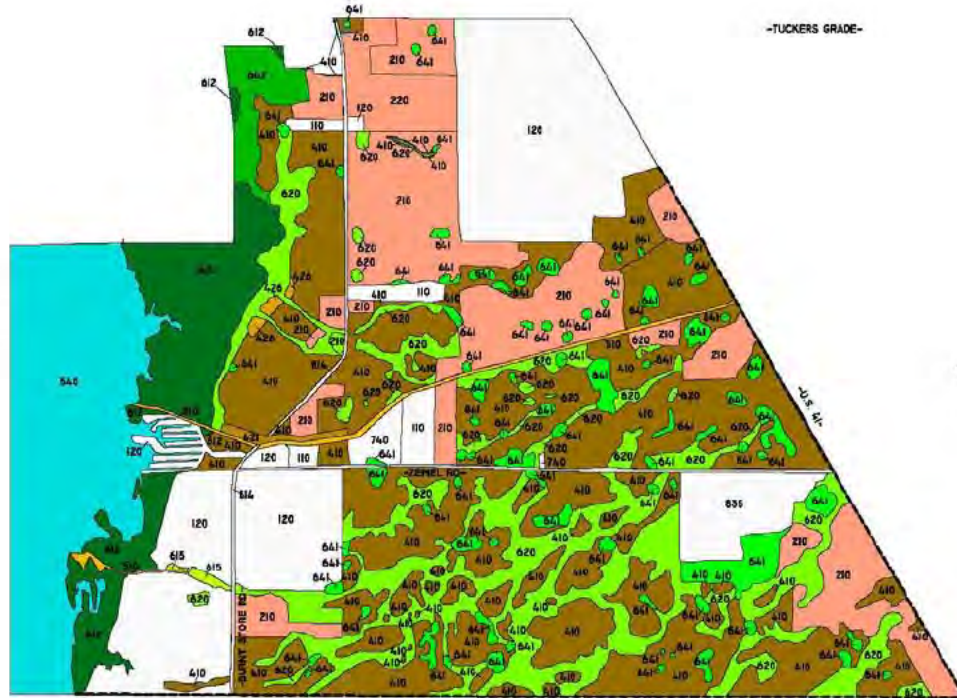
A potential current obstacle to the proposed alignments is that portions of them exist on private property. Public acquisition and/or cooperation from current owners would be necessary to implement the flow way, greenway/corridor, and wildlife corridor. If a large mammal corridor is desired for the proposed wildlife corridor alignment, public land acquisition funding to develop the large mammal wildlife corridor should be given the top priority out of all of the corridors. Opportunities for mitigation of projects in the Burnt Store Area Plan should include purchase of land for preservation along proposed corridors, funding for wildlife crossings under Burnt Store Road, and funding for the management and maintenance of the corridors.

Other issues to consider would be to determine if there are any prohibitions on land uses or potential land uses that may be permitted adjacent to the alignments that would prevent them from functioning as a flow way, greenway/corridor, and wildlife corridor. This must be determined through site-specific studies conducted for the corridors.

Management, maintenance, and monitoring programs should be developed for the flow ways, greenway/corridors, and wildlife corridor to ensure their success. The management guideline should include how domestic animals and human activities may need to be controlled in and adjacent to the proposed flow way, greenway, and wildlife corridor. Another management decision may be to determine what changes can be made to enhance the use of the corridor (i.e., restoration). A monitoring program would help determine the success of the corridor and should occur before and after a development project. Data that can be gathered may include wildlife track monitoring and photography. If habitat enhancement is proposed as part of the corridor, then monitoring the success of the vegetative habitat can be incorporated as part of the monitoring program.



SCALE: 1" = 5280'



FLUCFCS CODES	DESCRIPTIONS
110	RESIDENTIAL LOW DENSITY
120	RESIDENTIAL MEDIUM DENSITY
210	CROPLAND AND PASTURE
220	TREE CROPS
410	UPLAND CONIFEROUS FOREST
420	XERIC OAK
428	TROPICAL HAMMOCK
510	DITCH
540	BAYS AND ESTUARIES
612	MANGROVE SWAMPS
615	STREAM SWAMPS
620	WETLAND CONIFEROUS FOREST
641	FRESHWATER MARSH
642	SALTWATER MARSH
740	DISTURBED LAND
814	ROAD
835	LANDFILL

NOTE:
 FLUCFCS LINES ESTIMATED FROM 1"=2430" AERIAL PHOTOGRAPHS AND SWFWMD GIS DISTRICT LANDS MAP VIEWER, EXCEPT FOR 428 AND 426 AREAS PER MEETING WITH JAMES BEAVER OF FWCC.

STUDY AREA BOUNDARY PER BARRAZO AND ASSOCIATES, INC. DRAWING No. 6018SK00.DWG DATED NOVEMBER 19, 2004.

A:\PROJECTS\2004\04\10\Burnt Store\Drawings\FLUCFCS\Map 2 - FLUCFCS Map 2.dwg 10/22/04 10:00 AM




REVISIONS	DATE	DESIGNED BY	DATE	HORIZONTAL SCALE
ADDED NEW BOUNDARY	12/28/04	E.M.	10/22/04	1" = 5280'
REVISED FLUCFCS CODES	1/26/05	K.C.P.	10/22/04	N/A
		W.C., P.F.	10/22/04	

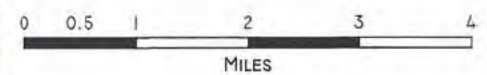
PASSARELLA and ASSOCIATES, INC.
Consulting Ecologists
 9110 College Pointe Court, Fort Myers, Florida 33919

BURNT STORE ROAD CORRIDOR STUDY AREA BOUNDARY WITH FLUCFCS	Drawing No.: 04BS11185
	SHEET No.: FIGURE 2



LEGEND

-  BURNT STORE ROAD CORRIDOR STUDY AREA
-  EXISTING PUBLIC LANDS
-  PROPOSED PUBLIC ACQUISITION LANDS



FIGURES OBTAINED FROM THE FLORIDA WEBSITE WWW.FWS.COM. THE INFO LAST UPDATED 05/20/04. PHOTO INFO OBTAINED FROM THE FLORIDA WEBSITE WWW.FWS.COM WAS LAST UPDATED NOVEMBER 2004.

AERIAL PHOTOGRAPHS WERE OBTAINED FROM AERIAL SERVICES AND WERE FLOWN NOVEMBER 2004.

PUBLIC LANDS INFO OBTAINED FROM THE DEP GIS WEBSITE AND PHOTO INFO WAS CHECKED AGAINST CHARLOTTE COUNTY GIS WEBSITE FOR ACCURACY.

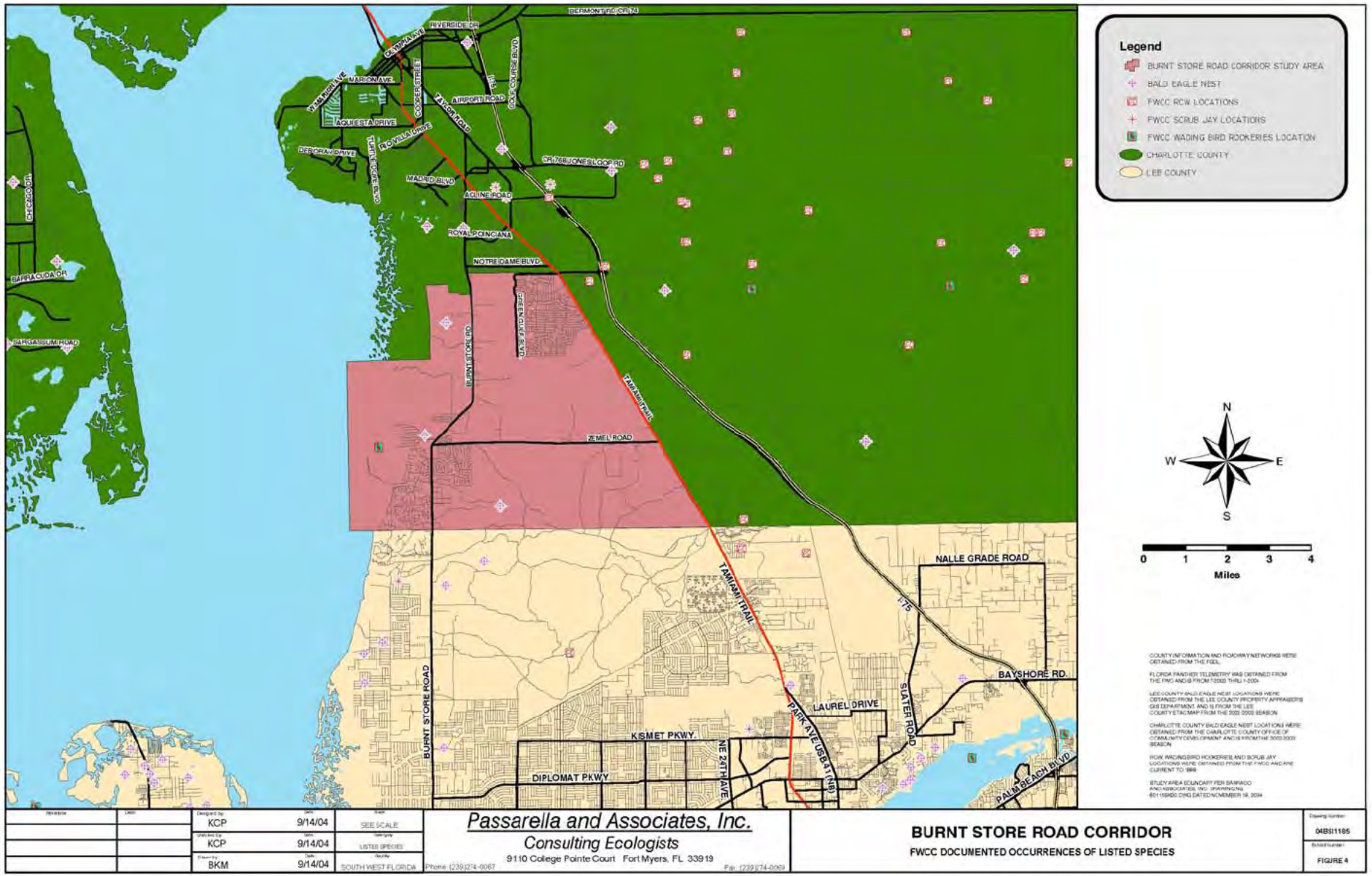
STUDY AREA BOUNDARY PER SHIMCO AND ASSOCIATES, INC. ORRONG 761 MISSISSOUGA DATED NOVEMBER 19, 2004.

Revisions	Date	Designed by	Date	Scale
		KCP	12/29/04	SEE SCALE
		Checked by		Category
		KCP	12/29/04	PUBLIC LANDS
		Drawn by		County
		BKM	12/29/04	SOUTHWEST FLORIDA

Passarella and Associates, Inc.
Consulting Ecologists
 9110 College Pointe Court Fort Myers, FL 33919
 Phone: (239)274-0067 Fax: (239)274-0069

BURNT STORE ROAD CORRIDOR
AERIAL PHOTOGRAPH WITH EXISTING AND PROPOSED PUBLIC LANDS

Drawing Number: 04DGR189
 Sheet Number: FIGURE 3



Legend

- BURNT STORE ROAD CORRIDOR STUDY AREA
- BALD EAGLE NEST
- FWCC RW LOCATIONS
- FWCC SCRUB JAY LOCATIONS
- FWCC WADING BIRD ROOKERIES LOCATION
- CHARLOTTE COUNTY
- LEE COUNTY

0 1 2 3 4
Miles

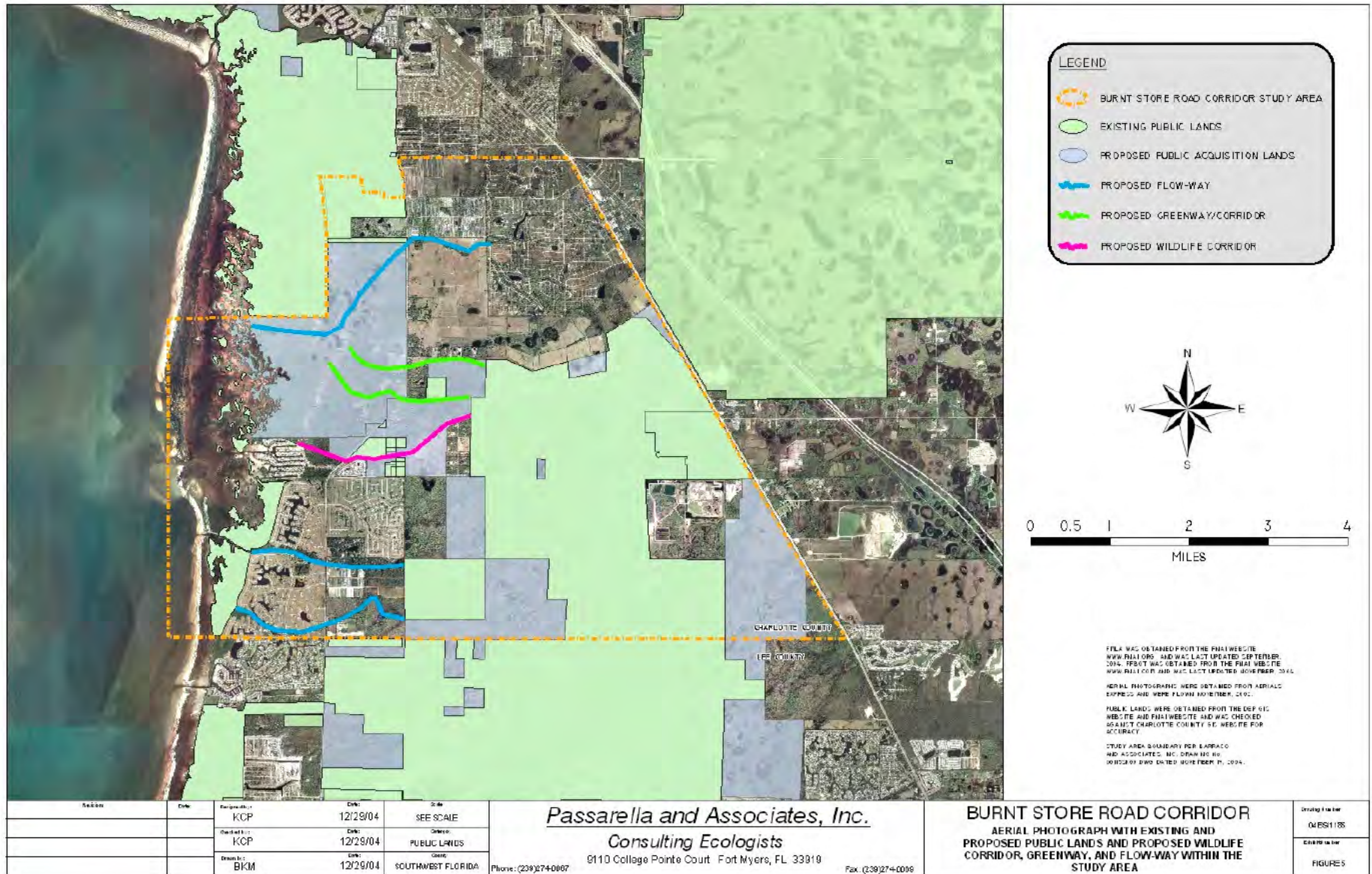
COUNTY INFORMATION AND ROADWAY NETWORKS WERE OBTAINED FROM THE FDOT.
 FLORIDA PARTNER TELEMETRY WAS OBTAINED FROM THE FWCC FROM 2000 THRU 2004.
 LEE COUNTY BALD EAGLE NEST LOCATIONS WERE OBTAINED FROM THE LEE COUNTY PROPERTY APPRAISERS GIS DEPARTMENT AND II FROM THE LEE COUNTY SETBACK MAP FROM THE 2002 2003 SEASON.
 CHARLOTTE COUNTY BALD EAGLE NEST LOCATIONS WERE OBTAINED FROM THE CHARLOTTE COUNTY OFFICE OF COMMUNITY DEVELOPMENT AND II FROM THE 2003 2002 SEASON.
 BIRD WADING BIRD ROOKERIES AND SCRUB JAY LOCATIONS WERE OBTAINED FROM THE FWCC AND ARE CURRENT TO 2004.
 STUDY AREA BOUNDARY FOR BARRACCO AND ASSOCIATES, INC. (FWCC) 8/11/04 DING DATE NOVEMBER 18, 2004

Revised	Date	Designed by	Date	Scale
		KCP	9/14/04	SEE SCALE
		Checked by	Date	
		KCP	9/14/04	LISTED SPECIES
		Drawn by	Date	
		BKM	9/14/04	SOUTH WEST FLORIDA

Passarella and Associates, Inc.
 Consulting Ecologists
 9110 College Pointe Court Fort Myers, FL 33919
 Phone (239) 674-0067 Fax (239) 674-0060

BURNT STORE ROAD CORRIDOR
 FWCC DOCUMENTED OCCURRENCES OF LISTED SPECIES

Drawing Number	O4BS11185
Sheet Number	FIGURE 4



E. FISCAL IMPACT STUDY

EXECUTIVE SUMMARY

Robert Charles Lesser & Co., LLC (RCLCo), a national independent real estate consulting and economic analysis firm, was retained by The Burnt Store Road Improvement Initiative to conduct a fiscal impact analysis for the Burnt Store Road Corridor in Charlotte County, Florida. The analysis took account of all categories of Charlotte County revenues and operating and capital expenditures expected to be received and incurred as a result of development in the Corridor, and incorporated them into detailed models for Charlotte County and for Charlotte County Schools. The assumptions used for the fiscal impact analysis were based on the Comprehensive Annual Financial Report for Charlotte County for the fiscal year ending September 30, 2003, (2003 CAFR) and the 2003-2004 Charlotte County School Budget (School Budget). The development program and prices were provided by the Burnt Store Improvement Initiative; RCLCo believes that these assumptions are reasonable based upon market analyses that we have conducted in Charlotte County.

Development in the Corridor as proposed (Figure 1) will have 5,332 residential units, including 3,732 single-family detached homes and 1,600 single-family attached/multifamily units, along with 75,000 square feet of office space and 200,000 square feet of retail space.

Figure 1 Development Program and Assumptions

Category	Improved Value	TOTAL	DELIVERY SCHEDULE															
			2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Residential																		
SFD	\$325,000	3,732	175	210	245	350	315	280	263	263	245	245	245	245	232	210	210	
SFA/MF	\$223,000	1,600	75	90	105	150	135	120	113	11	105	105	105	105	100	90	90	
Total		5,332	250	300	350	500	450	400	375	375	330	330	350	350	332	300	300	
Commercial																		
Retail		200,000	0	0	0	0	0	0	100,000	0	0	100,000	0	0	0	0	0	
Office		75,000	0	0	0	0	75,000	0	0	0	0	0	0	0	0	0	0	

As graphed on Exhibit 1 and shown on Figure 2 and Exhibit 6, the proposed community will generate a positive net fiscal benefit of \$348 million over a 30-year period (2005-2034) for the county and \$120 million for the Schools. In fact, the proposed development will be fiscally positive in every year of development. Exhibits 2 and 4 detail the annual cumulative fiscal benefit, and Exhibits 3 and 5 graph these cumulative results.

Figure 2 Fiscal Benefit Summary

CATEGORY	COUNTY		SCHOOL	
	Amount	% of Category	Amount	% of Category
REVENUES	\$541,644,000	100%	\$169,355,000	100%
Real Property Tax	\$424,522,000	78%	\$109,355,000	100%
Personal Property Tax	\$2,974,000	1%		
Sales Tax	\$31,081,000	6%		
Recordation Fees and Transfer Taxes	\$458,000	0%		
Miscellaneous Revenues 1/	\$82,609,000	15%		
EXPENDITURES	\$193,677,000	100%	\$49,048,000	100%
Expenditures 2/	\$193,677,000	100%		
Educational Operating Expenditures			\$14,071,000	28.69%
Educational Expenditures-Capital 3/			\$34,976,000	71.31%
NET FISCAL IMPACT	\$347,967,000		\$120,288,000	

1/ See Appendix 2 for allocation of Miscellaneous Revenues.

2/ See Appendix 3 for allocation of Expenditures.

3/ Includes cost of land for school construction.

The proposed development will generate approximately \$542 million in revenues and \$194 million in expenditures for the county and \$169 million in revenues and \$49 million in expenditures for the schools over a 30-year period. The net present value of the net fiscal benefit over the analysis period at a 6 percent discount rate is approximately \$112 million for the county and \$37 million for the schools.

CHARLOTTE COUNTY REVENUES

REAL PROPERTY TAX REVENUES

The model includes property tax revenues beginning in 2005. Revenues were calculated based on expected home prices, development costs and land-to-value ratios for each type of development. Unimproved land values were estimated based on local market transactions. Unimproved land is assumed to be agricultural and generating no real property tax revenues until one year prior to delivery, when unimproved land value was assumed to be reassessed to the current market price of \$45,000 per acre (in 2004 dollars). We calculated reassessed residential unimproved land values by dividing market land prices per acre by estimated density byproduct. We assumed a real property tax rate of \$7.28 per \$1,000 assessed value, which includes non-school related millage rates for District 161. Based upon the number of homestead exemptions reported to the Property Assessor's Office divided by the estimated number of housing units in Charlotte County, as well RCLCo's estimate of the percentage of residents that will qualify for homestead exemptions, we have estimated that 60 percent of homes will be occupied by full-time residents and will claim the exemption. Total county real property tax revenues for the 30-year period 2005-2034 were calculated at \$424.5 million (see Exhibit 6).

PERSONAL PROPERTY TAX REVENUES

Based on conversations with the Property Assessor's Office, business personal property in Charlotte County is expected to be taxed at \$16 to \$17 per \$1,000 assessed value.¹ Office and retail personal property are taxed at \$16.50 per \$1,000 assessed value. Assessed value is determined to be 74 percent of market value; this percentage is estimated based on historical business personal property assessment data as stated in the 2003 CAFR.² Total personal property tax revenues for the 30-year period 2005-2034 were calculated at \$3.0 million.

SALES TAX REVENUES

We assumed that sales tax revenues will be generated by purchases of materials for construction in the Corridor, expenditures at retail developed in the Corridor and expenditures of residents of homes in the Corridor. Sales taxes generated by residents of the project have been calculated based on consumer expenditures of full-time equivalent residents that will be made within Charlotte County. We determined a full-time equivalency factor of 76 percent by estimating that 60 percent will be full-time (spending 100 percent of the year in Charlotte County) and 40 percent will be part-time (spending 40 percent of the year in Charlotte County). These expenditures are expected to total \$380.9 million over the 30-year period. Approximately 60 percent of total sales are expected to be taxable,³ based upon County sales tax collections reported to the state of Florida in 2002. RCLCo estimates that Charlotte County will receive 1.6 percent of taxable sales (1 percent local options sales tax and approximately 0.6 percent under the state allocation of the Half-Cent Sales tax⁴). This results in total sales tax revenue of \$31.1 million.

MISCELLANEOUS REVENUES

Using the Comprehensive Annual Financial Report for Charlotte County for the fiscal year ended September 30, 2003, we estimated the portion of each type of miscellaneous revenue that is attributable to residential and non-residential uses, and calculated the average revenues per full-time equivalent resident and per employee. Total full-time equivalent population includes both full-time population and the full-time equivalency of part-time residents (see Appendix 2). The allocation was then applied to the residents in the Burnt Store Road Corridor using the 76 percent full-time equivalency factor (see *Sales Tax Revenues* section above). We included the Governmental Funds found on pages 25 and 26, which are comprised of the General Fund, Transportation Trust Fund, Public Safety Fund, Impact Fees Trust Fund, Sales Tax Extension 2002 Fund and Other Governmental

Funds, except that we excluded Other Governmental Funds and the Impact Fees Trust Fund. We excluded Other Governmental Funds, which are comprised of the Municipal Services Benefit Units/Taxing Units that provide maintenance to property owners payable by special assessments, in order to only account for revenue sources that serve the entire county. We excluded impact fees revenues and expenditures because they are also focused on particular sections of the County. In addition, we excluded revenue sources that are accounted for separately in the model: ad valorem taxes, sales taxes and development-related licenses & permits. The revenues were then escalated by 3.14 percent using the Consumer Price Index for all urban consumers in the Southern U.S. according to the Bureau of Labor Statistics from October 2003 to October 2004. The total amount of allocated miscellaneous revenues is \$79.1 million, or \$248 per resident and \$171 per employee.

In addition, the county will collect building permit fees for the construction of residential units and commercial space. Permit fees were determined using the fee schedule from the Community Development Department and building valuation data according to the International Code Council, taking account of likely construction types, the Florida cost modifier, the county fee percentages and estimated unit sizes and commercial square footages. Over the 30-year period, building permit fees are expected to total \$3.5 million.

The county collects a recordation tax of \$10 for the first page and \$8.50 for each subsequent page of each deed, according to the Charlotte County Circuit Court. Assuming each deed is 2 pages long, the County will receive an estimated recordation fee of \$18.50 per deed. Recordation taxes were calculated for both the initial sale of residential units, as well as subsequent transfers, based on homeowner turnover rates of 9.8 percent.⁵ Over the 30-year analysis period, recordation tax revenues will total \$0.46 million.

CHARLOTTE COUNTY EXPENDITURES

EXPENDITURES

Using the Comprehensive Annual Financial Report for Charlotte County for the fiscal year ended September 30, 2003, we estimated the portion of each type of non-educational operating expenditures and capital outlay that is attributable to residential and non-residential uses, and calculated the average expenditure per full-time equivalent resident and per employee (see explanation of full-time equivalency factors in *Miscellaneous Revenues* section of Charlotte County Revenues). In order to account for countywide expenditures, the Other Governmental Funds were excluded. The resulting total amount of allocated expenditures is \$193.7 million, or \$397 per employee and \$610 per resident (in 2004 dollars).

CHARLOTTE COUNTY SCHOOL REVENUES

REAL PROPERTY TAX REVENUES

We have not assumed any effective revenues to the schools from the real property taxes required under the Florida Education Finance Program (FEFP) program, as these revenues will not result in any net fiscal benefit to the schools. We have also not included any categorical aid, as this aid is likely to be proportional to number of students and would be

cancelled out by the additional students living in the Corridor.

The Schools will, however, benefit from other increases in real property taxes as a result of development in the Corridor. These taxes on the office, retail and residential uses will total \$2.904 per \$1,000 assessed value, accounting for the discretionary, supplemental discretionary, capital improvement and debt service millage rates reflected in the 2003-2004 Charlotte County School Budget. A 60 percent participation rate in the \$25,000 Homestead Exemption is also assumed in the model. Total real property tax revenues for the 30-year period 2005-2034 were calculated at \$169.3 million.

CHARLOTTE COUNTY SCHOOL EXPENDITURES

RCLCo estimated the public school pupil generation rates by level of school based on 2000 Census Public Use Microdata Sample (PUMS) data for the Lee County-Charlotte County area, and adjusted the rates to reflect Charlotte County only by calibrating the results from the PUMS analysis with the total number of public school students in Charlotte County. This resulted in total pupil generation rates of 0.28 for single-family detached and 0.12 for single-family attached/multifamily. These pupil generation rates were then multiplied by the number of housing units of each type expected to be developed in the Corridor and by the estimated per pupil local educational operating expenditures that are attributable to residential uses of the development. The local share of school operating costs not related to state funding is supported by discretionary and supplemental discretionary millage rates. We arrived at a best estimate of the local school operating costs by multiplying the above millage rates (\$.594 per \$1000 assessed value) by the gross taxable value (page 4-1 of the School Budget) and divided by the total number of students. The resulting total amount of allocated educational operating expenditures is \$14.1 million, or \$319 per pupil (in 2004 dollars).

The county expects to incur capital facilities costs (including land cost) associated with the new development at a rate of \$17,417 per elementary school student, \$24,891 per middle school student and \$24,231 per high school student. The resulting total amounts to \$35.0 million in educational capital expenditures bonded over 30 years at a 5.5 percent interest rate.

OTHER ASSUMPTIONS

- Although the county has experienced higher appreciation in recent years, we have assumed a more conservative home price escalation rate of 3 percent per year over the 30-year analysis period.
- We assumed that all other revenues and expenditures will escalate at 2.5 percent per year, based upon conversations with the Budget Office.
- We have also assumed stable millage rates over the 30-year period.

CRITICAL ASSUMPTIONS

The conclusions and recommendations presented in this report were reached based on our analysis of the information available to us from our own sources and from the client as of the date of this report. We assume that the information is correct, complete and reliable.

Our conclusions and recommendations are based on certain assumptions about the future performance of the global, national, and/or local economy, as well as that of the real estate market and on other factors similarly outside either our control or that of the client. To the best of our ability we analyzed trends and information available to us in drawing these conclusions and making the appropriate recommendations. However, due to the very fluid and dynamic nature of the economy and the real estate markets, it is critical to continually monitor the economy and the market, and to revisit the aforementioned conclusions and recommendations periodically to ensure that they stand the test of time.

We assume that in the future the economy and the real estate markets will grow at a stable and moderate rate. History tells us that stable and moderate growth patterns are not sustainable over extended periods of time. Indeed, we find that the economy is cyclical, and the real estate markets are typically very sensitive to these cycles. Our analysis does not take into account the potential impact that major economic “shocks” could have on the national and/or the local economy, nor does it account for the potential benefits from a major “boom”. Similarly, the analysis does not necessarily reflect the residual impact on the real estate market and the competitive environment of such boom or shock situations. We are currently in the midst of an economic recovery, the timing, depth and duration of which are unknown, and which to date has had varying impacts on the real estate market in most areas.

Additionally, we assume that economic, employment and household growth will occur more or less in accordance with current expectations, as will other forecasts of trends and demographic and economic patterns. Along these lines, we are not taking into account any major shifts in the level of consumer confidence; in the cost of development and construction; in tax laws (i.e., stable property and income tax rates, deductibility of mortgage interest, etc.); or, in the availability and/or cost of capital and mortgage financing for real estate developers, owners, and buyers. Should any of the above change, there is good reason to believe that this analysis should be updated, and the conclusions and recommendations summarized herein be accordingly reviewed (and possibly revised).

We also assume that competitive projects will be developed as planned (active and future), and that real estate demand will be met with a reasonable stream of supply offerings. Finally, we assume that major public works projects occur and are completed as planned.

GENERAL LIMITING CONDITIONS

Every reasonable effort has been made to insure that the data contained in this study reflect the most accurate and timely information possible and it is believed to be reliable. This study is based on estimates, assumptions and other information developed by RCLCo from its independent research effort, general knowledge of the industry and consultations with the Client and its representatives. No responsibility is assumed for inaccuracies in reporting by the Client, its agent and representatives or any other data source used in preparing or presenting this study. This report is based on information that was current as of December 2004, and RCLCo has not undertaken any update of its research effort since such date.

Our report may contain prospective financial information, estimates or opinions that represent our view of reasonable expectations at a particular point in time, but such information, estimates or opinions are not offered as predictions or as assurances that a particular level of income or profit will be achieved, that events will occur or that a particular price will be offered or accepted. Actual results achieved during the period covered by our prospective financial analysis may vary from those described in our report and the variations may be material. Therefore, no warranty or representation is made by RCLCo that any of the projected values or results contained in this study will actually be achieved.

Possession of this study does not carry with it the right of publication thereof or to use the name of “Robert Charles Lesser & Co., LLC” or “RCLCo” in any manner without first obtaining the prior written consent of RCLCo. No abstracting, excerpting or summarization of this study may be made without first obtaining the prior written consent of RCLCo. This report is not to be used in conjunction with any public or private offering of securities or other similar purpose where it may be relied upon to any degree by any person other than the Client without first obtaining the prior written consent of RCLCo. This study may not be used for any purpose other than that for which it is prepared or for which prior written consent has first been obtained from RCLCo.

Exhibit 1

**SUMMARY OF BOND PAYMENTS FOR ADDITIONAL ROAD IMPROVEMENTS
BURNT STORE CORRIDOR, CHARLOTTE COUNTY, FLORIDA
2005-2048**

Scenario	Improvement	Year of Construction	Cost 1/	Avail. For Debt Service	Bond Financing	Bond Series A	Bond Series B	Bond Series C	Combined Cross Debt Service	% of Cumulative NFI
Scenario 1										
	Tucker's Grade Extension	2014	\$14.0 M		Series A	\$35,121,877				
	New 2-Lane Road	2019	\$32.6 M		Series B		\$81,783,799			
	Total			\$754,747,310		\$35,121,877	\$81,783,799	\$0	\$116,905,676	15%
Scenario 2										
	Tucker's Grade Extension	2014	\$14.0 M		Series A	\$35,121,877				
	6-Lane Extension	2019	\$14.9 M		Series B		\$37,379,712			
	Total			\$754,747,310		\$35,121,877	\$37,379,712	\$0	\$72,501,588	10%
Scenario 1A										
	Tucker's Grade Extension	2014	\$14.0 M		Series A	\$35,121,877				
	New 2-Lane Road	2019	\$32.6 M		Series B		\$81,783,799			
	Approved Improvements	2010	\$41.7 M		Series C			\$112,390,006		
	Total			\$754,747,310		\$35,121,877	\$81,783,799	\$112,390,006	\$229,295,681	30%
Scenario 2A										
	Tucker's Grade Extension	2014	\$14.0 M		Series A	\$35,121,877				
	6-Lane Extension	2019	\$14.9 M		Series B		\$37,379,712			
	Approved Improvements	2010	\$41.7 M		Series C			\$112,390,006		
	Total			\$754,747,310		\$35,121,877	\$37,379,712	\$112,390,006	\$184,891,594	24%

1/ Dollars includes inflation to the year at which construction begins, assuming a 2.5% annual inflation rate.

Exhibit 2

BOND PAYMENTS FOR ADDITIONAL ROAD IMPROVEMENTS: SCENARIO 1 1/
BURNT STORE CORRIDOR, CHARLOTTE COUNTY, FLORIDA
2005-2048

Year	Revenues 4/	Road Impact Fee		Expenditures	Net Fiscal Impact 2/		Avail. For Debt Service	Bond Series A	Bond Series B	Combined Gross Debt Service	% of Annual NFI	
		Revenues	Total Revenue		Annual	Cumulative						
2005	\$132,391	\$410,026	\$542,416	\$0	\$542,416	\$542,416	\$542,416			\$0	0%	
2006	\$371,044	\$504,332	\$875,376	\$251,326	\$624,050	\$1,166,467	\$624,050			\$0	0%	
2007	\$1,107,312	\$603,096	\$1,710,408	\$566,739	\$1,143,669	\$2,310,136	\$1,143,669			\$0	0%	
2008	\$2,119,713	\$1,100,915	\$3,220,628	\$950,576	\$2,270,052	\$4,580,188	\$2,270,052			\$0	0%	
2009	\$3,221,139	\$814,665	\$4,035,803	\$1,515,641	\$2,520,163	\$7,100,351	\$2,520,163			\$0	0%	
2010	\$4,818,665	\$1,047,366	\$5,866,031	\$2,167,211	\$3,698,819	\$10,799,171	\$3,698,819			\$0	0%	
2011	\$6,239,156	\$713,256	\$6,952,412	\$2,676,354	\$4,276,057	\$15,075,228	\$4,276,057			\$0	0%	
2012	\$8,112,148	\$731,087	\$8,843,236	\$3,288,546	\$5,554,690	\$20,629,918	\$5,554,690			\$0	0%	
2013	\$9,687,866	\$1,027,983	\$10,715,849	\$3,818,880	\$6,896,969	\$27,526,887	\$6,896,969			\$0	0%	
2014	\$11,098,145	\$716,892	\$11,815,037	\$4,343,054	\$7,471,983	\$34,998,869	\$7,471,983	\$1,170,729		\$1,170,729	16%	
2015	\$13,123,501	\$714,814	\$13,858,315	\$5,007,453	\$8,850,862	\$43,849,731	\$8,850,862	\$1,170,729		\$1,170,729	13%	
2016	\$14,834,467	\$753,185	\$15,587,652	\$5,583,045	\$10,004,608	\$53,854,339	\$10,004,608	\$1,170,729		\$1,170,729	12%	
2017	\$16,495,166	\$732,311	\$17,227,477	\$6,184,286	\$11,043,191	\$64,897,530	\$11,043,191	\$1,170,729		\$1,170,729	11%	
2018	\$18,211,399	\$678,270	\$18,889,669	\$6,787,764	\$12,101,906	\$76,999,436	\$12,101,906	\$1,170,729		\$1,170,729	10%	
2019	\$19,955,968	\$695,227	\$20,651,194	\$7,373,204	\$13,277,991	\$90,277,426	\$13,277,991	\$1,170,729	\$2,726,127	\$3,896,856	29%	
2020	\$21,473,816	\$0	\$21,473,816	\$7,983,673	\$13,490,142	\$103,767,569	\$13,490,142	\$1,170,729	\$2,726,127	\$3,896,856	29%	
2021	\$22,930,299	\$0	\$22,930,299	\$8,183,265	\$14,747,033	\$118,514,602	\$14,747,033	\$1,170,729	\$2,726,127	\$3,896,856	26%	
2022	\$23,609,656	\$0	\$23,609,656	\$8,387,847	\$15,221,809	\$133,736,411	\$15,221,809	\$1,170,729	\$2,726,127	\$3,896,856	26%	
2023	\$24,308,750	\$0	\$24,308,750	\$8,597,543	\$15,711,207	\$149,447,618	\$15,711,207	\$1,170,729	\$2,726,127	\$3,896,856	25%	
2024	\$25,028,157	\$0	\$25,028,157	\$8,812,482	\$16,215,676	\$165,663,293	\$16,215,676	\$1,170,729	\$2,726,127	\$3,896,856	24%	
2025	\$25,768,471	\$0	\$25,768,471	\$9,032,794	\$16,735,677	\$182,398,970	\$16,735,677	\$1,170,729	\$2,726,127	\$3,896,856	23%	
2026	\$26,530,300	\$0	\$26,530,300	\$9,258,613	\$17,271,687	\$199,670,657	\$17,271,687	\$1,170,729	\$2,726,127	\$3,896,856	23%	
2027	\$27,314,275	\$0	\$27,314,275	\$9,490,079	\$17,824,196	\$217,494,853	\$17,824,196	\$1,170,729	\$2,726,127	\$3,896,856	22%	
2028	\$28,121,041	\$0	\$28,121,041	\$9,727,331	\$18,393,710	\$235,888,563	\$18,393,710	\$1,170,729	\$2,726,127	\$3,896,856	21%	
2029	\$28,951,263	\$0	\$28,951,263	\$9,970,514	\$18,980,749	\$254,869,312	\$18,980,749	\$1,170,729	\$2,726,127	\$3,896,856	21%	
2030	\$29,805,627	\$0	\$29,805,627	\$10,219,777	\$19,585,850	\$274,455,162	\$19,585,850	\$1,170,729	\$2,726,127	\$3,896,856	20%	
2031	\$30,684,838	\$0	\$30,684,838	\$10,475,271	\$20,209,566	\$294,664,728	\$20,209,566	\$1,170,729	\$2,726,127	\$3,896,856	19%	
2032	\$31,589,621	\$0	\$31,589,621	\$10,737,153	\$20,852,468	\$315,517,196	\$20,852,468	\$1,170,729	\$2,726,127	\$3,896,856	19%	
2033	\$32,520,724	\$0	\$32,520,724	\$11,005,582	\$21,515,143	\$337,032,339	\$21,515,143	\$1,170,729	\$2,726,127	\$3,896,856	18%	
2034	\$33,478,916	\$0	\$33,478,916	\$11,280,721	\$22,198,195	\$359,230,534	\$22,198,195	\$1,170,729	\$2,726,127	\$3,896,856	18%	
2035	\$34,464,989	\$0	\$34,464,989	\$11,562,740	\$22,902,249	\$382,132,783	\$22,902,249	\$1,170,729	\$2,726,127	\$3,896,856	17%	
2036	\$35,479,756	\$0	\$35,479,756	\$11,851,808	\$23,627,948	\$405,760,731	\$23,627,948	\$1,170,729	\$2,726,127	\$3,896,856	16%	
2037	\$36,524,057	\$0	\$36,524,057	\$12,146,103	\$24,375,954	\$430,136,685	\$24,375,954	\$1,170,729	\$2,726,127	\$3,896,856	16%	
2038	\$37,598,755	\$0	\$37,598,755	\$12,451,806	\$25,146,950	\$455,283,635	\$25,146,950	\$1,170,729	\$2,726,127	\$3,896,856	15%	
2039	\$38,704,739	\$0	\$38,704,739	\$12,763,101	\$25,941,638	\$481,225,273	\$25,941,638	\$1,170,729	\$2,726,127	\$3,896,856	15%	
2040	\$39,842,923	\$0	\$39,842,923	\$13,082,178	\$26,760,745	\$507,986,017	\$26,760,745	\$1,170,729	\$2,726,127	\$3,896,856	15%	
2041	\$41,014,249	\$0	\$41,014,249	\$13,409,233	\$27,605,016	\$535,591,034	\$27,605,016	\$1,170,729	\$2,726,127	\$3,896,856	14%	
2042	\$42,219,686	\$0	\$42,219,686	\$13,744,464	\$28,475,222	\$564,066,256	\$28,475,222	\$1,170,729	\$2,726,127	\$3,896,856	14%	
2043	\$43,460,232	\$0	\$43,460,232	\$14,088,075	\$29,372,156	\$593,438,412	\$29,372,156	\$1,170,729	\$2,726,127	\$3,896,856	13%	
2044	\$44,736,913	\$0	\$44,736,913	\$14,440,277	\$30,296,635	\$623,735,047	\$30,296,635		\$2,726,127	\$2,726,127	9%	
2045	\$46,050,786	\$0	\$46,050,786	\$14,801,284	\$31,249,502	\$654,984,550	\$31,249,502		\$2,726,127	\$2,726,127	9%	
2046	\$47,402,941	\$0	\$47,402,941	\$15,171,316	\$32,231,624	\$687,216,174	\$32,231,624		\$2,726,127	\$2,726,127	8%	
2047	\$48,794,496	\$0	\$48,794,496	\$15,550,599	\$33,243,896	\$720,460,070	\$33,243,896		\$2,726,127	\$2,726,127	8%	
2048	\$50,226,604	\$0	\$50,226,604	\$15,939,364	\$34,287,240	\$754,747,310	\$34,287,240		\$2,726,127	\$2,726,127	8%	
								\$754,747,310	\$35,121,877	\$81,783,799	\$116,905,676	15%

ASSUMPTIONS:	Bond Series A	Bond Series B
	Available Portion of NFI	100.0%
Assumed Bond Rate	6.0%	6.0%
Number of Payments	30	30
Estimated Par Amount	\$16,114,890	\$37,524,673
Annual Payment	\$1,170,729	\$2,726,127
Costs of Issuance (%)	1.5%	1.5%
Costs of Issuance	\$241,723	\$562,870
Bond Insurance Premium (%)	2.0%	2.0%
Bond Insurance Premium	\$702,438	\$1,635,676
Reserve Fund	\$1,170,729	\$2,726,127
Net Proceeds 3/	\$14,000,000	\$32,600,000
Cumulative Net Proceeds	\$14,000,000	\$46,600,000

NOTES:
1/ Scenario 1 assumes that construction on Tucker's Grade Extension will begin in 2014 and will cost \$14.0 million (\$10.9 million in 2004 dollars) and that construction of a new 2-lane road and connection will begin in 2019 and will cost \$32.6 million (\$22.5 million in 2004 dollars). A 2.5% inflation rate is used. Construction begins one year prior to expected completion.
2/ The Net Fiscal Impact includes impact fee revenues of \$1,799 for each single-family lot, \$1,136 for each multifamily unit, and \$2.63 per square foot of commercial space generated throughout the development program. The analysis period is extended to 2048, the final year of bond payments.
3/ Net proceeds for Bond Series A are in 2014 dollars and net proceeds for Bond Series B are in 2019 dollars.
4/ See "Fiscal Impact Analysis for the Burnt Store Corridor," December 13, 2004.

Exhibit 3

**BOND PAYMENTS FOR ADDITIONAL ROAD IMPROVEMENTS: SCENARIO 2 1/
BURNT STORE CORRIDOR, CHARLOTTE COUNTY, FLORIDA
2005-2048**

Year	Road Impact Fee Revenues 4/	Total Revenue	Expenditures	Net Fiscal Impact 2/		Avail. For Debt Service	Bond Series A	Bond Series B	Combined Gross Debt Service	% of Annual NFI	
				Annual	Cumulative						
2005	\$132,391	\$410,026	\$542,416	\$0	\$542,416	\$542,416			\$0	0%	
2006	\$371,044	\$504,332	\$875,376	\$251,326	\$624,050	\$1,166,467			\$0	0%	
2007	\$1,107,312	\$603,096	\$1,710,408	\$566,739	\$1,143,669	\$2,310,136			\$0	0%	
2008	\$2,119,713	\$1,100,915	\$3,220,628	\$950,576	\$2,270,052	\$4,580,188			\$0	0%	
2009	\$3,221,139	\$814,665	\$4,035,803	\$1,515,641	\$2,520,163	\$7,100,351			\$0	0%	
2010	\$4,818,665	\$1,047,366	\$5,866,031	\$2,167,211	\$3,698,819	\$10,799,171			\$0	0%	
2011	\$6,239,156	\$713,256	\$6,952,412	\$2,676,354	\$4,276,057	\$15,075,228			\$0	0%	
2012	\$8,112,148	\$731,087	\$8,843,236	\$3,288,546	\$5,554,690	\$20,629,918			\$0	0%	
2013	\$9,687,866	\$1,027,983	\$10,715,849	\$3,818,880	\$6,896,969	\$27,526,887			\$0	0%	
2014	\$11,098,145	\$716,892	\$11,815,037	\$4,343,054	\$7,471,983	\$34,998,869	\$1,170,729		\$1,170,729	16%	
2015	\$13,123,501	\$734,814	\$13,858,315	\$5,007,453	\$8,850,862	\$43,849,731	\$8,850,862	\$1,170,729	\$1,170,729	13%	
2016	\$14,834,467	\$753,185	\$15,587,652	\$5,583,045	\$10,004,608	\$53,854,339	\$10,004,608	\$1,170,729	\$1,170,729	12%	
2017	\$16,495,166	\$732,311	\$17,227,477	\$6,184,286	\$11,043,191	\$64,897,530	\$11,043,191	\$1,170,729	\$1,170,729	11%	
2018	\$18,211,399	\$678,270	\$18,889,669	\$6,787,764	\$12,101,906	\$76,999,436	\$12,101,906	\$1,170,729	\$1,170,729	10%	
2019	\$19,955,968	\$695,227	\$20,651,194	\$7,373,204	\$13,277,991	\$90,277,426	\$13,277,991	\$1,170,729	\$1,245,990	18%	
2020	\$21,473,816	\$0	\$21,473,816	\$7,983,673	\$13,490,142	\$103,767,569	\$13,490,142	\$1,170,729	\$1,245,990	\$2,416,720	18%
2021	\$22,930,299	\$0	\$22,930,299	\$8,183,265	\$14,747,033	\$118,514,602	\$14,747,033	\$1,170,729	\$1,245,990	\$2,416,720	16%
2022	\$23,609,656	\$0	\$23,609,656	\$8,387,847	\$15,221,809	\$133,736,411	\$15,221,809	\$1,170,729	\$1,245,990	\$2,416,720	16%
2023	\$24,308,750	\$0	\$24,308,750	\$8,597,543	\$15,711,207	\$149,447,618	\$15,711,207	\$1,170,729	\$1,245,990	\$2,416,720	15%
2024	\$25,028,157	\$0	\$25,028,157	\$8,812,482	\$16,215,676	\$165,663,293	\$16,215,676	\$1,170,729	\$1,245,990	\$2,416,720	15%
2025	\$25,768,471	\$0	\$25,768,471	\$9,032,794	\$16,735,677	\$182,398,970	\$16,735,677	\$1,170,729	\$1,245,990	\$2,416,720	14%
2026	\$26,530,300	\$0	\$26,530,300	\$9,258,613	\$17,271,687	\$199,670,657	\$17,271,687	\$1,170,729	\$1,245,990	\$2,416,720	14%
2027	\$27,314,275	\$0	\$27,314,275	\$9,490,079	\$17,824,196	\$217,494,853	\$17,824,196	\$1,170,729	\$1,245,990	\$2,416,720	14%
2028	\$28,121,041	\$0	\$28,121,041	\$9,727,331	\$18,393,710	\$235,888,563	\$18,393,710	\$1,170,729	\$1,245,990	\$2,416,720	13%
2029	\$28,951,263	\$0	\$28,951,263	\$9,970,514	\$18,980,749	\$254,869,312	\$18,980,749	\$1,170,729	\$1,245,990	\$2,416,720	13%
2030	\$29,805,627	\$0	\$29,805,627	\$10,219,777	\$19,585,850	\$274,455,162	\$19,585,850	\$1,170,729	\$1,245,990	\$2,416,720	12%
2031	\$30,684,838	\$0	\$30,684,838	\$10,475,271	\$20,209,566	\$294,664,728	\$20,209,566	\$1,170,729	\$1,245,990	\$2,416,720	12%
2032	\$31,589,621	\$0	\$31,589,621	\$10,737,153	\$20,852,468	\$315,517,196	\$20,852,468	\$1,170,729	\$1,245,990	\$2,416,720	12%
2033	\$32,520,724	\$0	\$32,520,724	\$11,005,582	\$21,515,143	\$337,032,339	\$21,515,143	\$1,170,729	\$1,245,990	\$2,416,720	11%
2034	\$33,478,916	\$0	\$33,478,916	\$11,280,721	\$22,198,195	\$359,230,534	\$22,198,195	\$1,170,729	\$1,245,990	\$2,416,720	11%
2035	\$34,464,989	\$0	\$34,464,989	\$11,562,740	\$22,902,249	\$382,132,783	\$22,902,249	\$1,170,729	\$1,245,990	\$2,416,720	11%
2036	\$35,479,756	\$0	\$35,479,756	\$11,851,808	\$23,627,948	\$405,760,731	\$23,627,948	\$1,170,729	\$1,245,990	\$2,416,720	10%
2037	\$36,524,057	\$0	\$36,524,057	\$12,148,103	\$24,375,954	\$430,136,685	\$24,375,954	\$1,170,729	\$1,245,990	\$2,416,720	10%
2038	\$37,598,755	\$0	\$37,598,755	\$12,451,806	\$25,146,950	\$455,283,635	\$25,146,950	\$1,170,729	\$1,245,990	\$2,416,720	10%
2039	\$38,704,739	\$0	\$38,704,739	\$12,763,101	\$25,941,638	\$481,225,273	\$25,941,638	\$1,170,729	\$1,245,990	\$2,416,720	9%
2040	\$39,842,923	\$0	\$39,842,923	\$13,082,178	\$26,760,745	\$507,986,017	\$26,760,745	\$1,170,729	\$1,245,990	\$2,416,720	9%
2041	\$41,014,249	\$0	\$41,014,249	\$13,409,233	\$27,605,016	\$535,591,034	\$27,605,016	\$1,170,729	\$1,245,990	\$2,416,720	9%
2042	\$42,219,686	\$0	\$42,219,686	\$13,744,464	\$28,475,222	\$564,066,256	\$28,475,222	\$1,170,729	\$1,245,990	\$2,416,720	8%
2043	\$43,460,232	\$0	\$43,460,232	\$14,088,075	\$29,372,156	\$593,438,412	\$29,372,156	\$1,170,729	\$1,245,990	\$2,416,720	8%
2044	\$44,736,913	\$0	\$44,736,913	\$14,440,277	\$30,296,635	\$623,735,047	\$30,296,635	\$1,245,990	\$1,245,990	\$1,245,990	4%
2045	\$46,050,786	\$0	\$46,050,786	\$14,801,284	\$31,249,502	\$654,984,550	\$31,249,502	\$1,245,990	\$1,245,990	\$1,245,990	4%
2046	\$47,402,941	\$0	\$47,402,941	\$15,171,316	\$32,231,624	\$687,216,174	\$32,231,624	\$1,245,990	\$1,245,990	\$1,245,990	4%
2047	\$48,794,496	\$0	\$48,794,496	\$15,550,599	\$33,243,896	\$720,460,070	\$33,243,896	\$1,245,990	\$1,245,990	\$1,245,990	4%
2048	\$50,226,604	\$0	\$50,226,604	\$15,939,364	\$34,287,240	\$754,747,310	\$34,287,240	\$1,245,990	\$1,245,990	\$1,245,990	4%
						\$754,747,310	\$55,121,877	\$37,379,712	\$72,901,588	10%	

ASSUMPTIONS:	Bond Series A	Bond Series B
Available Portion of NFI	100.0%	100.0%
Assumed Bond Rate	6.0%	6.0%
Number of Payments	30	30
Estimated Par Amount	\$16,114,890	\$17,150,847
Annual Payment	\$1,170,729	\$1,245,990
Costs of Issuance (%)	1.5%	1.5%
Costs of Issuance	\$241,723	\$257,263
Bond Insurance Premium (%)	2.0%	2.0%
Bond Insurance Premium	\$702,438	\$747,594
Reserve Fund	\$1,170,729	\$1,245,990
Net Proceeds 3/	\$14,000,000	\$14,900,000
Cumulative Net Proceeds	\$14,000,000	\$28,900,000

NOTES:	Bond Series A	Bond Series B
1/ Scenario 2 assumes that construction on Tucker's Grade Extension will begin in 2014 and will cost \$14.0 million (\$10.9 million in 2004 dollars) and that construction on the 6-lane extension will begin in 2019 and will cost \$14.9 million (\$10.3 million in 2004 dollars). A 2.5% inflation rate is used. Construction begins one year prior to expected completion.		
2/ The Net Fiscal Impact includes impact fee revenues of \$1,799 for each single-family lot, \$1,136 for each multifamily unit, and \$2.63 per square foot of commercial space generated throughout the development program. The analysis period is extended to 2048, the final year of bond payments.		
3/ Net proceeds for Bond Series A are in 2014 dollars and net proceeds for Bond Series B are in 2019 dollars.		
4/ See "Fiscal Impact Analysis for the Burnt Store Corridor," December 13, 2004.		

Exhibit 4

BOND PAYMENTS FOR ADDITIONAL AND CURRENTLY APPROVED ROAD IMPROVEMENTS: SCENARIO 1A 1/
BURNT STORE CORRIDOR, CHARLOTTE COUNTY, FLORIDA
2005-2048

Year	Road Impact Fee Revenues		Total Revenue	Expenditures	Net Fiscal Impact 2/		Avail. For Debt Service	Bond Series A	Bond Series B	Bond Series C	Combined Gross Debt Service	% of Annual NFI
	Revenues 4/	Revenues			Annual	Cumulative						
2005	\$132,391	\$410,026	\$542,416	\$0	\$542,416	\$542,416	\$542,416				\$0	0%
2006	\$371,044	\$504,332	\$875,376	\$251,326	\$624,050	\$1,166,467	\$624,050				\$0	0%
2007	\$1,107,312	\$601,096	\$1,710,408	\$566,739	\$1,143,669	\$2,310,136	\$1,143,669				\$0	0%
2008	\$2,119,713	\$1,100,915	\$3,220,628	\$950,576	\$2,270,052	\$4,580,188	\$2,270,052				\$0	0%
2009	\$3,221,139	\$814,665	\$4,035,803	\$1,515,641	\$2,520,163	\$7,100,351	\$2,520,163				\$0	0%
2010	\$4,818,665	\$1,047,366	\$5,866,031	\$2,167,211	\$3,698,819	\$10,799,171	\$3,698,819			\$3,746,334	\$3,746,334	101%
2011	\$6,239,156	\$711,256	\$6,952,412	\$2,676,354	\$4,276,057	\$15,075,228	\$4,276,057			\$3,746,334	\$3,746,334	88%
2012	\$8,112,148	\$731,087	\$8,843,236	\$3,288,546	\$5,554,690	\$20,629,918	\$5,554,690			\$3,746,334	\$3,746,334	67%
2013	\$9,687,866	\$1,027,983	\$10,715,849	\$3,818,880	\$6,896,969	\$27,526,887	\$6,896,969			\$3,746,334	\$3,746,334	54%
2014	\$11,098,145	\$716,892	\$11,815,037	\$4,343,054	\$7,471,983	\$34,998,869	\$7,471,983	\$1,170,729		\$3,746,334	\$4,917,063	66%
2015	\$13,123,501	\$734,814	\$13,858,315	\$5,007,453	\$8,850,862	\$43,849,731	\$8,850,862	\$1,170,729		\$3,746,334	\$4,917,063	56%
2016	\$14,834,467	\$751,185	\$15,587,652	\$5,583,045	\$10,004,608	\$53,854,339	\$10,004,608	\$1,170,729		\$3,746,334	\$4,917,063	49%
2017	\$16,495,166	\$732,311	\$17,227,477	\$6,184,286	\$11,043,191	\$64,897,530	\$11,043,191	\$1,170,729		\$3,746,334	\$4,917,063	45%
2018	\$18,211,399	\$678,270	\$18,889,669	\$6,787,764	\$12,101,906	\$76,999,436	\$12,101,906	\$1,170,729		\$3,746,334	\$4,917,063	41%
2019	\$19,955,908	\$695,227	\$20,651,194	\$7,373,204	\$13,277,991	\$90,277,426	\$13,277,991	\$1,170,729	\$2,726,127	\$3,746,334	\$7,643,189	58%
2020	\$21,473,816	\$0	\$21,473,816	\$7,983,673	\$13,490,142	\$103,767,569	\$13,490,142	\$1,170,729	\$2,726,127	\$3,746,334	\$7,643,189	57%
2021	\$22,930,299	\$0	\$22,930,299	\$8,183,265	\$14,747,033	\$118,514,602	\$14,747,033	\$1,170,729	\$2,726,127	\$3,746,334	\$7,643,189	52%
2022	\$23,609,656	\$0	\$23,609,656	\$8,387,847	\$15,221,809	\$133,736,411	\$15,221,809	\$1,170,729	\$2,726,127	\$3,746,334	\$7,643,189	50%
2023	\$24,308,750	\$0	\$24,308,750	\$8,597,543	\$15,711,207	\$149,447,618	\$15,711,207	\$1,170,729	\$2,726,127	\$3,746,334	\$7,643,189	49%
2024	\$25,028,157	\$0	\$25,028,157	\$8,812,482	\$16,215,676	\$165,663,293	\$16,215,676	\$1,170,729	\$2,726,127	\$3,746,334	\$7,643,189	47%
2025	\$25,768,471	\$0	\$25,768,471	\$9,032,794	\$16,735,677	\$182,398,970	\$16,735,677	\$1,170,729	\$2,726,127	\$3,746,334	\$7,643,189	46%
2026	\$26,530,300	\$0	\$26,530,300	\$9,258,613	\$17,271,687	\$199,670,657	\$17,271,687	\$1,170,729	\$2,726,127	\$3,746,334	\$7,643,189	44%
2027	\$27,314,275	\$0	\$27,314,275	\$9,490,079	\$17,824,196	\$217,494,853	\$17,824,196	\$1,170,729	\$2,726,127	\$3,746,334	\$7,643,189	43%
2028	\$28,121,041	\$0	\$28,121,041	\$9,727,331	\$18,393,710	\$235,888,563	\$18,393,710	\$1,170,729	\$2,726,127	\$3,746,334	\$7,643,189	42%
2029	\$28,951,263	\$0	\$28,951,263	\$9,970,514	\$18,980,749	\$254,869,312	\$18,980,749	\$1,170,729	\$2,726,127	\$3,746,334	\$7,643,189	40%
2030	\$29,805,627	\$0	\$29,805,627	\$10,219,777	\$19,585,850	\$274,455,162	\$19,585,850	\$1,170,729	\$2,726,127	\$3,746,334	\$7,643,189	39%
2031	\$30,684,838	\$0	\$30,684,838	\$10,475,271	\$20,209,566	\$294,664,728	\$20,209,566	\$1,170,729	\$2,726,127	\$3,746,334	\$7,643,189	38%
2032	\$31,589,621	\$0	\$31,589,621	\$10,737,153	\$20,852,468	\$315,517,196	\$20,852,468	\$1,170,729	\$2,726,127	\$3,746,334	\$7,643,189	37%
2033	\$32,520,724	\$0	\$32,520,724	\$11,005,582	\$21,515,143	\$337,032,339	\$21,515,143	\$1,170,729	\$2,726,127	\$3,746,334	\$7,643,189	36%
2034	\$33,478,916	\$0	\$33,478,916	\$11,280,721	\$22,198,195	\$359,230,534	\$22,198,195	\$1,170,729	\$2,726,127	\$3,746,334	\$7,643,189	34%
2035	\$34,464,989	\$0	\$34,464,989	\$11,562,740	\$22,902,249	\$382,132,783	\$22,902,249	\$1,170,729	\$2,726,127	\$3,746,334	\$7,643,189	33%
2036	\$35,479,756	\$0	\$35,479,756	\$11,851,808	\$23,627,948	\$405,760,731	\$23,627,948	\$1,170,729	\$2,726,127	\$3,746,334	\$7,643,189	32%
2037	\$36,524,057	\$0	\$36,524,057	\$12,148,103	\$24,375,954	\$430,136,685	\$24,375,954	\$1,170,729	\$2,726,127	\$3,746,334	\$7,643,189	31%
2038	\$37,598,755	\$0	\$37,598,755	\$12,451,806	\$25,146,950	\$455,283,645	\$25,146,950	\$1,170,729	\$2,726,127	\$3,746,334	\$7,643,189	30%
2039	\$38,704,739	\$0	\$38,704,739	\$12,763,101	\$25,941,638	\$481,225,273	\$25,941,638	\$1,170,729	\$2,726,127	\$3,746,334	\$7,643,189	29%
2040	\$39,842,923	\$0	\$39,842,923	\$13,082,178	\$26,760,745	\$507,986,017	\$26,760,745	\$1,170,729	\$2,726,127		\$3,896,856	15%
2041	\$41,014,249	\$0	\$41,014,249	\$13,409,233	\$27,605,016	\$535,591,034	\$27,605,016	\$1,170,729	\$2,726,127		\$3,896,856	14%
2042	\$42,219,686	\$0	\$42,219,686	\$13,744,464	\$28,475,222	\$564,066,256	\$28,475,222	\$1,170,729	\$2,726,127		\$3,896,856	14%
2043	\$43,460,232	\$0	\$43,460,232	\$14,088,075	\$29,372,156	\$593,438,412	\$29,372,156	\$1,170,729	\$2,726,127		\$3,896,856	13%
2044	\$44,736,913	\$0	\$44,736,913	\$14,440,277	\$30,296,635	\$623,735,047	\$30,296,635		\$2,726,127		\$2,726,127	9%
2045	\$46,050,786	\$0	\$46,050,786	\$14,801,284	\$31,249,503	\$654,984,550	\$31,249,503		\$2,726,127		\$2,726,127	9%
2046	\$47,402,941	\$0	\$47,402,941	\$15,171,316	\$32,231,624	\$687,216,174	\$32,231,624		\$2,726,127		\$2,726,127	8%
2047	\$48,794,496	\$0	\$48,794,496	\$15,550,599	\$33,243,896	\$720,460,070	\$33,243,896		\$2,726,127		\$2,726,127	8%
2048	\$50,226,604	\$0	\$50,226,604	\$15,939,364	\$34,287,240	\$754,747,310	\$34,287,240		\$2,726,127		\$2,726,127	8%
							\$754,747,310	\$35,121,877	\$81,783,799	\$112,390,006	\$229,295,681	30%

ASSUMPTIONS:	Bond Series A	Bond Series B	Bond Series C
Available Portion of NFI	100.0%	100.0%	100.0%
Assumed Bond Rate	6.0%	6.0%	6.0%
Number of Payments	30	30	30
Estimated Par Amount	\$16,114,890	\$37,524,673	\$51,567,648
Annual Payment	\$1,170,729	\$2,726,127	\$3,746,334
Costs of Issuance (%)	1.5%	1.5%	1.5%
Costs of Issuance	\$241,723	\$562,870	\$773,515
Bond Insurance Premium (%)	2.0%	2.0%	2.0%
Bond Insurance Premium	\$702,438	\$1,635,676	\$2,247,800
Reserve Fund	\$1,170,729	\$2,726,127	\$3,746,334
Net Proceeds 3/	\$14,000,000	\$32,600,000	\$44,800,000
Cumulative Net Proceeds	\$14,000,000	\$46,600,000	\$91,400,000

NOTES:
1/ Scenario 1A assumes that construction on Tucker's Grade Extension will begin in 2014 and will cost \$14.0 million (\$10.9 million in 2004 dollars) and that construction of a new 3-lane road and connection will begin in 2019 and will cost \$32.6 million (\$22.5 million in 2004 dollars). Scenario 1A also assumes that construction on the road improvements currently approved will begin in 2010, costing \$41.7 million (\$38.7 million in 2004 dollars). A 2.5% inflation rate is used. Construction begins one year prior to expected completion.
2/ The Net Fiscal Impact includes impact fee revenues of \$1,799 for each single-family lot, \$1,136 for each multifamily unit, and \$2.63 per square foot of commercial space generated throughout the development program. The analysis period is extended to 2048, the final year of bond payments.
3/ Net proceeds for Bond Series A are in 2014 dollars, net proceeds for Bond Series B are in 2019 dollars, and net proceeds from Bond Series C are in 2010 dollars.
4/ See "Fiscal Impact Analysis for the Burnt Store Corridor," December 13, 2004.

Exhibit 5

**BOND PAYMENTS FOR ADDITIONAL AND CURRENTLY APPROVED ROAD IMPROVEMENTS: SCENARIO 2A 1/
BURNT STORE CORRIDOR, CHARLOTTE COUNTY, FLORIDA
2005-2048**

Year	Revenues 4/	Road Impact Fee		Net Fiscal Impact 2/		Avail. For Debt Service	Bond Series A	Bond Series B	Bond Series C	Combined Gross Debt Service	% of Annual NFI
		Revenues	Total Revenue	Expenditures	Annual						
2003	\$132,391	\$410,026	\$542,416	\$0	\$542,416	\$542,416				\$0	0%
2006	\$571,044	\$504,332	\$875,376	\$251,326	\$624,050	\$1,165,467				\$0	0%
2007	\$1,107,312	\$603,096	\$1,710,408	\$566,739	\$1,143,669	\$2,310,136				\$0	0%
2008	\$2,119,713	\$1,100,915	\$3,220,628	\$950,576	\$2,270,052	\$4,580,188				\$0	0%
2009	\$3,221,139	\$814,665	\$4,035,803	\$1,515,641	\$2,520,163	\$7,100,351				\$0	0%
2010	\$4,818,665	\$1,047,366	\$5,866,031	\$2,167,211	\$3,698,819	\$10,799,171				\$3,746,334	101%
2011	\$6,239,156	\$713,256	\$6,952,412	\$2,676,354	\$4,276,057	\$15,075,228				\$3,746,334	88%
2012	\$8,112,148	\$731,087	\$8,843,236	\$3,288,546	\$5,554,690	\$20,629,918				\$3,746,334	67%
2013	\$9,687,866	\$1,027,983	\$10,715,849	\$3,818,880	\$6,896,969	\$27,526,887				\$3,746,334	54%
2014	\$11,098,145	\$716,892	\$11,815,037	\$4,343,054	\$7,471,983	\$34,998,869	\$1,170,729			\$3,746,334	66%
2015	\$13,123,501	\$734,814	\$13,858,315	\$5,007,453	\$8,850,862	\$43,849,731	\$8,850,862	\$1,170,729		\$3,746,334	56%
2016	\$14,834,467	\$753,185	\$15,587,652	\$5,583,045	\$10,004,608	\$53,854,339	\$10,004,608	\$1,170,729		\$3,746,334	49%
2017	\$16,495,166	\$732,311	\$17,227,477	\$6,184,286	\$11,043,191	\$64,897,530	\$11,043,191	\$1,170,729		\$3,746,334	45%
2018	\$18,211,399	\$678,270	\$18,889,669	\$6,787,764	\$12,101,906	\$76,999,436	\$12,101,906	\$1,170,729		\$3,746,334	41%
2019	\$19,955,968	\$695,227	\$20,651,194	\$7,373,204	\$13,277,991	\$90,277,426	\$13,277,991	\$1,170,729	\$1,245,990	\$3,746,334	46%
2020	\$21,473,816	\$0	\$21,473,816	\$7,983,671	\$13,490,142	\$103,767,569	\$13,490,142	\$1,170,729	\$1,245,990	\$3,746,334	46%
2021	\$22,930,299	\$0	\$22,930,299	\$8,183,265	\$14,747,033	\$118,514,602	\$14,747,033	\$1,170,729	\$1,245,990	\$3,746,334	42%
2022	\$23,609,656	\$0	\$23,609,656	\$8,387,847	\$15,221,809	\$133,736,411	\$15,221,809	\$1,170,729	\$1,245,990	\$3,746,334	40%
2023	\$24,308,750	\$0	\$24,308,750	\$8,597,543	\$15,711,207	\$149,447,618	\$15,711,207	\$1,170,729	\$1,245,990	\$3,746,334	39%
2024	\$25,028,157	\$0	\$25,028,157	\$8,812,482	\$16,215,676	\$165,661,293	\$16,215,676	\$1,170,729	\$1,245,990	\$3,746,334	38%
2025	\$25,768,471	\$0	\$25,768,471	\$9,032,794	\$16,735,677	\$182,398,970	\$16,735,677	\$1,170,729	\$1,245,990	\$3,746,334	37%
2026	\$26,530,300	\$0	\$26,530,300	\$9,258,611	\$17,271,687	\$199,670,657	\$17,271,687	\$1,170,729	\$1,245,990	\$3,746,334	36%
2027	\$27,314,275	\$0	\$27,314,275	\$9,490,079	\$17,824,196	\$217,494,853	\$17,824,196	\$1,170,729	\$1,245,990	\$3,746,334	35%
2028	\$28,121,041	\$0	\$28,121,041	\$9,727,331	\$18,393,710	\$235,886,563	\$18,393,710	\$1,170,729	\$1,245,990	\$3,746,334	34%
2029	\$28,951,263	\$0	\$28,951,263	\$9,970,514	\$18,980,749	\$254,869,312	\$18,980,749	\$1,170,729	\$1,245,990	\$3,746,334	32%
2030	\$29,805,627	\$0	\$29,805,627	\$10,219,777	\$19,585,850	\$274,455,162	\$19,585,850	\$1,170,729	\$1,245,990	\$3,746,334	31%
2031	\$30,684,838	\$0	\$30,684,838	\$10,475,271	\$20,209,566	\$294,664,728	\$20,209,566	\$1,170,729	\$1,245,990	\$3,746,334	30%
2032	\$31,589,621	\$0	\$31,589,621	\$10,737,151	\$20,852,468	\$315,517,196	\$20,852,468	\$1,170,729	\$1,245,990	\$3,746,334	30%
2033	\$32,520,724	\$0	\$32,520,724	\$11,005,582	\$21,515,143	\$337,032,339	\$21,515,143	\$1,170,729	\$1,245,990	\$3,746,334	29%
2034	\$33,478,916	\$0	\$33,478,916	\$11,280,721	\$22,198,195	\$359,230,534	\$22,198,195	\$1,170,729	\$1,245,990	\$3,746,334	28%
2035	\$34,464,989	\$0	\$34,464,989	\$11,562,740	\$22,902,249	\$382,132,783	\$22,902,249	\$1,170,729	\$1,245,990	\$3,746,334	27%
2036	\$35,479,756	\$0	\$35,479,756	\$11,851,808	\$23,627,948	\$405,760,731	\$23,627,948	\$1,170,729	\$1,245,990	\$3,746,334	26%
2037	\$36,524,057	\$0	\$36,524,057	\$12,148,101	\$24,375,954	\$430,136,685	\$24,375,954	\$1,170,729	\$1,245,990	\$3,746,334	25%
2038	\$37,598,755	\$0	\$37,598,755	\$12,451,806	\$25,146,950	\$455,281,635	\$25,146,950	\$1,170,729	\$1,245,990	\$3,746,334	25%
2039	\$38,704,739	\$0	\$38,704,739	\$12,763,101	\$25,941,638	\$481,225,273	\$25,941,638	\$1,170,729	\$1,245,990	\$3,746,334	24%
2040	\$39,842,923	\$0	\$39,842,923	\$13,082,178	\$26,760,745	\$507,986,017	\$26,760,745	\$1,170,729	\$1,245,990	\$3,746,334	9%
2041	\$41,014,249	\$0	\$41,014,249	\$13,409,233	\$27,605,016	\$535,591,034	\$27,605,016	\$1,170,729	\$1,245,990	\$3,746,334	9%
2042	\$42,219,686	\$0	\$42,219,686	\$13,744,464	\$28,475,222	\$564,066,256	\$28,475,222	\$1,170,729	\$1,245,990	\$3,746,334	8%
2043	\$43,460,232	\$0	\$43,460,232	\$14,088,075	\$29,372,156	\$593,438,412	\$29,372,156	\$1,170,729	\$1,245,990	\$3,746,334	8%
2044	\$44,736,913	\$0	\$44,736,913	\$14,440,277	\$30,296,635	\$623,735,047	\$30,296,635	\$1,170,729	\$1,245,990	\$3,746,334	4%
2045	\$46,050,786	\$0	\$46,050,786	\$14,801,284	\$31,249,502	\$654,984,550	\$31,249,502	\$1,170,729	\$1,245,990	\$3,746,334	4%
2046	\$47,402,941	\$0	\$47,402,941	\$15,171,316	\$32,231,624	\$687,216,174	\$32,231,624	\$1,170,729	\$1,245,990	\$3,746,334	4%
2047	\$48,794,496	\$0	\$48,794,496	\$15,550,599	\$33,243,896	\$720,460,770	\$33,243,896	\$1,170,729	\$1,245,990	\$3,746,334	4%
2048	\$50,226,604	\$0	\$50,226,604	\$15,939,364	\$34,287,240	\$754,747,310	\$34,287,240	\$1,170,729	\$1,245,990	\$3,746,334	4%
						\$754,747,310	\$35,121,877	\$37,379,712	\$112,390,006	\$184,891,594	24%

ASSUMPTIONS:	Bond Series A	Bond Series B	Bond Series C
Available Portion of NFI	100.0%	100.0%	100.0%
Assumed Bond Rate	6.0%	6.0%	6.0%
Number of Payments	30	30	30
Estimated Par Amount	\$16,114,890	\$17,150,847	\$51,567,648
Annual Payment	\$1,170,729	\$1,245,990	\$3,746,334
Costs of Issuance (%)	1.5%	1.5%	1.5%
Costs of Issuance	\$241,723	\$257,263	\$773,515
Bond Insurance Premium (%)	2.0%	2.0%	2.0%
Bond Insurance Premium	\$702,438	\$747,594	\$2,247,800
Reserve Fund	\$1,170,729	\$1,245,990	\$3,746,334
Net Proceeds 3/	\$14,000,000	\$14,900,000	\$44,800,000
Cumulative Net Proceeds	\$14,000,000	\$28,900,000	\$73,700,000

NOTES:	Bond Series A	Bond Series B	Bond Series C
1/ Scenario 2A assumes that construction on Tucker's Grade Extension will begin in 2014 and will cost \$14.0 million (\$10.9 million in 2004 dollars) and that construction on the 6-lane extension will begin in 2019 and will cost \$14.9 million (\$10.3 million in 2004 dollars). Scenario 2A also assumes that construction on the road improvements currently approved will begin in 2010, costing \$41.2 million (\$38.7 million in 2004 dollars). A 2.5% inflation rate is used. Construction begins one year prior to expected completion.			
2/ The Net Fiscal Impact includes impact fee revenues of \$1,799 for each single-family lot, \$1,136 for each multifamily unit, and \$2.63 per square foot of commercial space generated throughout the development program. The analysis period is extended to 2048, the final year of bond payments			
3/ Net proceeds for Bond Series A are in 2010 dollars, net proceeds for Bond Series B are in 2019 dollars, and net proceeds from Bond Series C are in 2010 dollars.			
4/ See "Fiscal Impact Analysis for the Burnt Store Corridor," December 13, 2004.			

FISCAL IMPACT STUDY ADDENDUM

At your request, we have analyzed the extent to which bonds to pay for road improvements in the Burnt Store Road Corridor could be paid off by a portion of the positive fiscal impact of the Burnt Store Road (BSR) projects.

Key Conclusion

Our analysis determined that all of the transportation improvements that have been determined to be necessary for development in the BSR Corridor can be easily financed using a portion of the net fiscal impact of the projects in the Corridor. In fact, even with the most expensive assumptions regarding road improvements, \$525 million in net fiscal benefit through the term of the last bonds (net present value of \$104 million) would still be available for other county purposes.

Assumptions

We have assumed that the road improvements will be financed using 30-year bonds and have included road impact fees as part of the total available revenue for the transportation improvements, although we did not include them in the fiscal impact analysis we conducted for the corridor. Estimated costs of transportation improvements were provided by David Plummer & Associates (DPA), the transportation/civil engineering consulting firm for the proposed BSR project. The 30-year analysis period in the fiscal impact analysis has been extended to 44 years to account for the entire bond repayment period for the various bond series.

The analysis includes revenues generated by development in the Burnt Store Road Corridor beginning in 2005 as indicated in Robert Charles Lesser & Co.'s "Fiscal Impact Analysis for the Burnt Store Corridor," dated December 13, 2004. In addition to the specific fiscal benefits as detailed in the Fiscal Impact Analysis report, we have assumed that road impact fee revenues, generated from development in the corridor, will also be available for transportation improvements in the area and have included these impact fees in our revenue estimates. Required net bond proceeds were calculated based upon estimated project costs inflated to the year anticipated for the bond issuance, and we have included costs of issuance, bond insurance and reserve funds to determine the total bond par amount and resultant annual debt service payments. Specific bonding assumptions are on Exhibits 2 through 5.

Scenarios Analyzed

We conducted the analysis for four road improvement scenarios. The first two scenarios (Scenarios 1 and 2) assume that the four-laning of Burnt Store Road will occur and be paid for by Charlotte County, as shown in the County's Financially Feasible Plan. These first two scenarios analyze only those impacts generated specifically by increased development along the corridor. The second two scenarios (Scenarios 1A and 2A) demonstrate how revenues from the anticipated development can also expedite the availability of funds to widen Burnt Store Road.

Scenario 1: Construction of a two-lane Tucker's Grade extension in 2014 and construction of a new north-south road plus an east-west connector in 2019.

Scenario 2: Construction of a two-lane Tucker's Grade extension in 2014 and widening of Burnt Store Road to six lanes between Tern Bay and the Tucker's Grade Extension in 2019.

Scenario 1A: The same as Scenario 1, plus widening of Burnt Store Road to four lanes in 2010.

Scenario 2A: The same as Scenario 2, plus widening of Burnt Store Road to four lanes in 2010.

Results

Based on our analysis, and as summarized in Figure 1 below, over the 44-year analysis period, the cumulative net fiscal impact will far exceed the bond payments require to fund the estimated transportation improvements under any of the four scenarios (see Exhibits 1-5). Additional revenues that the county has already allocated for Burnt Store Road under the 2025 Long Range Transportation Plan, and found to be financially feasible, were not included. Inclusion of these already-allotted funds would make the results for Scenarios 1A and 2A even more positive than in our analysis.

Over the period from 2005 through 2048, the anticipated last year of bond payments, only 10 percent-15 percent of the total net fiscal benefit from development in the BSR corridor will be required to pay for the improvements necessary for the development that are not already in the County's financially feasible plan. Even if the full cost of the widening of BSR to four lanes were to be paid for from the net fiscal benefit of development in the corridor, only 24 percent-30 percent of the fiscal benefit will be required to pay for the transportation improvements. In any of the scenarios, the vast majority of the benefit will still be available for other county needs.

Figure 1

Summary of Bond Payments for Additional Road Improvements

Scenario	Improvement	Year of Construction	Cost 1/	Avail. For Debt Service	Bond Financing	Bond Series A	Bond Series B	Bond Series C	Combined Gross Debt Service	% of Cumulative NFI
Scenario 1										
	Tucker's Grade Extension	2014	\$14.0 M		Series A	\$35,121,877				
	New 2-Lane Road	2019	\$32.6 M		Series B		\$81,783,799			
	Total			\$754,747,310		\$35,121,877	\$81,783,799	\$0	\$116,905,676	15%
Scenario 2										
	Tucker's Grade Extension	2014	\$14.0 M		Series A	\$35,121,877				
	6-Lane Extension	2019	\$14.9 M		Series B		\$37,379,712			
	Total			\$754,747,310		\$35,121,877	\$37,379,712	\$0	\$72,501,588	10%
Scenario 1A										
	Tucker's Grade Extension	2014	\$14.0 M		Series A	\$35,121,877				
	New 2-Lane Road	2019	\$32.6 M		Series B		\$81,783,799			
	Approved Improvements	2010	\$41.7 M		Series C			\$112,390,006		
	Total			\$754,747,310		\$35,121,877	\$81,783,799	\$112,390,006	\$229,295,681	30%
Scenario 2A										
	Tucker's Grade Extension	2014	\$14.0 M		Series A	\$35,121,877				
	6-Lane Extension	2019	\$14.9 M		Series B		\$37,379,712			
	Approved Improvements	2010	\$41.7 M		Series C			\$112,390,006		
	Total			\$754,747,310		\$35,121,877	\$37,379,712	\$112,390,006	\$184,891,594	24%

1/ Dollars includes inflation to the year at which construction begins, assuming a 2.5% annual inflation rate.

F. HURRICANE EVACUATION AND DEVELOPMENT DENSITIES

Examination of Hurricane Evacuation and Development Densities in Coastal High Hazard Areas of Charlotte County, Florida

1.0 INTRODUCTION

As discussed in the Charlotte County Comprehensive Plan (1997), the ability of residents in low lying coastal areas to safely and effectively evacuate the County or obtain shelter during a tropical storm or hurricane event guides the land development process with respect to the approval of specific development densities. As such, density and future zoning of undeveloped tracts of land along the west side of Burnt Store Road in southern Charlotte County were examined relative to evacuation clearance times. The Comprehensive Plan limits the density of new plats (subdivisions) in the Category 1 Hurricane Vulnerability Zone to 3.5 units per acre. The Plan also suggests that development densities in other low lying coastal areas of the County could be transferred to other like areas more suitable in accommodating hurricane evacuation.

The objective of this study is to provide technical information that may be used by Charlotte County planning staff and other governmental officials to better plan and make decisions for hurricane evacuation along the Burnt Store Road corridor. This study examines the projected influence of a likely 80-unit development (located in Section 5, Township 42, Range 23E and part of the Burnt Store Area Plan) would have on hurricane evacuation clearance times on the surrounding roadway network. The likely 80-acre development located west of Burnt Store Road and south of Notre Dame Boulevard was originally approved for a total of eight (8) dwelling units, with a density equal to 1.0 dwelling unit for every 10 acres. The proposal is to increase the development density on this 80-acre parcel to 1.0 dwelling unit per acre. Under this development intensity, the net difference between the number of approved and the number of proposed dwelling units would be 72 units (80 proposed units minus 8 approved units equals 72 net units). The rationale for proposing this increase in development density is to explore the feasibility of transferring densities from other low lying coastal high hazard areas in the County to the proposed parcel. Table 1, shown on this page, provides an estimate of the number of new vehicle trips that would evacuate the likely development during a tropical storm or hurricane. This table also compares the number of vehicle trips generated by the likely development with all other vehicle trips originating from the Burnt Store evacuation zone. The vehicle trip estimates shown in Table 1 are derived from seasonal occupancy and evacuation parameters outlined in the RHEP. As shown in Table 1, the likely 80-acre single-family residential development is projected to contribute less than four percent of the total number of vehicle trips accessing the Burnt Store Road corridor during a Category 3 hurricane.

Table 1
Summary of Evacuation Vehicle Trips

Description	Number of Dwelling Units	Evacuation Vehicle Trips	
		Non-Peak (July)	Peak (October)
Net New Development	72 units	75	79
Burnt Store Evacuation Zone ¹	2,811 units	2,108	2,650
Percent of Total	--	3.5%	2.9%

Source: Cater & Burgess, (2005)

¹Represents the number of housing units impacted by a Category 3 hurricane (adopted from the RHEP, 2001 Update)

Note that with the extension of the service area to the west side of Burnt Store Road other properties may also transfer density of 1.0 dwelling unit per acre. However, it is assumed that development would not occur in a meaningful timeframe do to environmental constraints and placement of those properties in the limited development land use category.

2.0 COUNTY-WIDE ASSESSMENT OF HURRICANE EVACUATION

An evaluation of evacuation clearance times was conducted to determine how the Burnt Store evacuation zone compares to other evacuation zones in coastal high hazard areas of Charlotte County. The Coastal High Hazard Area (CHHA) is defined in the Charlotte County Comprehensive Plan (1997) as locations requiring evacuation in a Category 1 hurricane. The RHEP identifies six (6) hurricane zones that fall under this storm category. The ranking of the time to clear each of the CHHA evacuation zones is shown in Table 2. The clearance time for each of the CHHA evacuation zones are listed in Table 2 in ascending order, starting from the lowest time needed to clear an evacuation zone and concluding with the evacuation zone that requires the greatest time to clear.

Table 2
Summary of Hurricane Evacuation Clearance Time, Category 1 Hurricane

Ranking	Evacuation Zone	Clearance Time (Hours)		Number of Evacuees	
		Non-Peak (July)	Peak (October)	Non-Peak (July)	Peak
1	Burnt Store	0.6	0.7	782	1,020
2	Myakka River	0.7	0.9	2,596	3,396
3	Punta Gorda	1.3	1.6	9,630	12,508
T4	Barrier Islands	2.0	2.3	6,005	6,847
T4	Lemon Bay	2.0	2.3	3,225	3,757
6	Peace River	2.3	2.5	10,370	11,292
	Mobile Homes	--	--	12,463	22,002
	Total	8.9	10.3	45,070	60,822

Source: RHEP, 2001 Update

Noted in the following are key observations from the clearance time information shown in Table 2:

- Out of the six evacuation zones in Charlotte County susceptible to flooding in a Category 1 hurricane, the Burnt Store evacuation zone requires the least amount of time to clear.
- The Burnt Store evacuation zone constitutes less than 7.0 percent of total evacuation time needed to clear all evacuation zones in the County during peak season of a Category 1 hurricane. The number of persons residing in the Burnt Store evacuation zone that would be affected by a Category 1 hurricane is less than 2.0 percent of the total population in Charlotte County impacted by a storm of this intensity.

This review illustrates the effectiveness of the Burnt Store evacuation zone to clear vehicle trips relative other low lying coastal areas in Charlotte County.

3.0 ASSESSMENT OF HURRICANE EVACUATION ALONG BURNT STORE ROAD

The comparison of clearance times for the six CHHA evacuation zones documented in the preceding section indicated that the Burnt Store evacuation zone is the best for clearing evacuees. A secondary assessment of hurricane evacuation was conducted to determine if the Burnt Store evacuation would continue to show similar favorable results for a

Category 3 hurricane. The analysis of Category 3 hurricane conditions was also performed to identify possible sub-regional roadway improvements that could be implemented to further reduce clearance time along this identified regional hurricane evacuation route.

The Burnt Store Improvement Initiative Partnership retained Carter & Burgess, Inc. in January 2005 to conduct a similar hurricane evacuation study to document regional clearance times in southern Charlotte and northern Lee Counties. The results of this previous study indicated that it would take as many as 17.3 hours to fully clear evacuation zones along the Burnt Store Road corridor during a Category 3 hurricane in the year 2005. The study also indicated that clearance times would be reduced by as much as 11.0 hours if Burnt Store Road were widened from a two-lane undivided roadway facility to a four-lane divided roadway facility. The widening of Burnt Store Road to four lanes is ranked the fifth highest priority project among 32 projects identified in the Charlotte County Cost Feasible Plan¹. However, prior to the Burnt Store Area Plan, inadequate funding was programmed in the Charlotte County Capital Improvement Program (CIP) for four laning Burnt Store Road. The procedure used to conduct the evaluation of clearance time for a four lane Burnt Store Road scenario and other sub-regional roadway improvements is described in the following.

3.1 Storm Surge Susceptibility and Delineation of Hurricane Evacuation Zones

As documented in the previous assessment of hurricane evacuation, the projected reduction in clearance time on evacuation routes is the primary measure used to assess the benefit of providing specific sub-regional roadway improvements. Clearance time along an evacuation route will vary according to storm intensity and the path that a storm follows. Of the three possible storm paths (paralleling, exiting and landfalling), the analysis of a landfalling storm represents a worse case scenario because it exhibits higher evacuation clearance times in comparison to the two other storm paths. A graphical illustration of tracts of land along the Burnt Store Road corridor geographically depicted relative to the bands of storm surge susceptibility is shown on page 150.

3.2 Determination of Evacuation Vehicle Trips

After delineating the Burnt Store corridor into specific evacuation zones, the number of vehicle trips projected to evacuate onto the Burnt Store corridor was estimated using the RHEP seasonal occupancy and evacuation parameters shown in Table 3. The study parameters in this table are specific to each of the northern Lee County and southern Charlotte County geographical areas. The Lee County parameters are included in this evaluation because, as the RHEP indicates, there is the likelihood that some of the vehicle trips exiting the northern Lee County evacuation zones will utilize the Burnt Store corridor to travel through the southern Charlotte County area. These trips will travel through the southern Charlotte County area to obtain access to I-75 via north Jones Loop Road, or evacuation shelters in the Punta Gorda area. The RHEP identifies the roadway segment from Scham Road to the Lee County line as a route constriction along the Burnt Store Road evacuation route.

¹ Adapted from the Charlotte County-Punta Gorda MPO (Year 2007-2025) Cost Feasible Plan.

Table 3
Seasonal Occupancy and Evacuation Parameters

Unit Type	Non-Peak (July)		Peak (October)	
	Lee County	Charlotte County	Lee County	Charlotte County
Occupancy Rate:				
Single Family	95%	95%	95%	100%
Mobile Home	43%	43%	75%	75%
Recreational Vehicle	18%	18%	41%	41%
Multi-Family	61%	61%	71%	71%
Duplex	94%	95%	93%	100%
Hotel/Motel	63%	40%	64%	50%
Population/Behavior Parameters:				
Persons per Household	2.27	2.23	2.27	2.23
Vehicles per Household	1.10	1.10	1.10	1.10
Percent Evacuating	100%	100%	100%	100%
Percent Going to Friends or Relatives	13%	13%	13%	13%
Percent Leaving the Region/County	34%	34%	34%	34%
Persons per Vehicle	2.06	2.03	2.06	2.03
Percent Going to Public Shelter	20%	15%	20%	15%

Source: RHEP, 2001

Tables 3a and 3b summarize the origin of the vehicle trips that are projected to travel through the Burnt Store Road route constriction for varying storm intensities. The northern Lee County trips that travel on Burnt Store Road are projected to combine with trips exiting the adjacent Burnt Store evacuation zone; thereby, increasing overall clearance times for Burnt Store evacuees. As is seen in Table 3b, as many as 9,200 vehicle trips originating from Lee County are projected to travel on Burnt Store Road during the peak season of a Category 3 hurricane.

3.3 Clearance Time

As mentioned above, assessing the change in evacuation clearance time with and without a modification to an existing evacuation route is the primary method to quantify the benefits of providing specific sub-regional roadway improvements. Clearance time is defined as the time needed for evacuees (vehicle trips) to safely exit the County or obtain public shelter. Clearance time is governed by the roadway capacity of an identified route constriction along an evacuation route. Utilizing the vehicle trip information summarized in Tables 3a and 3b, hurricane evacuation clearance times were estimated for a No- Build Alternative (without the implementation of alternate sub-regional roadway improvements) and a Build Alternative (with the implementation of alternate sub-regional roadway improvements).

Table 3a
2005 Hurricane Evacuation Zone Trip Interaction through Burnt Store Road Route Restriction Point (Non-Peak Season)

Storm Category Evacuation	Evacuation Zone Vehicle Trips					
	Burnt Store Evacuation Zone	Northern Lee County Evacuation Zones				Total All Zones
		Northwest Cape Coral	Outer Islands	Pine Island	Upper Captiva	
Tropical, T					106	106
Category 1	386		164	3,728	267	4,545
Category 2	1,527	1,729	164	5,918	267	9,605
Category 3	2,033	1,729	164	5,918	267	10,111

Source: Carter & Burgess, Inc. (2005)

Note: Vehicle trip estimates for each ascending storm category includes the vehicle trips from the preceding storm category.

Table 3b
2005 Hurricane Evacuation Zone Trip Interaction through Burnt Store Road Route Restriction Point (Peak Season)

Storm Category Evacuation	Evacuation Zone Vehicle Trips					
	Burnt Store Evacuation Zone	Northern Lee County Evacuation Zones				Total All Zones
		Northwest Cape Coral	Outer Islands	Pine Island	Upper Captiva	
Tropical, T					106	106
Category 1	503		166	4,559	268	5,496
Category 2	2,021	1,966	166	6,768	268	11,189
Category 3	2,571	1,966	166	6,768	268	11,739

Source: Carter & Burgess, Inc. (2005)

Note: Vehicle trip estimates for each ascending storm category includes the vehicle trips from the preceding storm category.

The two Build Alternatives examined in this study are described as follows:

- Extend Green Gulf Boulevard/Tucker’s Grade (at US 41) to the west to form a new connection with Burnt Store Road. This new access point could provide motorists evacuating the Burnt Store evacuation zone the opportunity to access I-75 via Tucker’s Grade, rather than requiring evacuees to travel several miles on an existing capacity constrained (two-lane) Burnt Store Road corridor to access I-75 via North Jones Loop Road.

- Widen Burnt Store Road from a two-lane to a four-lane roadway facility from the Lee County line to US 41. It should be noted that a proportionate share of the mitigation costs for this roadway improvement may be financed through the planned development in the Burnt Store Area Plan.

The hurricane evacuation clearance times for the Build alternatives were evaluated either by assessing the reduction in traffic traveling on Burnt Store Road as a result of the redistribution of traffic to an alternative east-west route, or by quantifying the reduction in clearance time after providing additional roadway capacity. A summary of the results of this analysis is discussed in the following section.

3.4 Comparison of Clearance Time with and without Proposed Sub-Regional Roadway Improvements

In order to assess the benefits of providing specific roadway improvement, an analysis of hurricane evacuation clearance time was performed for both the No-Build and Build alternatives. The No-Build alternative represents the time required to clear the Burnt Store evacuation zones without implementing any sub-regional roadway improvements. The Build alternative indicates the projected hurricane evacuation clearance times if the sub-regional roadway improvements described above were implemented. The difference between clearance time with and without the proposed improvements provides an indication of the benefits of the proposed improvement in reducing evacuation times during a tropical storm or hurricane event.

Table 4a summarizes the results of the comparison of clearance time with and without the proposed sub-regional improvement implemented on Burnt Store Road during the peak season of a Category 3 hurricane. The clearance time estimates in this table do not include vehicle trips originating from northern Lee County. As was previously documented in Table 1, the Burnt Store Evacuation zone is evaluated with respect to the other five coastal high hazard areas in the County. Of the six evacuation zones in the CHHA, the Burnt Store evacuation zone exhibits the second lowest clearance time (3.8 hours). If Burnt Store Road is widened to four lanes, clearance time would be reduced to 1.4 hours. Moreover, if Burnt Store Road is widened to four lanes and Tuckers Grade is extended to form a connection with Burnt Store Road, then the Burnt Store evacuation zone would be tied with the Myakka River evacuation zone for the least clearance time (0.9 hours). It should be noted that the Myakka River evacuation zone has the least clearance time due to its close proximity to the Charlotte County/Sarasota County line.

Table 4b summarizes the results of the comparison of clearance time with and without proposed sub-regional improvements implemented on Burnt Store Road, and includes vehicle trips originating from northern Lee County. With the influence of vehicle trips from northern Lee County, the Burnt Store evacuation zone is projected to be the least desirable zone for clearing evacuees. This is anticipated, as a two-lane roadway facility would be insufficient to accommodate both local and regional evacuation trips on Burnt Store Road. If Burnt Store Road is widened to four lanes, clearance time for the Burnt Store evacuation zone is improved substantially (6.3 hours). The Burnt Store evacuation would then be considered the second best evacuation zone in the CHHA to clear vehicles during a Category 3 hurricane. If Tucker's Grade extension and four laning of Burnt Store can be implemented, clearance time for the Burnt Store evacuation zone can be reduced to as little as 5.9 hours. Similar to a Category 1 storm, the results of this analysis indicate that development in the Burnt Store evacuation zone is preferable if Burnt Store Road can be widened to four lanes from the Lee County Line to just north of the US 41 intersection.

Table 4a
Summary of Hurricane Evacuation Clearance Time for Coastal High Hazard Areas of Charlotte County
(Peak Season of a Category 3 Hurricane)

Ranking	Evacuation Zone	Restricting Point Restricting Point/ Proposed Improvement	Clearance Time (Hours)	Evacuation Vehicle Trips	Time to Clear (per 1,000 Persons)
1	Myakka River	SR 776 from Cornelius Boulevard to US 41	0.9	1,650	0.55
2 (2) [2] {T1}	Burnt Store	Burnt Store Road from Sham to Lee County <ul style="list-style-type: none"> • Widen Burnt Store Road to Four Lanes • Tuckers Grade Extension • Four Lanes and Extension 	3.8 (1.4) [2.2] {0.9}	2,571	1.48 (0.54) [0.86] {0.36}
T3	Barrier Islands	SR 776 East from Sarasota County to CR 777	7.7	1,126	6.83
T3	Lemon Bay	SR 776 East from Sarasota County to CR 777	7.7	617	12.48
5	Punta Gorda	US 17 from Desoto County to Washington Loop North	10.8	2,052	5.26
6	Peace River	CR 39 (Toledo Blade Boulevard) and Kings Highway	15.4	2,785	5.53
Total			46.3	10,801	4.29

Source: Carter & Burgess, Inc. (2005)

Table 4b
Summary of Hurricane Evacuation Clearance Time for Coastal High Hazard Areas of Charlotte County
(Peak Season of a Category 3 Hurricane with Lee County Trips)

Ranking	Evacuation Zone	Restricting Point/ Proposed Improvement	Clearance Time (Hours)	Evacuation Vehicle Trips	Time to Clear (per 1,000 Persons)
1	Myakka River	SR 776 from Cornelius Boulevard to US 41	0.9	1,650	0.55
2	Barrier Islands	SR 776 East from Sarasota Count to CR 777	7.7	1,126	6.83
2	Lemon Bay	SR 776 East from Sarasota Count to CR 777	7.7	617	12.48
4	Punta Gorda	US 17 from Desoto County to Washington Loop North	10.8	2,052	5.26
5	Peace River	CR 39 (Toledo Blade Boulevard) and Kings Highway	15.4	2,785	5.53
6 (2) [5] {2}	Burnt Store	Burnt Sore Road from Sham to Lee County <ul style="list-style-type: none"> • Widen Burnt Store Road to four lanes • Tuckers Grade Extension • Four lanes and Extension 	17.3 (6.3) [14.0] {5.9}	11,739	1.47 (0.54) [1.19] {0.50}
Total			54.3	16,369	3.32

Source: Carter & Burgess, Inc. (2005)

A supplemental traffic analysis was conducted using the methodology and procedures of the Regional Hurricane Evacuation Plan to evaluate existing hurricane evacuation patterns in coastal high hazard areas of Charlotte County. This analysis was undertaken to evaluate hurricane evacuation clearance times along the Burnt Store Road corridor relative to clearance times for other coastal high hazard areas in Charlotte County. An additional examination was performed to assess current hurricane clearance times with and without subregional roadway improvements implemented on Burnt Store Road, which include widening Burnt Store Road to four lanes from the Lee County Line to US 41, and extending the existing Tucker's Grade roadway alignment to the west to form a new east-west connection between US 41 and Burnt Store Road. A list of the key findings from this study of hurricane evacuation along the Burnt Store Road corridor is shown below:

- The likely 80-acre residential development is estimated to contribute less than four percent of the total number of vehicle trips that would evacuate the Burnt Store evacuation zone during a Category 3 hurricane.
- During a Category 1 hurricane, the current regional hurricane evacuation plan indicates that the Burnt Store evacuation zone requires the least amount of time to clear all evacuees when compared to all other coastal high hazard areas in Charlotte County.
- The number of residents in the coastal high hazard areas of the Burnt Store evacuation zone that would be affected by a Category 1 hurricane is less than two percent of all evacuees of coastal high hazard areas of Charlotte County.
- For a Category 3 hurricane during peak season, the Burnt Store evacuation zone ranks second overall out of the six coastal high hazard areas in Charlotte County, with a clearance time of 3.8 hours. If Burnt Store Road is widened to four lanes and Tuckers Grade extension is implemented, then the Burnt Store evacuation zone would exhibit an equivalent clearance time to the highest ranked evacuation zone, Myakka River.
- If vehicle trips originating from Lee County are considered in the analysis of clearance time, then it is essential that at least the improvement to widen Burnt Store Road to four lanes is provided to increase the ranking of the Burnt Store Corridor from the least desirable to the second best evacuation zone in coastal high hazard area.

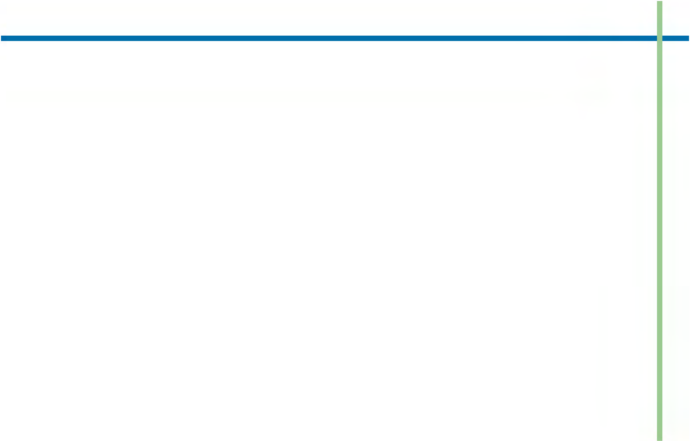
The results of this evaluation of hurricane evacuation in southern Charlotte County indicate that a significant benefit can be achieved in terms of reduced clearance time for residents of the low lying coastal areas along the Burnt Store Road corridor with the widening of Burnt Store Road to four lanes. If this widening can be implemented together with the extension of Tucker's Grade, then the Burnt Store evacuation zone would be considered one of the best locations in Charlotte County for a possible transfer of development density. It should be noted that given the lower magnitude of vehicle trips generated by the likely 80-acre development, a potential transfer of development density should not have a significant impact on evacuation clearance times along the Burnt Store Road corridor.



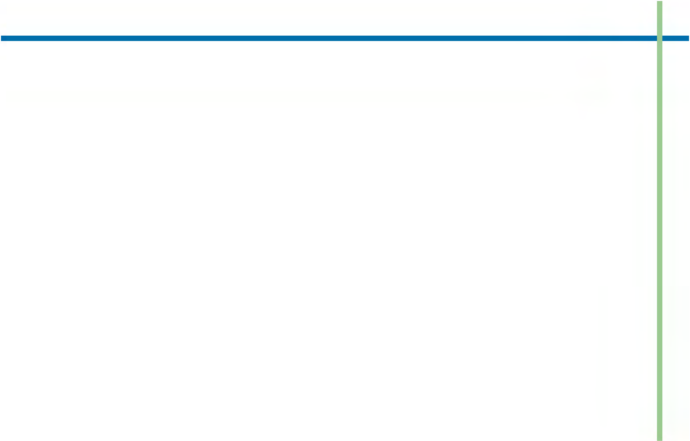
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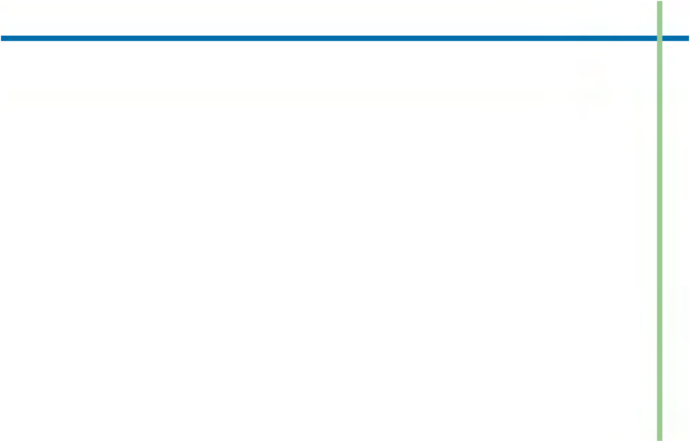
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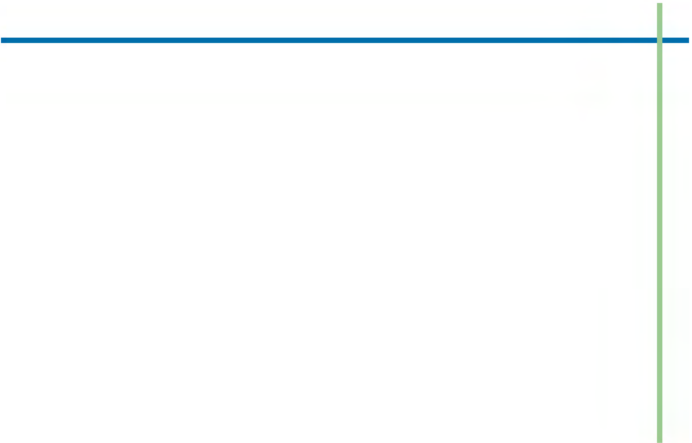
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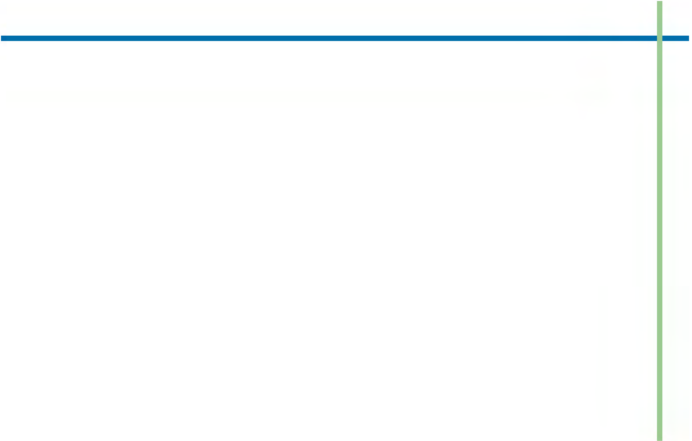
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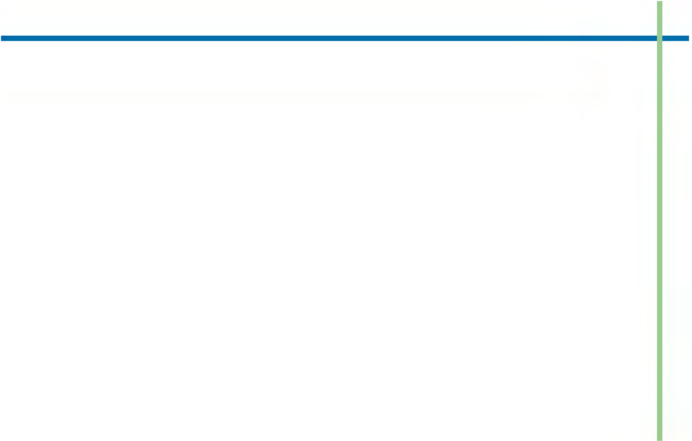
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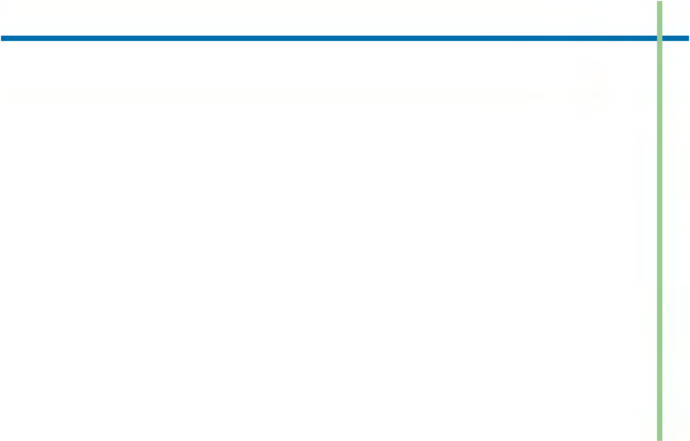
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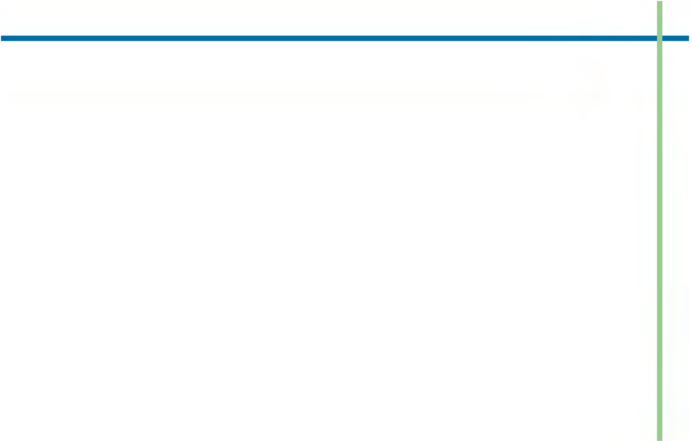
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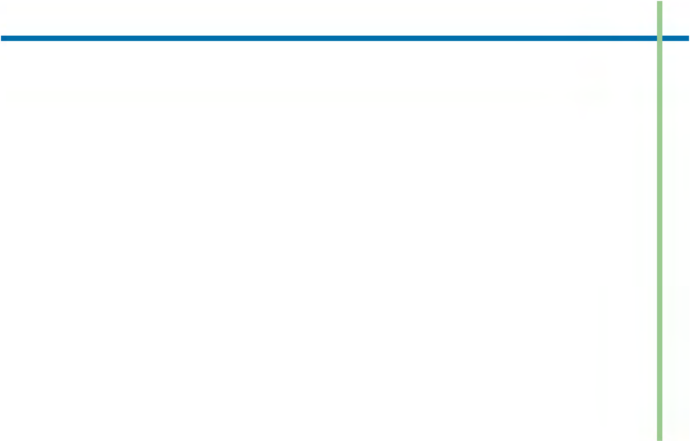
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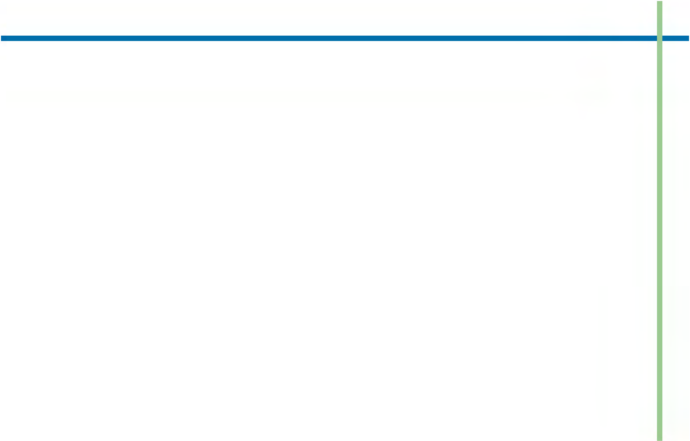
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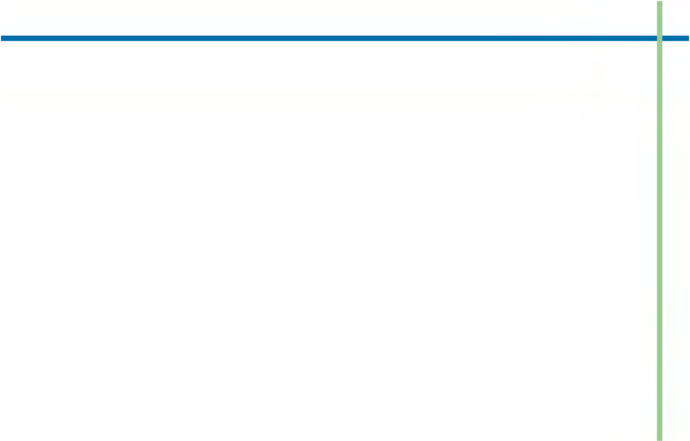
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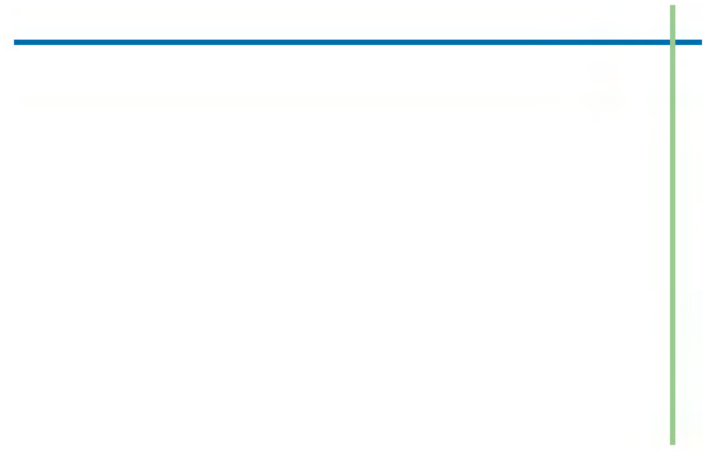


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H. ACREAGE TABLE

BURNT STORE AREA PLAN ACREAGE TABLE

EXISTING FLUM			PROPOSED FLUM		
FLUM CODES	ACRES	ACRES	FLUM CODES	ACRES	ACRES
	Outside USA	Inside USA		Outside USA	Inside USA
Agriculture	7,479.0	188	Agriculture	639	566
City	1	0	City	1	
Commercial Corridor		201	Commercial Corridor		201
High Density Residential	42	187	High Density Residential		187
Low Density Residential		3,615	Low Density Residential		3,615
Medium Density Residential	45		Medium Density Residential		
Mixed Use		936	Mixed Use		936
Parks & Recreation		17	Parks & Recreation		17
Preservation	2,732	77	Preservation	2,440	369
Public Lands & Facilities	655		Public Lands & Facilities	655	
Resource Conservation	6,111	62	Resource Conservation	5,917	256
Rural Estate Residential		25	Rural Estate Residential		25
			Village Residential		2,888
			Limited Development	3,022	639
<i>Gulf of Mexico</i>	1,325		<i>Gulf of Mexico</i>	1,325	
Urban Service Area Totals	18,390	5,308	Urban Service Area Totals	13,999	9,699
Total FLUM Acreage		23,698	Total FLUM Acreage		23,698

Note: Acreages based on the Proposed Urban Service Area (USA)

I. CHARLOTTE COUNTY SCHOOL CORRESPONDENCE

David E. Gayler, Ph.D
Superintendent



School Board

Barbara Rendell, *Chairman*
Sue Sifrit, *Vice Chairman*
Andrea Messina
Alleen Miller
Lee Swift

September 27, 2005

Daniel DeLisi, AICP
Director of Planning
The Bonita Bay Group
9990 Coconut Road, Suite 200
Bonita Springs, FL 34135

Dear Mr. DeLisi,

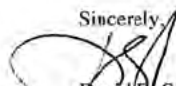
It has been a pleasure to meet with you several times over the past year or so to discuss the impact of the Burnt Store Area Plan on Charlotte County and, in particular, the Charlotte County Public School District.

In reviewing the Burnt Store Area Plan, it is clear that the development will have significant impact on the school system in terms of facility expansion and student population. I appreciate your willingness to work closely with us as we accommodate these new students and acquire land and place schools suitably.

Our review of the school expenditures section of the document yields a solid agreement with the numbers presented, although given rising construction and materials costs, the plans' estimated capital costs may be low by the time actual school facilities are planned and constructed. As you progress toward residential and commercial development we should remain attuned to current market conditions and work together to plan accordingly.

I look forward to working with you as the Burnt Store Area development becomes a reality in south Charlotte County.

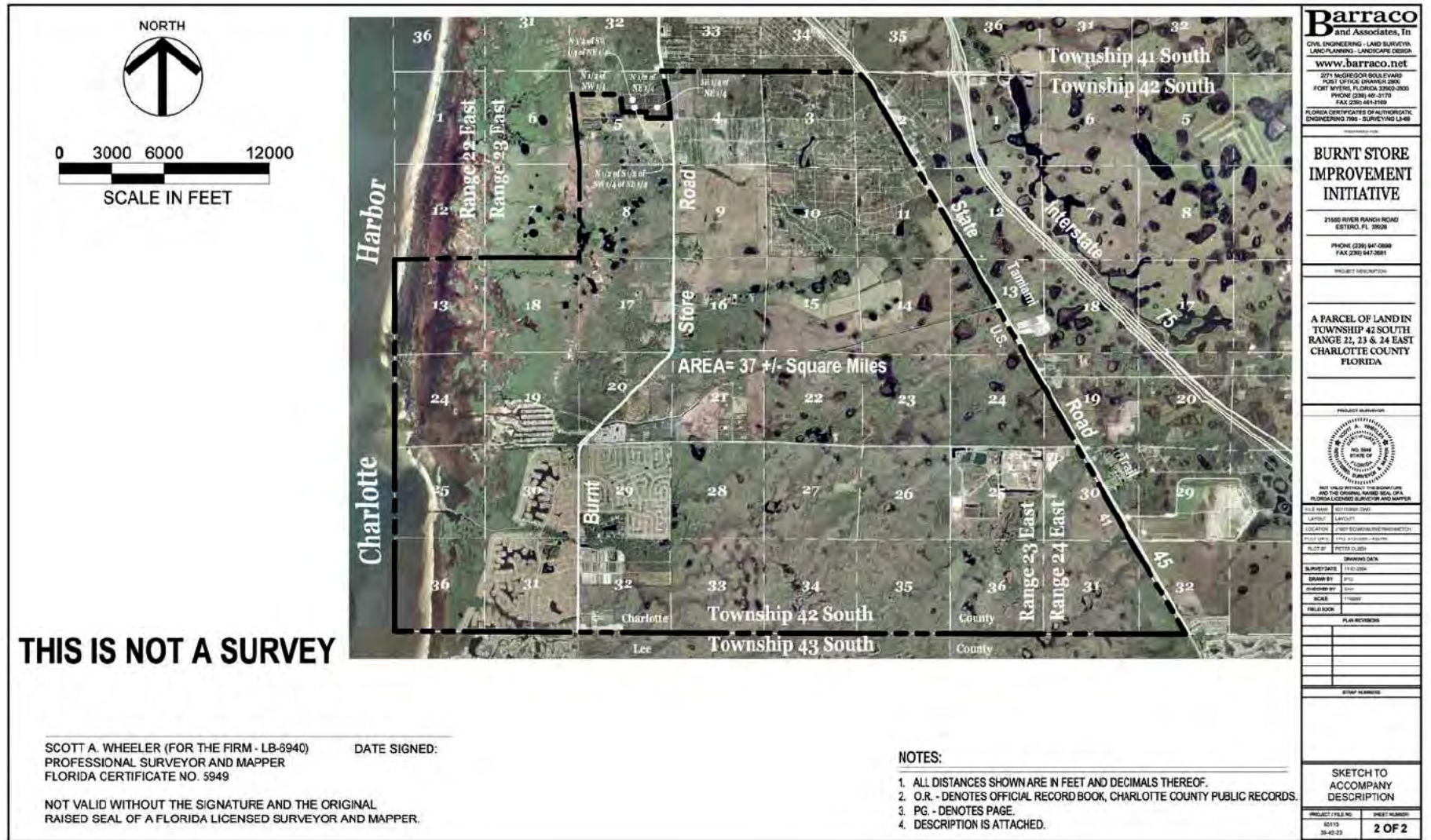
Sincerely,



David E. Gayler
Superintendent

1445 Education Way, Port Charlotte, FL 33948 • (941) 255-0808 • fax (941) 255-7571 • www.ccps.k12.fl.us

J. BOUNDARY SKETCH AND DESCRIPTION



DESCRIPTION

Parcel in
Township 42 South, Range 22 East,
Township 42 South, Range 23 East, and
Township 42 South, Range 24 East,
Charlotte County, Florida

A tract or parcel of land lying in Township 42 South, Range 22 East, Township 42 South, Range 23 East and Township 42 South, Range 24 East, Charlotte County, Florida, said tract or parcel being more particularly described as follows:

All of Sections 13, 24, 25 and 36, Township 42 South, Range 22 East.

AND

All of Township 42 South, Range 23 East, lying Westerly of the Westerly right of way line of Tamiami Trail (State Road No. 45).

LESS AND EXCEPT

All of Sections 6 and 7, and the North Half (N-1/2) of the Northeast Quarter (NE-1/4) and the Southeast Quarter (SE-1/4) of the Northeast Quarter (NE-1/4) and the North Half (N-1/2) of the Southwest Quarter (SW-1/4) of the Northeast Quarter (NE-1/4) and the North Half (N-1/2) of the South Half (S-1/2) of the Southwest Quarter (SW-1/4) of the Northeast Quarter (NE-1/4) of Section 5, Township 42 South, Range 23 East lying westerly of the westerly right of way line of Burnt Store Road.

AND

Sections 19, 30, 31 and 32, Township 42 South, Range 24 East, lying Westerly of the Westerly right of way line of Tamiami Trail (State Road No. 45).

All being in Charlotte County, Florida.

Scott A. Wheeler (For The Firm)
Professional Surveyor and Mapper
Florida Certificate No. 5949

CHARLOTTE
Herald-Tribune

AN EDITION OF THE SARASOTA HERALD-TRIBUNE

TUESDAY, OCTOBER 12, 2004

Landowners group hopes to develop Burnt Store

County officials have joined in the effort to plan the area's future.

By JAMIE MANFUSO

jamie.manfuso@heraldtribune.com

CHARLOTTE COUNTY — A group of seven property owners, including developer The Bonita Bay Group, is working to turn the rural Burnt Store Road corridor into a hotbed of new communities.

And in negotiations with the

county to get it done, the group intends to help speed up widening a narrow, two-lane road from Punta Gorda to Lee County into a four-lane thoroughfare.

Calling itself the Burnt Store Improvement Initiative, the group owns or controls 1,800 acres. Bonita Bay owns about 950 acres of that land.

In recent months, the Initiative paid for a study on the corridor to plan road work, utilities, conservation lands and other improvements.

County planners have joined the Initiative's consultants in the planning effort, and the group has also sought input from community groups.

Area residents seem amenable to increased development, especially if it means widening Burnt Store Road.

"We've heard a lot from the residents that they want the widening done as quickly as possible," said Daniel DeLisi, Bonita Bay's director of plan-

PLEASE SEE BURNT STORE ON 8A



HERALD-TRIBUNE ARCHIVE

Initiative hopes to develop Burnt Store corridor

BURNT STORE FROM 1A

ning. About a month ago, the study team met with the board of the South County Coalition, a 10-member consortium of property owners associations.

"We basically see (development) as inevitable," said coalition president Dr. David Phelen. "We just want to make sure that when it does occur, it's happening within the regulatory confinements of the city or the county."

County officials have said in the past that the four-laning of the road could be 10 to 20 years away. The coalition is excited that the road may be widened sooner than had been expected, Phelen said.

County officials have long said that they needed to develop a master plan for the corridor. But with so many other projects in the works — and even more since Hurricane Charley blew through two months ago — such a study was low on the county's list of priorities.

Bonita Bay and the other landowners decided to undertake the study themselves and divvy up the more than \$250,000 cost. County planners are working with developers on the study, and both sides will eventually present a plan to the County Commission.

County Commissioner Adam Cummings said he has mixed feelings about the undertaking.

"I suspect that what we'll see will be largely a developers' plan, and I guess we'll have to look at it with that in mind," Cummings said.

But he said some good ideas can still come from the effort.

"We're really not trying to control the vision of what the community is going to be," DeLisi said.

The public-private approach is new to Charlotte County. Bonita Bay, which has partnered with Lee and Collier counties

on development projects, is willing to donate right-of-way for the road widening, and to help the county manage the road's drainage, DeLisi said.

Developers may also have to help pay for the road if they want the widening project to happen soon, County Administrator Bruce Loucks said.

Aside from costs, building new communities along Burnt Store faces several hurdles.

The lands under study are outside the urban service area, the region the county has designated for growth. To accommodate new communities, commissioners may have to alter the county's growth management plan, which encourages compact development to discourage sprawl.

Also, the lands are zoned for agricultural use, which allows just one home for every 10 acres. To increase density, developers would have to take advantage of a county ordinance that lets developers shuffle development rights around and have the land rezoned.

County regulations set out two methods for increasing density. A developer can transfer development rights from land where the county wants to prevent development, or developers can pay the county about \$3,700 for each residential unit. That money would go to preserve other lands.

DeLisi said Bonita Bay may use the second method, spending \$7.5 million to \$8 million for 2,000 or more units.

Bonita Bay hasn't come up with a specific plan for the development, he said.

Residents will have an opportunity to offer opinions on the study at a public workshop starting at 6:30 p.m. Oct. 26 at the Friendship United Methodist Church, 12275 Paramoult Drive in Tropical Gulf Acres.

In addition to the four-laning project, the corridor study will also identify roads that could provide an east-west link between Burnt Store Road and U.S. 41.

Charlotte Sun

SUNDAY OCTOBER 17, 2004

Group pushes Burnt Store plan

By **GREG MARTIN**
STAFF WRITER

What has been called a "sleeping giant" — the landscape of pine flatwoods, marshes and fledgling developments along the eastern shore of Charlotte Harbor — is now waking up.

That has spurred a group of developers, led by The Bonita Bay Group, to attempt to jump-start a planning effort with Charlotte County for the entire 36-square-mile area.

The group has solicited input from

Charlotte County planners, area environmental agencies and residential property associations and is poised to finalize a report by mid-November.

The report will present the developers' and county planners' recommendations for how land uses should be changed, and where road, sewer, water and drainage improvements should be built.

The group, which calls itself the Burnt Store Improvement Initiative, includes the owners of seven large tracts of unde-

veloped land totaling 1,832 acres.

The group envisions a string of communities totaling some 6,000 residential units, according to Daniel DeLisi, director of planning for The Bonita Bay Group.

The vast majority of the sites are now zoned for low-density agriculture, which permits only one dwelling per 10 acres.

According to Bonita Bay, the study is intended to identify opportunities for:

See **PLAN**, page 4



Sun photo by Sarah Coward

That's progress:
A sign on Burnt Store Road in Punta Gorda tells the tale of things to come.

★ PLAN

From page 1

- privately funded transportation, utility and public infrastructure improvements.
 - linking environmental assets.
 - expanding hurricane evacuation routes.
- The group plans to present its plan to the Charlotte County Commission in November and apply for comprehensive plan amendments, rezonings and density increases within the next year.

Limiting growth

Currently, all of the proposed development sites lie outside the county's urban service area. Normally, the county's comprehensive plan calls for development to be discouraged outside the urban area.

However, the county has already permitted the Burnt Store Lakes and Tern Bay developments, so a precedent has been set, noted initiative member Kenneth Saundry Jr., a real estate broker who owns a 161-acre tract in the corridor.

"This isn't like a 'babcock Ranch,'" he argued. He was referring to the 92,000-acre ranch the state is working to acquire some 10 miles inland from the Burnt Store site.

To win development approval, the property owners would have to first convince the county commission to change the comprehensive plan to include the sites in the urban service area.

The developers would then have to rezone their properties to permit higher densities.

The county has a policy that does not allow developers to simply increase density by rezoning. The county requires them to also "transfer development rights" to the sites, said Tom Cookingham, Charlotte County planning services manager.

The county has a program that allows developers to purchase development rights from other property owners, which effectively decreases the development potential on those properties.

Or, the developers can pay a fee to the county. Theoretically, the fee allows the county to buy environmentally sensitive land to offset the impacts of the density increase.

The county charges only \$3,700 per development right, but a proposed ordinance to be considered next month would hike that price, Cookingham said.

County Commissioner Adam Cummings said the

Burnt Store corridor has an estuary link

By GREG MARTIN
STAFF WRITER

A past study by the Charlotte County Metropolitan Planning Organization found that widening Burnt Store Road poses more environmental impacts than any other road project in the county, said Dr. Lisa Beever, director of the Charlotte Harbor National Estuary Program.

Now, a group of seven property owners led by The Bonita Bay Group is conducting a study to plan roads, utilities and environmental conservation easements to serve a series of large-scale developments that they hope the county will permit along the road in the near future.

But, Bonita Bay planners have invited the NEP to provide input on the study, said Beever. Such cooperation could lead to the restoration of some of the natural flow "sheet flow" to the estuary that was diverted by past development in the corridor, she added.

The environmental impacts would come because the road runs through a coastal lowland along the shore of Charlotte Harbor. The state acquired a fringe of that land for a state aquatic pre-

county faces a dilemma over Bonita Bay's planning effort.

The county could take a hard line against the development — and end up with unplanned pockets of it anyway. Or, the county could work in cooperation with the developer to get a better-planned community, Cummings said.

"The goal is to achieve a cohesive whole that will hopefully produce a better product than if we allowed it to be developed willy nilly," he said.

Bonita Bay has worked cooperatively with Lee County on similar projects in the past, according to Scott Gilbertson, Lee County transportation planning director.

"They've always been a real community-conscious developer, very cooperative with the county planning staff, and very environmentally conscious," he said.

At several of its luxury-home developments, Bonita Bay has helped restore historic flow ways that had been altered in the past. The company also has a track record for working as partners with Lee

County in the 1970s. In the 1990s, the state also purchased some 10 square miles in the eastern part of the planning area to create the Charlotte Harbor Flatwoods.

Also, in recent years, the state has tried to purchase the Tern Bay development along the west side of Burnt Store Road and at least one other 94-acre tract now proposed for development. Offers were made but the property owners didn't accept them, Beever said.

Historically, runoff from much of the land to the east seeps toward the harbor as "sheet flow." That water is still some of the cleanest stormwater entering the harbor, Beever confirmed.

"It's got some of the best oxygenated in the harbor," she said.

The area still provides habitat for a number of endangered species she added.

However, the construction of Burnt Store Road decades ago diverted some of that flow.

Now, Beever said the joint planning effort with Bonita Bay provides an opportunity to restore some of the sheet flow along with the development.

You can e-mail Greg Martin at gmartin@sun-herald.com.

and Collier counties to extend roads, according to corporate publications.

On the Burnt Store Road project, the property owners would offer right of way to widen the road in exchange for impact fee credits, DeLisi said.

"We come to our projects with the idea that the question is not, 'What can we build?' It's, 'What can we preserve?'" said Mary Binges, Bonita's corporate public relations director.

Driving interest

Sandy Funk, who has lived in Burnt Store Lakes for some nine years, said the area was long considered a "sleeping giant."

When Lee County completed a major road project, Veterans Parkway, which connected Burnt Store Road to I-75 via downtown Fort Myers and Cape Coral, the giant woke up, said Funk, who works as secretary to the board of directors of the Burnt Store Lakes residents association.

Lee County's road project ties Burnt Store Road to Veterans Parkway, which con-

nects with Colonial Boulevard. Suddenly, Burnt Store residents found they could drive to the Edison Mall in downtown Fort Myers quicker than they could drive to Mudcock, Funk said.

"That's when we saw a lot of land sales, and a lot of land changed hands," she said. "(Before), a lakeside lot was \$15,000. Now, you can't touch one for \$120,000."

Currently, more than 100 homes are under construction in Burnt Store Lakes, she added.

Lee County earlier this year hired the Post, Buckley, Schuh and Jernigan firm to conduct Lee County's own corridor study. The goal is to plan more improvements for that county's development.

The southwest Florida Planning Council and the Charlotte County Metropolitan Planning Organization are providing input on that study, which is expected to be completed by next summer.

The Bonita Bay study forms a small piece of that larger planning effort, said Ken Heatherington, planning director for the regional planning council.

"I commend Bonita Bay for encouraging the community's participation, but it is not solely their effort," Heatherington said.

Over the next five years Lee County plans to design the four-laning of Burnt Store Road north nearly to the Charlotte County line, said Lee County Transportation Director Scott Gilbertson.

The county also plans to eventually widen the road to six lanes with access roads on each side to form what Gilbertson calls an "expressway."

Knowing that the Lee County road is coming, the Burnt Store property owners group offered to pay for the costs of drafting a similar plan for their corridor, in lieu of a Charlotte County plan.

Study launched

The offer came a year ago after Charlotte officials indicated that the corridor was "not a high priority," said Daniel DeLisi, planning director for Bonita Bay.

Charlotte officials have since recognized that "the Burnt Store corridor was coming under pressure," Cookingham said.

"Before Hurricane Charley, there was just a tremendous amount of developer interest in Charlotte County," Cookingham said.

Cape Coral and Burnt Store

residents also long lobbied for better hurricane evacuation routes, he noted.

The owner of a three-square-mile development site on Burnt Store Road known as Tern Bay recently began moving toward groundbreaking, Cookingham said.

Tern Bay's plan calls for the developer to provide right of way to four-lane Burnt Store Road at that project site.

Those movements piqued the county's interest in Burnt Store road.

The county plans to widen the road only some four feet on each side to make it safer, according to Cummings. He called that "safety project" a "Band-Aid" until the county can afford to build a four-lane highway.

Cummings said Bonita Bay has been lobbying the county to abandon its "safety project" in order to save the money for building the four-lane highway.

County officials are also talking with federal officials to get money in the wake of Charley for an evacuation route, but no money has been guaranteed.

He promised Burnt Store Road residents that the safety improvements would be built. The promise came when he campaigned for the one-cent sales tax extension a few years ago.

Now, Cummings said he won't abandon that project "unless the residents release me from my promise."

The county has provided oversight on the Burnt Store group's corridor study, Cookingham said.

The county advised the group to expand the boundaries of the study area. The area is now bounded by the Tropical Gulf Acres subdivision to the north, U.S. 41 to the east, the Lee County line to the south and the shore of Charlotte Harbor to the west.

Bonita's consultants will also study the feasibility of paving Zemel Road and building another road to connect Burnt Store with Tuckers Grade and I-75.

The plan should also identify where utilities will be needed and where different types of land uses should be located.

"We felt that a unified plan was very important," Cookingham said.

The group conducting the study has scheduled a public workshop to answer residents questions and hear their comments. The workshop is set for 6:30 p.m. Oct. 26 at the Friendship United Methodist church in Punta Gorda.

You can e-mail Greg Martin at gmartin@sun-herald.com.

OUR VIEW

Developers' idea to work with county an encouraging sign

We see only positives in the recent entreaty made by developers who own land surrounding Burnt Store Road.

In case you missed it, a group headed by officials with Bonita Bay Group has approached the county, the Metropolitan Planning Organization and environmental groups about its ideas for developing thousands of acres of land along the Burnt Store Road corridor. What is unusual about this is the fact the developers — contrary to a popular stereotype — are taking impacts on the environment to heart and offering to front their own money to help with infrastructure costs.

Perhaps developers are waking up to the idea that taking care of the environment and guaranteeing adequate infrastructure — especially roads that can handle a sudden increase in population — is as much a benefit to them as local governments. Despite arguments to the contrary, developers haven't always been interested in making sure pristine waters and green belts are left untouched or that roads can adequately handle the amount of traffic their new gated communities and high rises create.

That has always been a short-sighted way of looking at things. After all, clients would be more likely to buy — and better served — if they do not have to fight traffic congestion and if they have commercial areas providing basic needs that are convenient to them.

The Bonita Bay Group is heading up the project, but the massive developer is not the sole participant, or necessarily the originator, of the idea. The group calls itself the Burnt Store Improvement Initiative, and among its ideas is to offer right-of-way for the widening of Burnt Store Road and to pay for drafting a plan to improve that road and possibly connect it with a similar corridor originating in Lee County. The finished product would not only serve the 6,000-or-so new residents along the road but would provide a hurricane evacuation route.

The BSII group is also working with the MPO and the Charlotte Harbor National Estuary Program to make sure potential development

will help — not hurt — the natural “sheet flow” of water into the harbor.

Charlotte County commissioners are wisely taking a cautious approach to the whole scenario, but there is some optimism.

The trade off for all the considerations and financial help from developers would be to allow rezoning and possibly to change the county's comprehensive plan. Those are big steps and the county must tread carefully.

Still, it is encouraging to see developers willing to compromise, consider impacts to the environment and invest more of their own money when making long range plans. If everything we hear comes to pass, it could be a model for cooperation between local governments and developers in the future.

How to contact your legislator

Here are the addresses and phone numbers for state legislators and Congressmen:

- Sen. Bob Graham, D-Fla., 524 Hart Senate Office Building, Washington, D.C. 20510; Ph. 202-224-3041; e-mail: bob_graham@graham.senate.gov
- Sen. Bill Nelson, D-Fla., 818 Hart Senate Office Building, Washington, D. C., 20510; Ph. 202-224-5274; e-mail: not established.
- Rep. Katherine Harris, R-13th District, Sarasota, Fla., 116 Cannon House Office Building, Washington, DC 20515; call: 202-225-5015
- Rep. Mark Foley, R-16th District, West Palm Beach, Fla., 104 Cannon HOB Washington, DC 20515; call: 202-225-5792, 202-225-3132 (fax) e-mail through the web page: www.house.gov/foley/mail.htm
- Rep. Adam Putnam, R-12th District, 506 Cannon House Office Building, Washington, DC, 20515-0912; call: 202-225-1252 Fax: 202-226-0585
- Rep. Porter Goss, R-14th District, 20000 Main St. Suite 303, Fort Myers, Fla. 33901; ph. 941-332-4677; e-mail: porter.goss@mail.house.gov
- Gov. Jeb Bush, Florida Capitol Building, 402 S. Monroe St., Tallahassee, Fla. 32399; 850-488-4441 or e-mail: jeb@myflorida.com
- Sen. Lisa Carlton, R-Sarasota, 310 S.O.B. 404 Monroe St., Tallahassee, Fla. 32399; Ph. 850-487-5081; e-mail: carlton.lisa.web@leg.state.fl.us
- Rep. Jerry Paul, R-Englewood, 4456 Tamiami Trail, B14, Port Charlotte, Fla. 33980; ph. 941-764-1100; 850-488-0060 (Tallahassee); e-mail: paul.Jerry@leg.state.fl.us

OPINION

EDITORIALS

Preparing for the inevitable

County chooses the best course for Burnt Store Road

Demand for growth doesn't always occur where county planners would prefer. For instance, Charlotte County planners would probably prefer not to see widespread development along Burnt Store Road, a narrow, two-lane road outside the county's main urban service area.

But demand for development along the Burnt Store corridor is growing. The county can either fight it, or work with developers to manage it and thereby control the growth as much as possible.

On Tuesday, the county commissioners took the second route. They agreed to give a developer planning an 1,800-unit project impact fee credits in exchange for the developer paying to widen two miles of Burnt Store Road to four lanes.

This is the first indication that the county

will go along with a plan put together by a coalition of landowners and developers for the Burnt Store corridor. That plan would speed the widening of the entire seven miles of Burnt Store Road from U.S. 41 to the Lee County line.

The plan also calls for commercial nodes to provide: shopping and services for residents and cut down on trips to Punta Gorda and Cape Coral; wildlife corridors; and an extension of Tuckers Grade to provide a direct link between Burnt Store and I-75.

Burnt Store Road's location between Punta Gorda and Cape Coral and the access it offers to undeveloped waterfront property guarantees a strong demand for growth. Charlotte County is doing well by preparing for the inevitable, and working with developers to provide infrastructure and planning to handle the growth that will come.