



Bonita Beach Road Land Use Study

Volume I, Part 1
Visioning Study

Public Workshop: April 9 -12, 2018
Final Report Draft: September 25, 2018

Bonita Beach Road Visioning Documents

This report is organized into three volumes that reflect the team's work on the corridor. The PowerPoint presentations made publicly are available as a resource in the form of PDFs and can be found on the City's website.

Volume I

- Part 1 summarizes the team's work during the charrette and is anticipated to be available as a stand-alone brochure.
- Part 2 documents the interactive part of the study.
- Part 3 presents an analysis of the site and its context; examples are included of other thoroughfares around the world and the greater region.
- Part 4 summarizes the Autonomous Vehicles research requested by the City. A substantial collection of research supporting this written analysis is included in Volume III.

Volume II

- Economic research PowerPoint summary followed by full reports

Volume III is a reader of research done on Autonomous Vehicles, and is bound into the following categories:

- Part I: Planning and Psychology
- Part 2: Economics
- Part 3: Technology
- Part 4: Learning from Florida's 30A
- Part 5: AV actions being taken around the world.

Contents

Introduction.....	4
Defining the Study Area.....	6
Visioning Workshop/Main Topics.....	8
The Region.....	10
Corridor Opportunity Areas.....	12
Mobility.....	14
Connectivity.....	16
Land Use.....	18
Built Form.....	20
Frontage Study.....	24
Bonita Beach Gateway.....	32
Tamiami Trail.....	36
Historic Old 41.....	46
Bonita Springs Gateway.....	54
Neighborhood Node.....	58
Eastern Bonita Communities.....	60

A Future Vision For Bonita Beach Road

DPZ CoDESIGN was retained by the City of Bonita Springs in late December 2017 to conduct a Land Use Study of Bonita Beach Road. Prime concerns included the built form of the thoroughfare and its abutting properties, and the traffic congestion.

This report summarizes the findings and recommendations of the DPZ team based on: review of prior studies, research and analysis of existing conditions, input received from the City and participants during a multi-day interactive public workshop, and our expertise in understanding the impacts influencing the City's future.

The DPZ-led interactive public workshop took place April 9 - 12, 2018. Discussion with the City Staff continued into the summer of 2018. A summary of the workshop was presented to the City Council on June 20th. Subsequent feedback from the City was incorporated into the final draft of the report completed on September 25th, 2018.

Introduction

The City of Bonita Springs tasked DPZ to look at its primary road corridor, Bonita Beach Road, and the use of the properties along the corridor, to produce a “majestic gateway” for the City and help provide solutions for the traffic congestion. The challenges are substantial:

- The pattern of development along the corridor is one which contributes to traffic;
- A limited thoroughfare network forces all cars onto this primary thoroughfare, which must act in the dual role as a regional transit route and a local road, with few other options for the driver;
- The City does not have control over the thoroughfare;
- The thoroughfare is crossed by a major north-south state corridor of substantial size;
- The City of Bonita Springs is situated between regional growth patterns, where places of work and places of residence are vastly divided, resulting in an intensive through-traffic condition.
- Bonita Beach Road serves as the egress route for Bonita Springs, a low-lying community vulnerable to flooding from Everglades discharge from the north and southeast as the Imperial River and Spring Creek empty into the Bonita Bay at Bonita Springs, as well as ocean tides and surges with little buffer from stormwater in the Gulf of Mexico.

To approach these challenges, DPZ compiled a team of experts to study the market (Fishkind Associates); to bring familiarity with the local, county and state transportation entities (Keith and Schnars). DPZ conducted a charrette, which examined possibilities for the corridor and the nodes, and proposed conceptual visions for response, followed by these recommendations.

The recommendations found in this report fall into four categories:

- Regional growth patterns (to be pursued with Lee and Collier Counties) and looking at the longer term and vulnerability resilience planning of larger water and road networks;
- Local development patterns to be addressed with local zoning but also require adjustment with the comprehensive long-range plan; the report includes conceptual proposals for several interventions along the corridor length, mostly tied with the prior Toole Study;
- Suggestions for the thoroughfares and connectivity networks at a local level; some of which require cooperation with Lee and Collier Counties.
- Suggestions for changes to human behavior, including a commitment to Complete Streets, shared mobility in the form of trolleys, Autonomous Vehicles, regional transit and other means to reduce the burden on the intersecting thoroughfares, and the overall network.

The largest challenge for the City will be creating a unified vision with a willingness to work alongside other agents of change in the region, especially the transit authorities. The problems in Bonita Springs will become increasingly more onerous if change is not made; however, the citizen acceptance of what is needed to adjust such patterns and behavior to achieve the vision requires unification. The current choices of growth are either sprawl or complete communities. The team heard opposing opinions. Currently sprawl is the predominant pattern. This report suggests various tools to allow the complete community way of growth.

Our hope for the project is to leave clear next steps that are actionable, even in incremental stages.

Defining the Study Area and Furthering Progress

DPZ entered the Bonita Springs intensive work process in which the City and Community members had been involved for a lengthy period of time. DPZ worked from the studies completed by prior teams; some of the most recent and influential for the corridor included Toole's Visioning Study and ALTA's Trail Plan.

Many of DPZ's recommendations are similar to those of the other teams. What differentiates this next step of work is in how DPZ took the nodes identified by Toole, refined them, and presented concepts for the City to react to, both in plan and three-dimensionally, in stirring the pot with the public to elicit a vision for the Land Use abutting the corridor. DPZ also provided the typical pedestrian sheds and started to tie the nodes into thinking about land use policy and the use of alternative modes of transit, ways to take pressure off of the corridor itself and how Bonita Springs could start addressing some of its regional influences more positively.

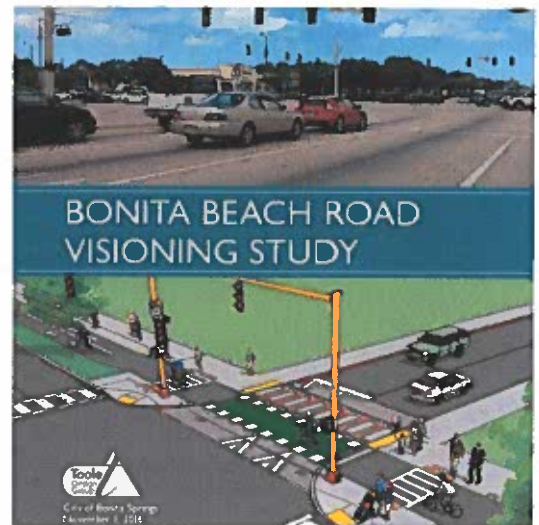
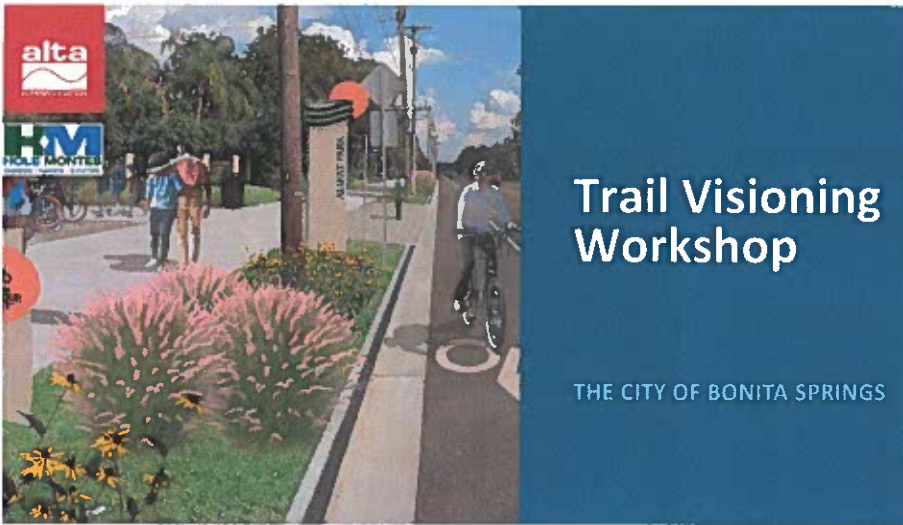
This page shows the adjustments from the Toole Nodes to the DPZ study areas. The proposals for infill and redevelopment are on subsequent pages.

During the charrette, DPZ also had some unexpected opportunities: to discuss with developers ready and eager to invest along the corridor their visions and their obstacles. While much of this moves beyond the scope of the corridor study itself, the information was enough for the team to provide recommendations.

All drawings and illustrations are conceptual in nature and represent possibilities that in the long run will become models for a type of growth based on complete, connected, livable, and resilient communities.



The Bonita Beach Road corridor, highlighting land within 1/2 mile north and south of the road. The opportunity areas are shown with 10 minute pedestrian sheds.

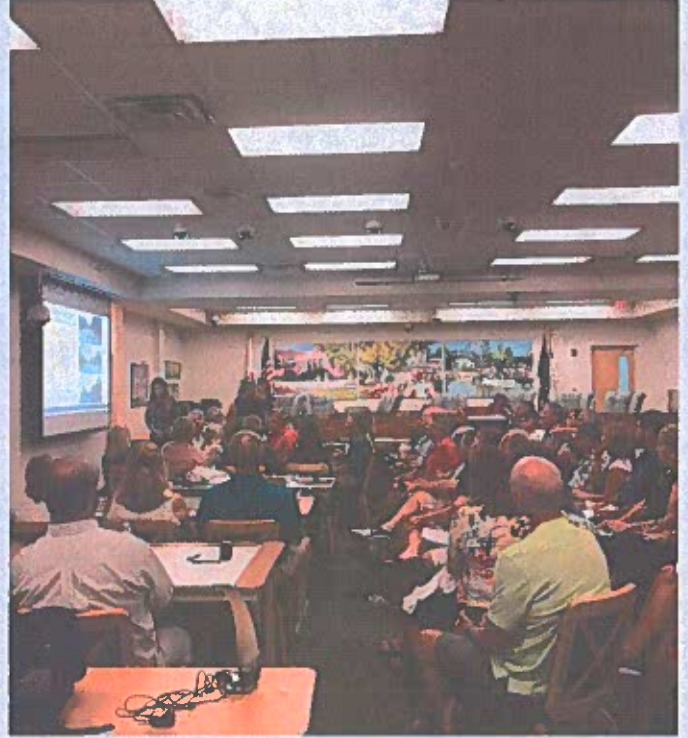


Top: Prior studies

Above: Zones and nodes as defined in the Toole Study



Visioning Workshop and Main Topics



The impacts of Bonita Beach Road extend far beyond its right-of-way. As the only southern egress point from Ft. Myers and Bonita Beaches, it is a critical East-West thoroughfare for the Lee and Collier County region.



1) The Region

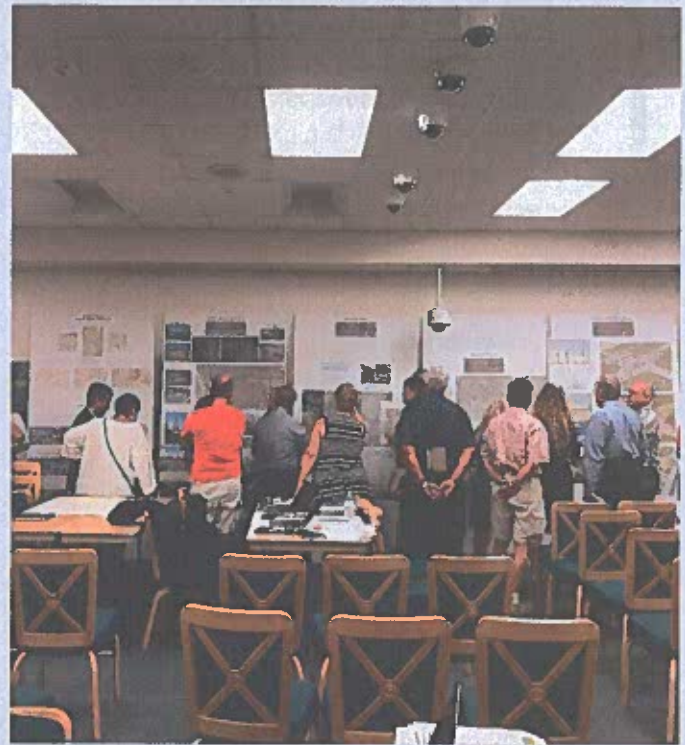


2) Corridor Opportunity Areas



3) Mobility

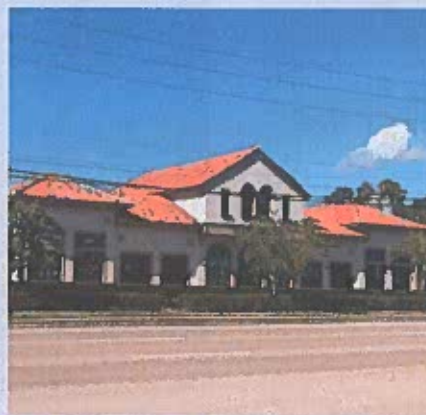
A four day workshop was conducted on-site at the City of Bonita Springs City Hall. Multiple meetings with interested community groups/stakeholders were conducted, as well as opening, mid-term, and final presentations. These were open to the general public and allowed for further input via leaving comments on project boards after the presentations.



The far-reaching and local impacts of Bonita Beach Road served as areas of focus for the study, along with the importance of mobility, connectivity, land use, and built form of the corridor and its surroundings.



4) Connectivity



5) Built Form



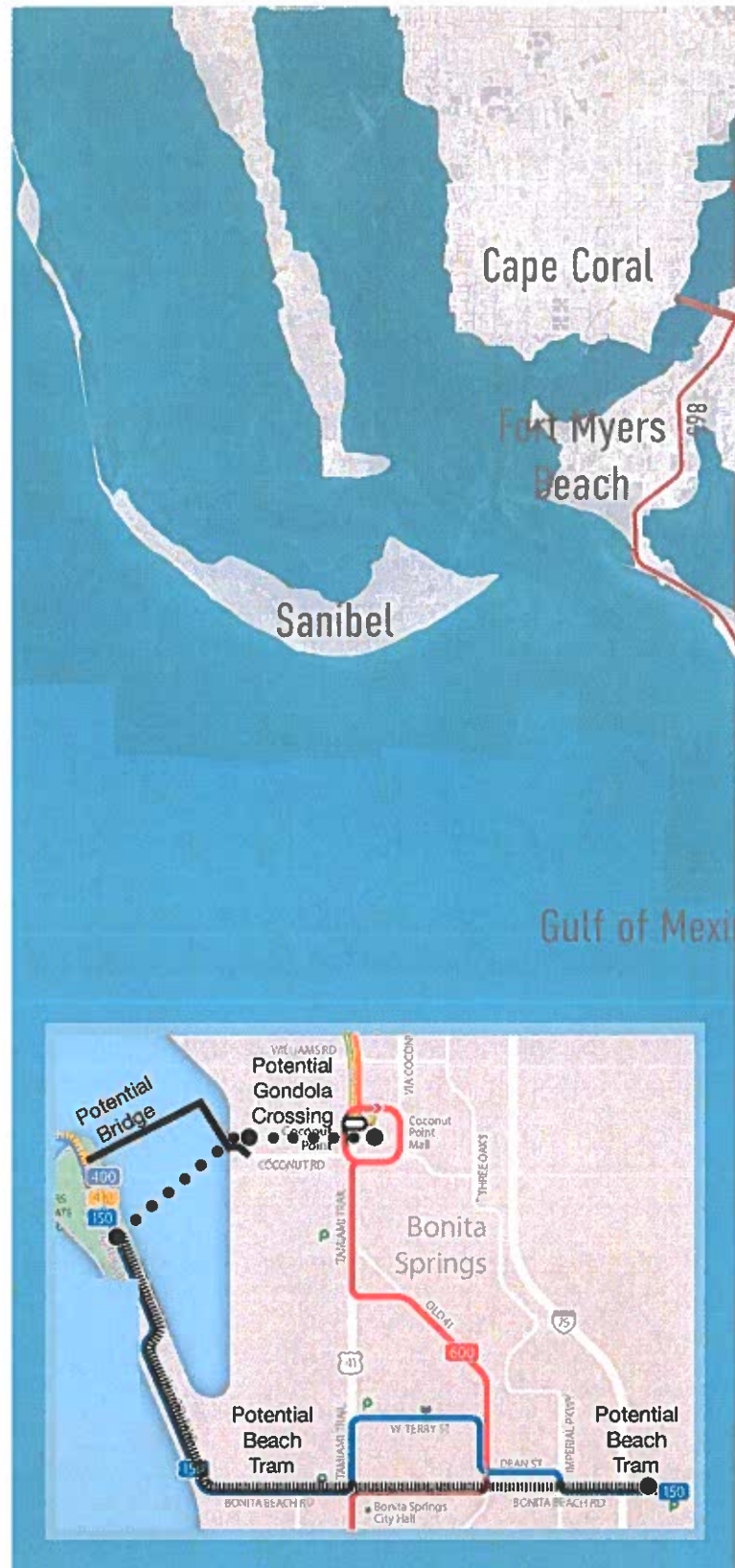
6) Land Use

Focus on The Region

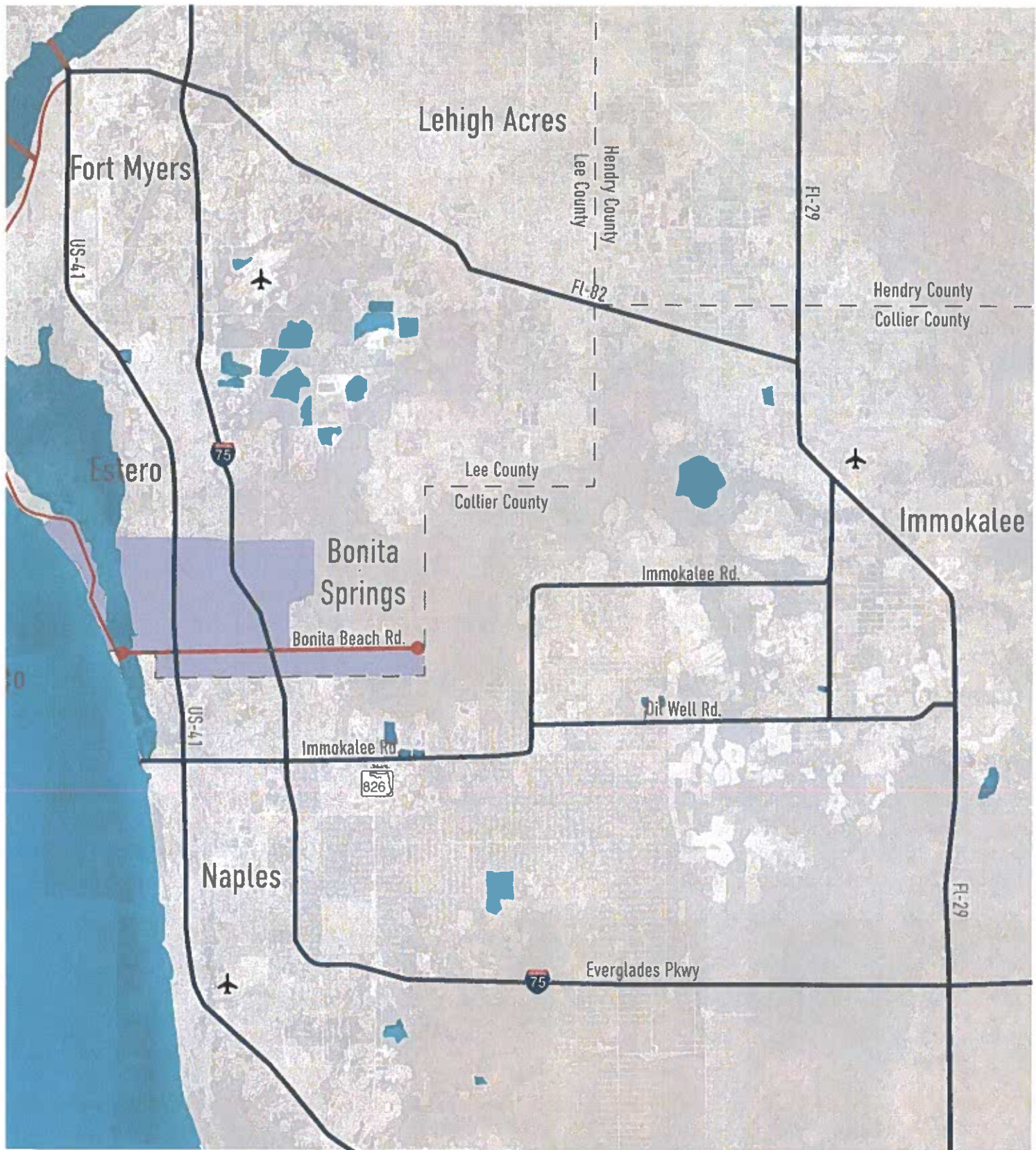
The DPZ team formulated a series of regional recommendations that can be implemented at a different level of responsibility than the City of Bonita Springs. The collaboration of Lee and Collier Counties will be central to the success of moving the region from the path of sprawl towards that of 21st century, resilient communities.

Regional Recommendations:

1. Create a multi-county plan for conservation and development, which recognizes natural waterway systems and open space networks within which communities have been built.
 - Acknowledge the pressure on Bonita Springs will continue as the region grows.
2. Create boundaries for new growth and redevelop with a mix of uses in existing urban areas rather than expanding communities outwards.
3. Understand that the geographical location of Bonita Springs places it between a regional mismatch of housing and jobs market with limited connecting roads, resulting in regional traffic.
 - Create a variety of housing types and price points in proximity with the workplace locations to reduce regional commuting.
 - Acknowledge that regional transit requires density to support it financially.
4. Identify additional regional connectivity.
5. Prioritize sustainability and resilience to natural disaster, such as local food sources and egress.
6. Develop incentives to keep the people living within Bonita Springs rather than commuting.



The addition of a new bridge/Gondola connecting Coconut Pointe to Lover's Key State Park or a Beach Tram may help alleviate traffic on Bonita Beach Rd.



- 1 Bonita Beach Road
- 2 Major Regional Roads
- 3 Bonita Springs Urban Boundary



Corridor Opportunity Areas



Bonita Springs' assets are not centered on a single destination, but a series of connected places, each having its own unique character and scale. Five different areas were identified, along with a neighborhood node study.



Bonita Beach Gateway



Tamiami Trail



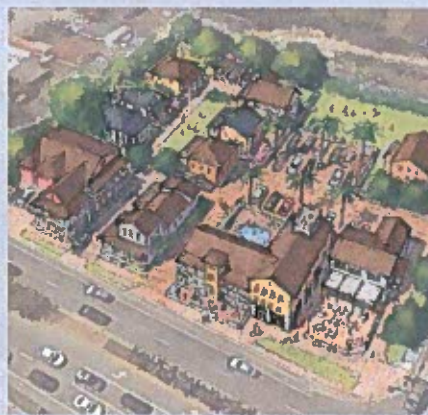
Historic Old 41



These Opportunity Areas, known as “Nodes” in previous studies, are crucial locations along the corridor where mobility, connectivity, land use, and built form are all important issues in need of study and re-visioning.



Bonita Springs Gateway



Neighborhood Node Study



Eastern Bonita Communities

Focus on Mobility

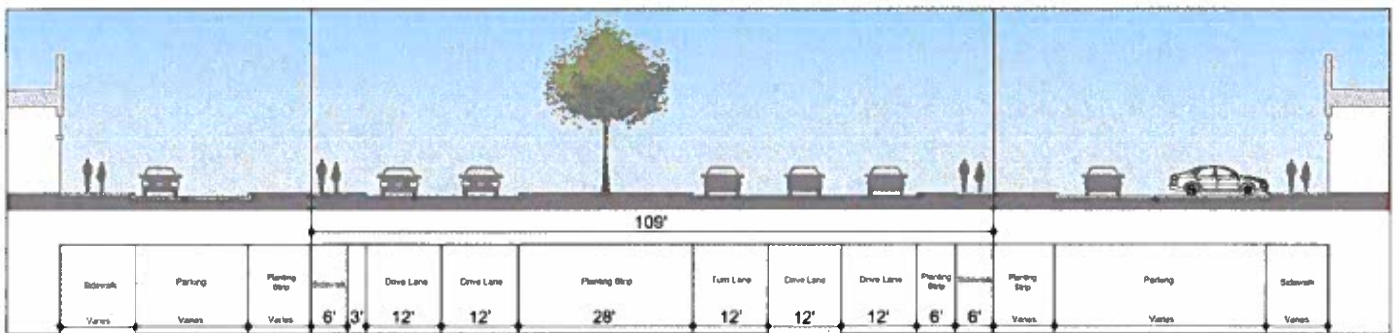
Team members walked to City Hall across Bonita Beach Road each day. They found the street difficult and dangerous to cross and drivers to be aggressive, including older drivers without tolerance for pedestrians. Due to the demographics in Bonita Springs, it is particularly important that the crosswalks be maintained and highly visible. It is also important to communicate the Complete Streets concept to the local citizenry.

Bonita Beach Road Recommendations:

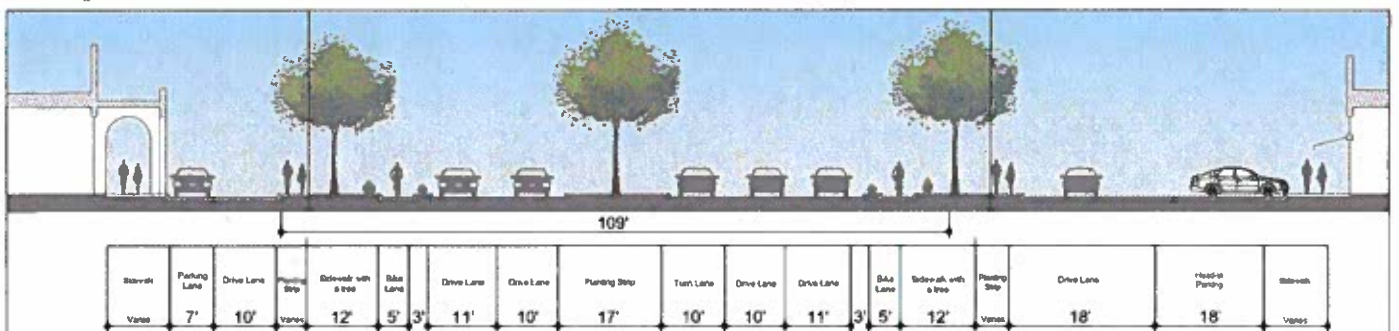
1. Keep existing number of travel lanes
2. Narrow existing travel lanes from 12 feet to 10 or 11 feet
3. Reduce median width, but provide room for landscaping
4. Redistribute excess / underutilized space within existing R/W
5. Introduce slip-lanes (frontage roads) to reduce BBR traffic to help improve connectivity between adjacent uses/properties
6. Reduce number of left turn lanes, particularly if roundabouts are added
7. Enhance pedestrian experience: wider sidewalks further from traffic, more shade, repainted crosswalks, etc.
8. Extend private sidewalk connections to Right of Way.
9. Add buffered bike lanes

General Mobility Recommendations:

1. Continue to integrate Complete Streets with Stormwater Management throughout the City.
2. Work with Lee Collier MPO to prepare for Autonomous Vehicles.
3. Design drop-off/pick-up locations to prevent conflict with flow of traffic and bicycle traffic.
4. Add trees and landscape along sidewalks and stormwater features for shade and ambiance.
5. Trim low tree branches.



Existing BBR Street Section at Tamiami Trail - Preference to automobiles



Proposed BBR Street Section at Tamiami Trail - Increased mobility for all



Example: A Gondola/Chair Lift in Honduras shuttles visitors to a beach. A solution similar to this one could help alleviate traffic on Bonita Beach Road. (GoogleMaps)



Example: A "Safari" taxi in Saint Thomas, USVI. Large format vehicles such as this one could be used as a shuttle to the beach along Bonita Beach Road. (Wikimedia)



Example: A tree and landscape lined Main Street in Naples, FL. The wide sidewalks/shade encourage walking and allow for outdoor dining/shopping. (GoogleMaps)



Example: A tree lined county road in Aly's Beach, FL. The slip lanes provide additional parking, a bike path, and keep local traffic and highway thru-traffic separate. (GoogleMaps)



Example: The city should prepare for Autonomous Vehicles, both for personal use and as a potential transit solution along the Bonita Beach Road corridor. (Wikimedia)



Example: A key component of AVs/ride sharing will be designed pick-up/drop-off areas like this shared street, a designated ride share/bus loading zone in Little Havana.

Focus on Connectivity



As frequently heard during the Bonita Beach Road (BBR) charrette meetings and documented in the prior Bonita Springs studies, BBR traffic congestion is intense, especially during tourist season. A look at the regional roadway map reveals the reason for this situation. The sizable parcels of sprawl developments have resulted in a limited number of arterial roadways. Bonita Beach Road is one of only two east-west streets that connect US Hwy 41, Old 41, Imperial Pkwy, and I-75, and the only city street that connects the mainland to the beach.

One frequently proposed solution to congestion, however, is seriously discouraged by this study. This would be the widening of Bonita Beach Road. This approach, although perhaps inevitable for some of the local 2-lane collector roads, is increasingly being discredited by recent transportation research, including by FDOT, for inducing rather than reducing traffic.

This study attempts instead to highlight opportunities within each node to add greater connectivity by supporting new roadways currently being proposed by efforts such as the Bonita Beach Road Visioning Study and other connections, in addition to complementary mobility strategies outlined on this page.

Connectivity Recommendations:

1. Build/complete additional planned E/W roads.
2. Connect existing parking lots (shopping centers, strip malls, out parcels) where possible.
3. Create more interconnectivity between developments.
4. Increase pedestrian continuity via connecting sidewalks, paths, crosswalks, etc.



1 Existing Road

2 Potential Connection Options



Two Models of Connectivity - Traditional Downtown vs Sprawl



Downtown Bonita Springs - A connected grid of streets provides various routes for cars and pedestrians. These connections exist despite the railroad/creek obstructions.

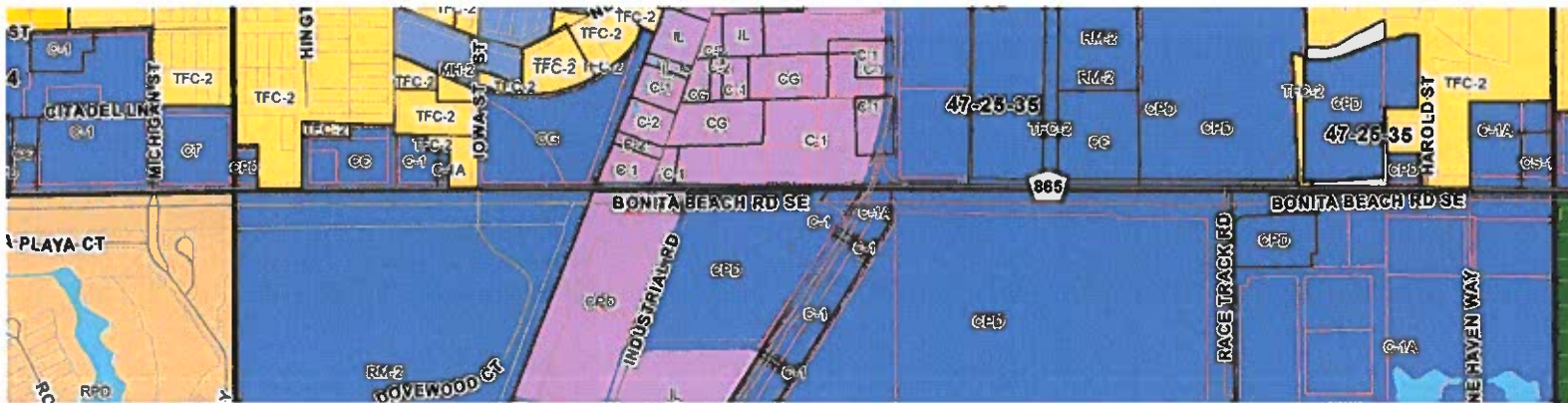


Bonita Beach Road and Hwy 41 - Sprawl planning has resulted in disconnected streets/parking lots, which all empty onto the major arterials, causing major traffic issues.

Focus on Land Use



Current Bonita Springs zoning at Old 41



Same zoning simplified from 8 sub-uses down to 4

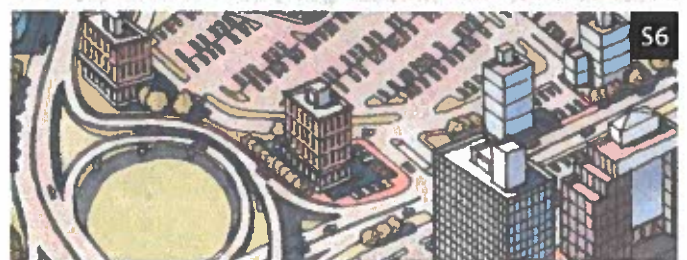
The Transect is a tool where urbanism is broken into zones, each representing a complex habitat of different building types, streetscapes, and public spaces. This is in contrast to sprawl, in which each element is a single-use agglomeration, usually a mono-culture of a single building type. The Transect zones represent zoning conditions that are similar to the ones administered by conventional zoning codes, except they include not only the building use, density, height, and setback requirements, but also how buildings relate to each other and how together they shape the public realm. Bonita Springs currently has mainly sprawl as a result of its conventional zoning code.

Sprawl elements cannot be repaired in isolation; they must always be considered in the context of the community scale. Single-use and typologically monotonous areas need to be balanced with other required elements and uses to form the full range of Transect

zones appropriate to complete communities. For example, commercial enclaves, such as malls and office parks, which exemplify the intensity of T6, Urban Core zone, need to be rebalanced with the lower-intensity Transect zones, like T3, T4, and T5. The distribution and ratios of Transect zones within the plan will be defined by a process of local adjustment and calibration of existing conditions and by the densities necessary for transit. The zoning modifications, together with the urban design adjustments, such as connecting streets and creating public space, are reflected in specific regulating plans.

Land Use Recommendations:

1. Complete Lee Collier Regional Plan and incentivize complete community growth.
2. Simplify current zoning code by combining sub-zones into Transect Zones.



Traditional Transect

Conventional Transect

Above are transects through a traditional neighborhood (left) and a transect through sprawl (right). Rather than zoning land by use, a Form-Based Code uses the transect as a base. This results in complete neighborhoods with a mix of uses, with the transect ensuring that complementary building forms are adjacent to one another.

Focus on Built Form

There are basic urban design guidelines already in place for the Bonita Beach Corridor. While these are more effective than traditional zoning standards, they should be calibrated more finely to the nuances of the corridor.

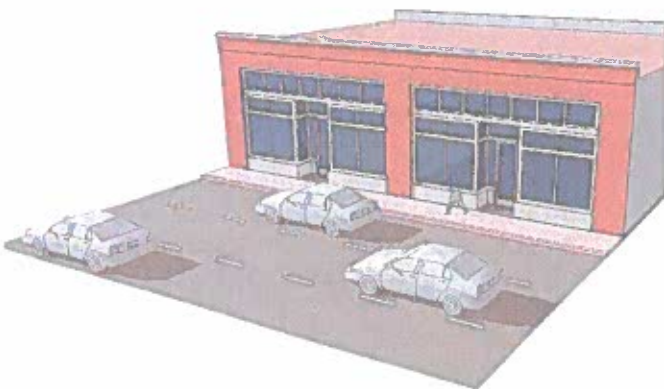
A Form-Based Code will regulate land development along the corridor and in Bonita Springs by controlling the physical form, rather than simply focusing on the separation of uses, as the main organizing principle.

In a Form-Based code, the Regulating Plan takes the place of a zoning map. This plan would break down each area into transect zones and sub-zones. Each zone incorporates standards for building frontage, height, and orientation.

The photos to the right show buildings in Bonita Springs developed under the existing, Euclidean code. These are then compared to buildings of the same use, instead built under a form-based code.

Built Form Recommendations:

1. Define and retain the character of BBR and Bonita Springs as “small town charm” and “beachy”, by calibrating the buildings and spaces to a human-scale through a Form Based Code.
2. Designate A & B streets, where an excellent pedestrian experience is provided along primary frontages, while secondary frontages are more utilitarian and auto-oriented.
3. Introduce a range of frontage types allowing various urban-to-suburban conditions and allocate them according to their contribution to the public realm.
4. Introduce new Form-Based code to Bonita Springs.



Existing: One-story storefront with inadequate sidewalk, no on-street parking, and unattractive high-speed street.



Form-Based Code: The same storefront with improved design standards. Such conditions would be permitted in a T4 or T5 zone of a Form-Based code.



Existing: A McDonald's as seen from Bonita Beach Road. Large setback, car oriented, extremely large pole sign.



Form Based Code: A Pollo Tropical (fast-food restaurant) in Miami, FL. Parking is hidden by pergola, wide sidewalks, sign on a tower.



Existing: A Wallgreens Pharmacy as seen from Bonita Beach Road. Large setback, parking in front, not pedestrian friendly.



Form Based Code: A CVS Pharmacy in Miami, FL. Entrance to store is on the street, parking lot hidden by arcade, pedestrian's are gifted a covered sidewalk.



Existing: A Shell gas station as seen from Bonita Beach Road. Large sign and pumps dominate the frontage.



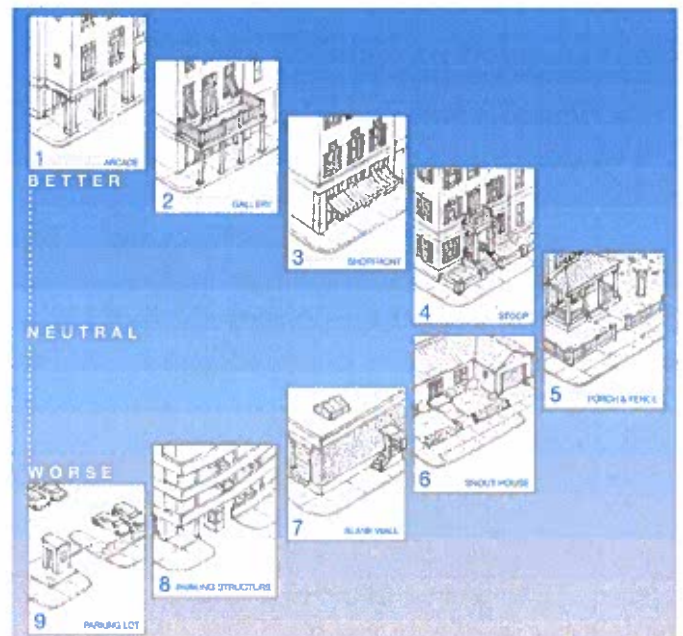
Form Based Code: An Arco gas station in Chula Vista, CA. The mini-market and a small gas sign front the street, while the pumps are located in the rear of the lot.

Comparisons between existing sprawl-oriented uses on Bonita Beach Road and Form-Based code alternatives.

Frontages: The City of Bonita Springs should Implement a tiered system of design standards that upholds higher standards for specific areas of focus.



This illustration depicts a series of typical frontages. The first five are most supportive to pedestrian activity and the last four are progressively less so. Almost all of these exist within Bonita Springs. A Form-Based code would encourage frontages 1 to 5, especially along “A” streets, and allocate frontages 7 through 9 to less important “B” streets.



Bonita Beach Gateway

Located at the western end of Bonita Beach Road, the Bonita Beach Gateway is a critical transition point. As the road turns northward, it stops bordering Collier County and continues up through Lee County. This municipality change is a firm border that causes beach parking to be split into two dead-end parking lots, each with sub-par beach amenities. A master plan produced during the workshop encourages more efficient design for the two parking lots, with the potential for an internal connector road and new, shared amenity facilities.

This curve in the road is also where the thoroughfare changes names from Bonita Beach Road to Hickory Blvd. The curve is the transition point of two very different street sections; Bonita Beach Road is a wide, high-speed, four-lane corridor, whereas Hickory Blvd is a single-family home lined, low-speed, two-lane road. Numerous vehicles turn into beach parking lots, Doc's Beach House restaurant, and Kings Kew along this

Opportunity Area Recommendations:

1. Create a better pedestrian realm (sidewalks, raised/decorative crosswalks, etc).
2. Add textured pavement (brick/pavers) to slow traffic at Hickory Blvd merge point.
3. Consider alternatives to roundabouts.
4. Add buffered right turn lane for Kings Kew and parking lots.
5. Introduce parking management system (indicate available spaces).
6. Make consistent signage, indicate handi-cap-accessible beach access.
7. Consider potential addition of minor facilities (bathrooms, showers, etc).
8. Propose bridge or Gondola system at Lovers Key to help alleviate traffic.

stretch of road. To better manage this traffic, new slip-turn lanes with ample stacking space are introduced, as well as new entrances for both the Lee and Collier County parking lots. The Collier entrance is moved so that access is no longer through Barefoot Beach.

Introducing better transit options along Bonita Beach Road will also help reduce traffic. With no bridge for 15 miles between Bonita Beach and Ft. Myer's Beach, a mid-crossing bridge is needed but most likely impossible due to environmental concerns. Instead, Lee County and Bonita Springs should study the potential of a gondola/chair lift system which could run from Coconut Pointe Mall to Lover's Key State Park. While the gondola is located outside of the master plan area, the Beach Gateway plan does include a convenient drop-off area for a shuttle/autonomous vehicles, located on a plaza in-between the two county parking lots. Another cross-walk plaza is located just down the road at the intersection of Hickory Blvd and Kings Kew.

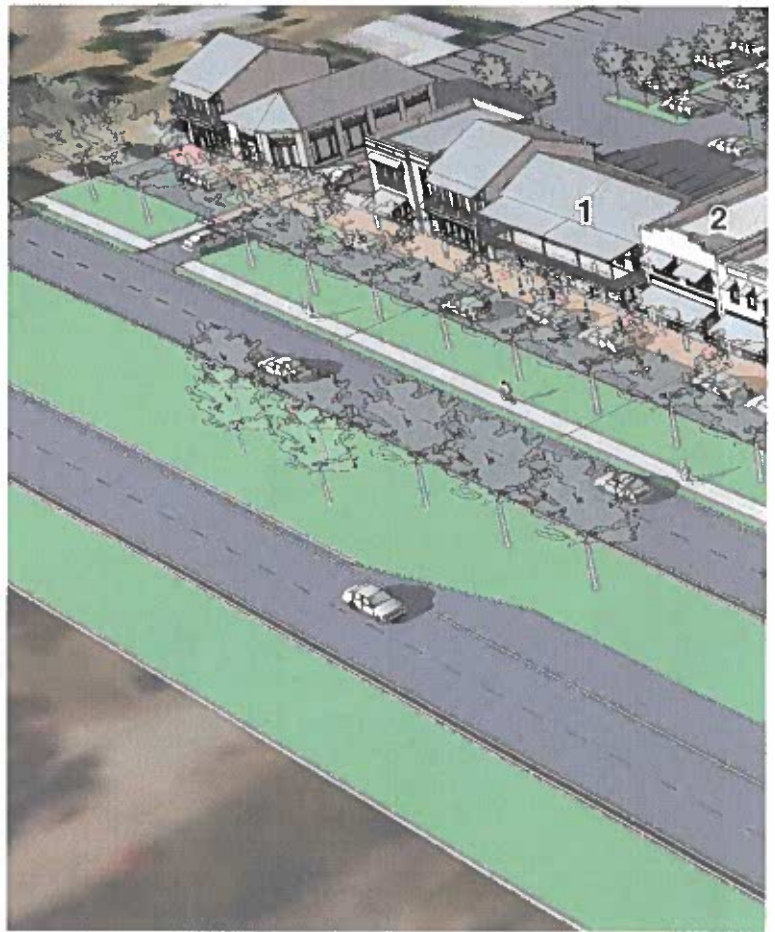


A bridge or gondola routing between Coconut Pointe Mall and Lover's Key State Park should be studied.



III & IV) Possible Second & Third Generation Improvements

1. Add infill structures
2. Add new mixed-use/ multi-story buildings.
3. Add liner buildings
4. Add Awnings/ Arcades
5. Retrofit storefronts
6. Pave and connect rear parking areas.
7. Create gathering plazas between buildings.
8. Replace original, "non-conforming" structures that are set back too far or don't contribute to the new sidewalk frontage.



V) Possible Climax Condition

1. Allow an expanded residential and/or office program to a 3.5 story maximum height.





II) Possible First Generation Improvements

1. Connect the drives and parking lots with a one-way street.
2. Add a connected, wide sidewalk.
3. Rationalize the access roads to BBR from one-way street.
4. Connect & Landscape the resulting greenway buffer.
5. Screen remaining side/rear parking lots.



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Frontage Study: Successional Evolution

The aerial to the right represents a portion of the north side of Bonita Beach Road, just west of Tamiami Trail and the Bonita Springs Centre (Publix Shopping Center). This portion of the corridor was chosen as a further exploration into the potential evolution of how current and future buildings will front the road and may assist in the reduction of vehicle trips on Bonita Beach Road.



I) Typical Existing Conditions

1. Structure close to BBR with no drive/ none to minimal parking in front.
2. Structure with a single paved drive and /or one layer of parking
3. Structure set back away from BBR with a parking lot in front.
4. Structure close to BBR with side parking lot.
5. Structure close to BBR with one layer of parking and access drive in front.



These "A" frontages would be reserved for Important intersections and major neighborhood connections, while more flexibility would be given for areas in between.



Existing Frontage Examples



A proper frontage that currently exists along Bonita Beach Road. Building has front facade and glazing facing the street, with a small setback and parking on the side.



A frontage that currently exists along Bonita Beach Road. Land is vacant with a large, low-lying billboard dominating the view.



Existing: Lee County Parking Lot entrance. Minimal signage, small pay station hut, no parking management.



Example: Build a signature tower/pavilion at the bend of Hickory Blvd to welcome visitors and indicate parking area. Parking management sign can be incorporated on tower.



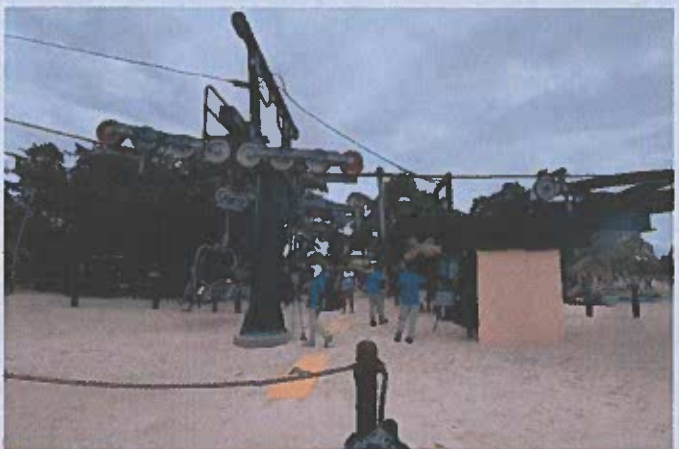
Existing: Missing bus stop and missing signage at a beach access point on Hickory Blvd. Access points are small, hard to spot, and lack facilities.



Example: Current naturally formed beach access points are beautiful. However, a few hardscaped and ADA accessible access points should be built for easier mobility. (GoogleMaps)



Existing: Unclear entrance to Lover's Key State Park recreation area. Parking and facilities are underutilized.




Example: A gondola/chair lift landing on the beach in Honduras. This technology could be used to connect the mainland to Lover's Key State Park. (GoogleMaps)

Comparisons between existing conditions along Hickory Blvd and built examples of solutions/improvements.



Existing conditions at the Bonita Beach Gateway. Parking lots are disconnected, inefficiently laid out, and traffic bottlenecks due to poor lane management.

- 1 Poor pedestrian crossing 
- 2 Lack of easy drop-off
- 3 Disjointed parking (172 spaces)



Proposed master plan for the Bonita Beach Gateway. New turn lanes on Hickory Blvd lead into a redesigned Lee-Collier parking area. Paver plazas and crosswalks slow down traffic and assist pedestrians in crossing.

- 1 Crossing Plaza
- 2 Drop-off
- 3 Connected parking (312 spaces)



Tamiami Trail

The Tamiami Trail node is Bonita Springs' principal intersection along the Florida west coast's most important north-south corridor, US Hwy 41. Unfortunately known too well for its congested conditions and long waits at the traffic light, the BBR intersection is largely devoid of aesthetic character, provides little shade for pedestrians, and looks much like any other suburban crossroads in the region.

Some promising existing conditions are nonetheless worth noting. Within 1200 ft of the intersection in both directions along BBR, and to the north along US Hwy 41, existing traffic lights connect to a number of parking lots and peripheral driveways parallel to the two arterials. This collection of nearly contiguous strip center lots and access drives offers the possibility of establishing a more robust, interconnected urban fabric to help alleviate the congestion. Another hopeful sign is the large undeveloped parcel to the north of The Center of Bonita Springs shopping center that is ideal for mixed-use development. In addition, the owners of the Center have just confirmed their commitment to this site with a round of recent improvements. The City should take these hopeful indicators, as well as the fair amount of landscaping and stormwater features that exist at this intersection, to craft an even more ambitious future vision for the node.

Opportunity Area Recommendations:

1. An additional signal, or two, should be added south of BBR. If not at 1300 ft from BBR, where two access drives align, one should be added at least at 2300 ft. where Beaumont Road meets US Hwy 41.
2. Connect, to the greatest degree feasible, as many existing parking lots, drives and perimeter roads surrounding this node to make a more porous street network. The goal is to offer multiple routes between any two points at these four quadrants or as a bypass to

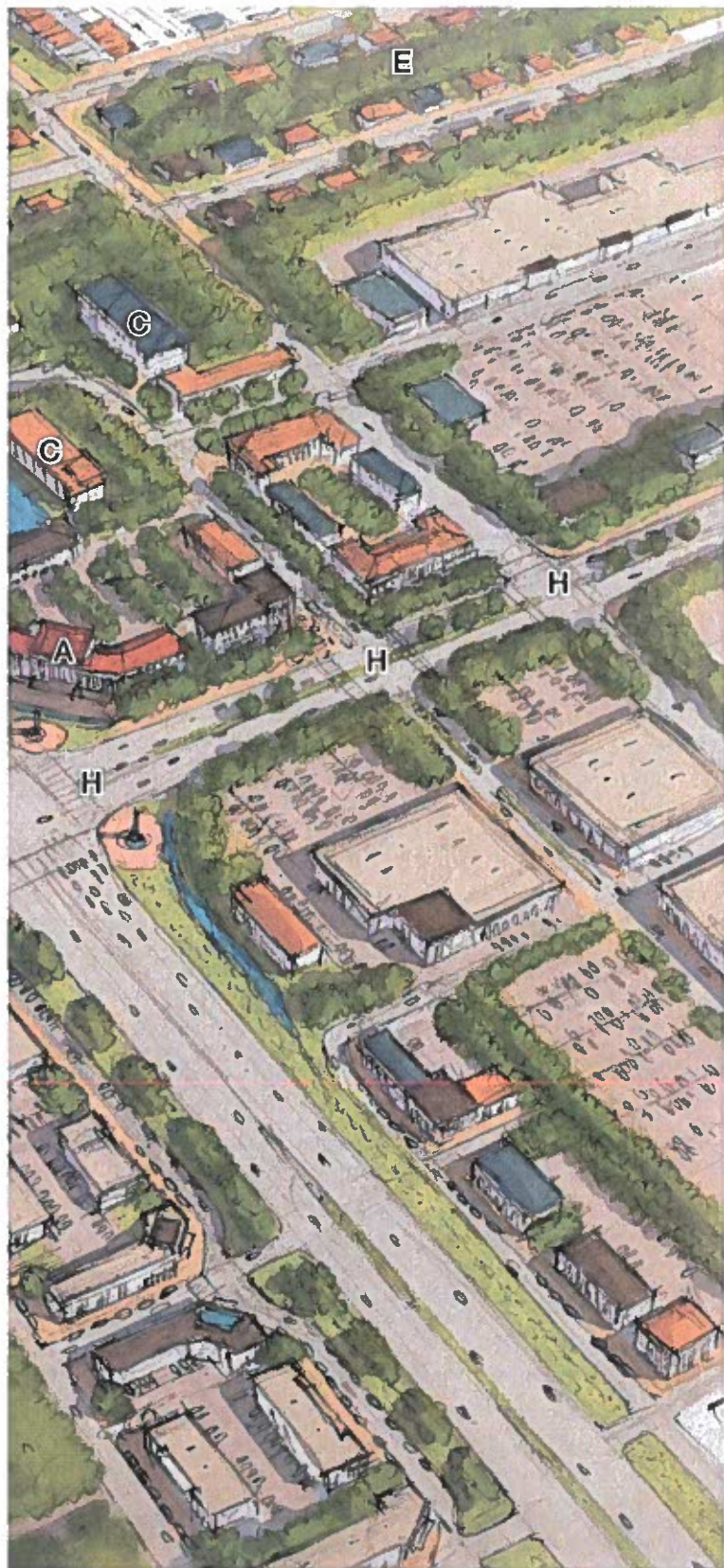






Bonita Beach Road and US Hwy 41 transitioning into a walkable village center.

- A Gateway Hotel
- B Reversed Gas Station
- C Existing Hotel
- D Light Imprint Parking Lot
- E Existing Single Family
- F Potential Structured Parking



- G** Potential Stormwater Management
- H** Pedestrian Crossing
- I** Proposed Development

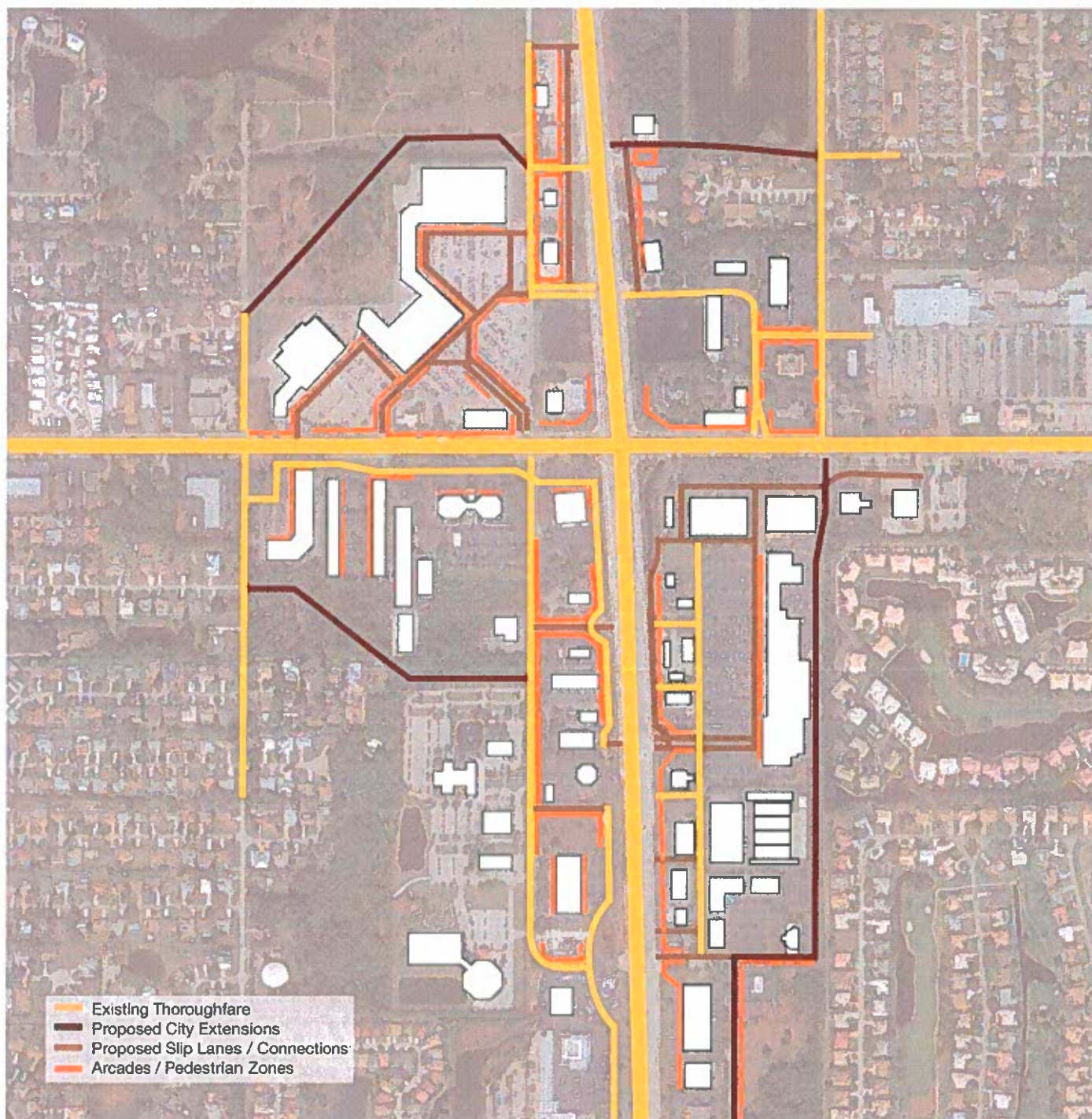


Bonita Beach Road

access the two main thoroughfares. Where possible new slips lanes parallel to BBR and US Hwy 41 should be created if they do not exist.

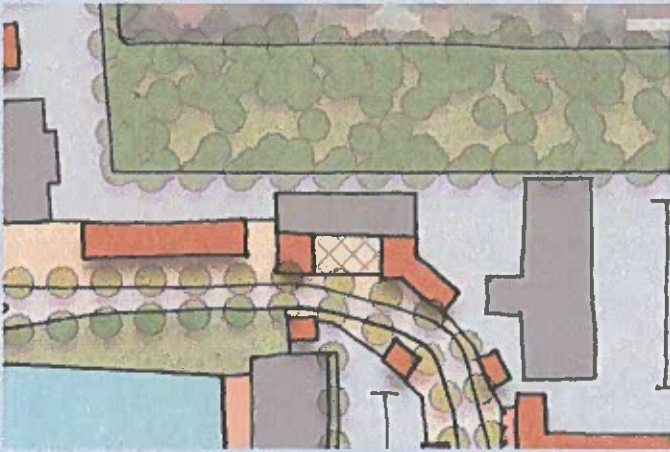
3. The new roadway connections should be added with care to disperse local traffic, but not overload existing neighborhoods with regional traffic.
4. Provide consistent signage for better wayfinding.
5. Encourage gradual infill development of future restaurants and businesses along the edges of both BBR and US Hwy 41 to help define those frontages.
6. Mandate the creation of arcades and/or sidewalks with awnings when new buildings are approved or old ones redeveloped. The goal is to create/enhance a pedestrian realm where walkways are coordinated to be as connected and comfortable as possible, and include safe and well-marked crossings.
7. Provide a dignified place/shelter to access transit at the Publix parking lot where a transfer location is currently operated by LeeTran.
8. Create plazas/squares that provide useful arrival places where social gathering and dining establishments can lend an identity of community to the village.
9. Infill with additional housing, where feasible, in as diverse a mix of housing types (from single to multifamily) as possible.
10. Introduce multiple, narrow streets.
11. Add enhancements to the existing stormwater management ponds so they become usable parks.
12. Provide parking facilities that meet the necessary demands, but are located in mid-block locations and screened from the view of the more walkable streets. Parking garages could be built in the larger lots as the needs arise, and allow on-street parking on the walkable streets. Newer parking management systems, such as those that alert drivers to the availability of spaces, should be welcomed.

Connectivity and Mobility: Introducing slip-lanes & connecting existing frontage parking helps local traffic avoid Hwy 41/BBR. Inserting new roadway connections between 41 and BBR to surrounding areas disperses local traffic.



Introducing and maintaining proper arcades and pedestrian zones will provide better connectivity. Giving pedestrians a safe option to walk between businesses will promote walkability and reduce local traffic trips.





Plan: Existing bar-building out-parcel retail can be retrofitted with additions to create outdoor space and improve street frontages.

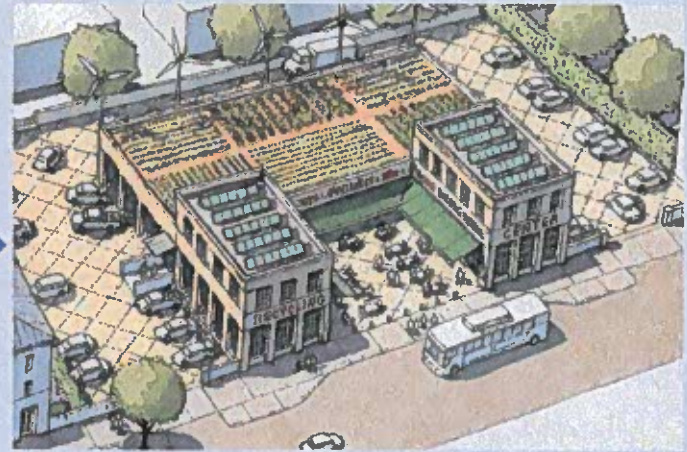
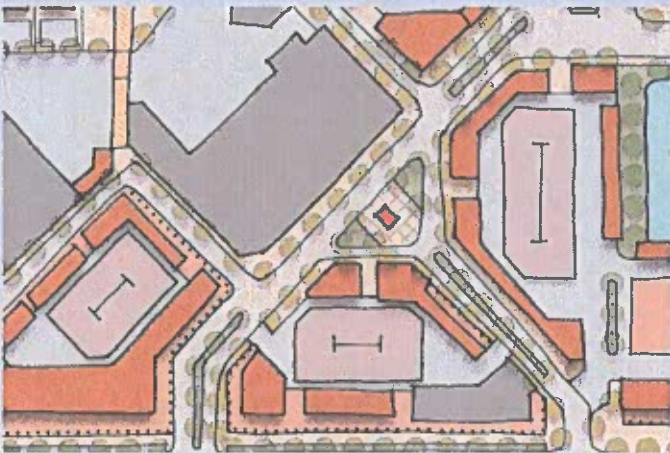


Illustration: A retail out-parcel building after a retrofit. The rear bar is existing with exception of the green roof addition. The two new wings in front engage the sidewalk.



Plan: Existing big-box buildings in shopping centers can be retained by eliminating large parking lots and infilling them with mixed-use buildings/courtyard parking.



Illustration: A big box building with a retrofitted parking lot. Mixed use buildings with interior parking decks form walkable blocks and streets that lead to the anchor store.



Plan: Existing gas station on the corner of Bonita Beach Road/Tamiami Trail is retrofitted with a corner store liner.

Comparisons between existing sprawl-oriented uses on Bonita Beach Road and form-based code alternatives.

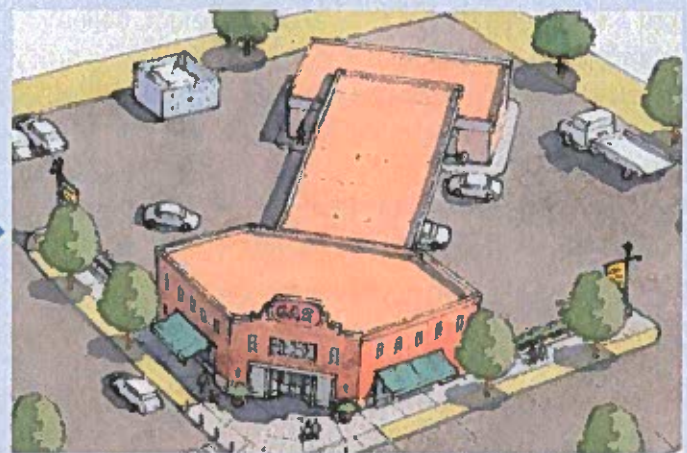
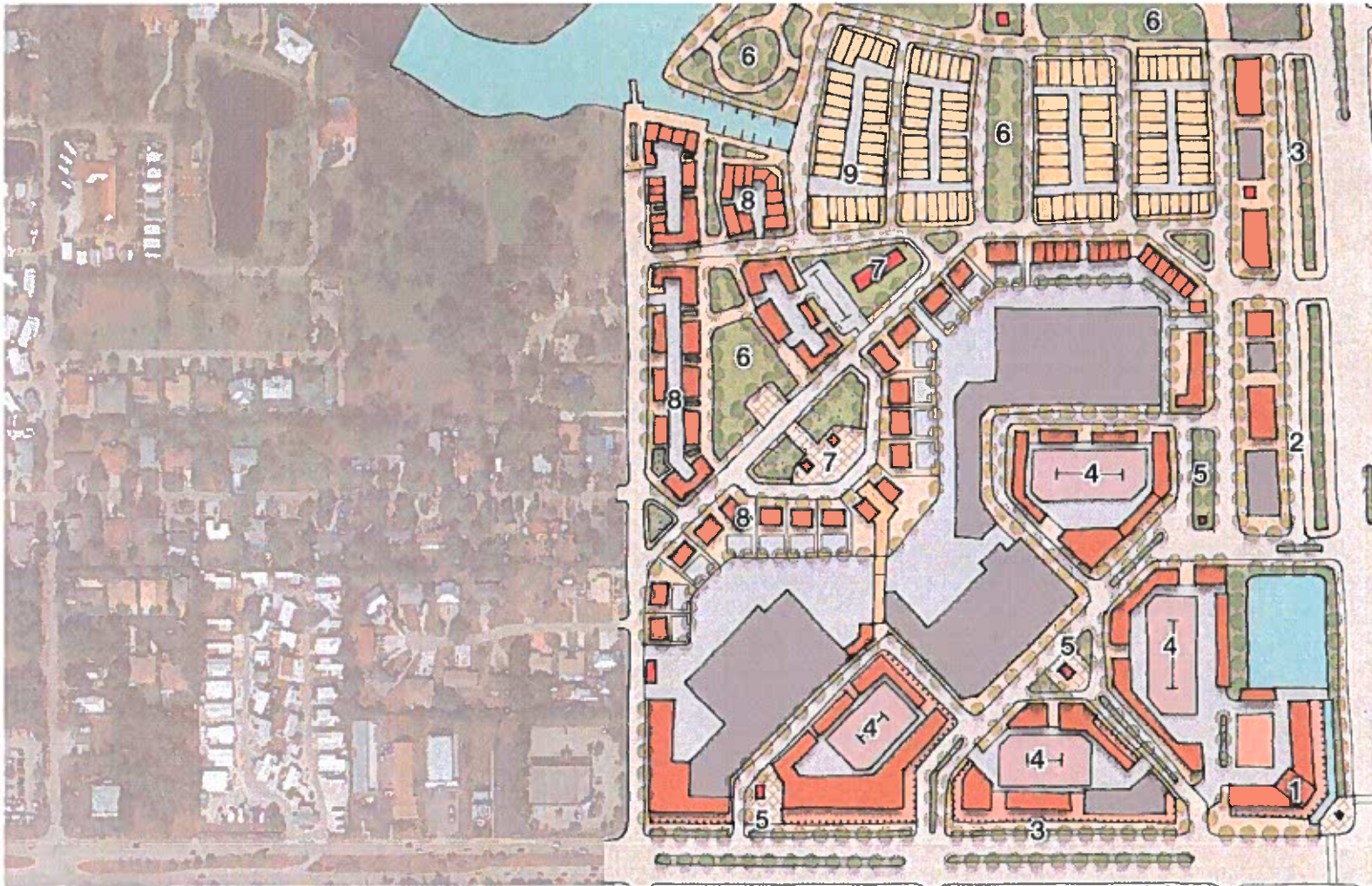


Illustration: Placing the mini-market of the gas station on the corner creates a better frontage while hiding the pumps and garages behind.



Northwest Quadrant

This quadrant illustrates a more ambitious transformation of the Center at Bonita Springs shopping plaza from a single-use suburban strip development, defined by large parking lots edged with isolated out-parcel pads, to a traditional village pattern of mixed-use, shaded, walkable streets and mid-block parking.

Existing Shopping Center Short-Term - Gradual Infill along perimeter of parking lot:

1. Gas Station (when any renovation/expansion is contemplated) gets reversed to give a gallery frontage to BBR & US Hwy 1 and pumps largely concealed from street-view.
2. Bus Transfer Station is equipped with a shelter and smaller shops receive front galleries and awnings.
3. The outermost parking areas are gradually transitioned into blocks with liner retail at the periphery.

Existing Shopping Center Long-Term: Transformation into a Pedestrian Village

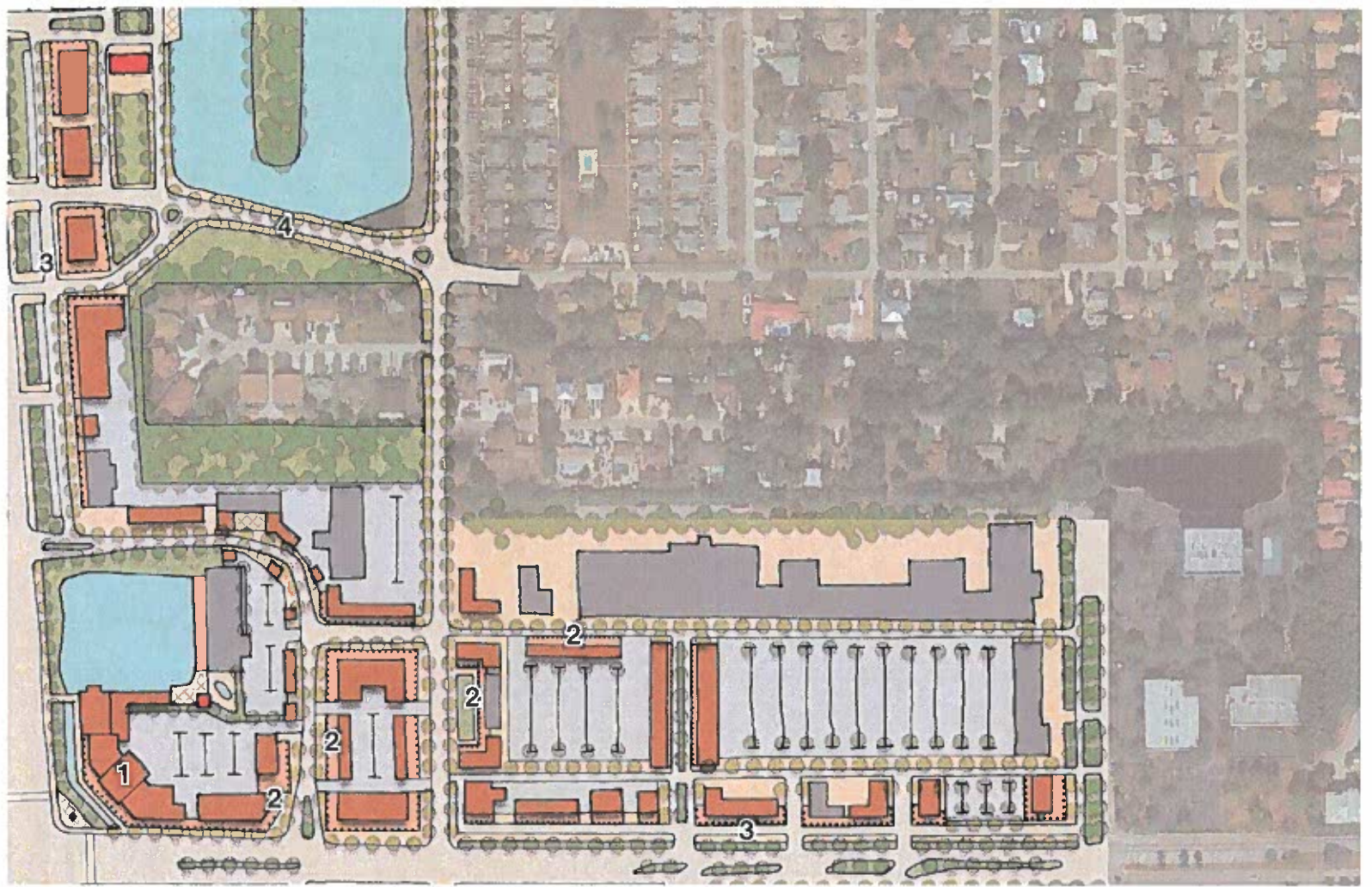
4. Mid-block parking is screened from sidewalk; surface lots dimensioned to allow structured parking as need arises.
5. Key locations marked with special plazas/ squares for gathering and restaurant/ cafe terraces.

Large open parcel behind Shopping Center - Open land is developed as a mixed-use neighborhood with interconnected street-grid and:

6. Parks and playgrounds
7. Civic/community facilities

Range of residential unit types:

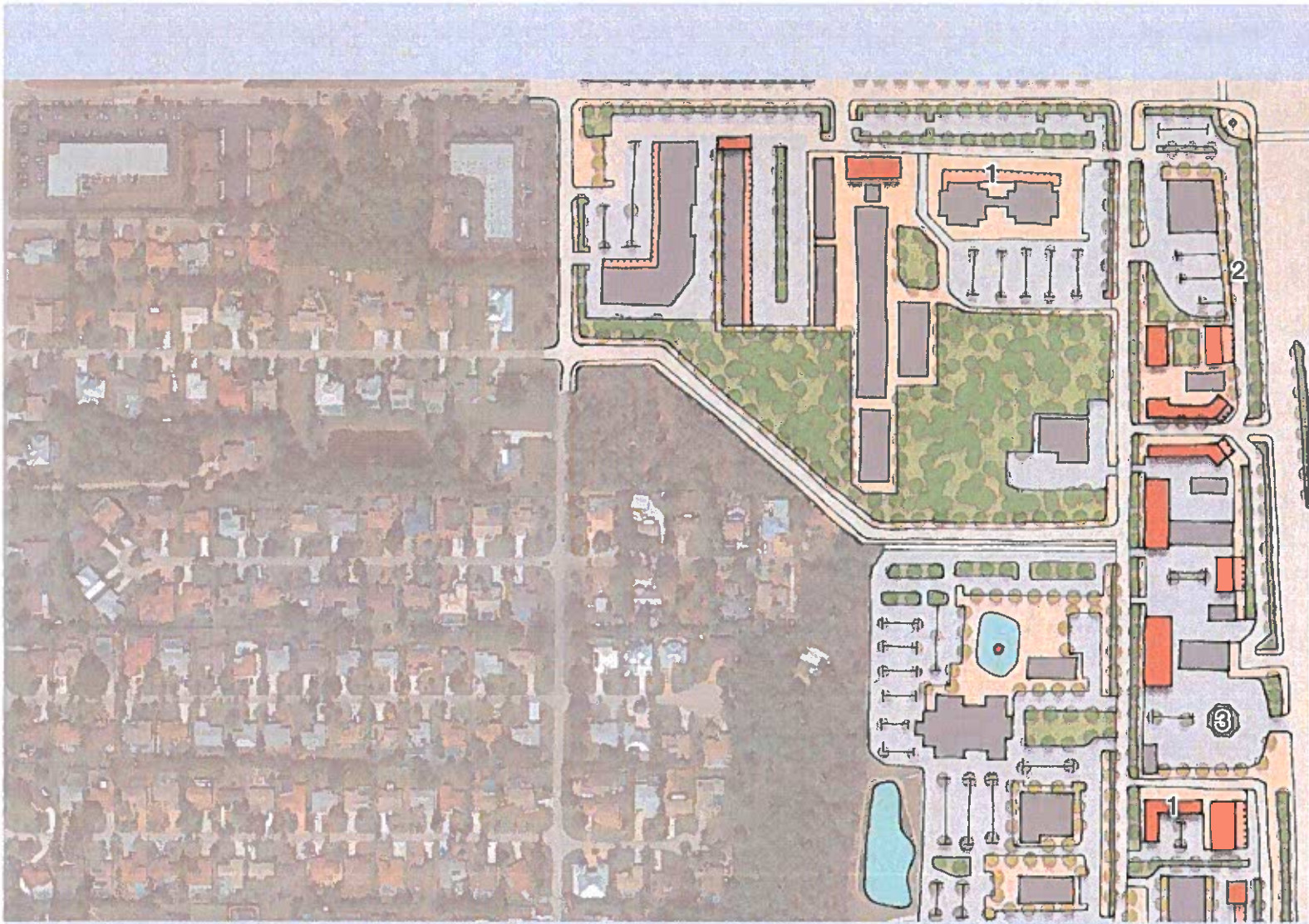
8. Multi-family/ Attached units: Apartment Villas; Live-Work Units; Townhouses & Duplexes;
9. Single Family –Houses, Cottages, & ADUs.



Northeast Quadrant

This quadrant occurs at the edge of a traditional neighborhood and is thus endowed with a more connected urban street network than the other three quadrants. Though suburbanized with single-use zoning and isolated strip centers, this location can be infilled, made more walkable, and provide greater relief to the traffic along BBR and US Hwy 41 with a few strategic insertions.

1. The block containing the hotel facing the storm-water pond and the restaurant and offices at the corner of the BBR intersection can be better defined and given a more walkable perimeter. An iconic gateway hotel could be added atop the existing corner restaurant.
2. New infill buildings, and liners/galleries added to existing structures, can be added to better define the street network and facilitate walkability from one business to another.
3. Existing parking lots lined up along BBR & US Hwy 41, but presently clipped from one another, can be connected to become a slip lane that effectively allows through-traffic from one business to the next and thus keeps those vehicles from having to access the main thoroughfares.
4. A new road connection through an open space in this quadrant— identified in the BBR Visioning Study— needs further study so it is better coordinated with an existing traffic signal to allow crossing over to the northwest quadrant.



Southwest Quadrant

This quadrant features a church, a large office complex and a series of isolated pads. It also has an important existing roadway in Beaumont Rd to connect much of them. Additional connections could help keep a substantial traffic from BBR and US Hwy 41 and encourage viable and walkable retail frontage one block from those arterials.

1. New infill buildings, and liners/galleries added to existing structures, can be added to better define the street network and facilitate walkability from one business to another
2. Existing parking lots lined up along BBR & US Hwy 41, but presently clipped from one another, can be connected to become a slip lane that effectively allows through-traffic from one business to the next and thus keeps those vehicles from having to access the main thoroughfares.
3. One business, because of the nature of the enterprise (a funeral home), requested to not be connected to the slip lane and this was honored. Because of the existence of Beaumont Rd, this was not a problem.



Southeast Quadrant

This quadrant has the City Hall, as well as a broad businesses ranging from big box retail to banks to small restaurants and neighborhood services. It also features great expanses of asphalt that over time could receive additional commercial infill.

City Hall, if it is to remain in this location, needs to reconfigure itself so that it offers a front face to BBR, instead of the current condition of turning its back to it. This plan envisions a civic plaza as a proper welcoming feature.

1. New infill buildings, and liners/galleries added to existing structures, can be added to better define the street network and facilitate walkability from one business to another.
2. Existing parking lots lined up along BBR & US Hwy 41, but presently clipped from one another, can be connected to become a slip lane that effectively allows through-traffic from one business to the next and thus keeps those vehicles from having to access the main thoroughfares.
3. The additional connectivity needs to extend to the south to meet the newly anticipated multi-family complex (south of master plan area) from where residents should be given the option of walking to the nearby shops and services.

Historic Old 41

The intersection of Bonita Beach Road and Old Highway 41 is the midpoint of the corridor and the gateway into Downtown Bonita Springs. The intersection breaks the node into four distinct quadrants. The northwest quadrant (and to some extent, the southwest quadrant) still maintain the light industrial character that resulted from the railroad's presence just to west. It is recommended that these zones be allowed to maintain this character, while still accommodating new uses that might take advantage of the cheaper real estate (business start-ups, restaurants, art studios, etc.). The southeast quadrant is home to the Naples-Fort Myers Greyhound Track, which sits far back from the street with a large parcel of vacant land facing the intersection. The future development on this tract should be carefully considered. A programmatic mix of uses would be preferred over one large regionally-scaled use which could compound traffic problems on the BBR corridor.

Opportunity Area Recommendations:

1. Simplify land use zones to allow more flexibility in use, while maintaining design standards.
2. Uphold high design standards at this intersection. The juncture of Bonita Beach Road and Old 41 is the central node of BBR and the gateway into Downtown.
3. Add parallel connections between properties along BBR help mitigate traffic congestion.
4. Study further to evaluate the feasibility and practicality of the proposed round-about.
5. Allow the existing industrial zone to transform over time. This will keep rents cheap and encourage innovative businesses.
6. Plant trees in medians and along sidewalks.
7. Provide a continuous, shaded sidewalk, separated from travel lanes, along the corridor.
8. Implement recommendations for use of the existing rail corridor as a trail connecting to Downtown.
9. Introduce more consistent signage.



Aerial of existing conditions at Old 41 and Bonita Beach Road.



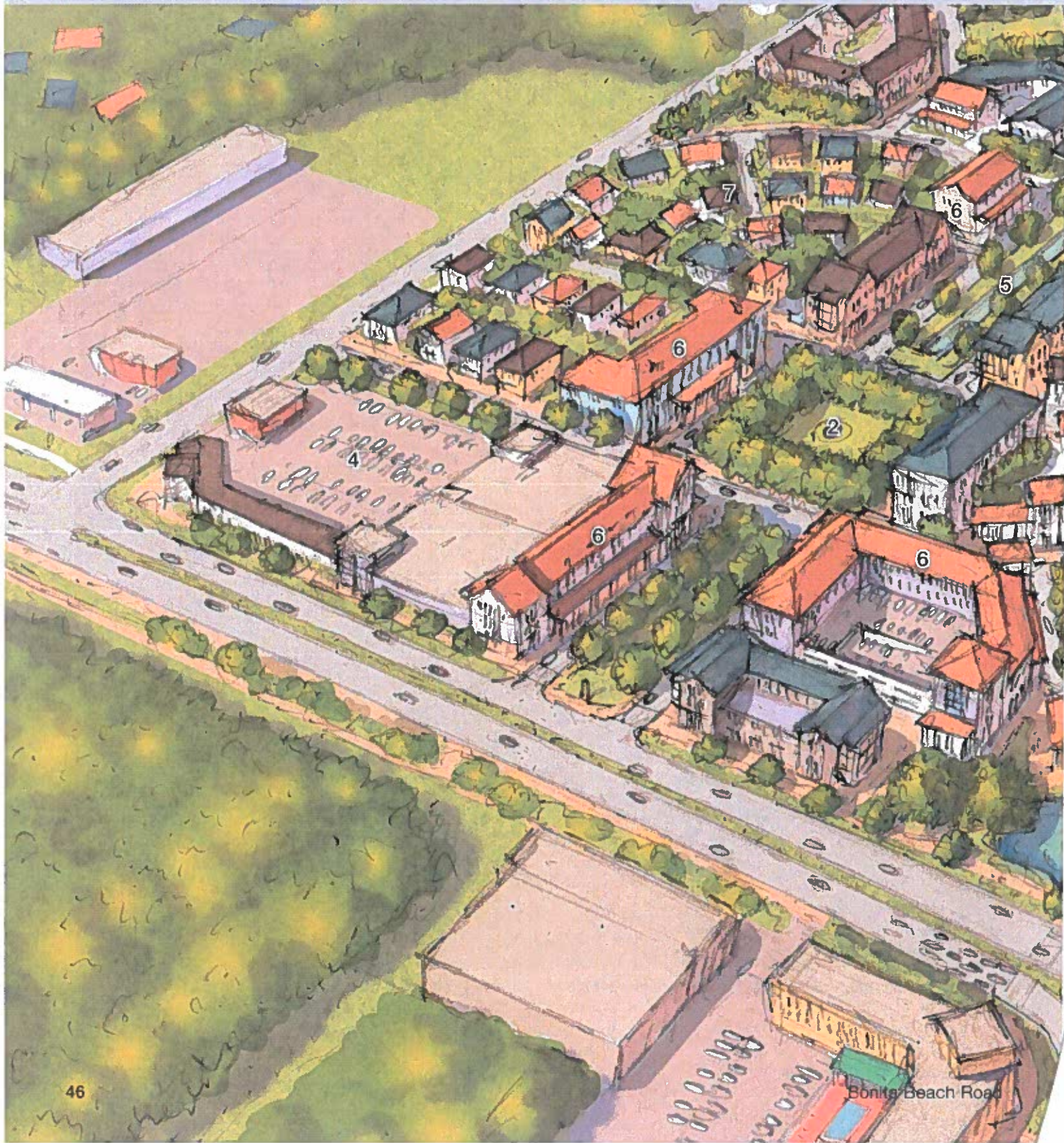
Proposed master plan for unbuilt parcels of Historic Old 41.



onita Beach Road



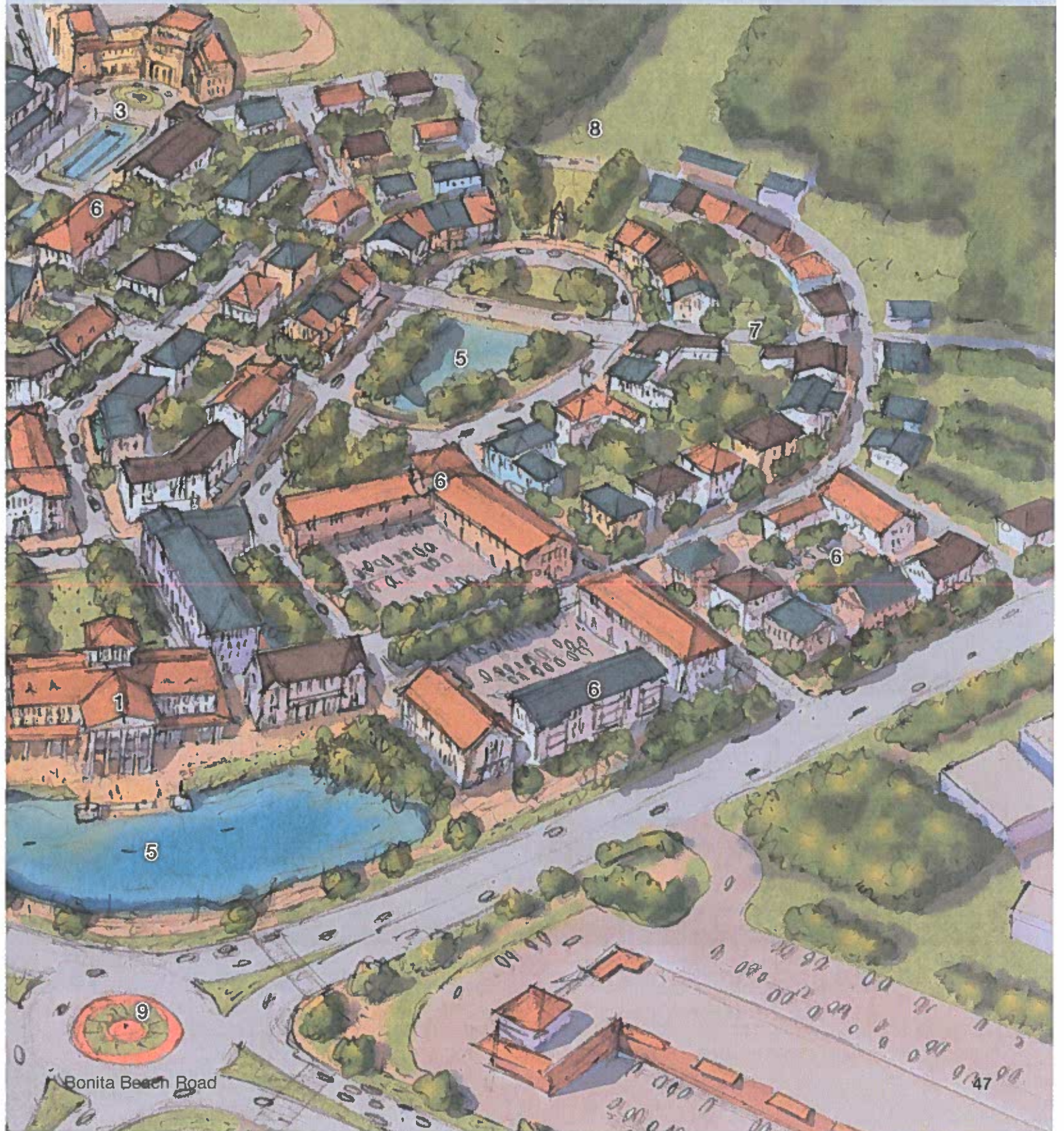
Underutilized land at Bonita Beach Road and Old 41 is transformed into a new neighborhood. A mix of housing and commercial accompanies the existing race track and serves as an extension of Downtown Bonita Springs. The site is large enough to accommodate multiple uses in order to mitigate the traffic impacts of a single use.



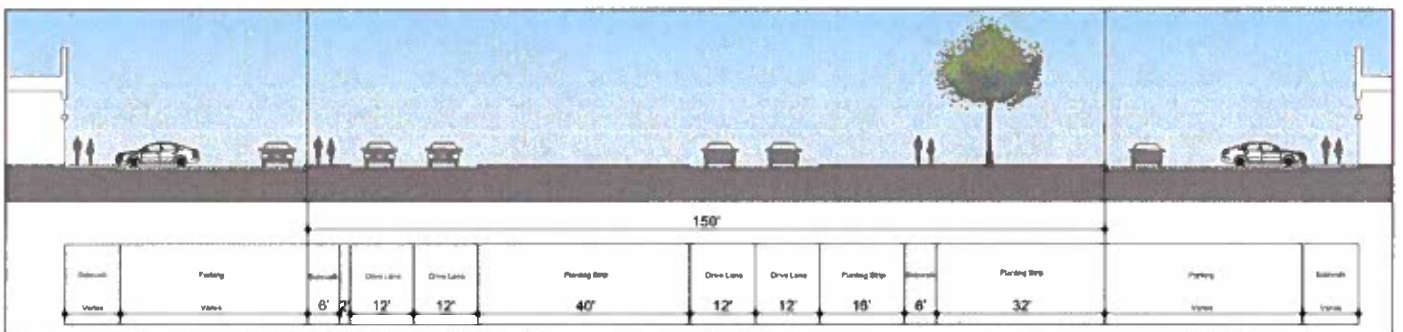
- 1 Signature corner building
- 2 Central green
- 3 A formalized entry for the existing Greyhound Track

- 4 Potential larger scale retail with an urban edge along BBR
- 5 Incorporated and amenitized stormwater management facility

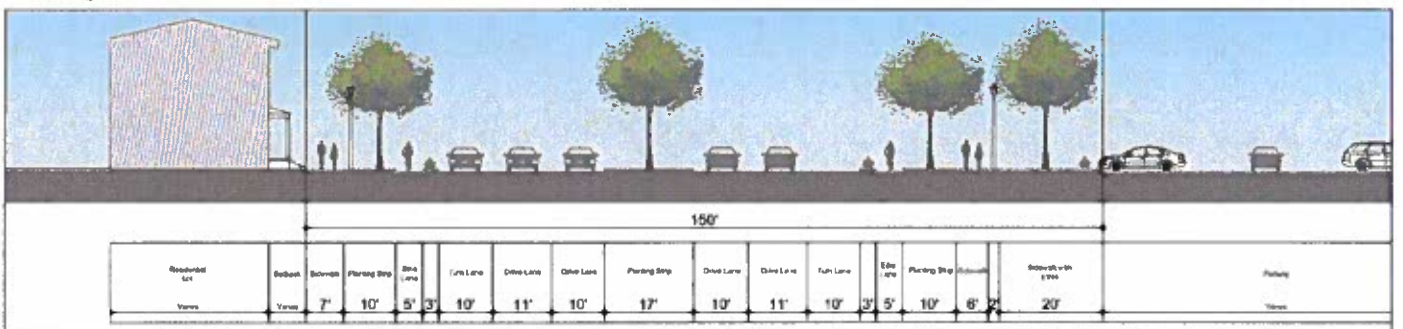
- 6 Proposed Multi-Family
- 7 Proposed Single-Family
- 8 Potential Entertainment Area
- 9 The proposed round-about warrants further study



Connectivity and Mobility. Inserting new roadway connections as well as creating a network of A and B streets will help reduce traffic on BBR. A revised street section for BBR is also illustrated, providing better experiences for cars, bikes, and pedestrians.



Existing BBR Street Section at Old 41- Preference to automobiles



Proposed BBR Street Section at Old 41- Increased mobility for all



Existing: Intersection of Racetrack and BBR is large, with views consisting mostly of overhead infrastructure, large gas station, and empty land.



Illustration: A corner store/CVS hides the gas pumps from BBR. A small shop/restaurant



Existing: The Naples-Fort Myer's Racetrack is located at the rear of a large, vacant property. No other attractions are located on the site.



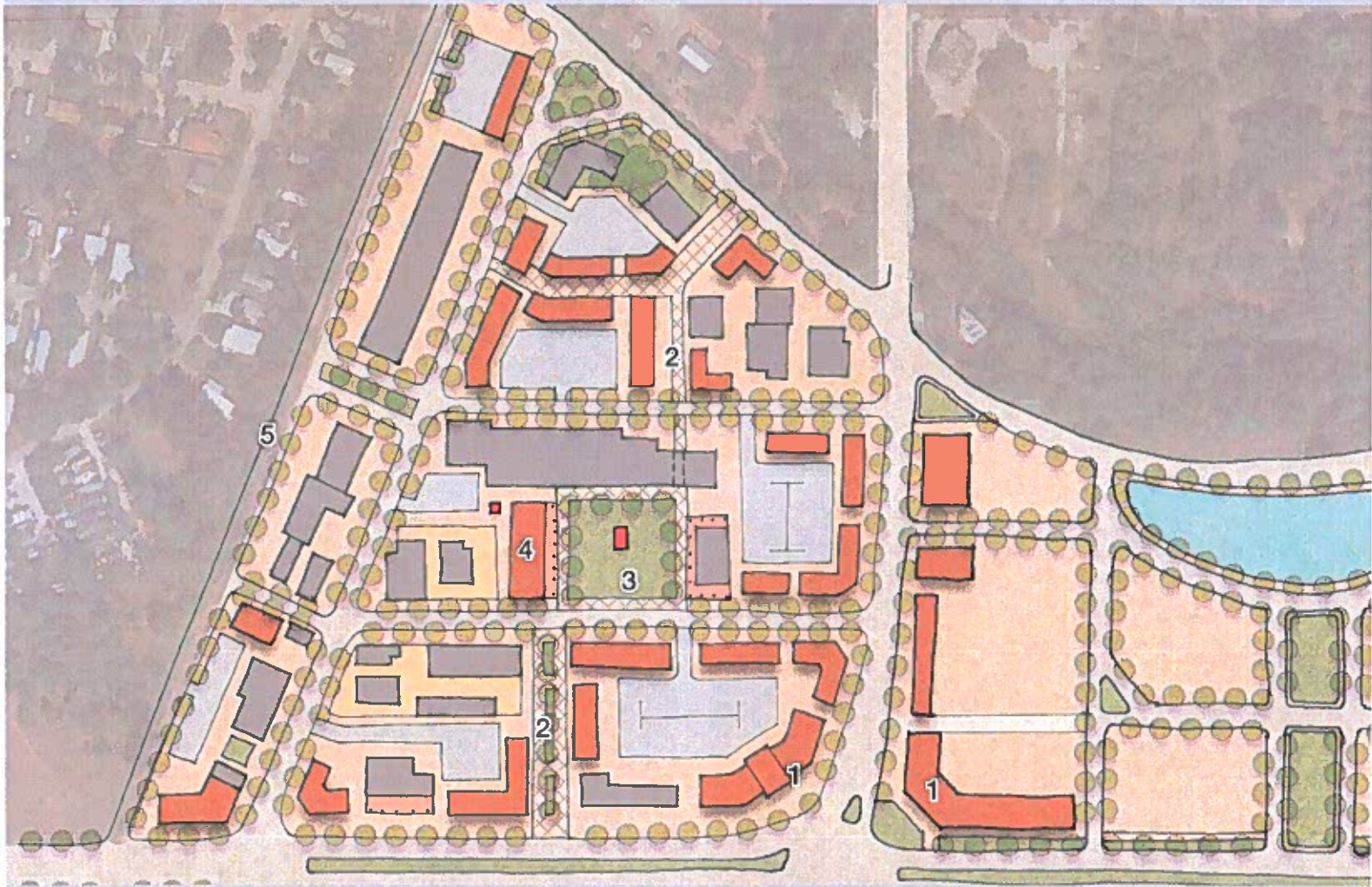
Illustration: The existing racetrack becomes the center of a new entertainment district. Playgrounds, parks, plazas, and a potential TopGolf facility help activate the area.



Existing: While the donut shop is well-regarded in the community, it may not be the highest and best use of this important, busy, corner. A downtown location may be more appropriate for this use.



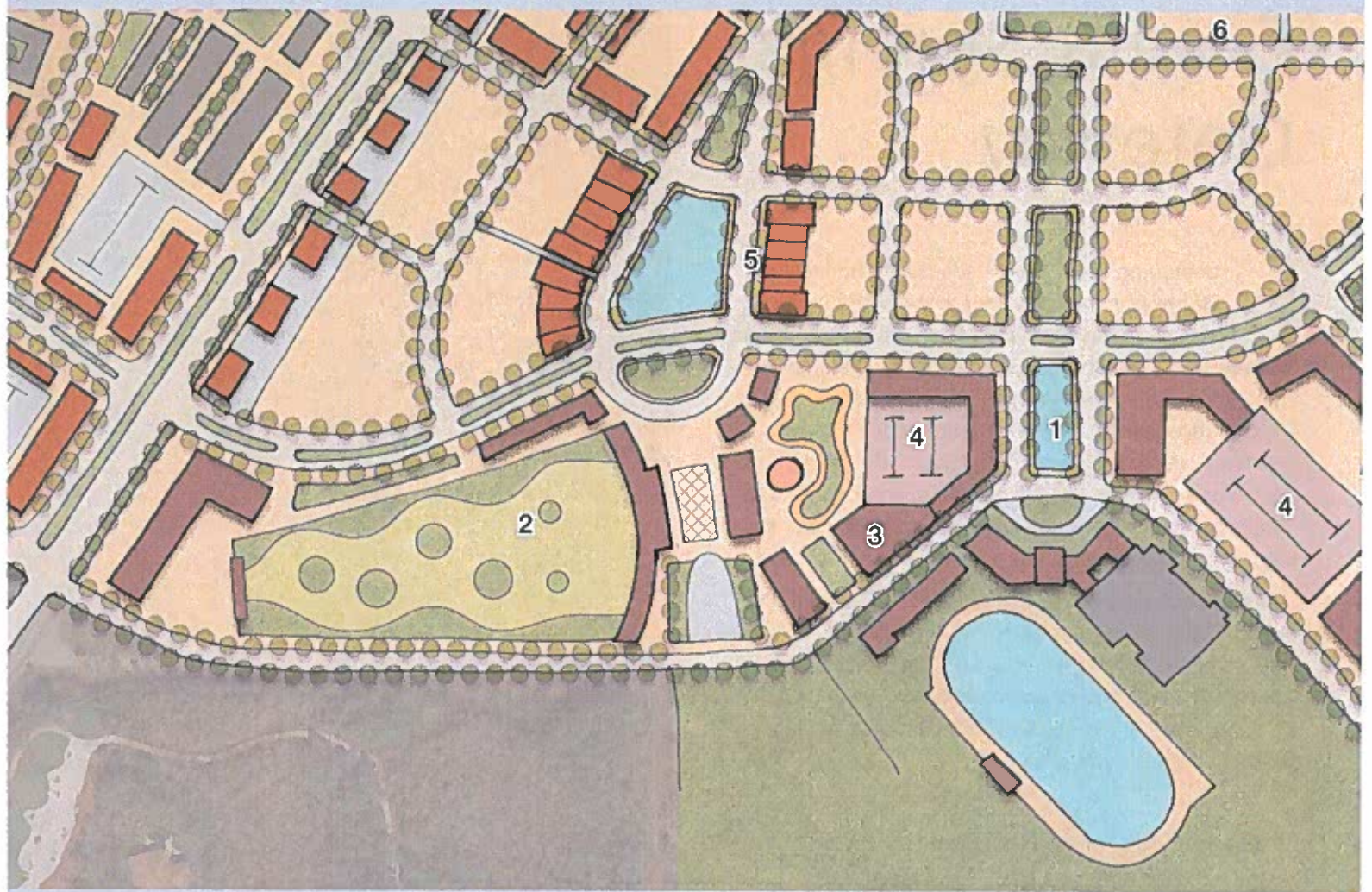
Illustration: The southeast corner of the intersection is conducive for development of a hotel, assisted living facility, corporate office or other larger facility.



Northwest Quadrant

This district, a holdover from the days when the railroad was active, has the potential to take on many forms. The industrial “patina” offers a unique character that is not available in other areas of Bonita Springs. The district should be allowed to organically transform over time. And in time, it may become an arts district, innovation hub, “restaurant row”, light manufacturing center, or a combination of all of these.

1. The corners facing Old 41 and BBR are the most critical from a design standpoint as they form a gateway into downtown just to the north.
2. Pedestrian paths can be used where vehicular streets are not feasible or desirable.
3. A new green space, which could be privately developed, is proposed to give a “center” to the district.
4. New buildings may be mixed in with the older buildings to help organize the civic space and open space network.
5. The existing railroad is preserved, but could be converted into a trail in the future.



Southeast Quadrant - Entertainment Area

The Illustrative Plan shows the potential integration of new and expanded entertainment venues associated with the Greyhound Racetrack.

1. A new formalized entry sequence is proposed for the existing Naples-Ft. Myers Greyhound Track. This might incorporate a water feature to reinforce the identity and brand of the facility.
2. A "Top Golf" venue was discussed as a possible entertainment destination on the property.
3. Other entertainment venues might include a bowling alley and/or cinema that could be enjoyed by residents and their visiting families.
4. Structured parking (i.e., parking garages) are recommended when possible to incorporate more intense uses and to reduce the amount of paved parking lots; thereby mitigating the impact of heat island effect.
5. Other uses (commercial, residential and mixed-use) may be combined with entertainment uses.

Bonita Springs Gateway

Located adjacent to I-75, the Bonita Springs Gateway is the front door to the corridor, city, and surrounding beach region. The journey along Bonita Beach Road to the water is the shortest route from I-75 to beachfront in all of Lee County, only a direct 6 mile journey. At the northern end of the beach in Ft. Myers, the route is a multiple turn, 14+ mile trip from I-75 to beach. Thus, this critical interchange is not only where vehicles exit the highway for Bonita Springs, but it is also the main regional entry point for beach access.

The Bonita Springs Gateway consists of interventions which give a more welcoming frontage to I-75 and some infill centered around the popular Flamingo Island Flea Market. The addition of some residential uses, accompanying retail, and a gateway hotel around the Flea Market could activate the node for the future.

Opportunity Area Recommendations:

1. Introduce consistent signage and artistic branding for the side of I-75 near the gateway.
2. Simplify land use zones to allow more flexibility in use, while maintaining design standards.
3. Uphold high design standards at this intersection. The interchange of Bonita Beach Road and I-75 is the gateway node of BBR and the welcome into the city/beach.
4. Develop parcels immediately adjacent to I-75 with gateway structures. A potential mix of hotel/office/senior housing/retail is proposed.
5. Add connections, especially the extension of Dean Street down towards the flea market.
6. Allow the flea market to transform and add parking/uses over time. This will keep rents affordable and encourage innovative businesses.
7. Plant trees in medians and along sidewalks.
8. Provide a crossing plaza on BBR at the flea market to make walking safer.



Proposed infill around the Flea Market creates a gateway for Bonita Springs adjacent to I-75. A neighborhood node study is shown to the upper left and further detailed on page 50.



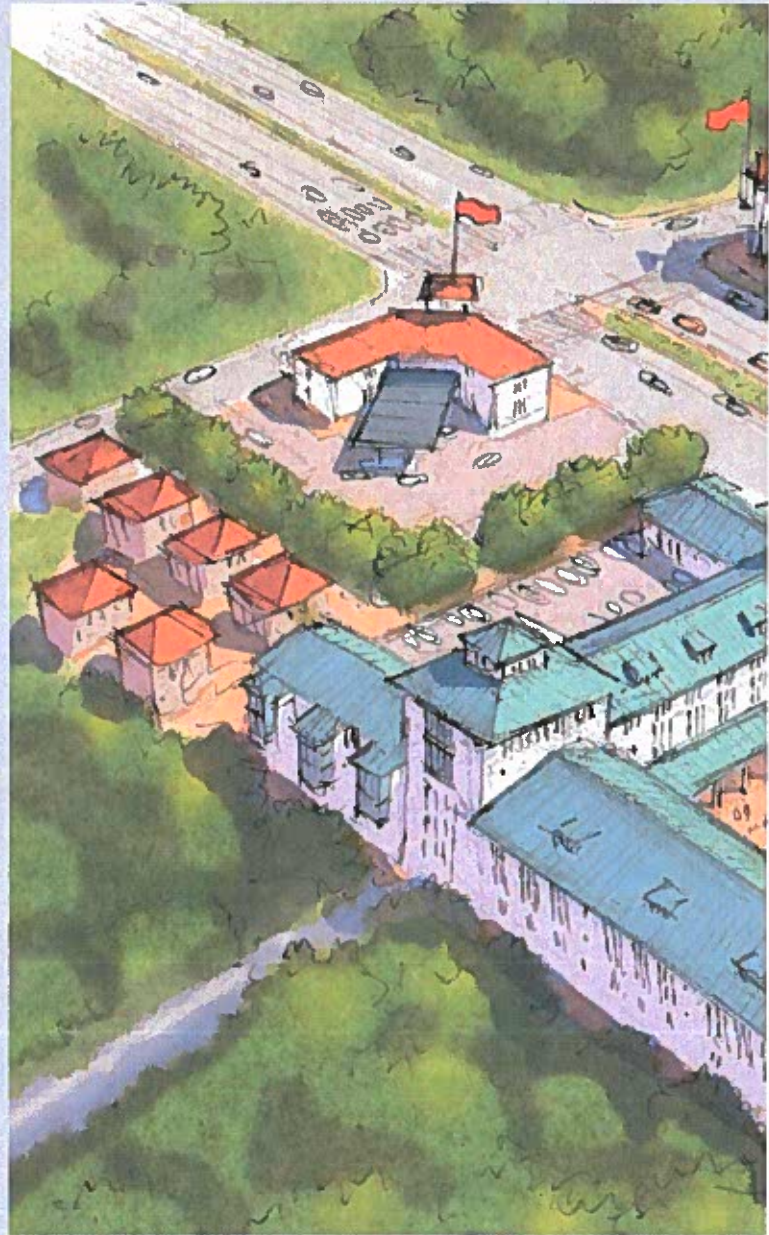
- | | | |
|------------------------|-----------------------------------|-----------------------------|
| 1 Gateway Buildings | 4 Flamingo Island Flea Market | 7 Potential Lots |
| 2 Reversed Gas Station | 5 Light Imprint Parking Lot | 8 Existing Single-Family |
| 3 Existing Hotel | 6 Potential Stormwater Management | 9 Pedestrian Plaza Crossing |



Bonita Beach Road



Gateway Phase 1 - Introduce roadside branding.



Gateway Phase 3 - Climax condition with hotels

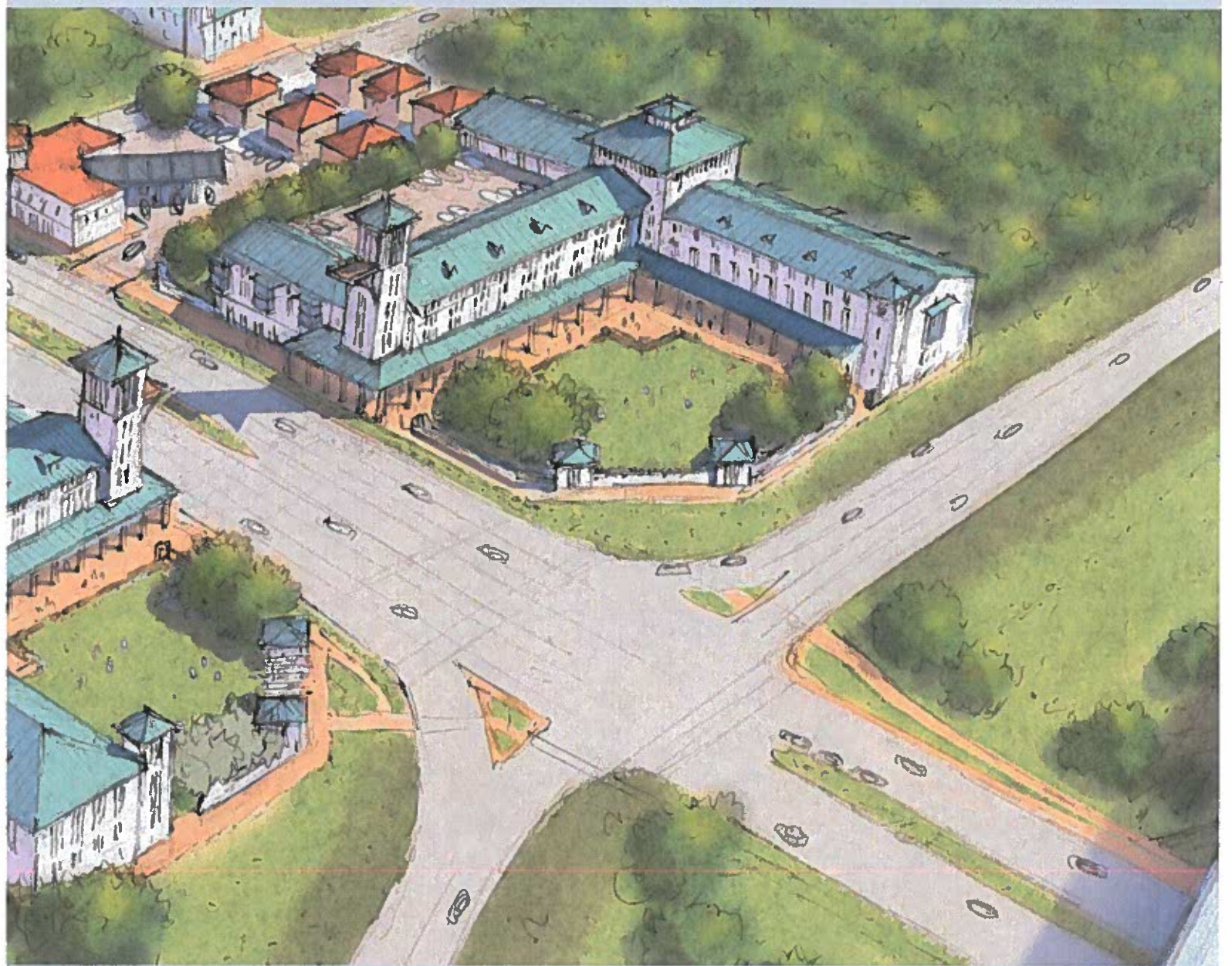


Gateway Phase 2 - Development west of interchange.



Existing and proposed plan representation of the above illustration for the Bonita Springs Gateway





Numerous studies in successional development were generated for the Bonita Springs Gateway at I-75. New city branding along the highway welcomes drivers into Bonita Springs. Once off of the interstate, new development just west of the interchange serves as the gateway to the Bonita Beach Road corridor, not only drawing visitors into the city, but also creating value for these underutilized real estate assets.



Potential branding for Bonita Springs along I-75.



Illustration of the neighborhood node, which provides a local community area for the surrounding populous.

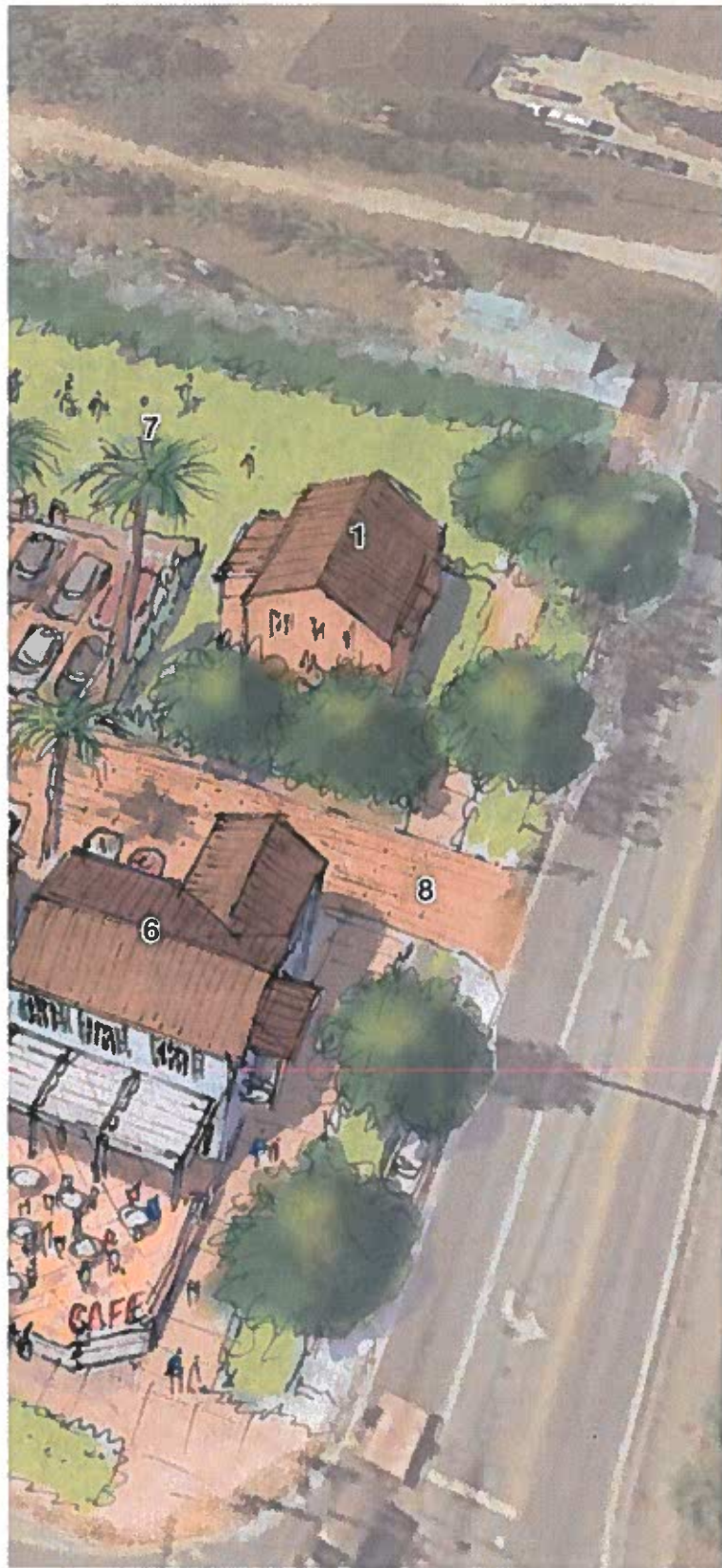
- 1 Existing home with new addition towards street frontage
- 2 Cottage Court

- 3 Two Live-Work units
- 4 Shops, four apartments above
- 5 Corner Cafe

Neighborhood Node

The design for this specific neighborhood location can be applied to other places in the future. The node includes several expanded and renovated existing structures, live-work units, potential shops and cafes, and apartments above the retail. Additionally, a small cottage court is centered around a linear playground. A larger green space can also be used by the wider community as a playing field.

A 'pocket neighborhood' is particularly appropriate in this location due its position on the Imperial Parkway/Dean Street intersection with connectivity to the near-by river/green space. The live-work units and retail serve the surrounding community and also provide a resting hub for cyclists using local bike routes.



- 6 Apartment above cafe
- 7 Common lawn/play field
- 8 New pervious driveway

Detail of the plan for the neighborhood node. Multiple buildings with small footprints create a "pocket neighborhood" with multiple uses and spaces.

Eastern Bonita Communities



Bonita Beach Road



With little potential for future development, the existing communities and land east of I-75 were not a subject of major recommendations during the workshop. This area of the corridor suffers from two main issues: stormwater flow and lack of local amenities and services. Due to its high elevation, Bonita Beach Road acts as a dam between the wetlands and swamp the on the north side and the communities to the south. In a storm or flood event, Bonita Beach Road is the primary egress route from the gated communities. New routes should be introduced as either permanent alternatives or for emergency use.

With all of the development in this area being single egress communities, all residents must drive long distances to their daily needs. A resident at the center of Village Walk would need to drive over 3.5 miles to the closest food source, a Publix grocery. Introducing small, local markets and shops either within or adjacent to these communities would promote walkability and reduce traffic counts on BBR.

Opportunity Area Recommendations:

1. Require a minimum of two egress routes for all new gated communities. Existing gated communities shall have a determined amount of time (tbd by City) to establish a secondary means of egress.
2. Introduce regulations where all new projects in the Community Zone must include a general store accessible by foot and bicycle. This may be an open air market and may be community subsidized.
3. Study potential bike/pedestrian connections between communities, with the goal of providing better access to near-by retail and restaurants while also reducing trips/traffic on Bonita Beach Road.



Bonita Beach Road



Potential Neighborhood Market



Perspacity, Seaside, Florida

A small roadside market, similar to those above, is envisioned for a small parcel in the Eastern Bonita Communities. A small, new local market would give the



Wayside Market, Pinecrest, Florida

Eastern Bonita neighborhoods a closer shopping choice than the Publix near I-75, thus reducing trips and traffic counts on Bonita Beach Road.

Bonita Beach Road

Prepared by:



in partnership with:
Keith and Schnars
Fishkind and Associates

for and on behalf of:
City of Bonita Springs

Jacqueline Genson

From: Xavier Iglesias <xavier@dpz.com>
Sent: Monday, March 04, 2019 10:58 AM
To: Jacqueline Genson
Cc: Paul Genovesi; Galina Tachieva; Arleen Hunter; Jane Swanson
Subject: Re: DPZ BBR LAND USE STUDY REPORT- FINAL version confirmation

Good morning Jackie,

Happy to reactivate the link (they are good for 1 month). No inconvenience.

Only please note, we've not yet added the dates referenced in this email, as we'd not heard from you all and it escaped my memory to ask you last month during our visit!

Xavier

F. Xavier Iglesias CNU-A
Sr. Project Manager
DPZ CODESIGN
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C. 305 586 7655
W. 786.871.2174

From: Jacqueline Genson <jgenson@cityofbonitaspringscd.org>
Sent: Monday, March 4, 2019 10:45 AM
To: Xavier Iglesias
Cc: Paul Genovesi; Galina Tachieva; Arleen Hunter; Jane Swanson
Subject: RE: DPZ BBR LAND USE STUDY REPORT- FINAL version confirmation

Good morning Paul and Xavier,

Do you mind enabling this link again? My sincerest apologies for any inconvenience. Thanks!

