

**Miami
Beach**

**Neighborhood
Greenways**

Bay Drive

NOVEMBER 19, 2018
UPDATED JANUARY 31, 2019

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EXECUTIVE SUMMARY

Background

The adopted 2016 Miami Beach Transportation Master Plan was built on a mode share goal and modal prioritization strategy adopted by Resolution 2015-29083 on July 8, 2015, which places pedestrians first; transit, bicycles, and freight second; and private automobiles third. Projects in the Transportation Master Plan are intended to move Miami Beach towards this mode share vision by increasing pedestrian, bicycle, and transit travel.

The Miami Beach Transportation Master Plan (TMP) suggested the Neighborhood Greenways as a way to help reach this mode share vision. Neighborhood Greenways, as defined in the TMP, are streets where cars are not excluded, but allow for bicycle and pedestrian travel to be comfortable for all ages and skill levels. This can be accomplished through lower vehicular traffic speeds, landscaping to enhance the bicycle and pedestrian experience, and/or enhanced road design. The results of which improve the safety for all users.

In summary, the goal is for Neighborhood Greenways to be so appealing that they encourage bicycle use for recreational riders and trips within Miami Beach. Neighborhood Greenways will also reduce regional greenhouse gas emissions, and align with Miami Beach’s resiliency program and the goals of the 100 Resilient Cities partnership.

The project area for the Bay Drive Neighborhood Greenway Plan runs along Bay Drive, south of 71st Street along the south side of Normandy Island. The west side of the study area is the west intersection of Normandy Drive, Bay Drive, and 71st Street. The east side of the study area is the east intersection of Normandy Drive, Bay Drive, and 71st Street.

Project History and Outreach

On May 17, 2017, the Transportation Department issued a Notice to Proceed to Zyscovich Architects for a Feasibility Study evaluating implementation of Neighborhood Greenways in North Beach. A kickoff meeting initiated the studies and ensured that City Staff and the consultant team were on the same page regarding project deliverables.

The consultants then conducted field reviews and read existing plans and studies to better understand the context and current conditions of the study area. From that review, initial design options were created for review by staff. The approach was to work toward a comprehensive network of bicycle facilities in North Beach

On August 7, 2017, the first public meeting was held to present the study to the public and invite community feedback. The response from the community was positive.

The Bay Drive Neighborhood Greenway concepts were then refined and reviewed extensively with Transportation staff and internal Miami Beach stakeholders. The concepts were also presented to the North Beach Steering Committee on October 25, 2017. Transportation toured the area with TCED staff on December 7, 2017. The Transportation, Parking and Bicycle Facilities Committee reviewed the North Beach Neighborhood Greenways concepts on April 9, 2017 and June 11, 2018.

Two concept review meetings were held with internal stakeholders March 19, 2018 and August 22, 2018. Attendees included representatives from Capital Improvement Projects, Emergency Management, Facilities Management, Parking, Planning, Public Works, Sustainability, and Tourism, Culture, and Economic Development (TCED).

The Bay Drive Neighborhood Greenway concepts were also reviewed with the Florida Department of Transportation (FDOT) on February 23, 2018 and Miami-Dade County Department of Transportation and Public Works (DTPW) on April 11, 2017. Final draft plan concepts will also be sent to both FDOT and DTPW for review. Input was received from FDOT on bicycle box placement and incorporated into the conceptual design. Input was also received from DTPW on initial decorative crosswalk concepts that were incorporated into the initial design. Alternative design concepts with enhanced landscaping instead of decorative crosswalks were incorporated into the final concepts. DTPW suggested that crosswalks would not meet the warrant analysis required for mid-block installation in such a quiet residential neighborhood. Bicycle crossing concepts will be finalized during the design process.

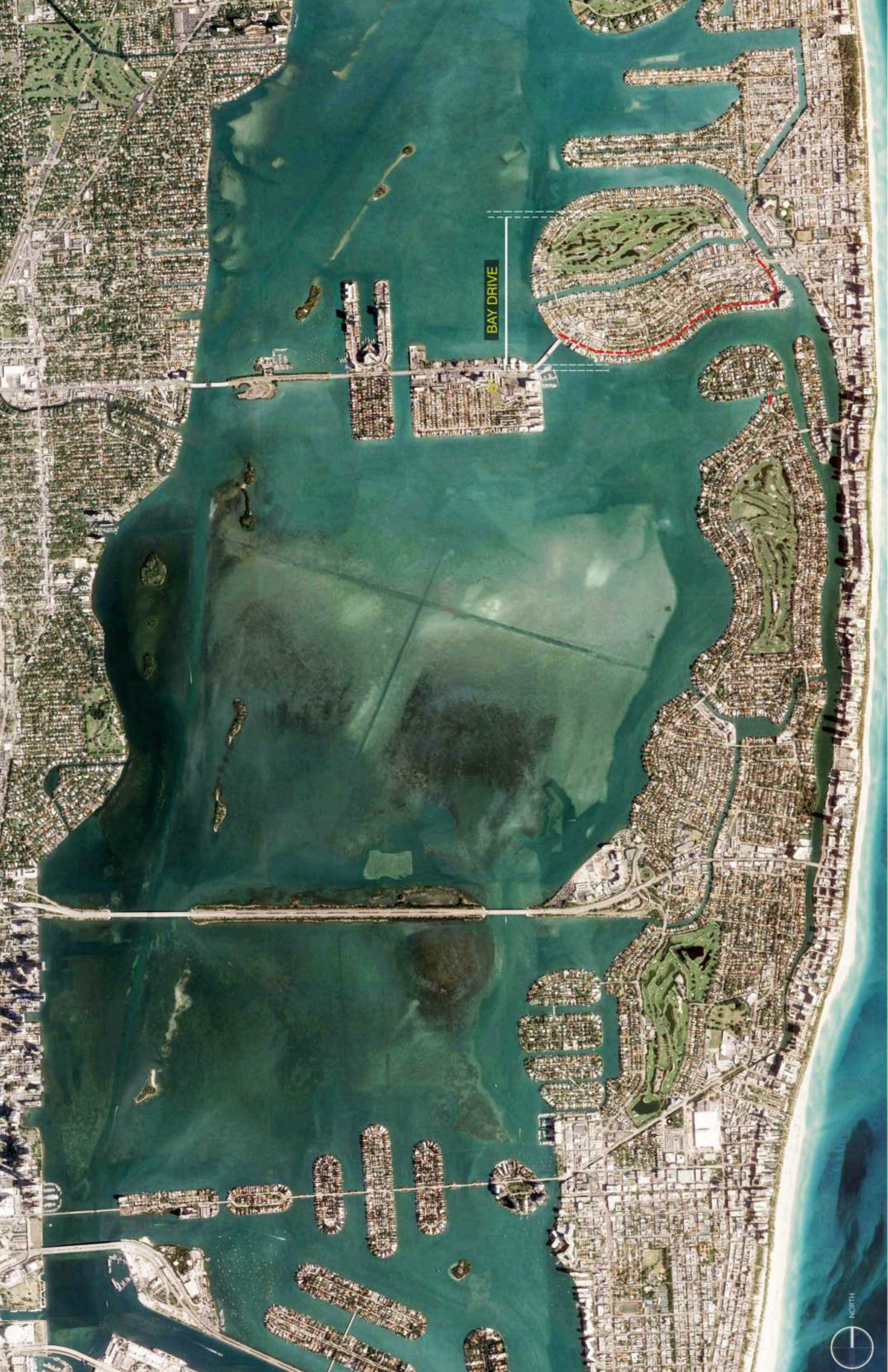
Future review by the Miami Beach Neighborhood and Community Affairs Committee and City Commission are the final steps in the Bay Drive Neighborhood Greenways Feasibility Study.

Proposed Improvements

The Bay Drive Neighborhood Greenway is important because it provides a safe and comfortable roadway for cars, bicycles, and pedestrians when travelling east and west through Normandy Island. It encourages potential car free living in the North Beach area of Miami Beach and connects to existing bicycle lanes and the Miami Beach trolley on 71 Street and Normandy Drive.

Segment 1 of the study focuses on the west intersection of Bay Drive and 71 Street to Rue Granville and proposes to add sharrows to the roadway, narrow the travel lanes slightly, and add 2’ to the north sidewalk for trees and landscaping.

Segment 2 of the study focuses on Rue Granville to Rue Versailles, and proposes to add sharrows to the roadway, provide mid-block landscaping features, and raise intersections at all way stops located where Bay Drive intersects Trouville



BAY DRIVE



Esplanade, Rue Bourdeax Drive and Rue Notre Dame. These raised crosswalks are permissible in the 3-way stop conditions at these intersections because there is no travel lane on the south side of these intersections.

Segment 3 of the study area currently has a tremendous tree canopy. Due to this tree canopy and geometric constraints, sharrows are the only proposed enhancement in this segment of Bay Drive.

This study also recommends enhancements to the landscaped areas where Bay Drive has been closed at Rue Granville and Rue Versailles, and identifies places where there are gaps in the existing sidewalk network on Bay Drive.

No parking will be displaced along Bay Drive by the Neighborhood Greenway.

A supplemental part of the Bay Drive Neighborhood Greenway Study recommends ways to fill in the bicycle lane gaps on 71 Street and Normandy Drive on an interim basis with a buffered bicycle lane. These concepts will be incorporated into the **SR 934 / 71st Street / Normandy Drive Exclusive Transit Lanes/ Protected/Buffered Bicycle Lanes Feasibility Study** being initiated in Fall 2018.

The bicycle lane gaps are located in two locations. One is located on the west side of Normandy Island between Bay Drive and Biarritz Drive. The other is located east side of Normandy Island between Rue Notre Dame and Bay Drive. The suggestion to fill the gaps is consistent with the recommendations of the Miami Beach Bicycle Pedestrian Master Plan (BPMP). As a Category 2 project improving existing facilities, the BPMP recommends:

- On Normandy Drive from Biarritz Drive to Bay Drive upgrading to protected bicycle lanes. Currently there are both sharrows and an unprotected bicycle lane.

- On 71st Drive from Biarritz to Bay Drive, upgrading to protected bicycle lanes. Currently there are both sharrows and an unprotected bicycle lane.
- Implementing protected bike lanes on 71st St from Biarritz to City limits.
- Implementing protected bike lanes on Normandy Drive from Biarritz to city limits.

Replacement parking may be needed to accommodate these bicycle lane improvements on 71 Street and Normandy Drive. On 71 Street, 7 parallel parking spaces on the north side of the road between Rue Notre Dame and Rue Versailles will need to be relocated. On Normandy Drive, 5 parallel parking spaces on the north side of the road between Rue Notre Dame and Rue Versailles will need to be relocated.

Two replacement parking lots have been identified, both within City of Miami Beach Ownership. One lot is just southwest of the eastern intersection of Bay Drive and 71st Street on Beatriz Court. The lot currently has 44 parking spaces, and can be reconfigured to accommodate 5 additional parking spaces, for a total of 49 parking spaces by converting from angled to 90° spaces. (No street address has been assigned to the lot.) A new lot to the north of Normandy Drive at 1144 Marseille Drive can accommodate 36 new parking spaces.

The City of Miami Beach evaluated the existing conditions of the sidewalks along Bay Drive, between Rue Granville and Rue Bordeaux. The analysis identified 2,049 linear feet of sidewalk on the south side of Bay Drive that is missing between Rue Granville and Rue Bordeaux. In order to promote a pedestrian friendly environment, sidewalk should be installed at this location.

COST ESTIMATES SUMMARY | Bay Drive Neighborhood Greenways

Bay Drive- Cost Estimate Summary

BAY DRIVE		No. of Trees	Year 1	Year 2	Year 3	Year 4	Year 5
Roadways				30% design	Construction		
Segment 1	\$597,587.38	32		\$ 179,276.21	\$597,587.38		
Segment 2	\$491,950.55	50		\$ 147,585.17	\$491,950.55		
Segment 2 - Sidewalk Repairs	\$216,810.00	0		\$ -	\$216,810.00		
Sub-Total =	\$1,306,347.93	82		\$ 326,861.38	\$1,306,347.93		
NORMANDY							
Roadways							
Segment 1	\$862,772.95	33		\$ 258,831.89	\$862,772.95		
Segment 2	\$405,430.04	0		\$ 121,629.01	\$405,430.04		
Sub-Total =	\$1,268,202.99	33		\$ 380,460.90	\$1,268,202.99		
71St STREET							
Roadways							
Segment 1	\$1,108,331.41	36		\$ 332,499.42	\$1,108,331.41		
Segment 2	\$250,921.33	0		\$ 75,276.40	\$250,921.33		
Sub-Total =	\$1,359,252.73	36		\$ 407,775.82	\$1,359,252.73		
PARKING LOTS							
Beatriz Parking lot - Reconfigured	\$185,440.00			\$ 55,632.00	\$185,440.00		
Sub-Total =	\$185,440.00			\$ 55,632.00	\$185,440.00		
TOTAL Demo & Construction =	\$4,119,243.65	151					
Total incl 30% Design Costs =	\$5,289,973.74			\$ 1,170,730.09	\$4,119,243.65		

PLANNING CONTEXT

The Normandy Isle neighborhood is home to some of the most vibrant pedestrian friendly commercial districts in the City. Indeed, these attractions place many of life's daily needs within a short walk or bike ride for most residents, something which is not obvious when looking at the mode share analysis for the area.

Normandy Drive and 71st Street are two of the main east-west arterials in this neighborhood connecting the City of Miami Beach to JFK causeway. High traffic volume in these roads creates an unfriendly environment for bicyclists and pedestrians. Enhancing Bay Drive bicycle and pedestrian facilities parallel to these streets may encourage walking and bicycling in this area.

The City of Miami Beach Transportation Master Plan supports this idea and recommended establishing Bay Drive as part of the Neighborhood Greenway network approved in the 2016 Miami Beach Transportation Master Plan.

PROJECT AREA

The project area for the Bay Drive Neighborhood Greenway Plan encompasses Bay Drive from the east intersection of Normandy Drive, Bay Drive, and 71st Street to the west intersection of Normandy Drive, Bay Drive, and 71st Street.

PROJECT APPROACH

Our project approach seeks to plan, develop and implement a context-sensitive Neighborhood Greenway Plan for Bay Drive that addresses multi-modal transportation connectivity, and Complete Streets management through a feasibility-focused planning framework and process to ensure that transportation decisions and investments address the needs of all users of the network and respond to community goals and context.

We understand the City's goals and objectives for the Neighborhood Greenway Feasibility Studies can be summarized, as follows:

- To provide a neighborhood-wide system which is safe, convenient and accessible for cyclists and pedestrians.
- To create and designate bicycle routes and facilities in the neighborhood.
- To improve access to transit for people who walk and bike.
- To include bicycle and pedestrian facilities in community land use planning.

With a network of slow, residential streets, and a budding bicycle network, the prospects for North Beach are strong. The Neighborhood Greenway Feasibility Study for Bay Drive shows how the existing network may develop by focusing on connecting to or improving existing bicycle facilities and proposing solutions that can be implemented.

Along Bay Drive South, the City's Bicycle Pedestrian Master Plan proposes a Neighborhood Greenway identified as a low-speed and low-volume thoroughfare with shared vehicular lanes that give movement priority to bicyclists, designed for commuting and recreational bicyclist as well as pedestrian use. Connections to 71st Street on the east and west addresses gaps in the existing network. Refer to 71st Avenue and Normandy Drive Section.


Low to medium intervention is proposed with possible light construction for signage, pavement markings, and, actuated bike signals as well as traffic calming measures.



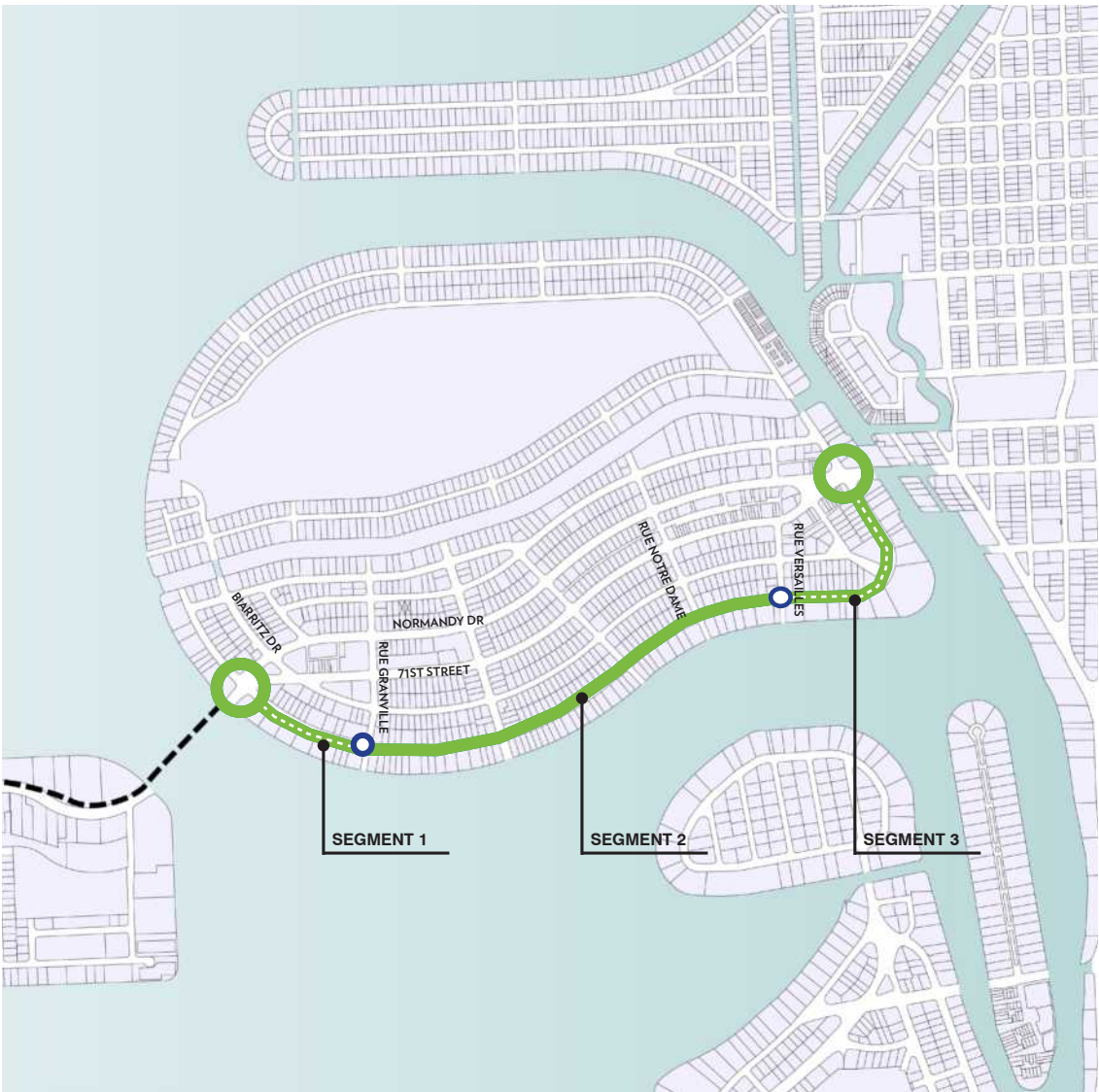
EXISTING CONDITIONS |
PHOTO INVENTORY



BAY DRIVE | Segment 1

 Enhanced Treatment for Existing Road Closure / Raised Median Condition. See Page 21 for detail.

 Proposed Neighborhood Greenway along Segment 1.

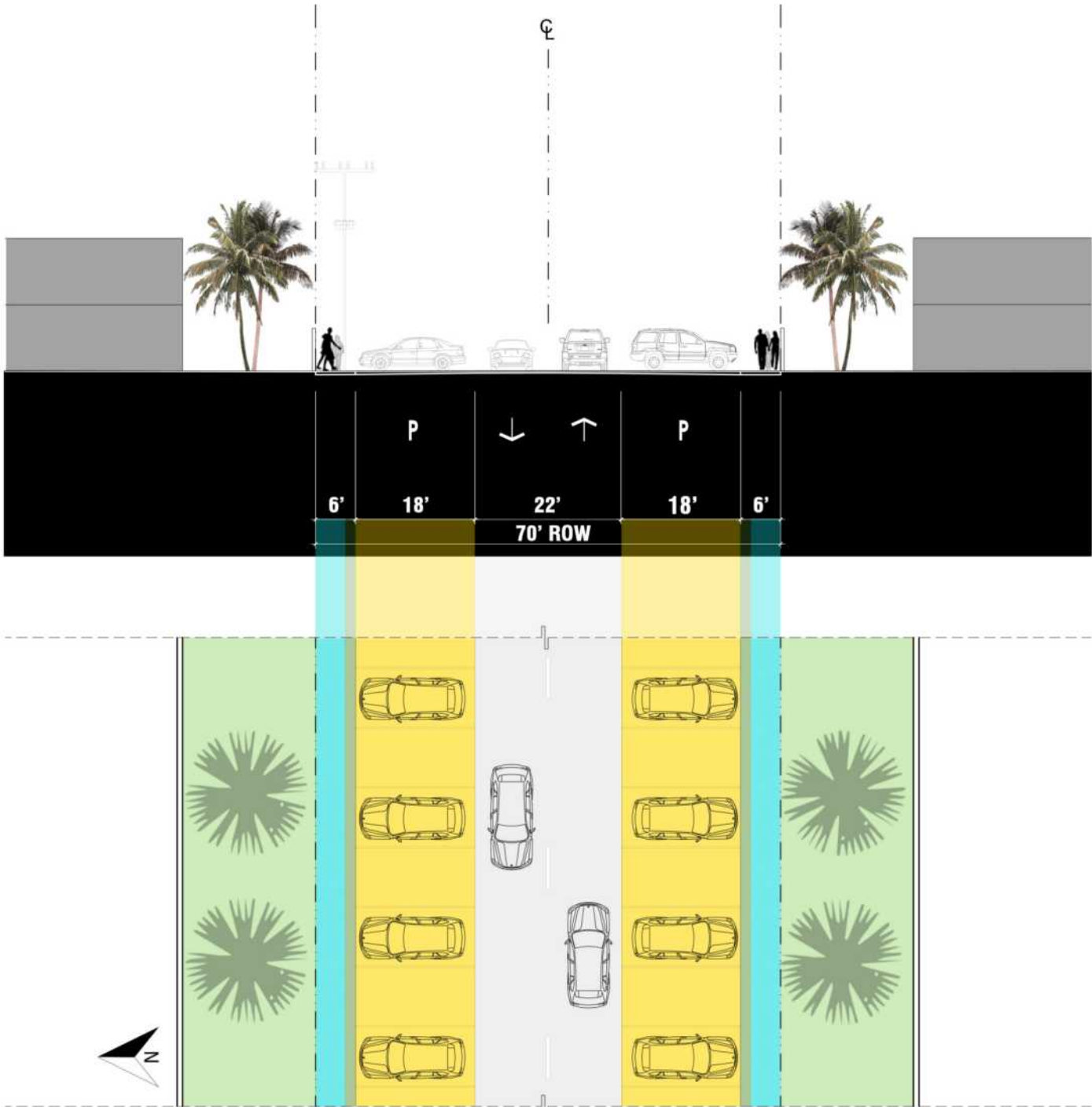


Existing Street View looking East

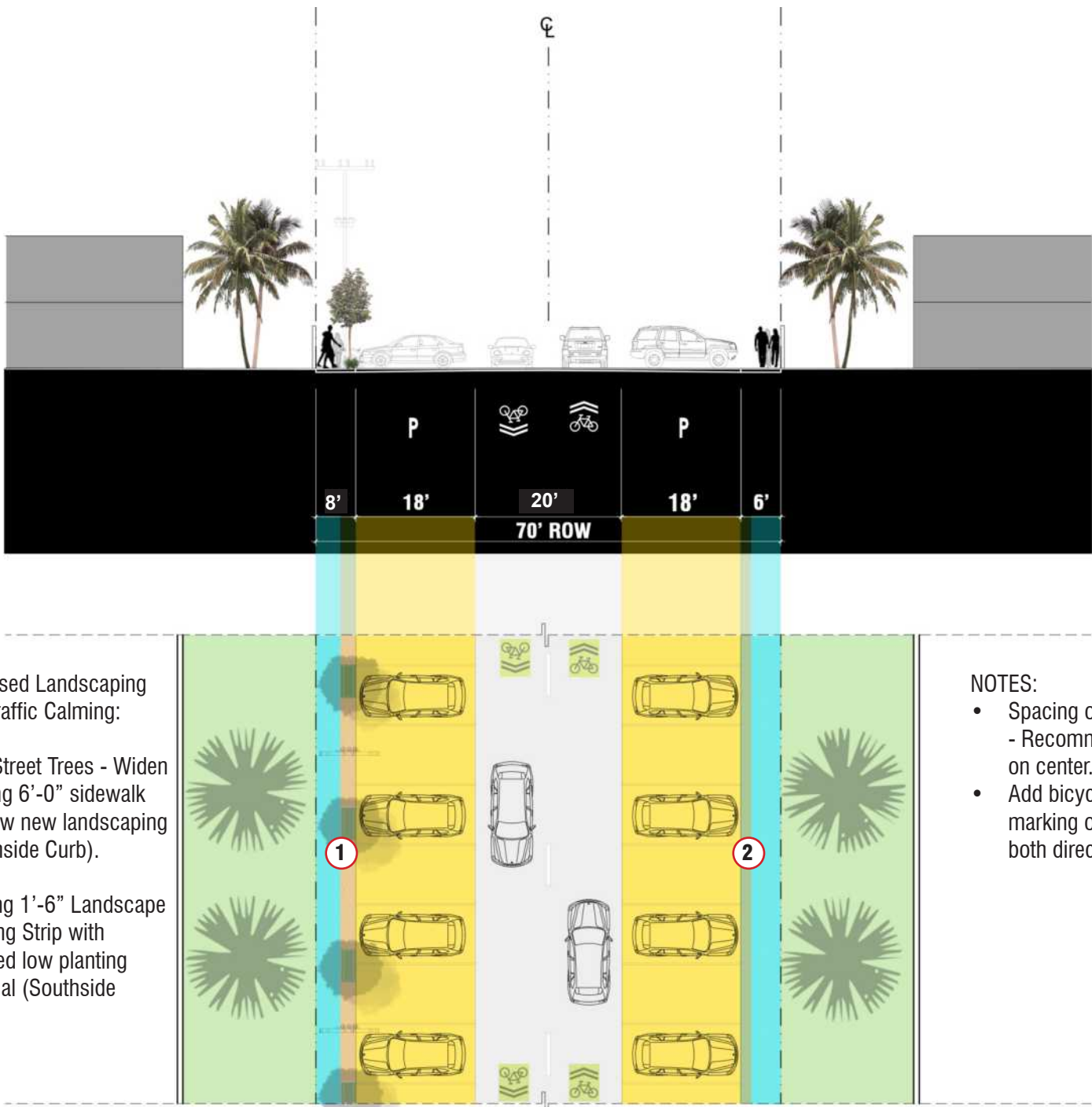


Proposed

EXISTING: BAY DRIVE *between 71st Street and Rue Granville*



PROPOSED: BAY DRIVE Neighborhood Greenway



Proposed Landscaping and Traffic Calming:

- 1 New Street Trees - Widen existing 6'-0" sidewalk to allow new landscaping (Northside Curb).
- 2 Existing 1'-6" Landscape Planting Strip with updated low planting material (Southside Curb).

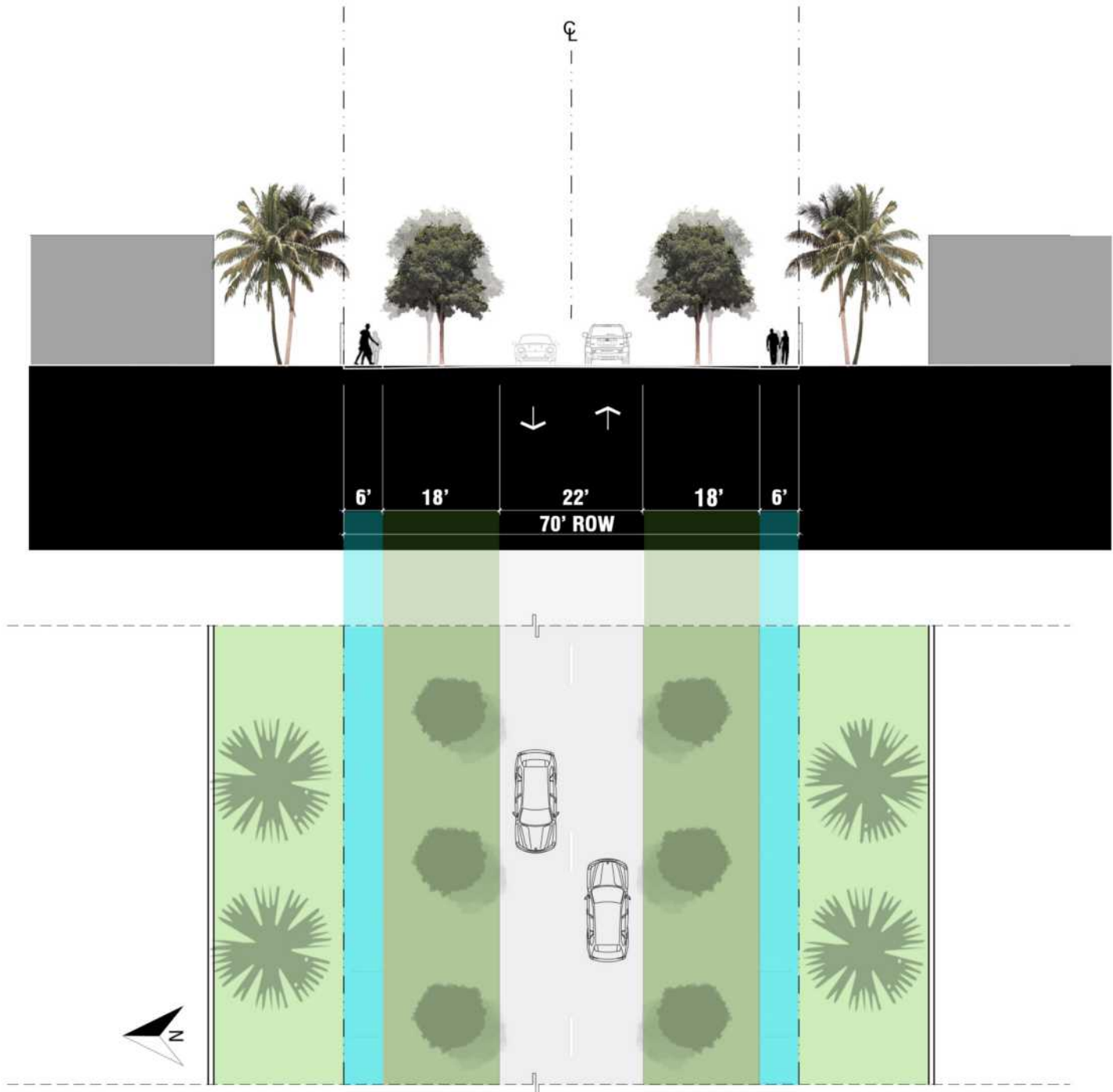
- NOTES:
- Spacing of New Trees - Recommended 20' on center.
 - Add bicycle symbol marking on roadway, both directions.

BAY DRIVE | Segment 2

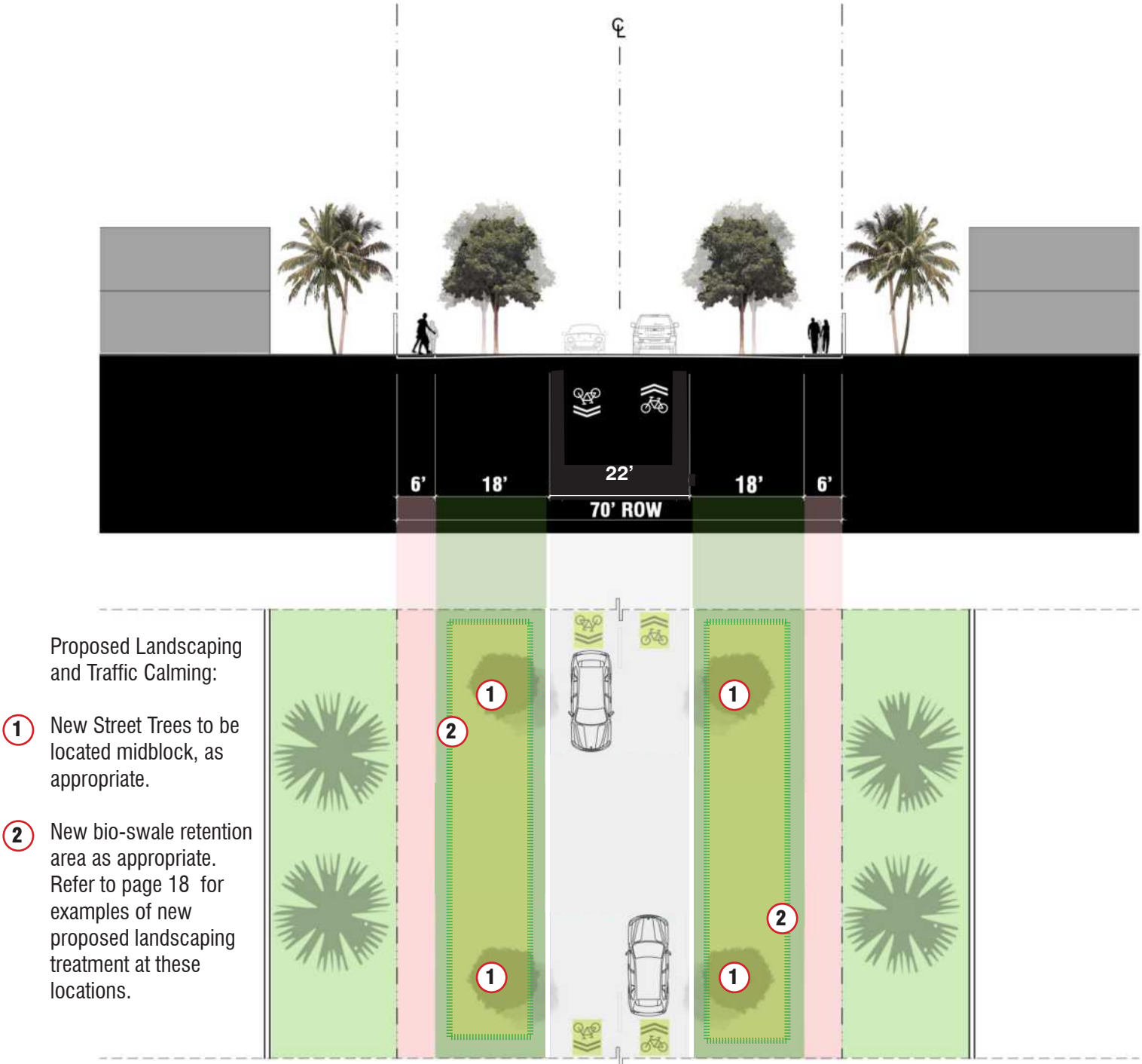
- Enhanced Treatment for Existing Road Closure / Raised Median Conditions. See Page 21 for detail.
- Proposed Neighborhood Greenway along Segment 2
- Proposed Midblock Landscape Enhancements. Location to be determined, as appropriate.
- Proposed Raised Intersections at Trouville Esplanade, Rue Bordeaux and Rue Notre Dame, between Rue Granville and Rue Versailles



EXISTING: BAY DRIVE *between Rue Granville and Rue Versailles*



PROPOSED: BAY DRIVE Neighborhood Greenway



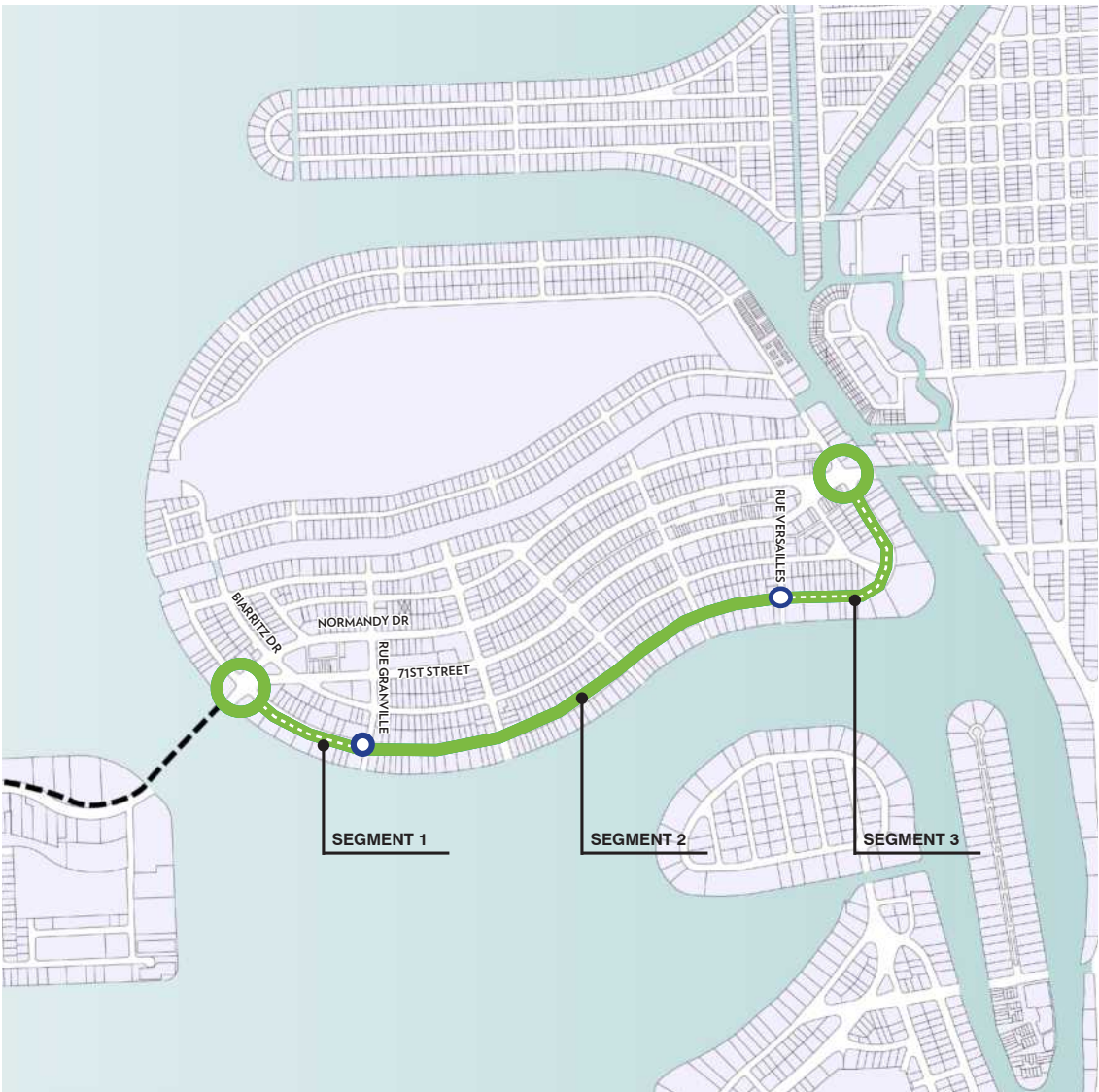
BAY DRIVE | Segment 3

○ Enhanced Treatment for Existing Road Closure / Raised Median Conditions. See Page 21 for detail.

Proposed Neighborhood Greenway along Segment 3

NOTE:

- Add bicycle symbol marking on roadway, both directions.
- Landscaping: Options were evaluated to enhance the existing landscaping along this segment. However, due to the lush existing tree canopy, only sharrows are proposed.

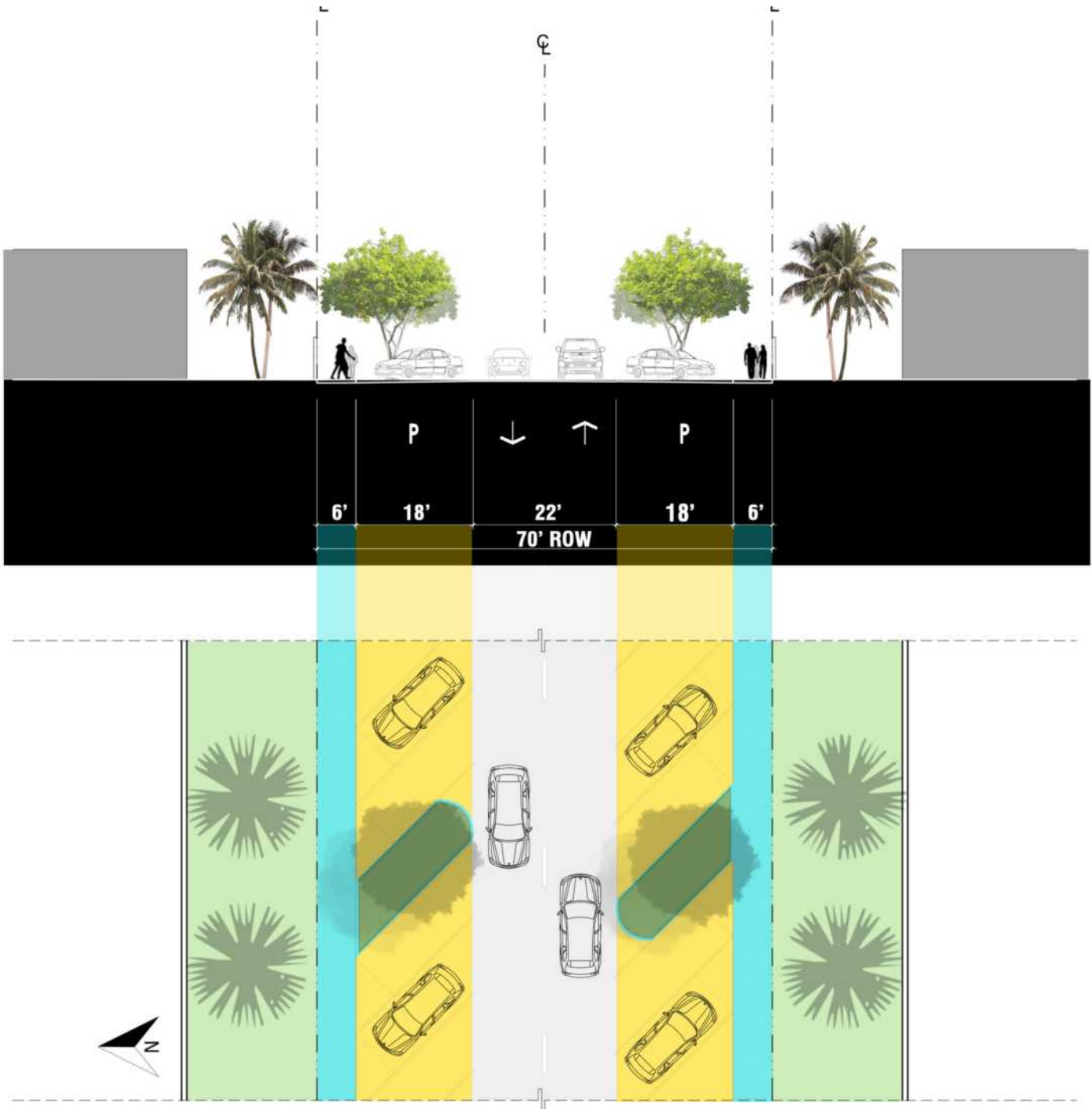


Existing Street View looking East

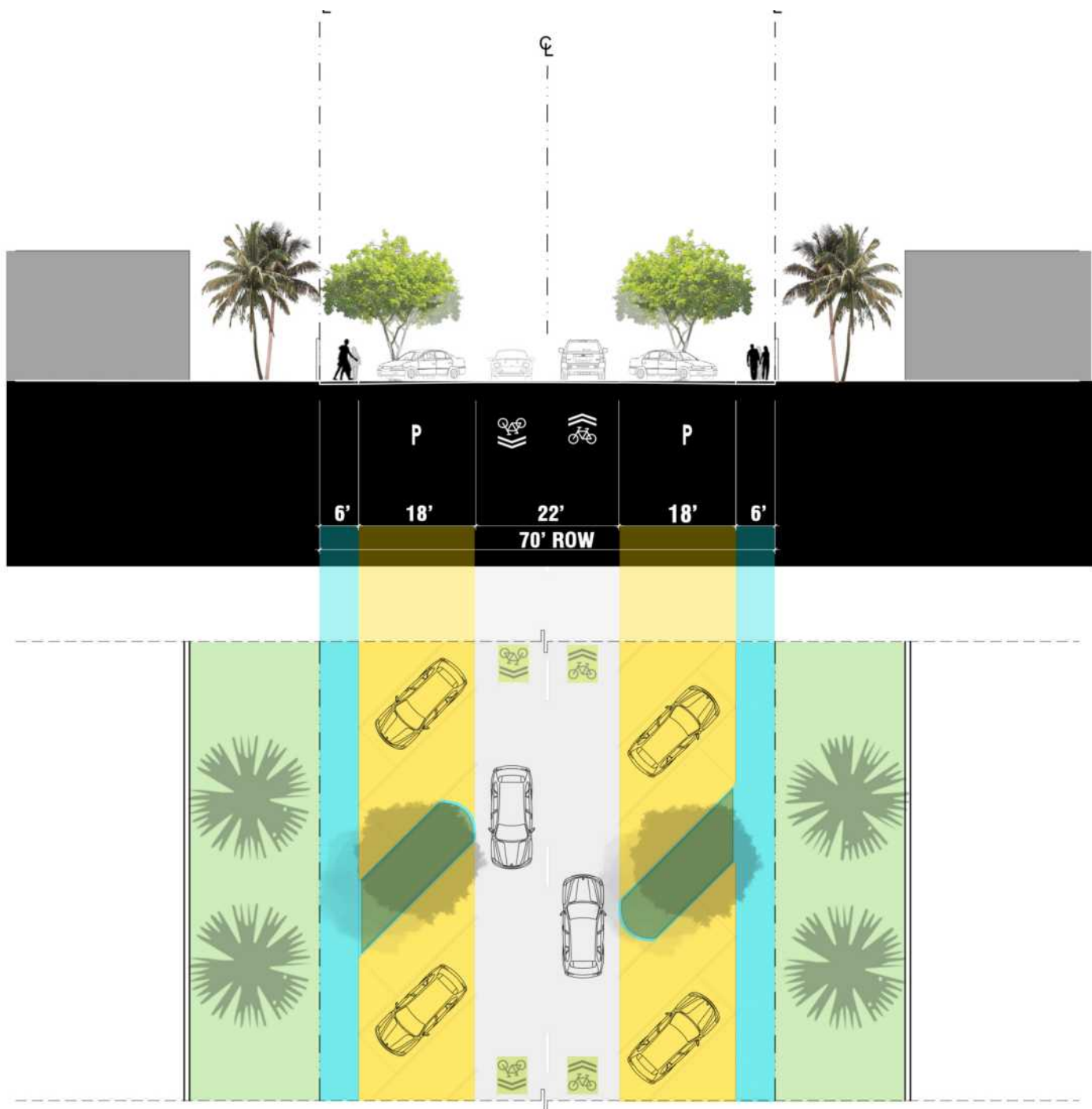


Proposed

EXISTING: BAY DRIVE *between Rue Versailles and 71st Street*



PROPOSED: BAY DRIVE Neighborhood Greenway



LANDSCAPING | Bay Drive Segments 1, 2 and 3

Street Trees

BENICIA / VERA WOOD - Medium Sized Trees (Areas 7-10 feet wide)

Along Bay Drive, BENICIA / VERA WOOD trees are recommended and are proposed to be planted as part of the new street speed tables or along the street at minimum 20' on center.

CREPE-MYRTLE trees are proposed to be planted as part of existing street-end pocket parks.



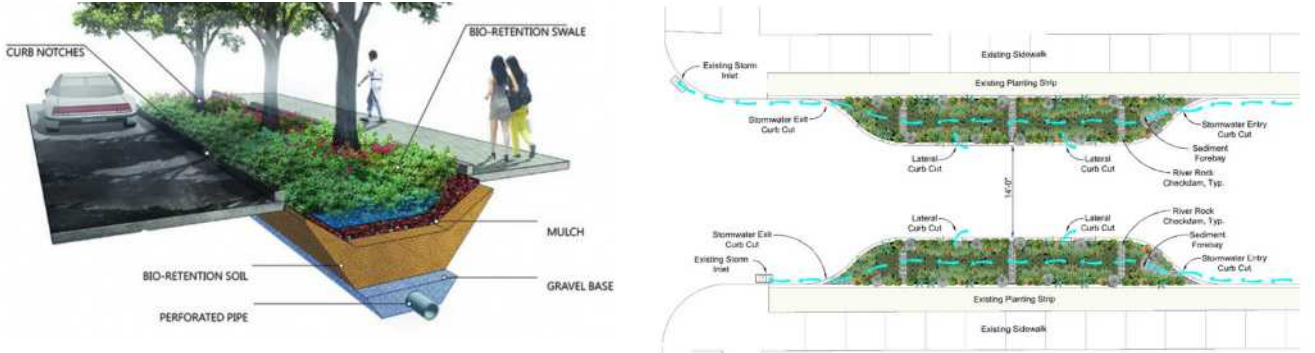
Bioswale / Bioretention Treatment

Swales along Bay Drive (Segment 2) are typically +/-20' wide. Plants and soil can be used as key functional elements of landscaped stormwater facilities. This natural system approach improves the quality of the urban runoff through bio-retention processes and helps restore lost hydrologic functions in urbanized areas.

Bioswale/bioretention swale treatment benefits include:

- Reduced runoff: In a typical road, a 4-meter (13-feet) swale can reduce approximately 25 percent of total rainfall runoff.
- Reduced pollutants: Bioswales/bioretention ponds remove pollutants by filtering stormwater runoff through natural vegetation and soil-based systems.
- Recharged groundwater: Instead of releasing stormwater into the drainage system, stormwater can be filtered and may provide some groundwater recharge.
- Improved energy efficiency: Sustainable, decentralized stormwater management systems may be more cost effective than centralized stormwater systems. At the minimum, these natural technologies reduce pressure on existing systems and the maintenance costs associated with centralized stormwater management systems.

The following examples illustrate various types of bioswales and bioretention treatment options depending on existing roadway configurations (eg. swale; curb conditions; etc.).



Access for Bikes and Pedestrians Only

Along Bay Drive, two locations - at Rue Granville and at Rue Versailles - have necessitated the installation of a road barrier to close access to vehicular traffic traveling along the roadway. As illustrated in these examples, safe bike/ped dividers can be retrofitted into the existing road barrier island to allow for better and safer bike and pedestrian access. Design can be temporary to permanent and incorporate signage, colored textured pavement for crossings, and bollards to keep motorists from crossing into the space and protect pedestrians and bicyclists from errant vehicles.

Figure 1 and 2 below show the location of the existing road closures / barriers at Bay Drive / Rue Granville and Bay Drive / Rue Versailles. The proposed location for incorporating safe dividers / crossings allows access for pedestrians from the existing sidewalk and for bicyclists from proposed sharrows. The photos show examples of dividers incorporating crossings to allow for safe bike and pedestrian access.

Figure 1: Bay Drive Bike/Ped Connection Between Segment 1 and 2
Intersection of Bay Drive and Rue Granville



Figure 2: Bay Drive Bike/Ped Connection Between Segment 2 and 3
Intersection of Bay Drive and Rue Versailles



TRAFFIC CALMING | Bay Drive Segment 2



A. Existing Intersection at Bay Drive and Trouville Esplanade. (See Map below for location)



B. Existing Intersection at Bay Drive and Rue Bordeaux. (See Map below for location)



C. Existing Intersection at Bay Drive and Rue Notre Dame. (See Map below for location)

● Proposed Raised Intersections along Bay Drive (Segment 2) to be located at corner of Bay Drive and Trouville Esplanade, Rue Bordeaux and Rue Notre Dame. See Figure 1: Location Map.

Traffic calming for Bay Drive includes recommendation for raised intersections at three key intersections located between Rue Granville and Rue Versailles.

A raised intersection is essentially a speed table for an entire intersection. Construction involves providing ramps on each intersection approach and elevating the entire intersection to the level of the sidewalk. They can be built with a variety of materials, including asphalt, concrete, or pavers. The crosswalks on each approach are also elevated as a part of the treatment, to enable pedestrians to cross the road at the same level as the sidewalk. This is good for mobility impaired pedestrians.

Changes in pavement color and texture (such as bricks or Belgian blocks) can be used in interesting and visually attractive ways and have the effect of rumble strips to ensure reduction in vehicular speed and traffic calming.

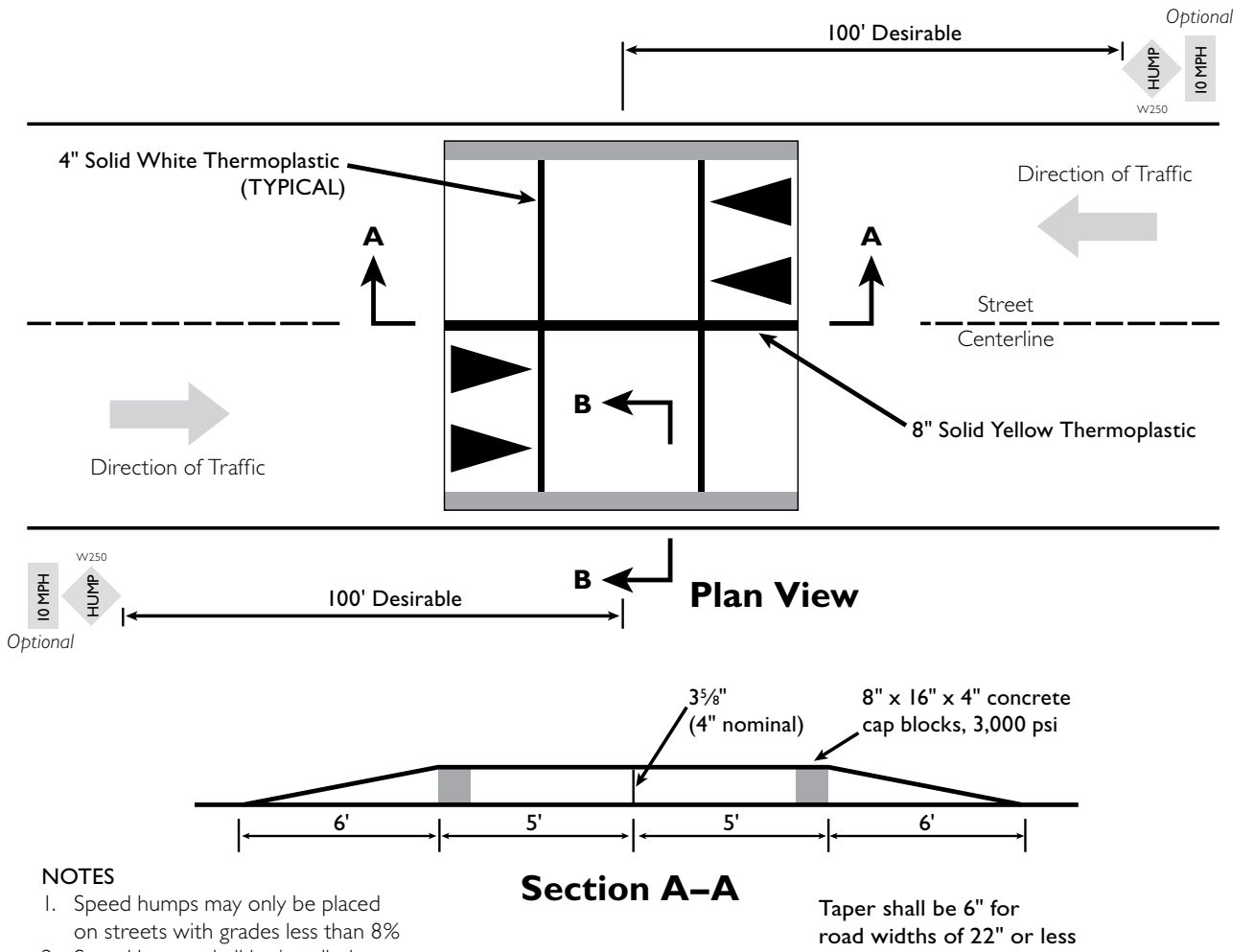
Paving treatments can also delineate and create awareness of a pedestrian crosswalk or haven; make a street appear narrower than it is to deter speeding; and, define a street from a sidewalk or a parking lane.

Refer also to page 9 for locations of proposed raised intersections along Bay Drive (Segment 2).

Figure 1. Location Map



Figure 2. Raised Intersection / Speed Table - Dimensional Detail



Examples of Raised Intersections for Traffic Calming

Decorative patterns with art motifs can be incorporated at raised intersections as a traffic calming measure. These are proposed to be located where Bay Drive intersects Trouville Esplanade, Rue Bordeaux and Rue Notre Dame. These raised intersections also provide a decorative entry feature to existing pocket parks located along Bay Drive.

Refer to page 9 for locations of proposed raised intersections along Bay Drive and for the location of neighborhood pocket parks fronting the bay.

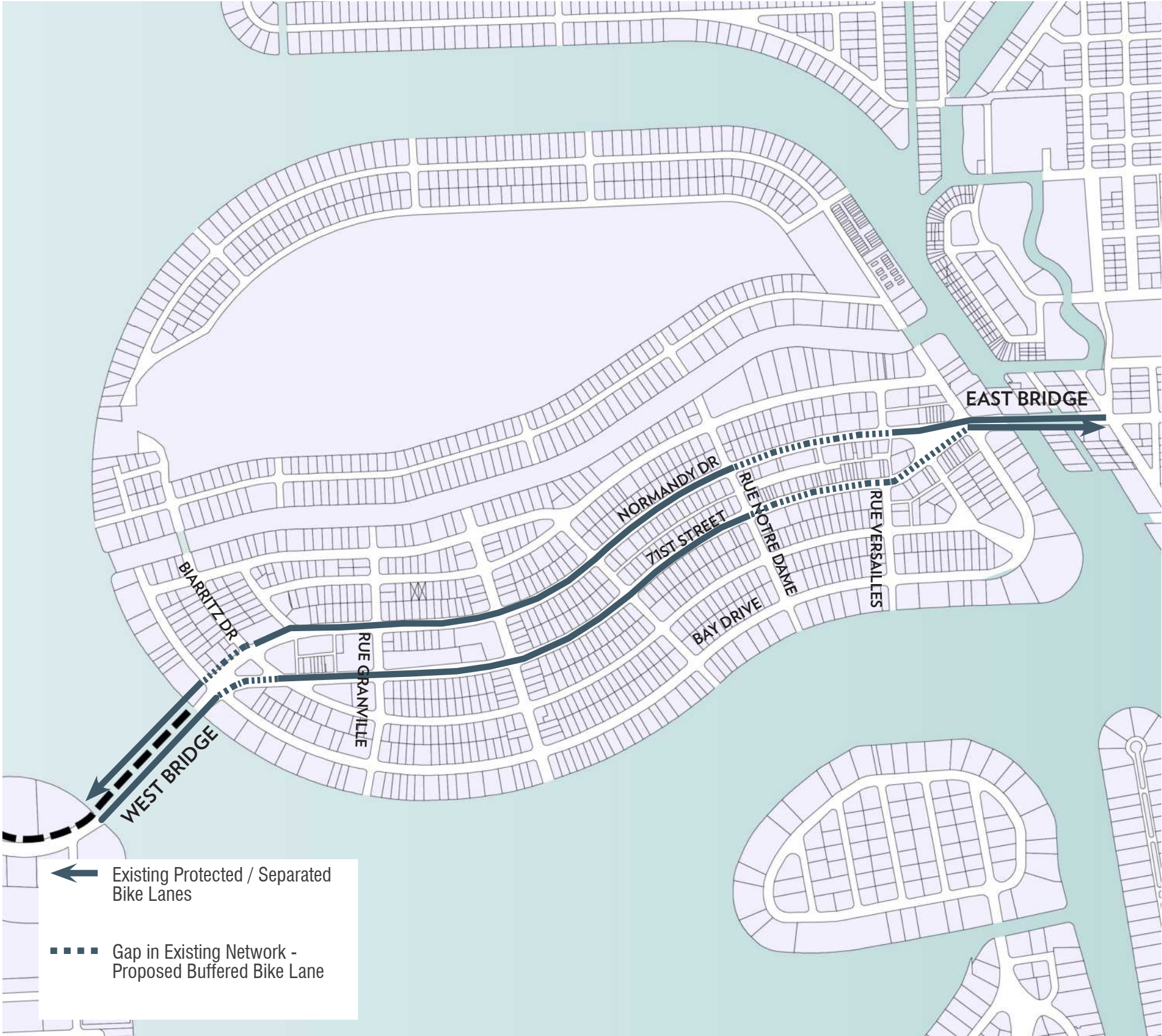
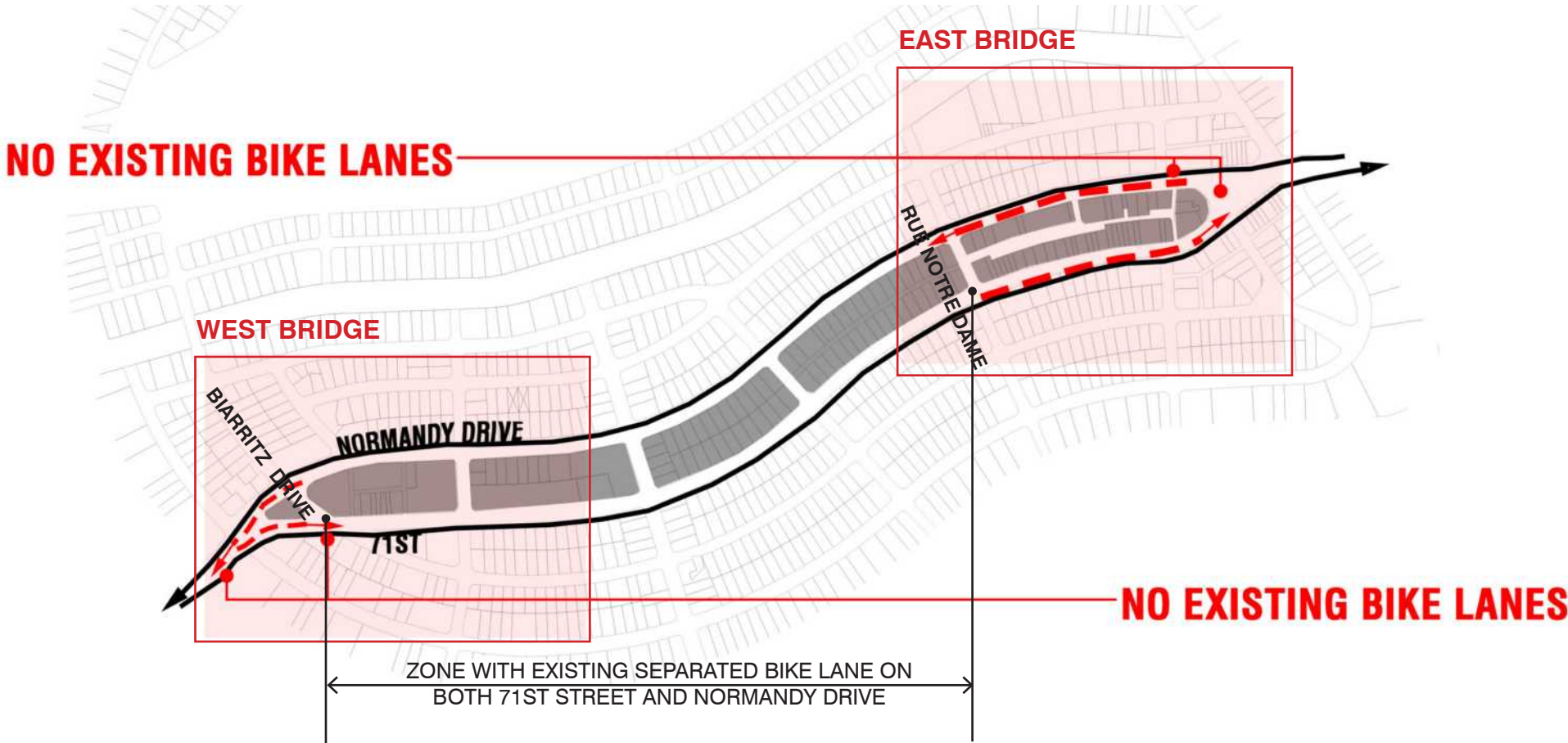


71st Street & Normandy Drive

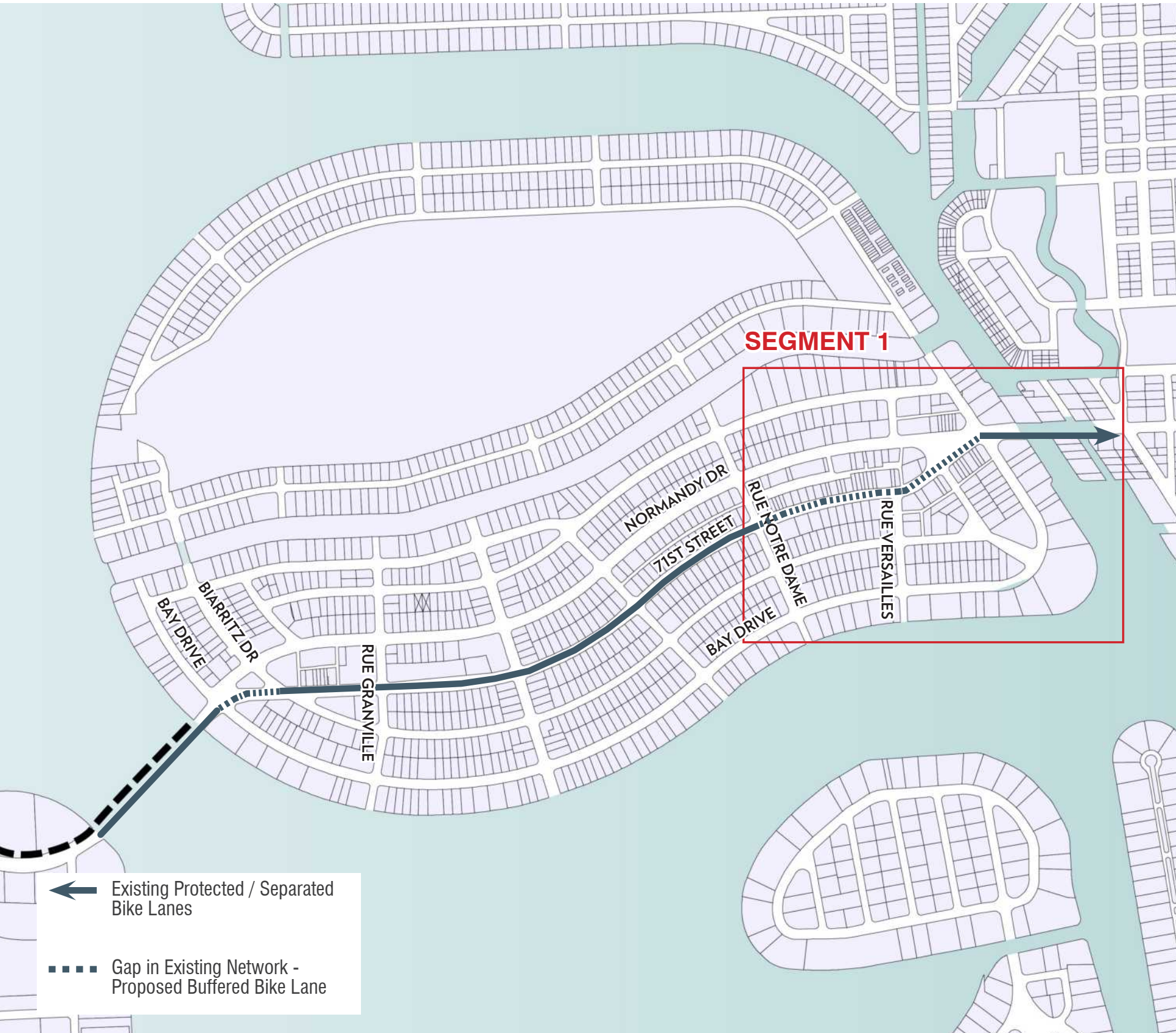
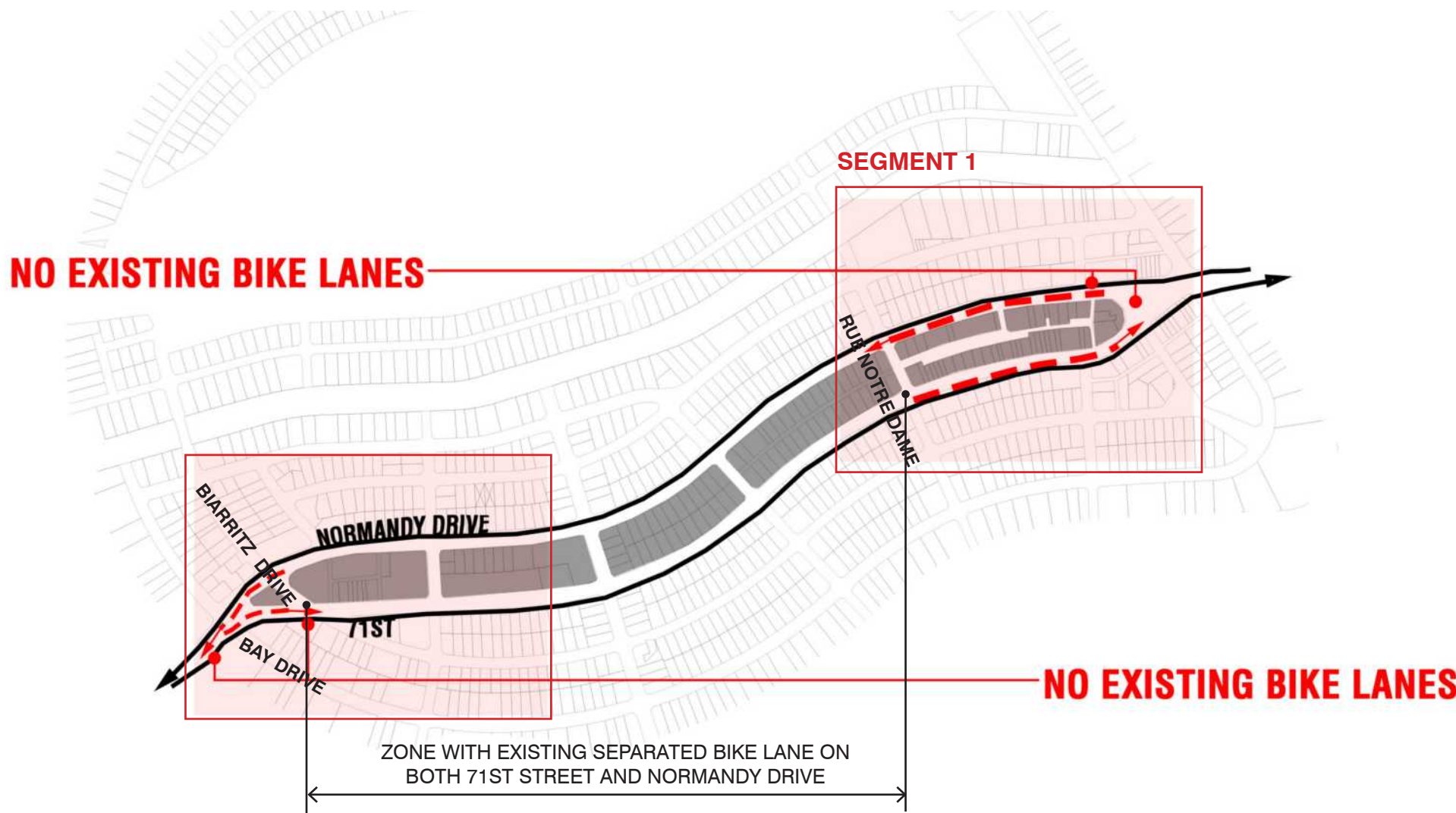
SAFE CONNECTIONS

Creating Safe Connections between Networks

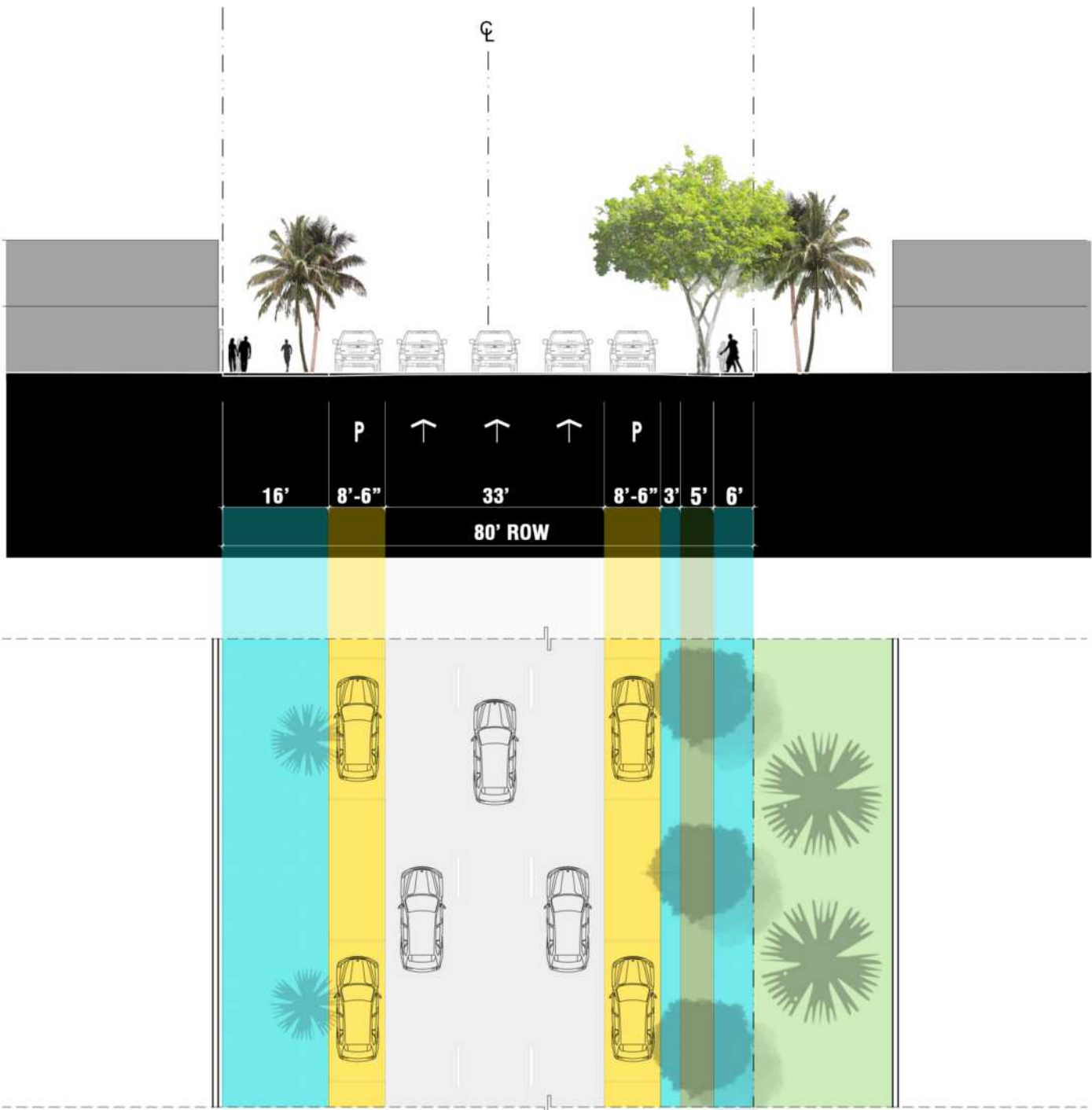
Along 71st Street And Normandy Drive, the City has the opportunity to upgrade sharrows to buffered bike lanes along a portion of both roadways where bike lanes are missing. This Neighborhood Greenway Feasibility Study for Bay Drive identifies ways to “fill in the gap” in order to create a safe and connected bike lane network.



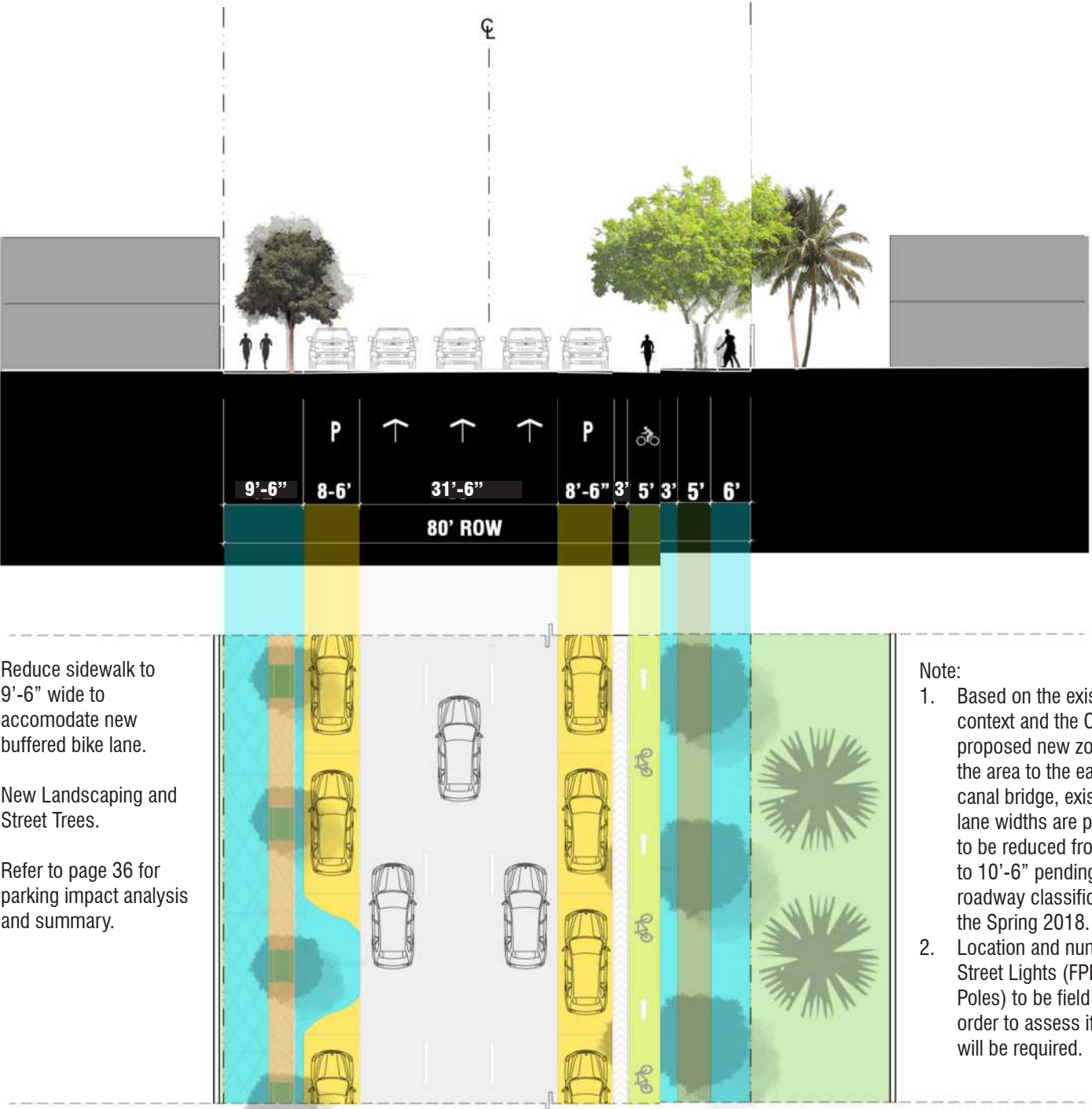
BAY DRIVE STUDY | 71st STREET (East, Segment 1)



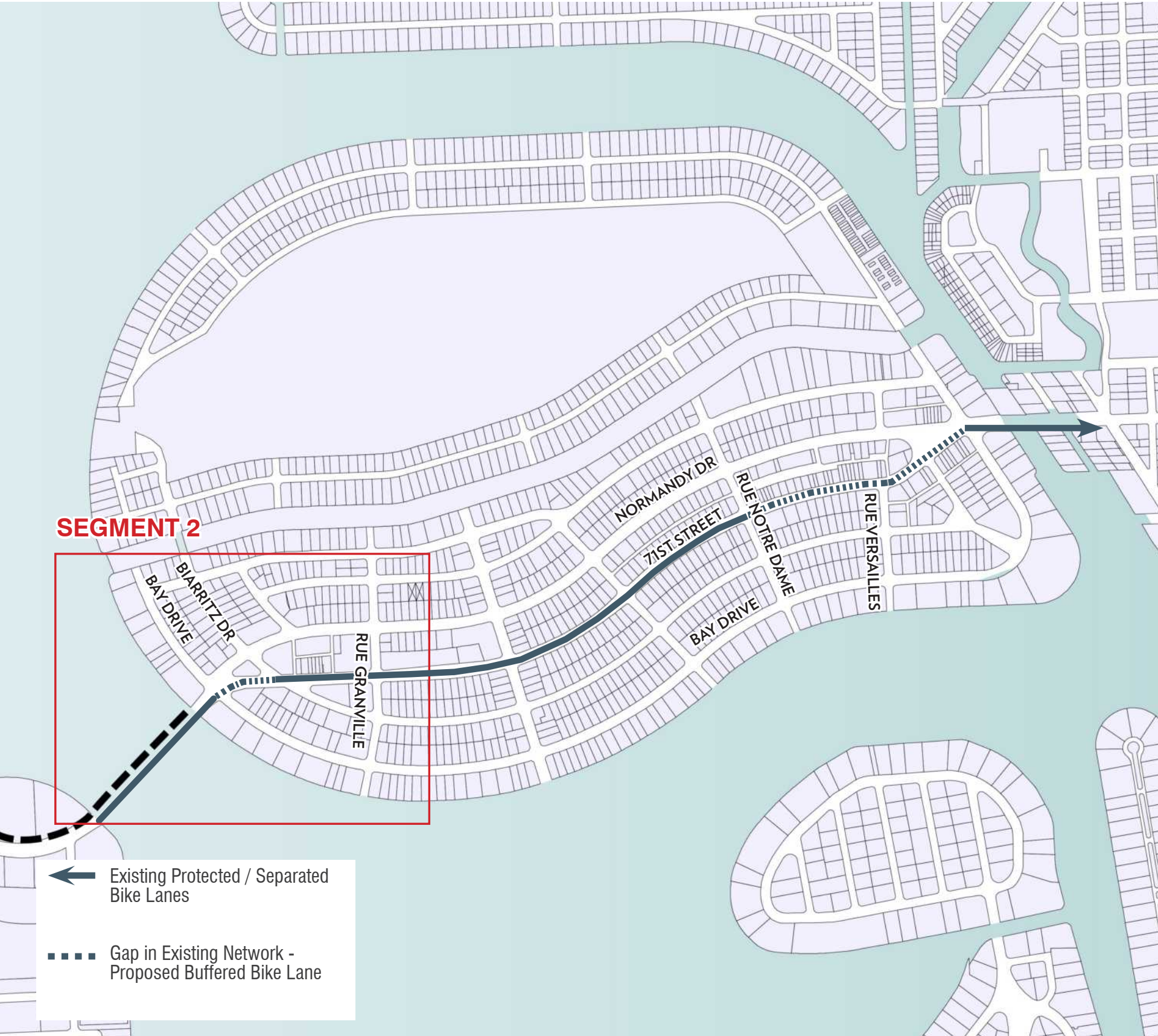
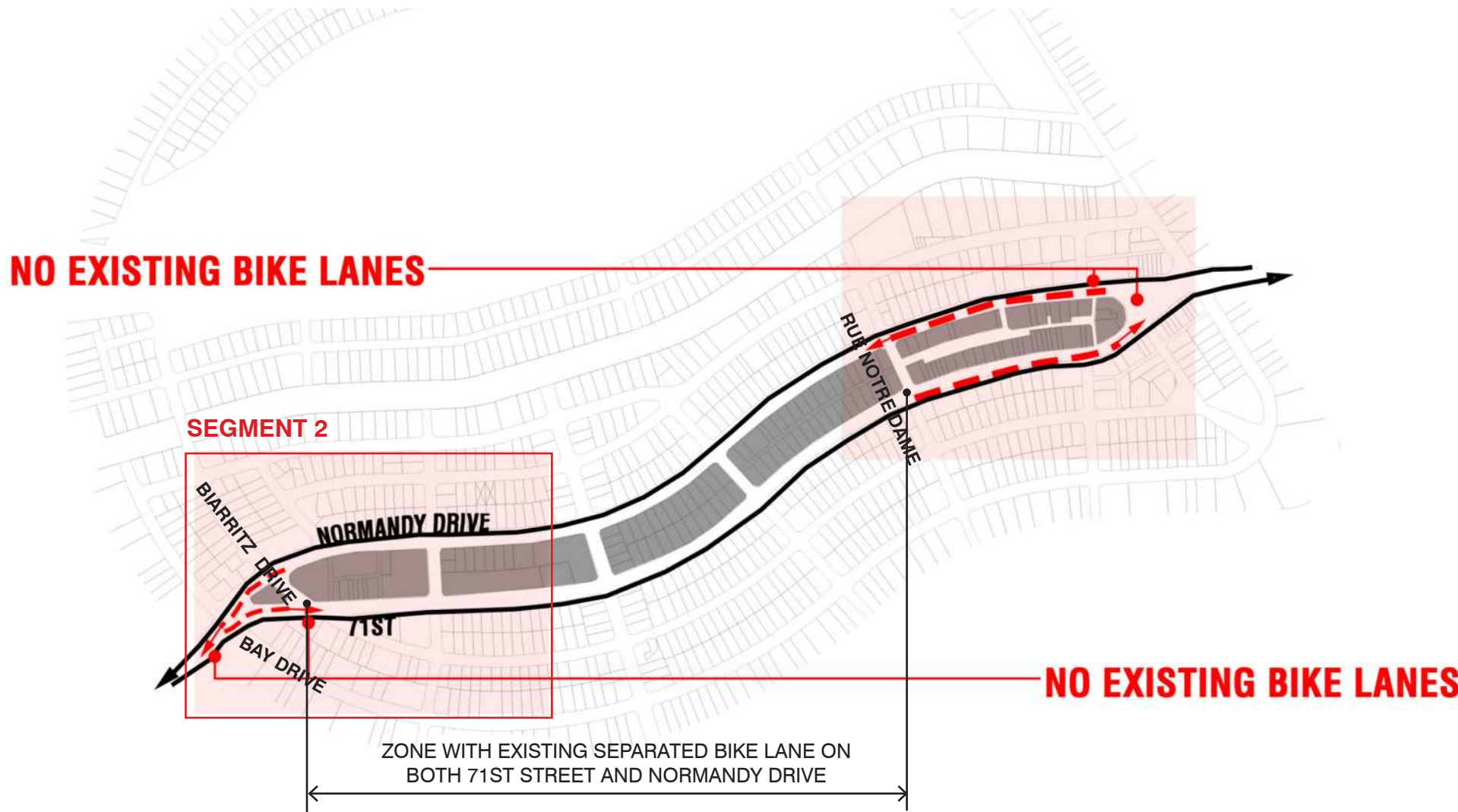
EXISTING: 71ST STREET *between Rue Notre Dame and Bay Drive* (Commercial)



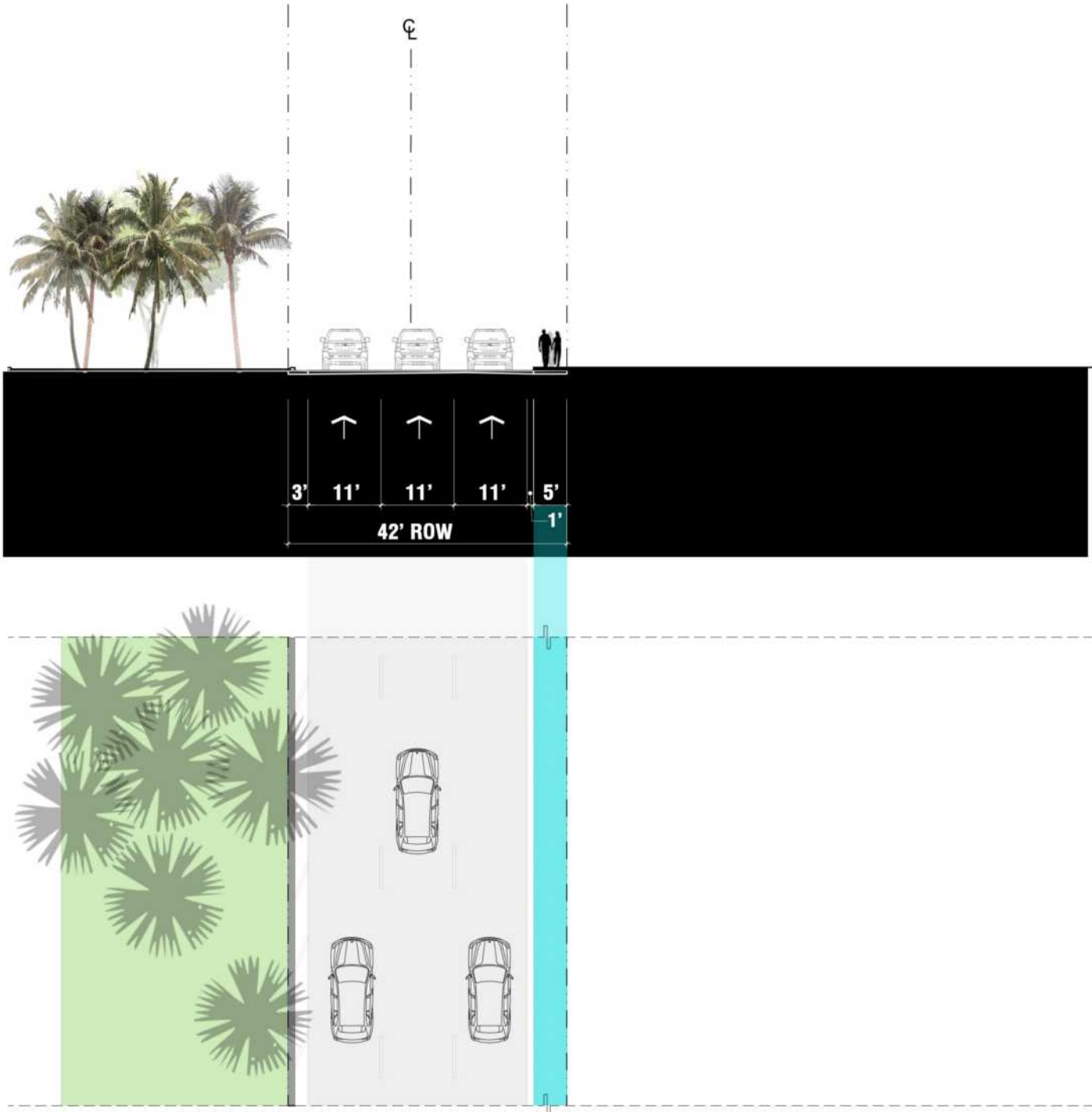
PROPOSED: 71ST STREET Buffered Bike Lane



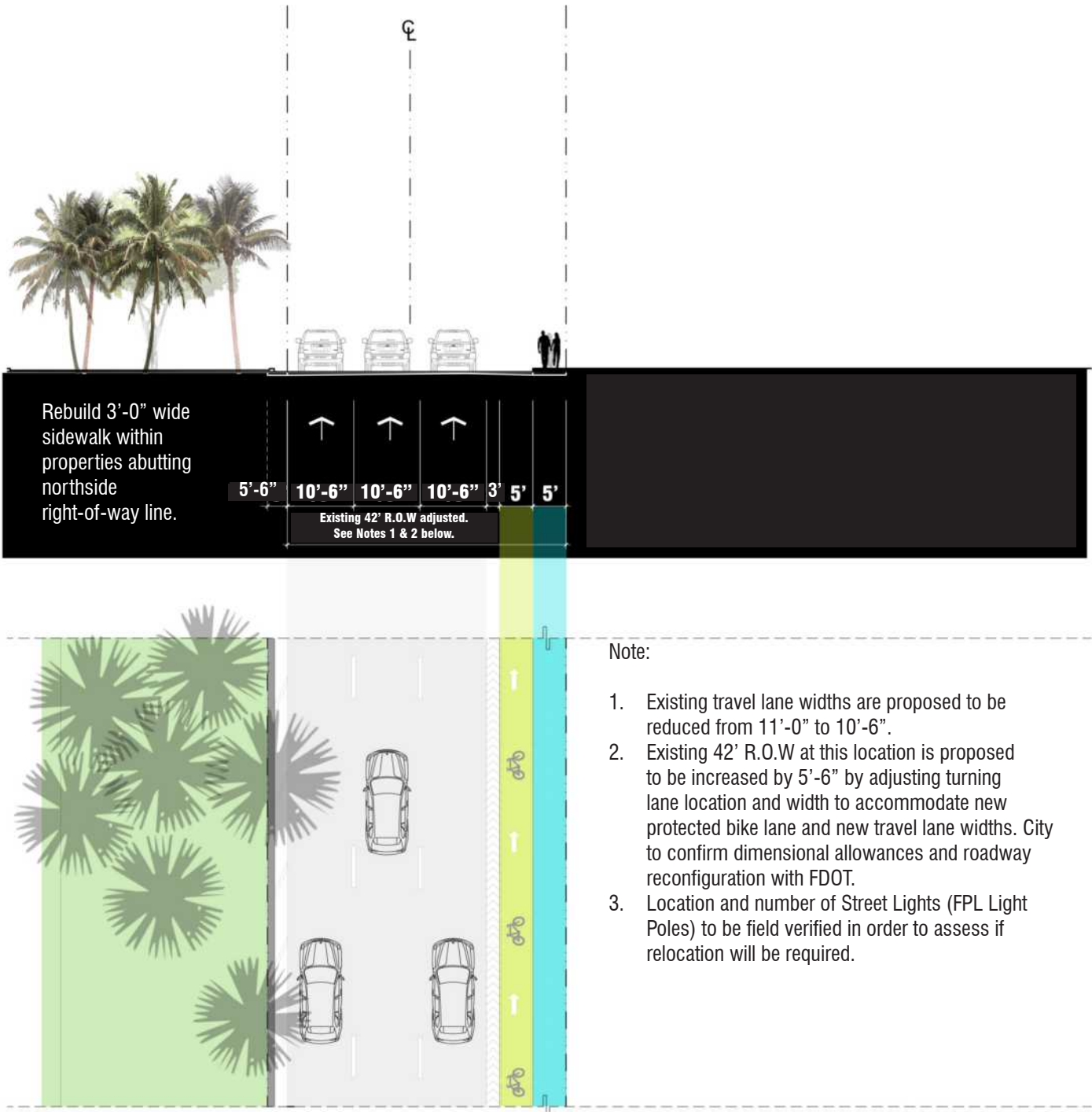
BAY DRIVE STUDY | 71st STREET (West, Segment 2)



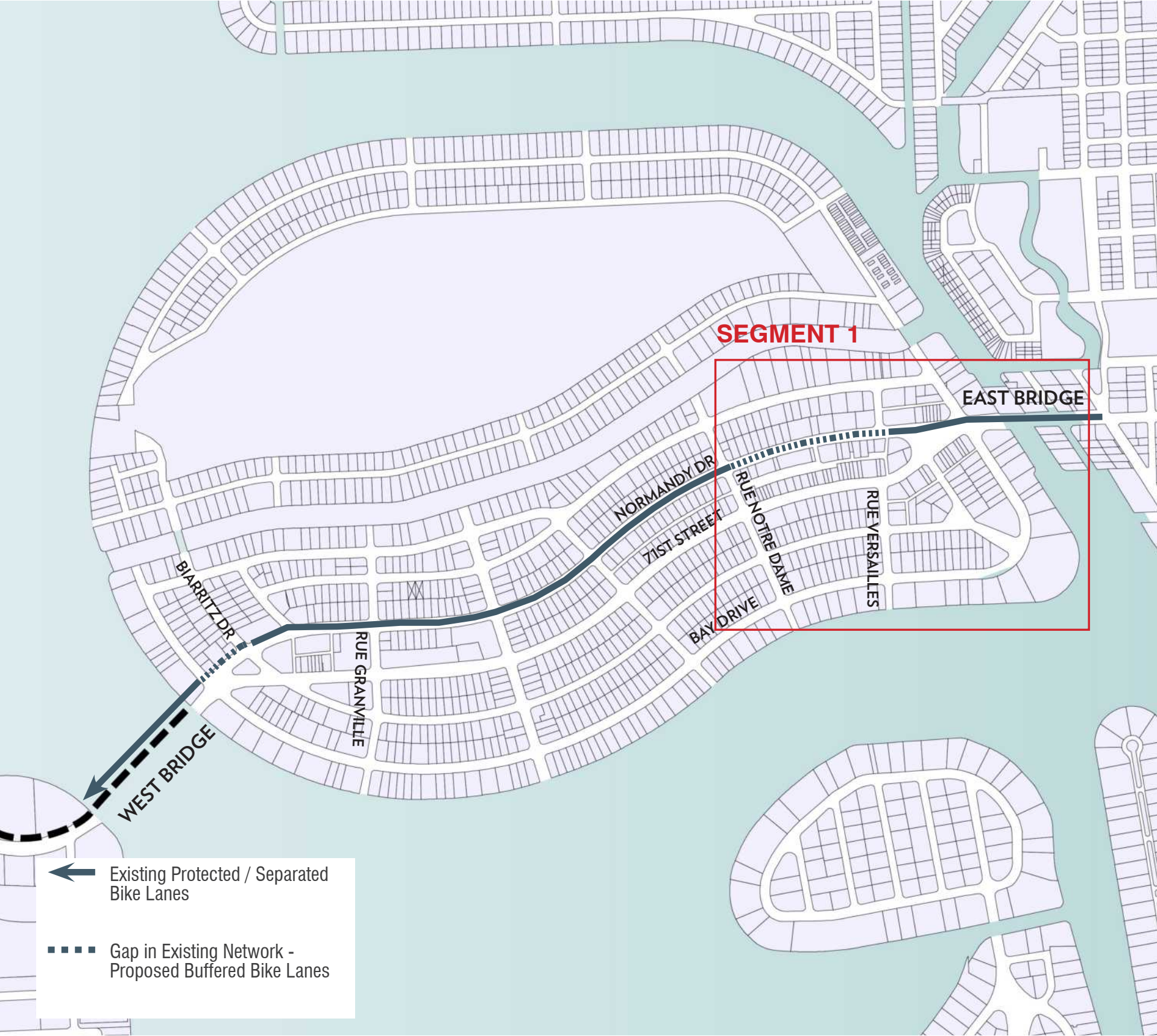
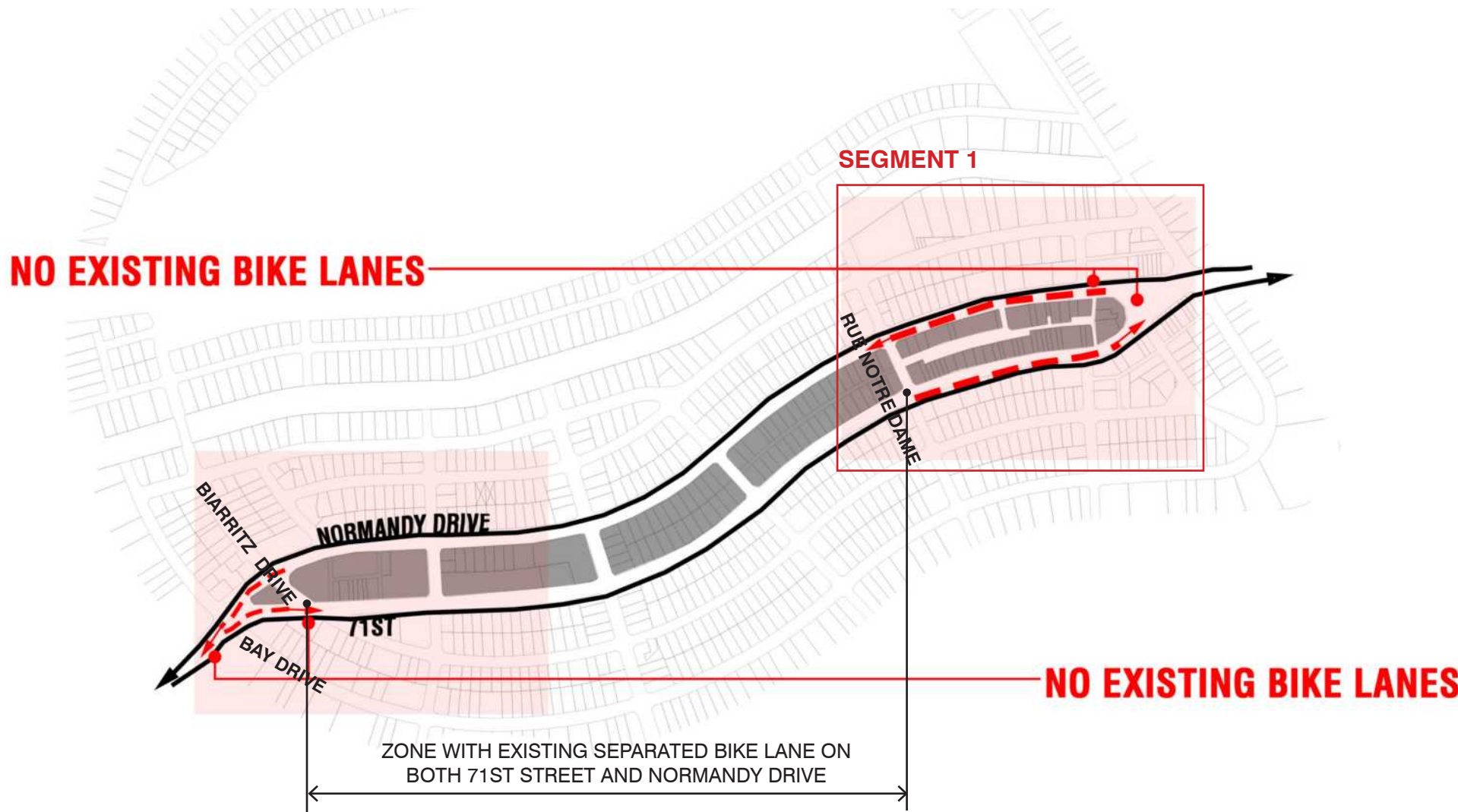
EXISTING: 71ST STREET *between Bay Drive and Biarritz Drive*



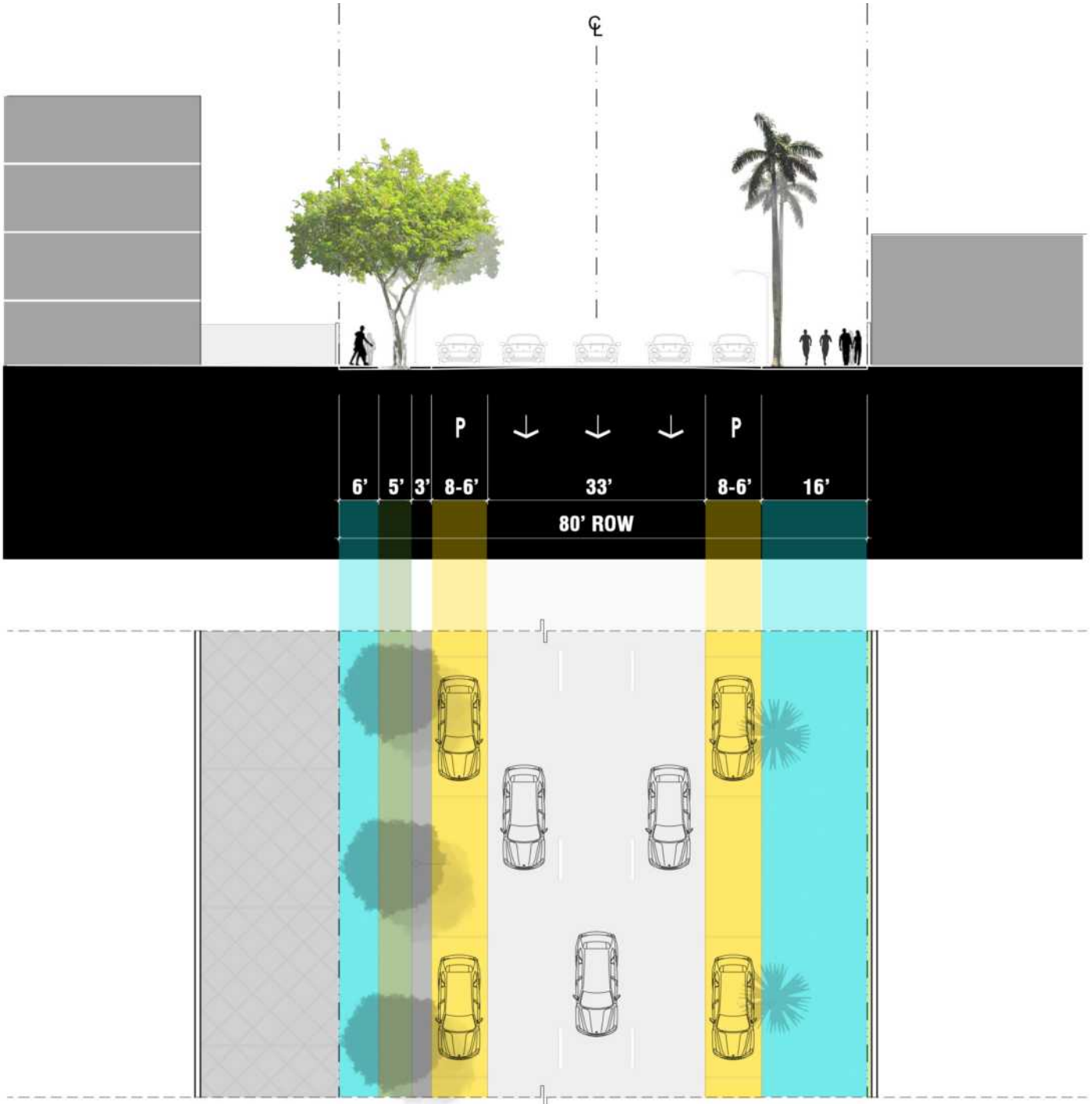
PROPOSED: 71ST STREET Buffered Bike Lane



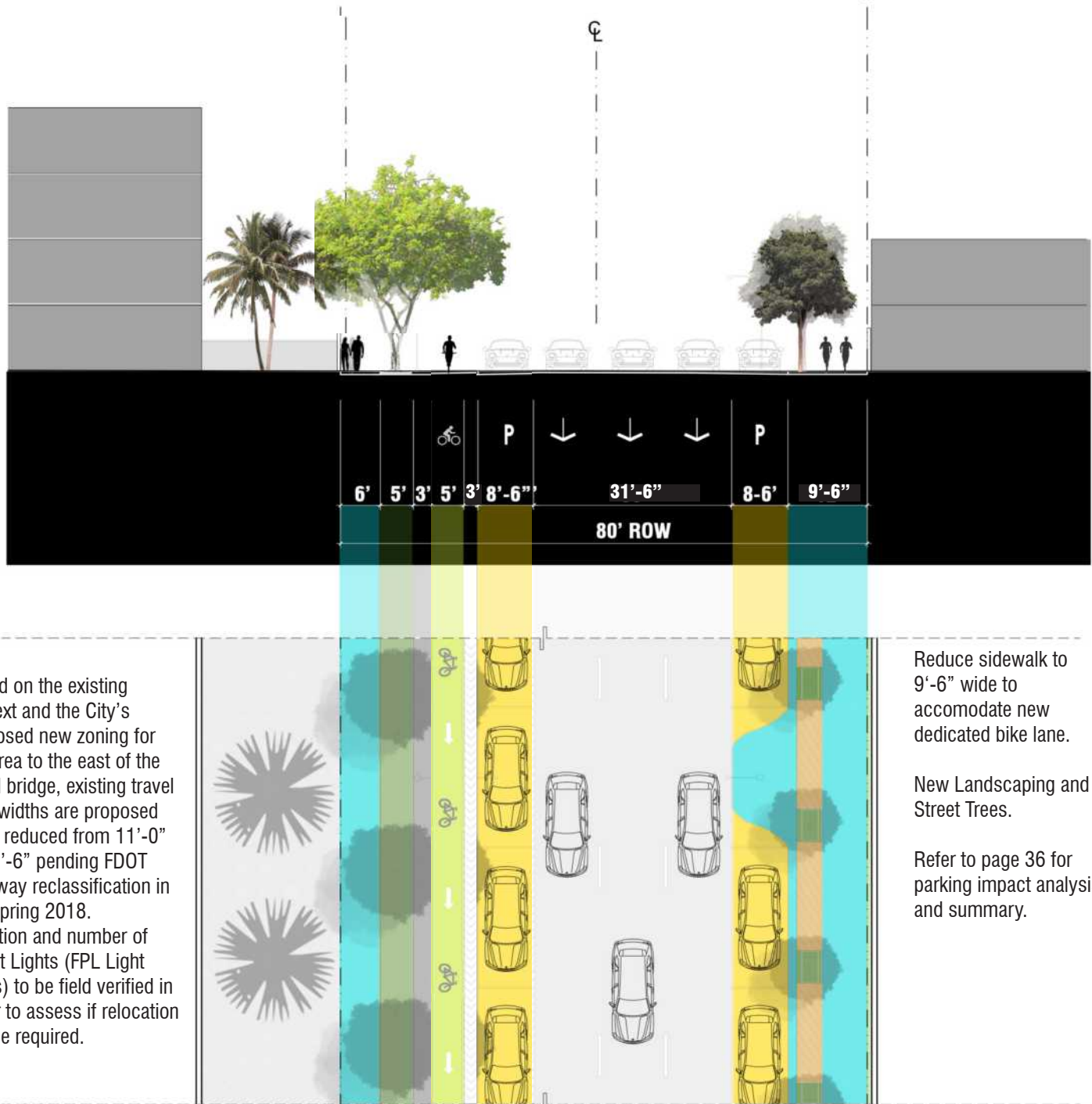
BAY DRIVE STUDY | NORMANDY DRIVE (East, Segment 1)



EXISTING: NORMANDY DRIVE *between Rue Notre Dame and Bay Drive* (Commercial)



PROPOSED: NORMANDY DRIVE Buffered Bike Lane



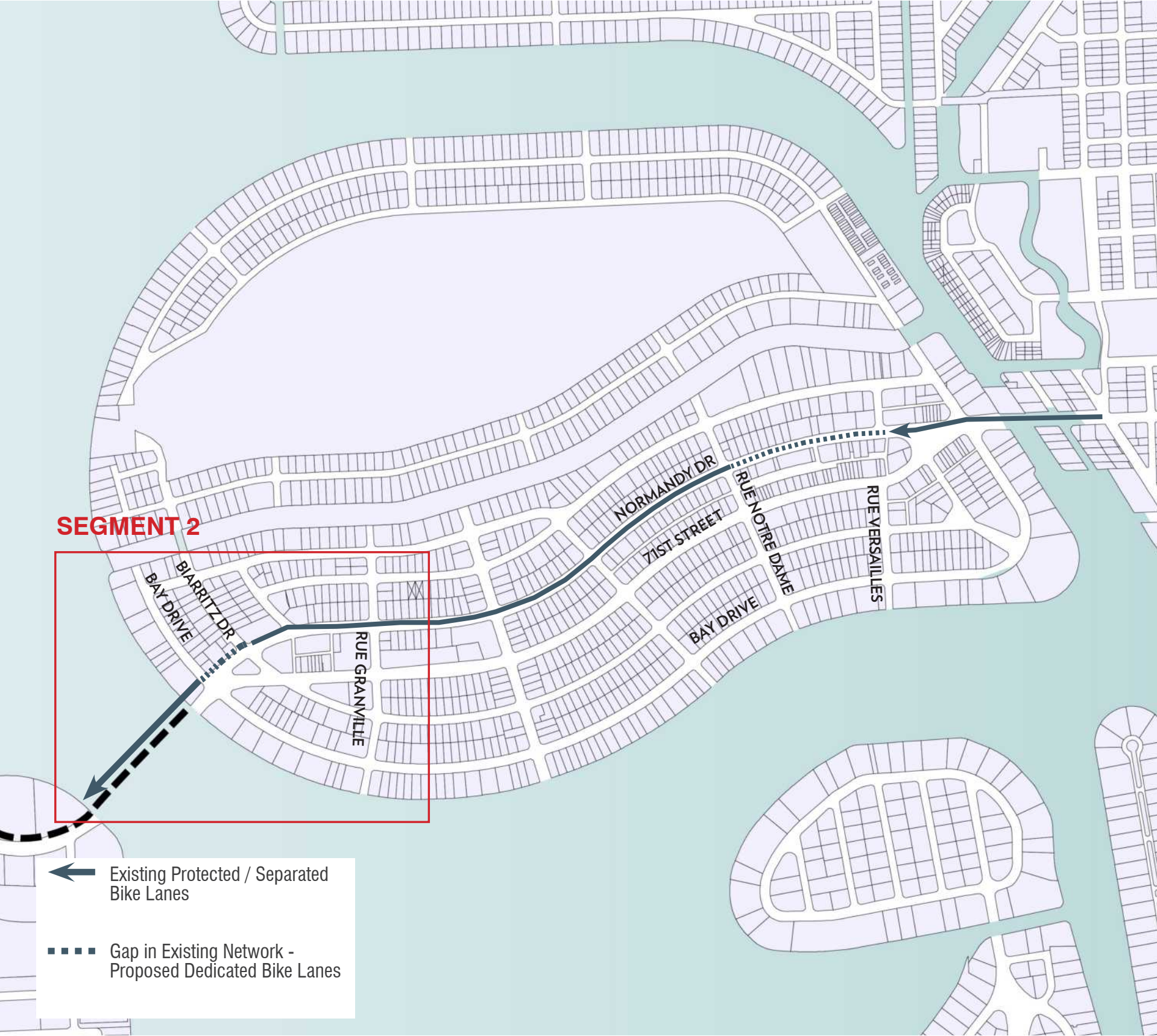
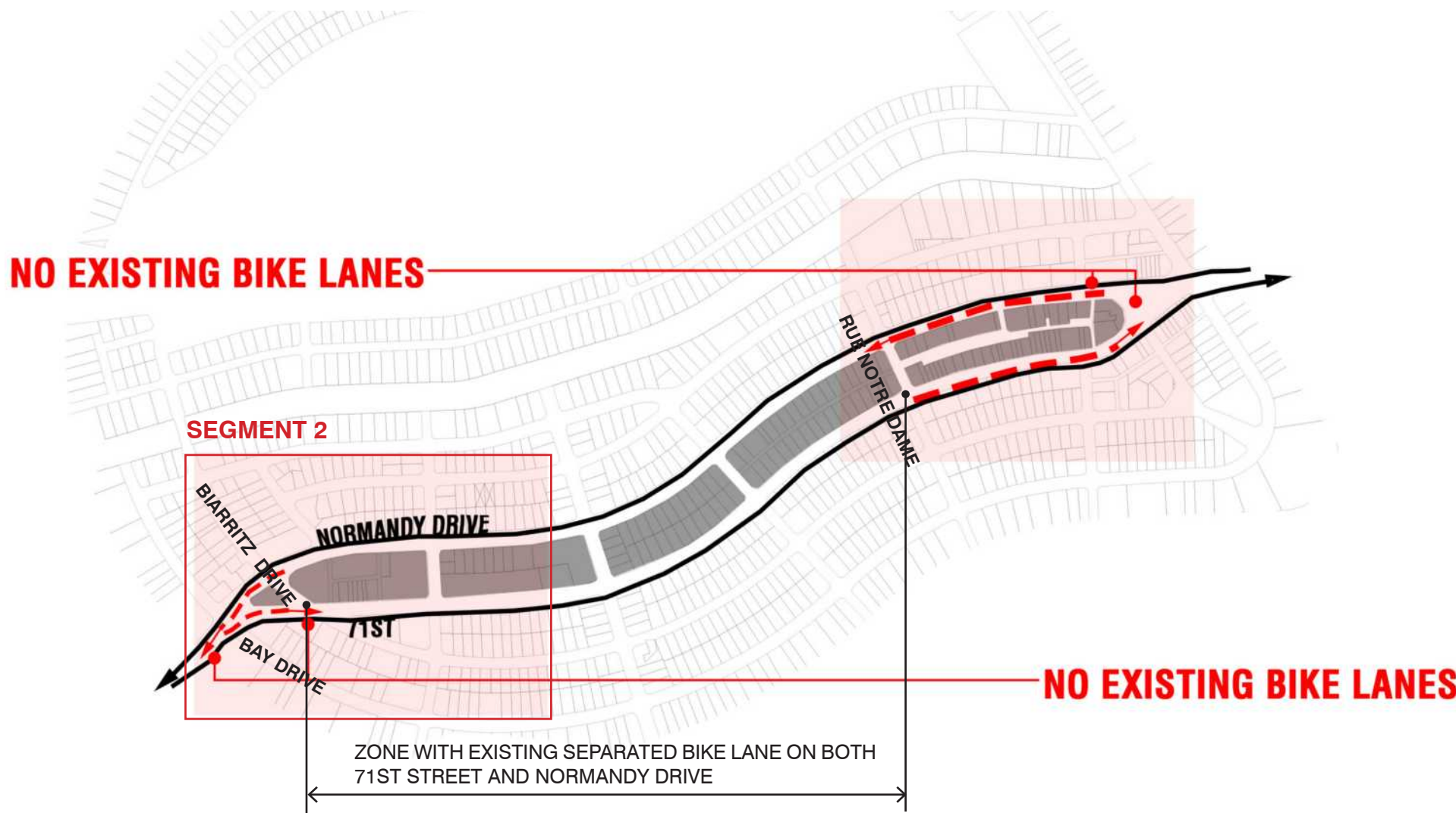
- Note:
- 1. Based on the existing context and the City's proposed new zoning for the area to the east of the canal bridge, existing travel lane widths are proposed to be reduced from 11'-0" to 10'-6" pending FDOT roadway reclassification in the Spring 2018.
 - 1. Location and number of Street Lights (FPL Light Poles) to be field verified in order to assess if relocation will be required.

Reduce sidewalk to 9'-6" wide to accommodate new dedicated bike lane.

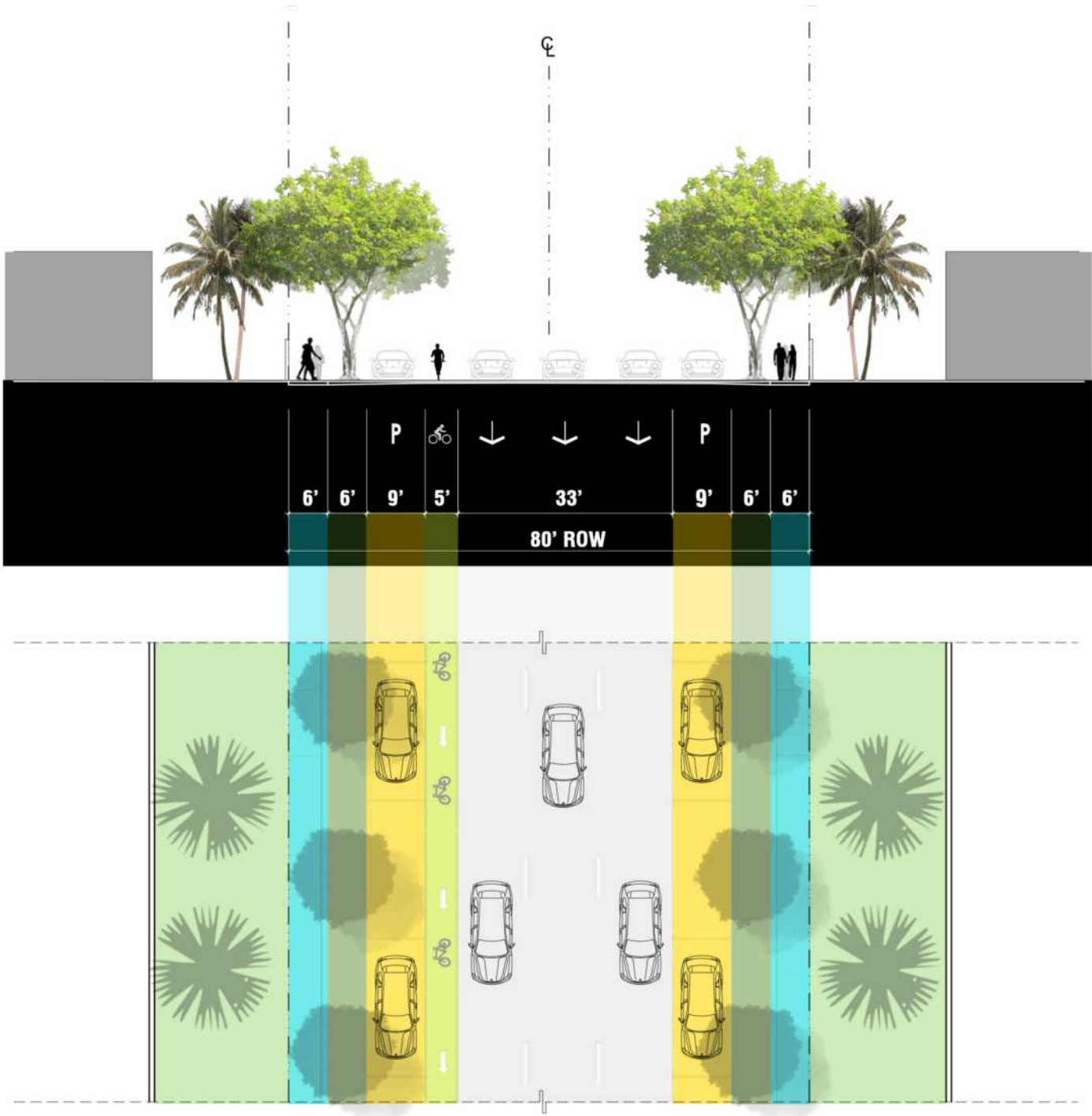
New Landscaping and Street Trees.

Refer to page 36 for parking impact analysis and summary.

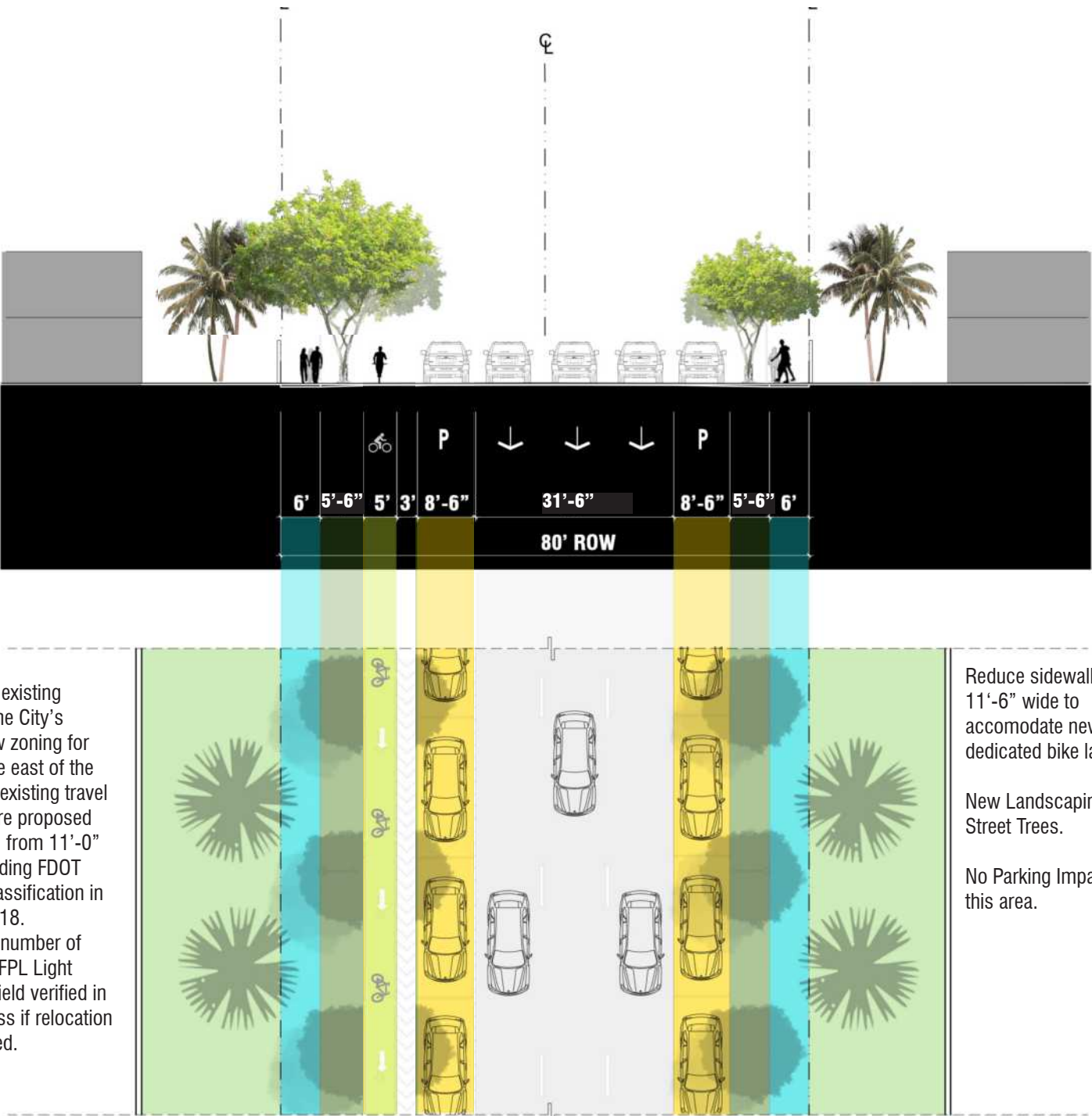
BAY DRIVE STUDY | NORMANDY DRIVE (West, Segment 2)



EXISTING: NORMANDY DRIVE *between Bay Drive and Biarritz Drive* (Residential)



PROPOSED: NORMANDY DRIVE Buffered Bike Lane



Note:

- 1. Based on the existing context and the City's proposed new zoning for the area to the east of the canal bridge, existing travel lane widths are proposed to be reduced from 11'-0" to 10'-6" pending FDOT roadway reclassification in the Spring 2018.
- 1. Location and number of Street lights (FPL Light Poles) to be field verified in order to assess if relocation will be required.

Reduce sidewalk to 11'-6" wide to accommodate new dedicated bike lane.

New Landscaping and Street Trees.

No Parking Impact in this area.

EAST BRIDGE | EXISTING

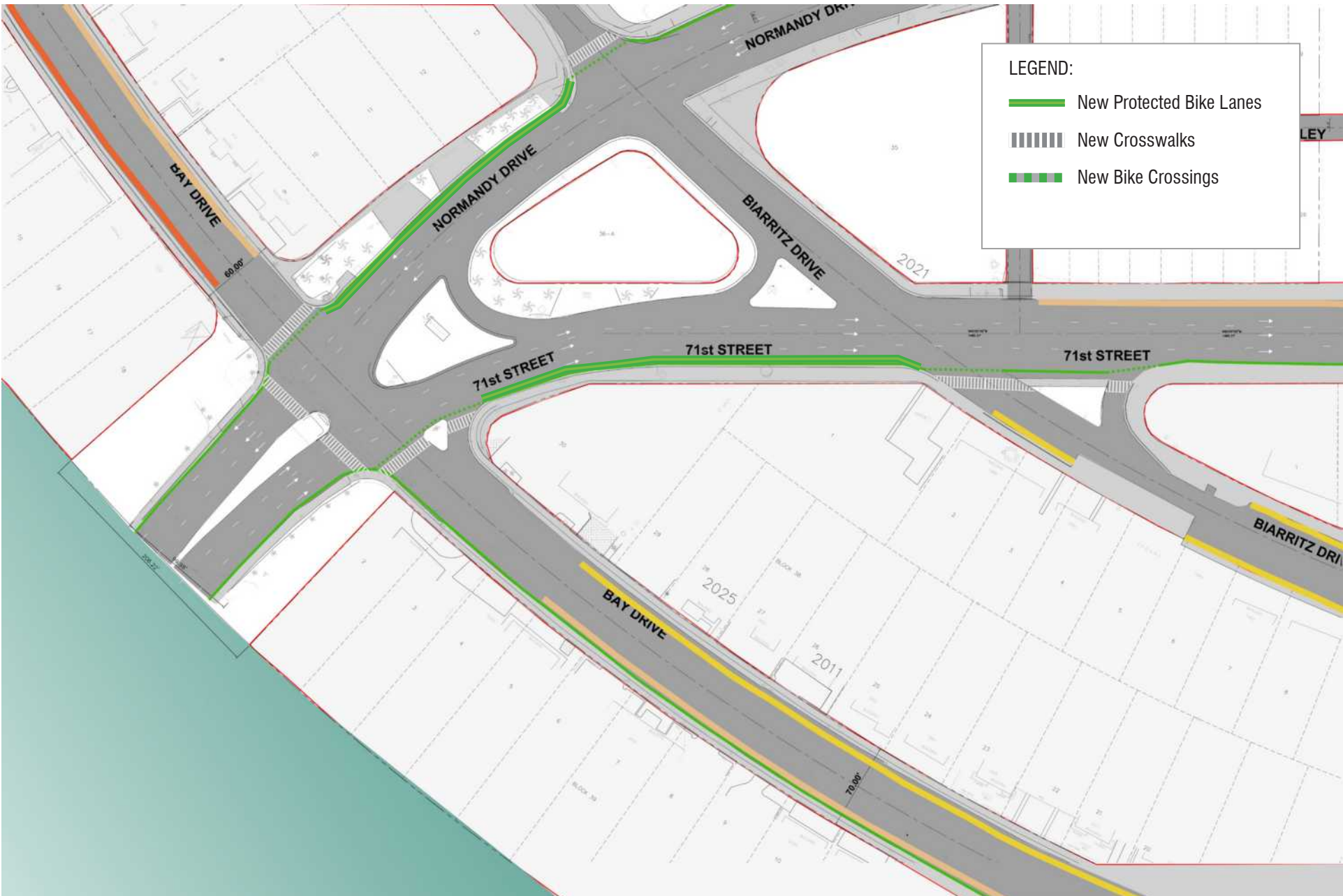


EAST BRIDGE | PROPOSED





WEST BRIDGE | PROPOSED

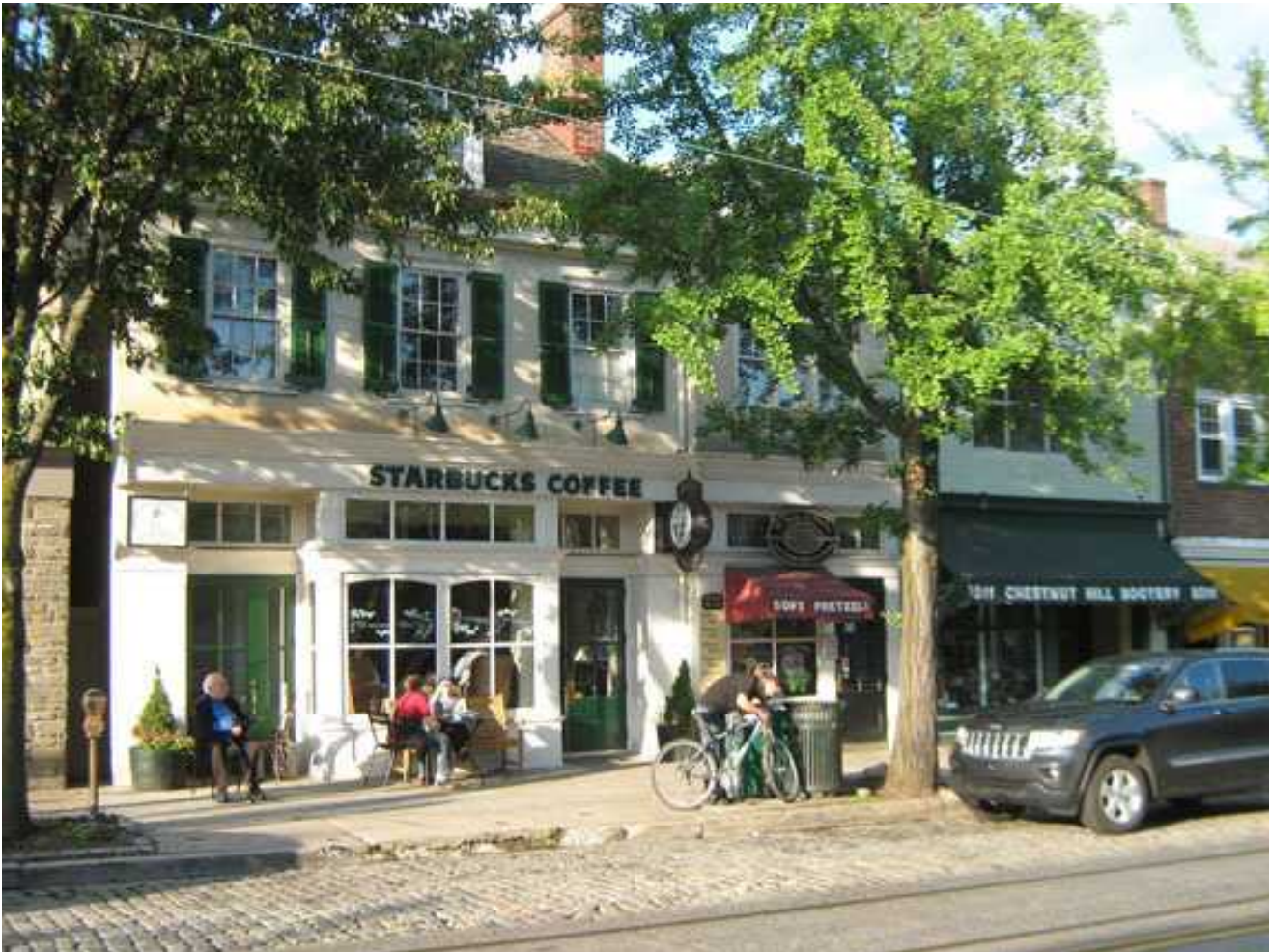


LANDSCAPING | 71st Street and Normandy Drive

Street Trees

LIVE OAK - Larger Trees (Spaces greater than 10', no overhead wires)

New LIVE OAK Street Trees are proposed along 71st Street and Normandy Drive Segment 1 (East) between Rue Vendome and Rue Notre Dame. Refer to proposed street cross sections.



Sidewalk Treatment along 71st Street and Normandy Drive

Sidewalks along one side of 71st Street and Normandy are proposed to be reduced to accommodate one-way buffered bike lanes and new landscaping treatment.



Bike Box

The Bike Box is a green space on the road with a white bicycle symbol inside located between painted space between vehicle stop bar and crosswalk for bicyclists.

The Bike Box creates space before the intersection so that people on bikes can cross the intersection ahead of traffic. This makes bikes more visible and predictable to approaching drivers.

Benefits

Improves visibility of cyclists and provides a “head start” at signalized intersections by allowing cyclists to queue in front of motorists.

Considerations

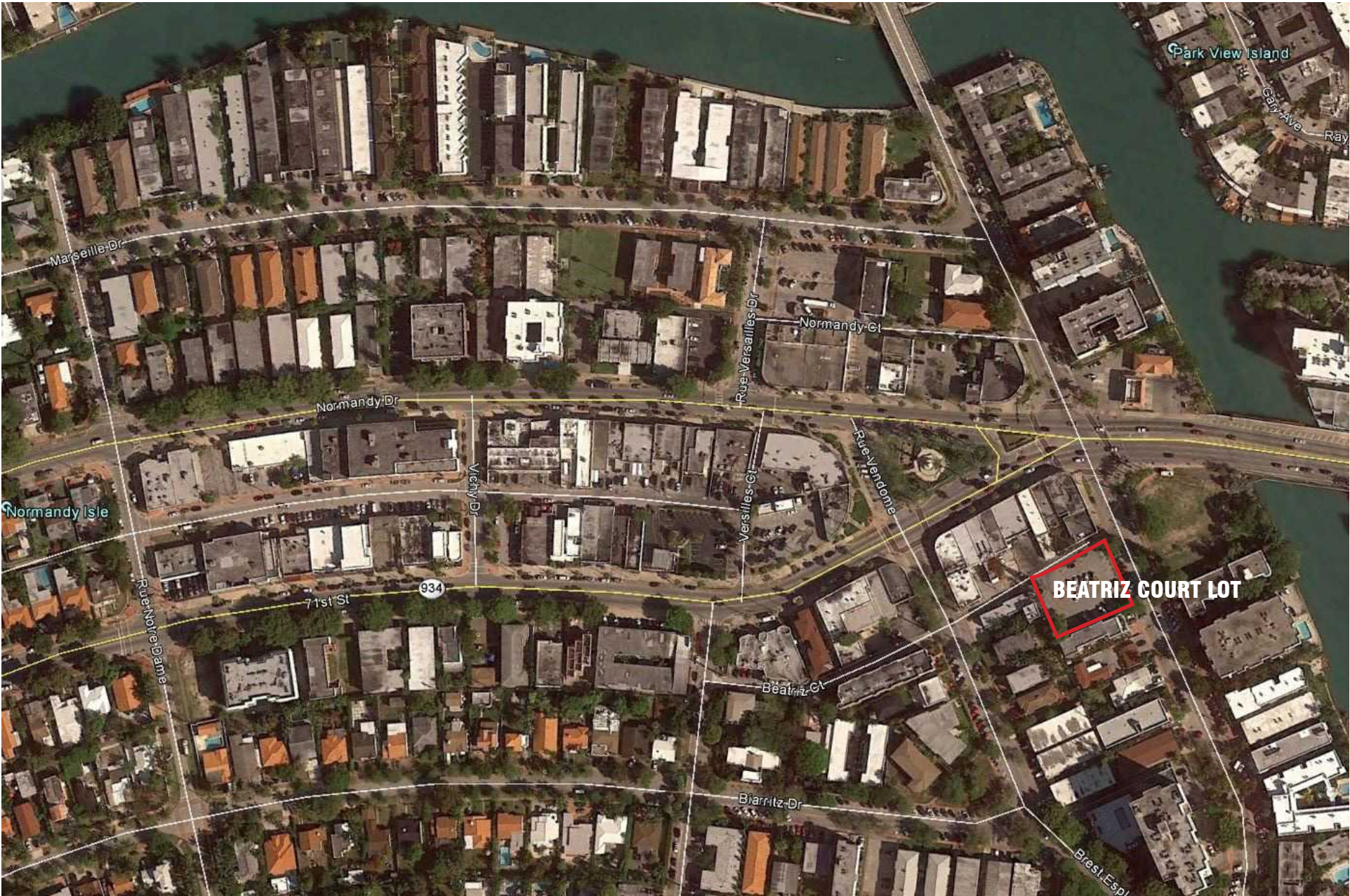
A clear path should be provided to enter the bicycle box, preferably to the left of the right turn lane. The box needs to be deep enough (10-16’) to allow cyclists to turn 90 degrees within it and reposition themselves parallel to the roadway.

Vehicular clearance phase may have to be adjusted to compensate for increased motorist crossing distance. However, the vehicular clearance time is unlikely to exceed the existing pedestrian clearance interval in most cases.

Education of cyclists and motorists on proper use should accompany implementation.

Refer to Page 9 for Proposed Bike Box locations along 71st Street and Normandy Drive.





PARKING IMPACT ANALYSIS

This study recommends relocating a total of twelve (12) parking spaces located on Normandy and 71st Street (Segment 1, East) in order to accomodate the proposed new separated / buffered bicycle lanes. The table below summarizes the existing location of the parking spaces to be relocated. There is no parking impact for the proposed neighborhood greenways on Bay Drive.

PARKING SUMMARY

BAY DRIVE	71ST SEG 1 (East)	71ST SEG 2 (West)	NORMANDY SEG 1 (East)	NORMANDY SEG 2 (West)	SEGMENT 1	SEGMENT 2	SEGMENT 3
Proposed Change	Remove existg parking to accommodate dedicated bike lanes	No Parking Removed	Remove existg parking to accommodate dedicated bike lanes	No Parking Removed	Neighborhood Greenway - Add Sharrow Markings	Neighborhood Greenway - Add Sharrow Markings	Neighborhood Greenway - Add Sharrow Markings
Existing Parking	52 North/South Curb - Parallel	N/A	44 North/South - Parallel	N/A	N/A	N/A	N/A
Total Parking	52	N/A	44	N/A	N/A	N/A	N/A
Parking to be Relocated =	7 North - Parallel (i)	0 E/W - Parallel/Parallel	5 South - Parallel (i)	0 E/W - Parallel/Parallel	N/A	N/A	N/A

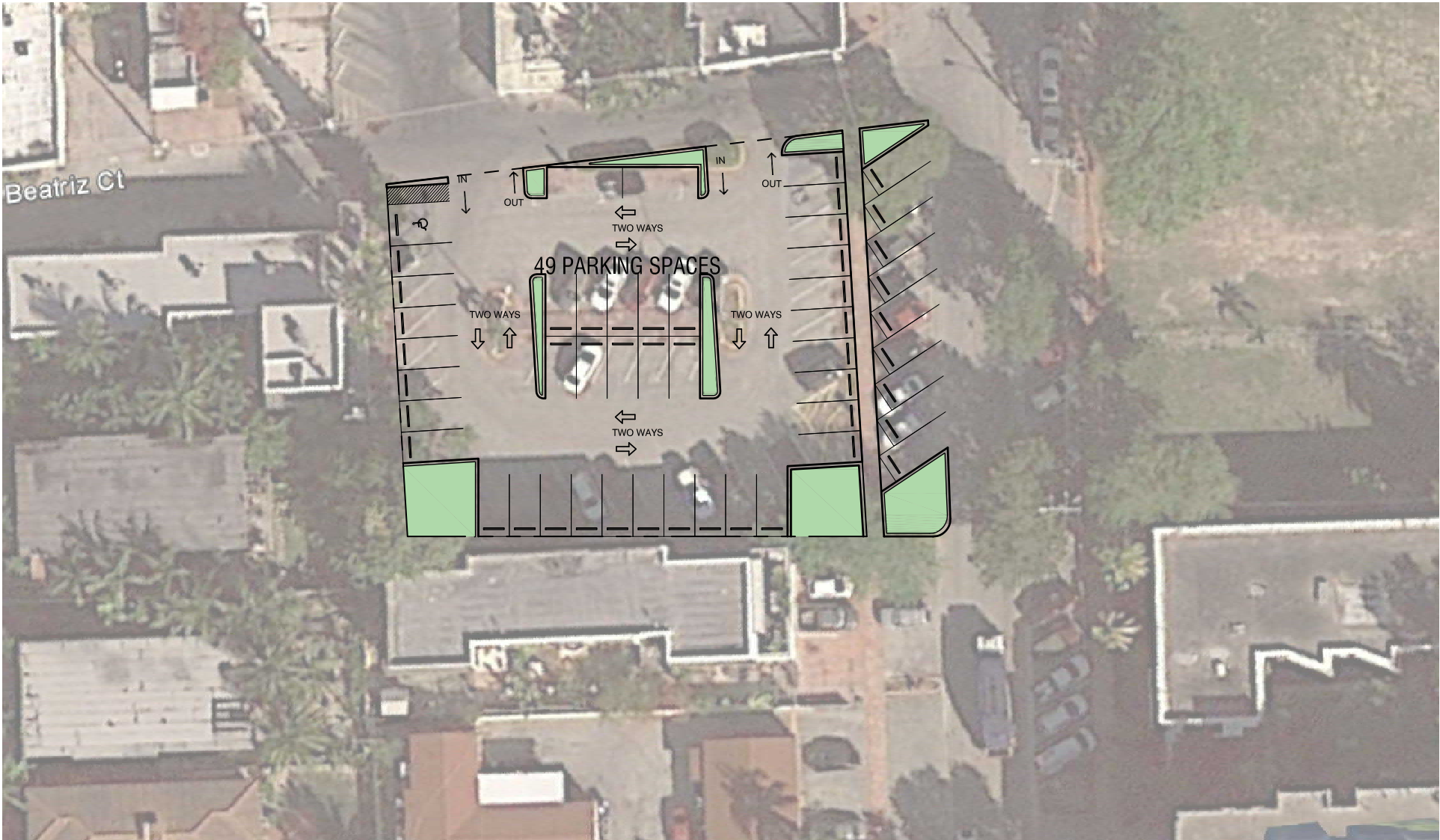
Summary:

(i) In order to accomodate new dedicated bike lanes along 71st Street and Normandy Drive Segment 1 (East), a total of 12 parking spaces will need to be relocated as noted above.

(ii) The alternative with no removal of parking for new protected bike lanes would require relocation of existing FPL light poles.

The existing Beatriz Court Parking Lot located on Bay Drive and Beatriz Court is comprised of two (2) properties owned by the City of Miami Beach. Refer to page 38 for Folio # and Legal Description for each property. Beatriz Court currently has 44 parking spaces and can be reconfigured to accomodate an additional five (5) parking spaces, for a total of 49 parking spaces. The proposed reconfiguration of the Beatriz Court parking lot is shown on page 37.

In addition to the use of Beatriz Court for replacement parking, a total of twelve (12) locations have been identified as replacement parking lots to accomodate the twelve (12) parking spaces that need to be relocated. **Refer to Appendix for the “Bay Drive Neighborhood Greenway Feasibility Study: Possible Parking Replacement Analysis to Complete 71st Street Normandy Drive Bicycle Lanes.”** Note proposed parking replacement locations will need to be evaluated based on the proposed streetscape improvements and bumpouts for both 71st Street and Normandy Drive.



Beatriz Court Proposed Parking Reconfiguration
New Parking Configuration on City Lot located at Beatriz Court.

The Beatriz Court Lot is a City-owned parking lot. The Lot is composed of two (2) properties as noted in the Miami-Dade Property Appraiser website. See page 38 for specifics noting Folio numbers and Legal Description for each property.

Existing Parking Spaces	= 44 ps
Total New Parking Spaces	= 49 ps
Total Additional Parking	= +5 parking spaces

PARKING | Impact Analysis

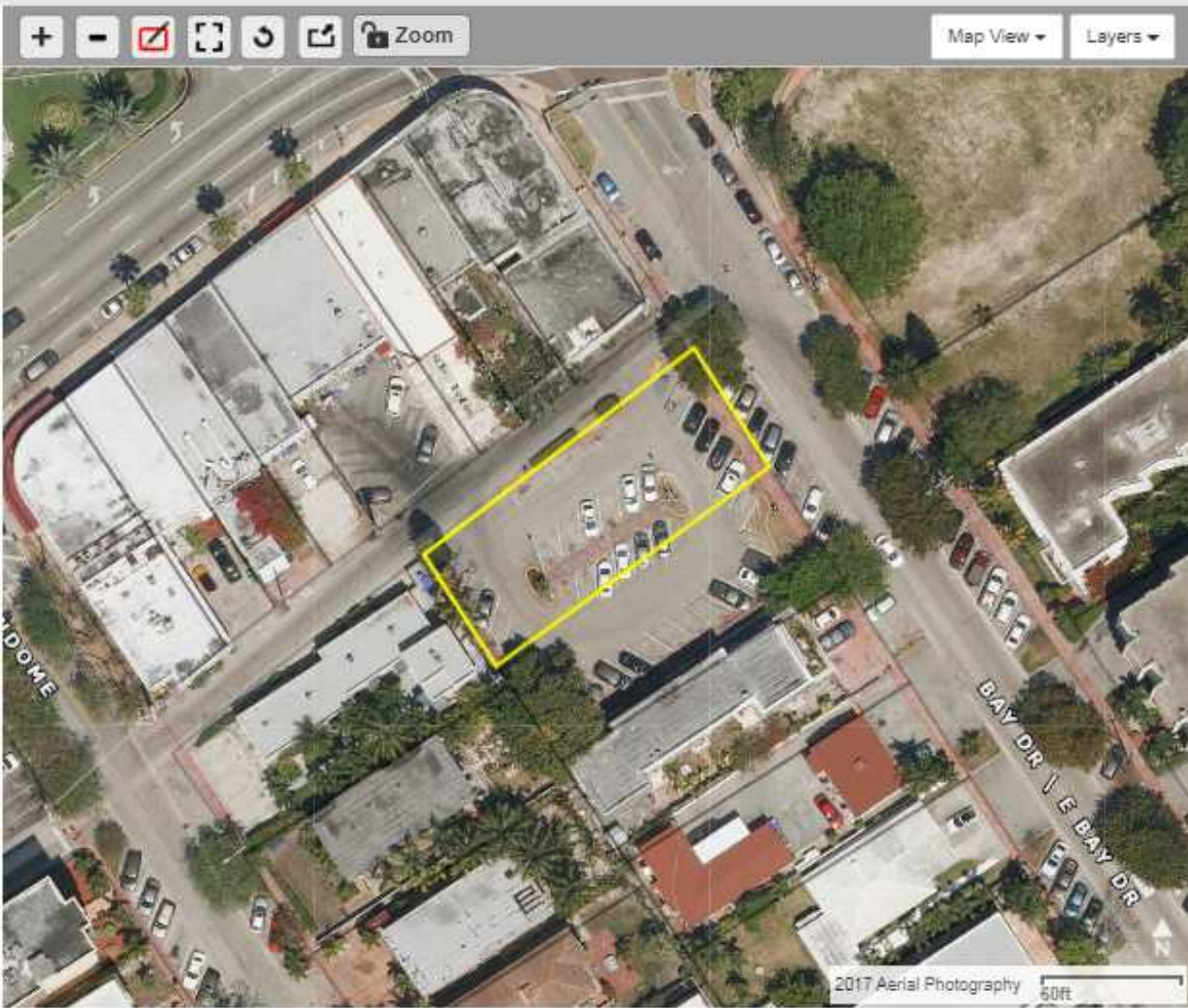
Beatriz Court Parking Lot

Lot is comprised of Two (2) Properties owned by the City of Miami Beach as noted in the Miami-Dade Property Appraisers website. Refer to Folio # and Legal Description below. Address not noted on website.

FOLIO: 02-3210-013-0540

Legal Description: OCEAN SIDE SEC ISLE OF NORMANDY PB 25-60 LOT 10 BLK 5 LOT SIZE 57.400 X 140

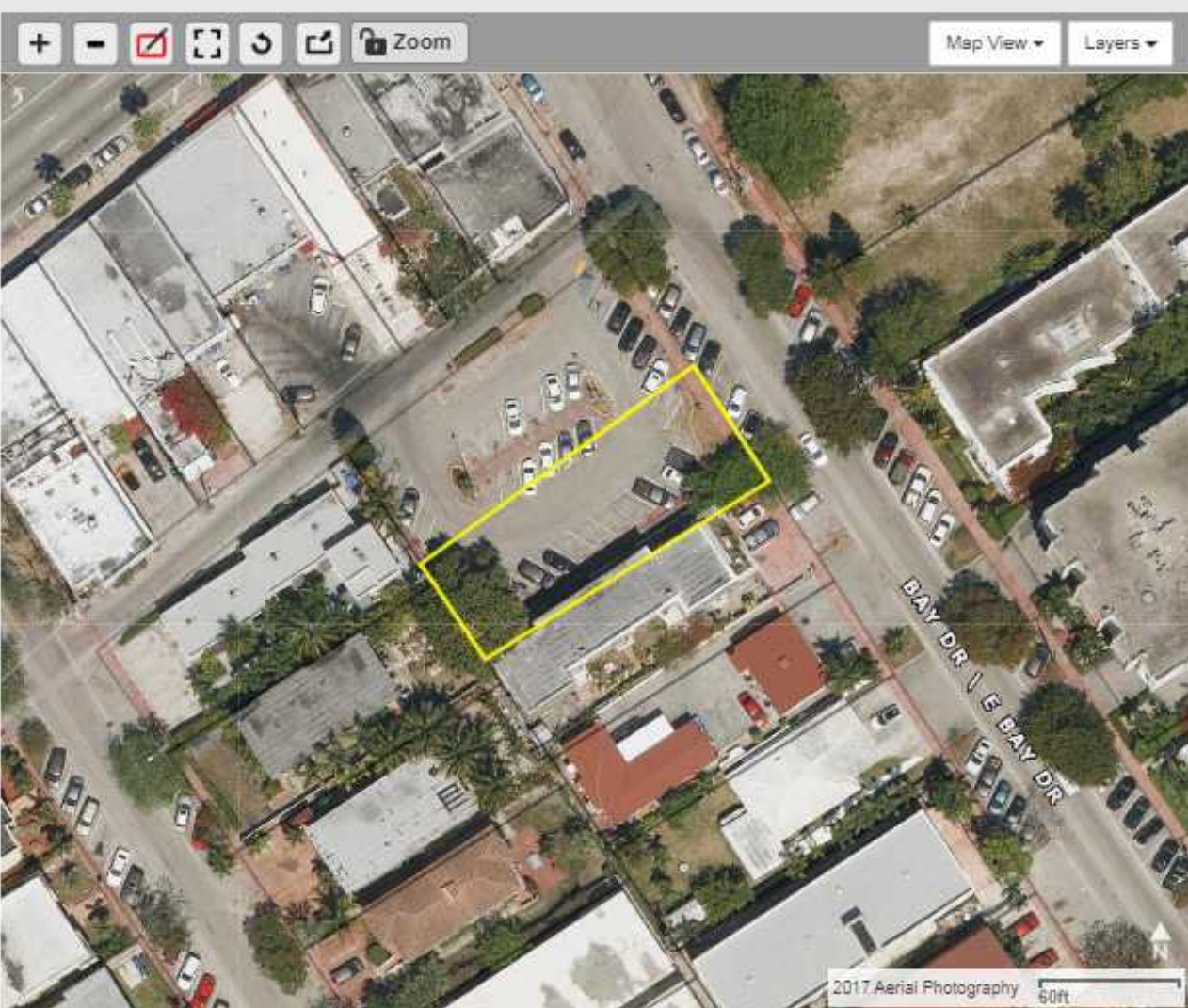
PROPERTY INFORMATION ⓘ	
Folio: 02-3210-013-0540	
Sub-Division: OCEAN SIDE SEC ISLE OF NORMANDY	
Property Address	
Owner: CITY OF MIAMI BEACH CITY HALL	
Mailing Address 1700 CONVENTION CENTER DR MIAMI BEACH, FL 33139-1819	
PA Primary Zone 8000 COMMUNITY FACILITIES	
Primary Land Use 8080 VACANT GOVERNMENTAL : VACANT LAND - GOVERNMENTAL	
Beds / Baths / Half	0 / 0 / 0
Floors	0
Living Units	0
Actual Area	0
Living Area	0
Adjusted Area	0
Lot Size	8,036 Sq.Ft
Year Built	0



FOLIO: 02-3210-013-0550

Legal Description: OCEAN SIDE SEC ISLE OF NORMANDY PB 25-60 LOT 11 BLK 5 LOT SIZE 50.000 X 140

PROPERTY INFORMATION ⓘ	
Folio: 02-3210-013-0550	
Sub-Division: OCEAN SIDE SEC ISLE OF NORMANDY	
Property Address	
Owner: CITY OF MIAMI BEACH CITY HALL	
Mailing Address 1700 CONVENTION CENTER DR MIAMI BEACH, FL 33139-1819	
PA Primary Zone 8000 COMMUNITY FACILITIES	
Primary Land Use 8080 VACANT GOVERNMENTAL : VACANT LAND - GOVERNMENTAL	
Beds / Baths / Half	0 / 0 / 0
Floors	0
Living Units	0
Actual Area	0
Living Area	0
Adjusted Area	0
Lot Size	7,000 Sq.Ft
Year Built	0



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APPENDIX

COST ESTIMATES SUMMARY | Bay Drive Neighborhood Greenways

Summary Table: BAY DRIVE COST ESTIMATE SUMMARY

BAY DRIVE		No. of Trees	Year 1	Year 2	Year 3	Year 4	Year 5
Roadways				30% design	Construction		
Segment 1	\$597,587.38	32		\$ 179,276.21	\$597,587.38		
Segment 2	\$491,950.55	50		\$ 147,585.17	\$491,950.55		
Segment 2 - Sidewalk Repairs	\$216,810.00	0		\$ -	\$216,810.00		
Sub-Total =	\$1,306,347.93	82		\$ 326,861.38	\$1,306,347.93		
NORMANDY							
Roadways							
Segment 1	\$862,772.95	33		\$ 258,831.89	\$862,772.95		
Segment 2	\$405,430.04	0		\$ 121,629.01	\$405,430.04		
Sub-Total =	\$1,268,202.99	33		\$ 380,460.90	\$1,268,202.99		
71St STREET							
Roadways							
Segment 1	\$1,108,331.41	36		\$ 332,499.42	\$1,108,331.41		
Segment 2	\$250,921.33	0		\$ 75,276.40	\$250,921.33		
Sub-Total =	\$1,359,252.73	36		\$ 407,775.82	\$1,359,252.73		
PARKING LOTS							
Beatriz Parking lot - Reconfigured	\$185,440.00			\$ 55,632.00	\$185,440.00		
Sub-Total =	\$185,440.00			\$ 55,632.00	\$185,440.00		
TOTAL Demo & Construction =	\$4,119,243.65	151					
Total incl 30% Design Costs =	\$5,289,973.74			\$ 1,170,730.09	\$4,119,243.65		

Table 1: Bay Drive (seg 1) Per L.F. Cost Estimate

Item	Description	Units	Quantity	Unit Price	Cost/L.F
1D	Milling (S. road)	S.Y.	5.3	\$6.50	\$34.45
2D	Asphalt Removal	S.Y.	1	\$6.50	\$6.50
3D	Curb & Gutter Removal	L.F.	2	\$10.50	\$21.00
4D	6' wide Concrete swk removal	L.F.	1	\$12.50	\$12.50
5D	roadway excavation	C.Yd.	1.775	\$15.50	\$27.51
Total DEMO	Total Demo per L.F. of Road				\$101.96
Item	Description	Units	Quantity	Unit Price	Cost/L.F
1C	Resurfacing (2" of SP 9.50 in two lifts) S. Half	S.Y.	5.3	\$21.50	\$113.95
2C	Stabilized Sub-Base (40 LBR)	S.Y.	1.775	\$6.50	\$11.54
3C	12" Base Rock (LBR=100)	S.Y.	1	\$17.50	\$17.50
4C	2" SP 9.5 in 2-lifts	S.Y.	1	\$21.50	\$21.50
5C	Type "F" Curb & Gutter	L.F.	1	\$23.50	\$23.50
6C	New 6' sidewalk with 2' landscape edge	L.F.	1	\$28.50	\$28.50
8C	Landscape (2' b on side of Rd.)	L.F.	1	\$3.10	\$3.10
9C	Enhanced treatment /Landscape for existing road closure	L.F.	1	\$40.00	\$40.00
	Total Construction per L.F. of Road				\$259.59
9C	Pavement Marking & Signage (10% of Const. Cost)	L.F.	L.S.	L.S.	\$25.96
10C	Drainage (10% of Const. Cost)	L.F.	L.S.	L.S.	\$25.96
11C	MOT (20% of Const. Cost)	L.F.	L.S.	L.S.	\$51.92
12C	Lighting (Not Applicable)	L.F.	L.S.	L.S.	\$0.00
13C	Mobilization (10% of Const. Cost)	L.F.	L.S.	L.S.	\$25.96
14C	Contingency (20% of Const. Cost)	L.F.	L.S.	L.S.	\$51.92
Total CONSTRUCTION	Total Construction Cost per L.F. of Road				\$441.30
Grand Total	Demo and Construction Cost per L.F. of Road				\$543.26

1,100 L.F

\$597,587.38

- Notes:
1. North walk widens to include 2 foot landscape edge

2. Mill & resurface south portion of the road

3. Re-construct portion of the north edge of the street

4. Total trees =length of sidewalk 1,100 -40% to account for curb cuts/20 (trees o.c) =

5. One (1) Enhanced treatment and landscape is provided for the existing road closure

Approx. 32 trees on North side

Table 2: Bay Drive (seg 2) Per L.F. Cost Estimate

Item	Description	Units	Quantity	Unit Price	Cost/L.F
1D	Milling (all asphalt)	S.Y.	1	\$6.50	\$6.50
2D	Asphalt Removal	S.Y.	1.9	\$6.50	\$12.35
3D	Curb & Gutter Removal	L.F.	0	\$10.50	\$0.00
4D	6' wide Concrete swk removal	L.F.	0	\$12.50	\$0.00
5D	roadway excavation	C.Yd.	2.85	\$15.50	\$44.18
Total DEMO	Total Demo per L.F. of Road				\$63.03
Item	Description	Units	Quantity	Unit Price	Cost/L.F
1C	Resurfacing (2" of SP 9.50 in two lifts) all asphalt	S.Y.	2	\$21.50	\$43.00
2C	Stabilized Sub-Base (40 LBR)	S.Y.	1.9	\$6.50	\$12.35
3C	12" Base Rock (LBR=100)	S.Y.	1.9	\$17.50	\$33.25
4C	2" SP 9.5 in 2-lifts	S.Y.	1	\$21.50	\$21.50
5C	Type "F" Curb & Gutter	L.F.	1	\$23.50	\$23.50
6C	Raised Intersections with decorative paving	L.F.	1	\$50.00	\$50.00
7C	Landscape at bio-swailes	L.F.	1.9	\$3.10	\$5.89
8C	Enhanced treatment /landscape for existing street closure	L.F.	1	\$40.00	\$40.00
9C	Landscape /trees pocket parks	L.F.	3	\$3.10	\$9.30
	Total Construction per L.F. of Road				\$238.79
9C	Pavement Marking & Signage (20% of Const. Cost)	L.F.	L.S.	L.S.	\$47.76
10C	Drainage (20% of Const. Cost)	L.F.	L.S.	L.S.	\$47.76
11C	MOT (20% of Const. Cost)	L.F.	L.S.	L.S.	\$47.76
12C	Lighting (Not Applicable)	L.F.	L.S.	L.S.	\$0.00
13C	Mobilization (10% of Const. Cost)	L.F.	L.S.	L.S.	\$23.88
14C	Contingency (30% of Const. Cost) -Includes conc. Repairs	L.F.	L.S.	L.S.	\$71.64
Total CONSTRUCTION	Total Construction Cost per L.F. of Road				\$477.58
Grand Total	Demo and Construction Cost per L.F. of Road				\$540.61

70 LF X 13

\$491,950.55

- Notes:
1. Bio-swailes to be located midblock

2. New street trees per midblock traffic calming feature

3. This link has 3 raised intersections

4. New trees on 5 street end "pocket parks"

5. One (1) Enhanced treatment and landscape is provided for the existing road closure

6 trees per midblock X4=

6 trees per park X 5 parks =

24 trees

30 trees

NORMANDY ISLE | 71st Street
East, Segment 1 and West, Segment 2

Table 3: 71st Street (East, seg 1) Per L.F. Cost Estimate

Item	Description	Units	Quantity	Unit Price	Cost/L.F	
1D	Milling(S. Half)	S.Y.	2.9	\$6.50	\$18.85	
2D	Asphalt Removal	S.Y.	2.9	\$6.50	\$18.85	
3D	Curb & Gutter Removal	L.F.	1	\$10.50	\$10.50	
4D	12' wide Concrete swk removal	L.F.	2	\$12.50	\$25.00	
5D	roadway excavation	C.Yd.	2.9	\$15.50	\$44.95	
Total DEMO	Total Demo per L.F. of Road				\$118.15	
Item	Description	Units	Quantity	Unit Price	Cost/L.F	
1C	Resurfacing (2" of SP 9.50 in two lifts) S. Half	S.Y.	2.9	\$21.50	\$62.35	
2C	Stabilized Sub-Base (40 LBR)	S.Y.	4.11	\$6.50	\$26.72	
3C	12" Base Rock (LBR=100)	S.Y.	3	\$17.50	\$52.50	
4C	2" SP 9.5 in 2-lifts	S.Y.	3.22	\$21.50	\$69.23	
5C	Type "F" Curb & Gutter	L.F.	1	\$23.50	\$23.50	
6C	8' Wide 4" thick Sidewalk	L.F.	1	\$28.50	\$28.50	
7C	Bike Lane Green Pavement Area	L.F.	1	\$55.00	\$55.00	
8C	Sod (5' behind sidewalk on both sides of Rd.)	L.F.	1	\$3.10	\$3.10	
	Total Construction per L.F. of Road				\$320.90	
9C	Pavement Marking & Signage (10% of Const. Cost)	L.F.	L.S.	L.S.	\$32.09	
10C	Drainage (10% of Const. Cost)	L.F.	L.S.	L.S.	\$32.09	
11C	MOT (20% of Const. Cost)	L.F.	L.S.	L.S.	\$64.18	
12C	Lighting (Not Applicable)	L.F.	L.S.	L.S.	\$0.00	
13C	Mobilization (10% of Const. Cost)	L.F.	L.S.	L.S.	\$32.09	
14C	Contingency (20% of Const. Cost)	L.F.	L.S.	L.S.	\$64.18	
Total CONSTRUCTION	Total Construction Cost per L.F. of Road				\$545.52	1,670 L.F
Grand Total	Demo and Construction Cost per L.F. of Road				\$663.67	\$1,108,331.41

Notes:

1. North walk recedes from 16 ' to 12'
2. Mill & resurface south half
3. Re-construct north half
4. Total trees =legth of sidewalk 1,200 -40% to acount for curb cuts/20 (trees o.c) = 36 trees

Table 4: 71st Street (West, seg 2) Per L.F. Cost Estimate

Item	Description	Units	Quantity	Unit Price	Cost/L.F
1D	Milling (all asphalt)	S.Y.	4.11	\$6.50	\$26.72
2D	Asphalt Removal	S.Y.	0	\$6.50	\$0.00
3D	Curb & Gutter Removal	L.F.	0	\$10.50	\$0.00
4D	6' wide Concrete swk removal	L.F.	0	\$12.50	\$0.00
5D	roadway excavation	C.Yd.	0	\$15.50	\$0.00
Total DEMO	Total Demo per L.F. of Road				\$26.72
Item	Description	Units	Quantity	Unit Price	Cost/L.F
1C	Resurfacing (2" of SP 9.50 in two lifts) all asphalt	S.Y.	4.11	\$21.50	\$88.37
2C	Stabilized Sub-Base (40 LBR)	S.Y.	0	\$6.50	\$0.00
3C	12" Base Rock (LBR=100)	S.Y.	0	\$17.50	\$0.00
4C	2" SP 9.5 in 2-lifts	S.Y.	0	\$21.50	\$0.00
5C	Type "F" Curb & Gutter	L.F.	0	\$23.50	\$0.00
6C	7.5' Wide 4" thick Sidewalk	L.F.	0	\$28.50	\$0.00
7C	Bike Lane Green Pavement Area	L.F.	1	\$55.00	\$55.00
8C	Sod (5' behind sidewalk on both sides of Rd.)	L.F.	1	\$3.10	\$3.10
	Total Construction per L.F. of Road				\$146.47
9C	Pavement Marking & Signage (20% of Const. Cost)	L.F.	L.S.	L.S.	\$29.29
10C	Drainage (20% of Const. Cost)	L.F.	L.S.	L.S.	\$29.29
11C	MOT (20% of Const. Cost)	L.F.	L.S.	L.S.	\$29.29
12C	Lighting (Not Applicable)	L.F.	L.S.	L.S.	\$0.00
13C	Mobilization (10% of Const. Cost)	L.F.	L.S.	L.S.	\$14.65
14C	Contingency (30% of Const. Cost) -Includes conc. Repairs	L.F.	L.S.	L.S.	\$43.94
Total CONSTRUCTION	Total Construction Cost per L.F. of Road				\$292.93
Grand Total	Demo and Construction Cost per L.F. of Road				\$319.65

785 L.F

\$250,921.33

Notes:

1. Sidewalks remain the same width
2. Mill & resurface all existing asphalt

Table 5: Normandy Drive (East, seg 1) Per L.F. Cost Estimate

Item	Description	Units	Quantity	Unit Price	Cost/L.F	
1D	Milling(NS. Half)	S.Y.	2.9	\$6.50	\$18.85	
2D	Asphalt Removal	S.Y.	2.9	\$6.50	\$18.85	
3D	Curb & Gutter Removal	L.F.	1	\$10.50	\$10.50	
4D	12' wide Concrete swk removal	L.F.	2	\$12.50	\$25.00	
5D	roadway excavation	C.Yd.	2.9	\$15.50	\$44.95	
Total DEMO	Total Demo per L.F. of Road				\$118.15	
Item	Description	Units	Quantity	Unit Price	Cost/L.F	
1C	Resurfacing (2" of SP 9.50 in two lifts) N.. Half	S.Y.	2.9	\$21.50	\$62.35	
2C	Stabilized Sub-Base (40 LBR)	S.Y.	4.11	\$6.50	\$26.72	
3C	12" Base Rock (LBR=100)	S.Y.	3	\$17.50	\$52.50	
4C	2" SP 9.5 in 2-lifts	S.Y.	3.22	\$21.50	\$69.23	
5C	Type "F" Curb & Gutter	L.F.	1	\$23.50	\$23.50	
6C	8' Wide 4" thick Sidewalk	L.F.	1	\$28.50	\$28.50	
7C	Bike Lane Green Pavement Area	L.F.	1	\$55.00	\$55.00	
8C	Sod (5' behind sidewalk on both sides of Rd.)	L.F.	1	\$3.10	\$3.10	
	Total Construction per L.F. of Road				\$320.90	
9C	Pavement Marking & Signage (10% of Const. Cost)	L.F.	L.S.	L.S.	\$32.09	
10C	Drainage (10% of Const. Cost)	L.F.	L.S.	L.S.	\$32.09	
11C	MOT (20% of Const. Cost)	L.F.	L.S.	L.S.	\$64.18	
12C	Lighting (Not Applicable)	L.F.	L.S.	L.S.	\$0.00	
13C	Mobilization (10% of Const. Cost)	L.F.	L.S.	L.S.	\$32.09	
14C	Contingency (20% of Const. Cost)	L.F.	L.S.	L.S.	\$64.18	
Total CONSTRUCTION	Total Construction Cost per L.F. of Road				\$545.52	1,300 L.F
Grand Total	Demo and Construction Cost per L.F. of Road				\$663.67	\$862,772.95

- Notes:
1. South walk recedes from 16 ' to 12'

2. Mill & resurface north half

3. Re-construct south half

4. Total trees =length of sidewalk 1,100 -40% to account for curb cuts/20 (trees o.c) = 33 trees

Table 6: Normandy Drive (West, seg 2) Per L.F. Cost Estimate

Item	Description	Units	Quantity	Unit Price	Cost/L.F
1D	Milling (all asphalt)	S.Y.	6.22	\$6.50	\$40.43
2D	Asphalt Removal	S.Y.	0	\$6.50	\$0.00
3D	Curb & Gutter Removal	L.F.	0	\$10.50	\$0.00
4D	6' wide Concrete swk removal	L.F.	0	\$12.50	\$0.00
5D	roadway excavation	C.Yd.	0	\$15.50	\$0.00
Total DEMO	Total Demo per L.F. of Road				\$40.43
Item	Description	Units	Quantity	Unit Price	Cost/L.F
1C	Resurfacing (2" of SP 9.50 in two lifts) (all asphalt)	S.Y.	6.22	\$21.50	\$133.73
2C	Stabilized Sub-Base (40 LBR)	S.Y.	0	\$6.50	\$0.00
3C	12" Base Rock (LBR=100)	S.Y.	0	\$17.50	\$0.00
4C	2" SP 9.5 in 2-lifts	S.Y.	0	\$21.50	\$0.00
5C	Type "F" Curb & Gutter	L.F.	0	\$23.50	\$0.00
6C	7.5' Wide 4" thick Sidewalk	L.F.	0	\$28.50	\$0.00
7C	Bike Lane Green Pavement Area	L.F.	1	\$55.00	\$55.00
8C	Sod (5' behind sidewalk on both sides of Rd.)	L.F.	1	\$3.10	\$3.10
	Total Construction per L.F. of Road				\$191.83
9C	Pavement Marking & Signage (20% of Const. Cost)	L.F.	L.S.	L.S.	\$38.37
10C	Drainage (20% of Const. Cost)	L.F.	L.S.	L.S.	\$38.37
11C	MOT (20% of Const. Cost)	L.F.	L.S.	L.S.	\$38.37
12C	Lighting (Not Applicable)	L.F.	L.S.	L.S.	\$0.00
13C	Mobilization (10% of Const. Cost)	L.F.	L.S.	L.S.	\$19.18
14C	Contingency (30% of Const. Cost) -Includes conc. Repairs	L.F.	L.S.	L.S.	\$57.55
Total CONSTRUCTION	Total Construction Cost per L.F. of Road				\$383.66
Grand Total	Demo and Construction Cost per L.F. of Road				\$424.09

956 L.F

\$405,430.04

- Notes:
1. Sidewalks remain the same width

2. Mill & resurface all existing asphalt

Table 7: Beatriz Court Parking Lot Per L.F. Cost Estimate

Item	Description	Units	Quantity	Unit Price	Cost/L.F
1D	Demo	S.F.	19,520	\$0.75	\$14,640.00
Total DEMO	Total Demo per S.F. of parking lot				\$14,640.00
Item	Description	Units	Quantity	Unit Price	Cost/L.F
1C	Paving	S.Y.	19,520	\$3.10	\$60,512.00
2C	Drainage	S.Y.	19,520	\$3.10	\$60,512.00
3C	Pavement Marking & Signage	S.Y.	19,520	\$0.30	\$5,856.00
4C	Lighting (not applicable)	S.Y.	19,520	\$0.75	\$0.00
5C	Landscape	L.F.	19,520	\$0.35	\$6,832.00
6C	Mobilization	L.F.	19,520	\$0.50	\$9,760.00
7C	MOT	L.F.	19,520	\$0.15	\$2,928.00
8C	Contingency	L.F.	19,520	\$1.25	\$24,400.00
	Total Construction per L.F. of Road				\$170,800.00
Total CONSTRUCTION	Total Demo and Construction Cost				\$185,440.00

Table 8: Bay Drive (seg 2) Sidewalk Repair Per L.F. Cost Estimate

Item	Description	Units	Quantity	Unit Price	Cost/L.F
1C	Repair 5 foot Sidewalk	L.F.	1	\$45.00	\$45.00
	Total Construction per L.F. of Road				\$45.00
9C	Pavement Marking & Signage (20% of Const. Cost)	L.F.	L.S.	L.S.	\$9.00
10C	Drainage (20% of Const. Cost)	L.F.	L.S.	L.S.	\$9.00
11C	MOT (20% of Const. Cost)	L.F.	L.S.	L.S.	\$9.00
12C	Lighting (Not Applicable)	L.F.	L.S.	L.S.	\$0.00
13C	Mobilization (10% of Const. Cost)	L.F.	L.S.	L.S.	\$4.50
14C	Contingency (30% of Const. Cost) -Includes conc. Repairs	L.F.	L.S.	L.S.	\$13.50
Total CONSTRUCTION	Total Construction Cost per L.F. of Road				\$90.00
Grand Total	Demo and Construction Cost per L.F. of Road				\$90.00

2,409 LF

\$216,810.00

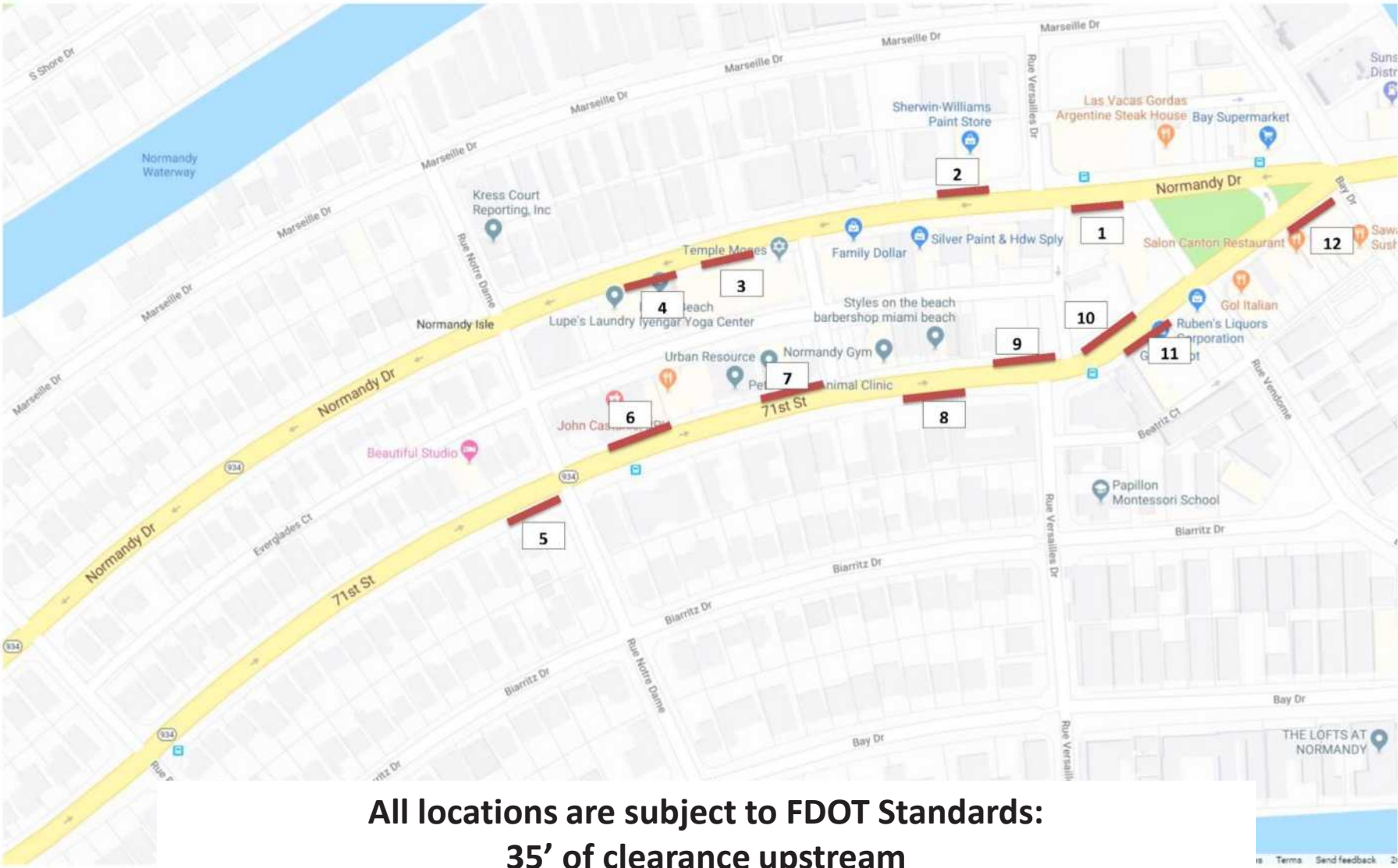
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Bay Drive Neighborhood Greenway Feasibility Study

Possible Parking Replacement Analysis To Complete 71st Street / Normandy Drive Bicycle Lanes

MIAMI BEACH

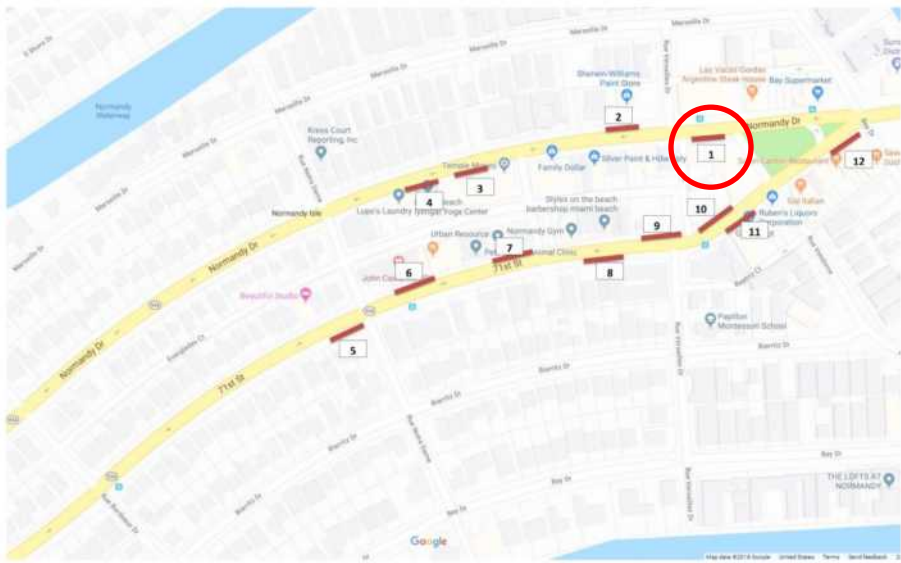
Proposed Replacement Parking Locations along Normandy Drive and 71st Street



All locations are subject to FDOT Standards:
35' of clearance upstream
20' of clearance downstream

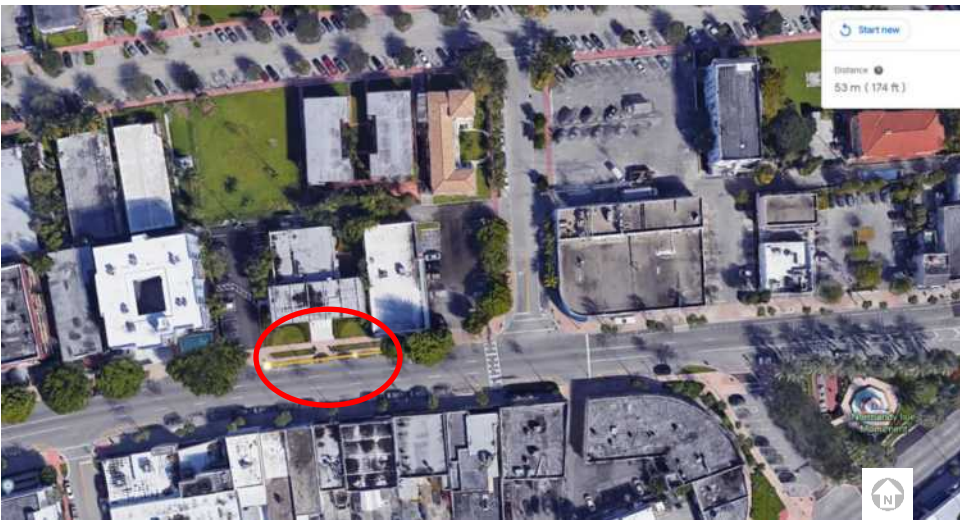
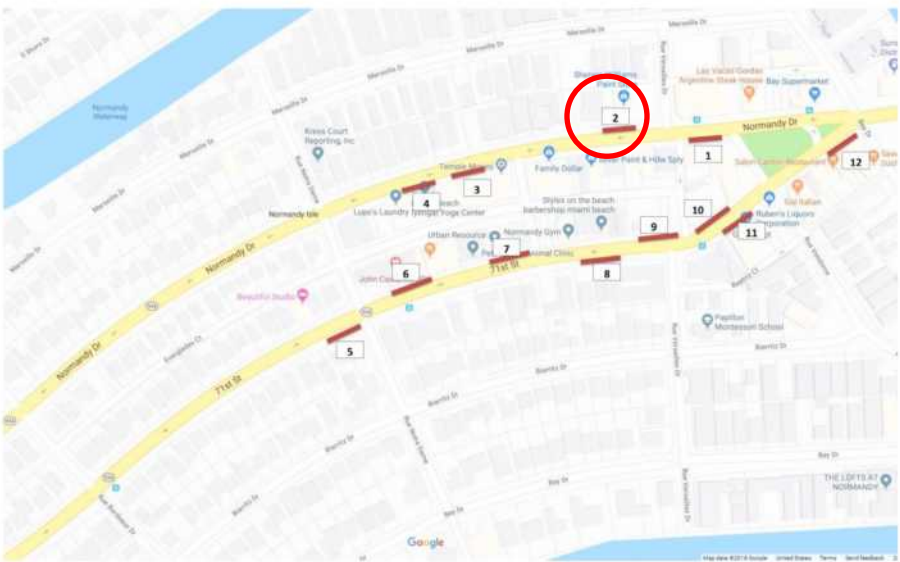
Location 1 – South East Corner of Normand Drive and Versailles Court

- Possible gain of 1 parking space
- Normandy is one-way east
- Versailles Court is one-way south
- ~ 42’ of hatch marking



Location 2 – North West Corner of Normand Drive and Versailles Court

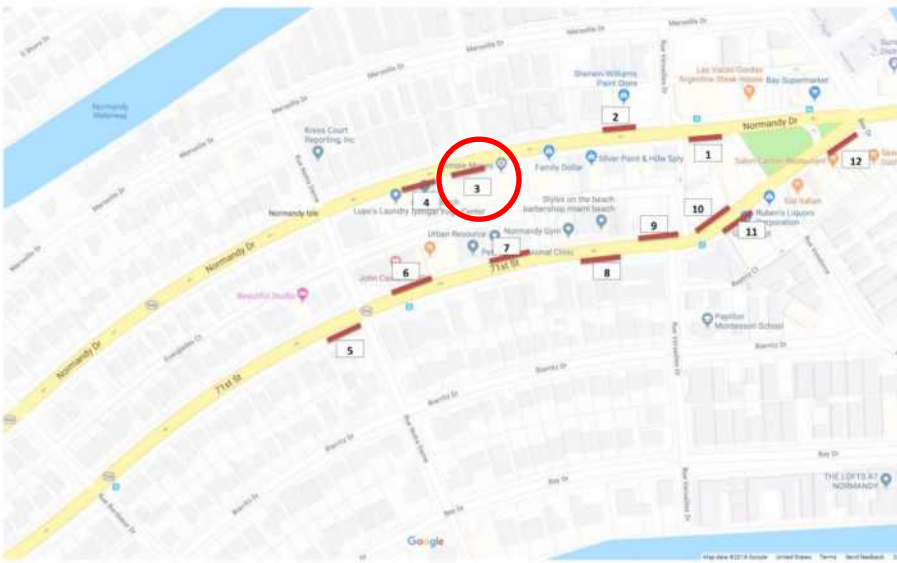
- Possible gain of 1 - 3 parking space
- Resize existing spaces to 20’
- Resize hatched locations
- Removal of Taxi Stand



PARKING REPLACEMENT ANALYSIS | Possible Replacement Lots as identified by City of Miami Beach

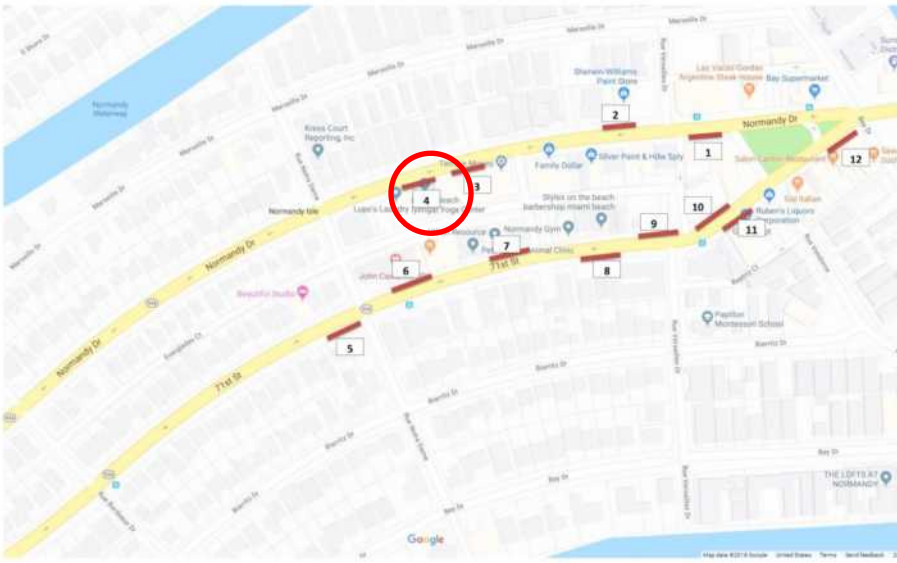
Location 3 – West of Vichy Drive

- Possible gain of 1 parking space
- Repurpose hatched location to parking



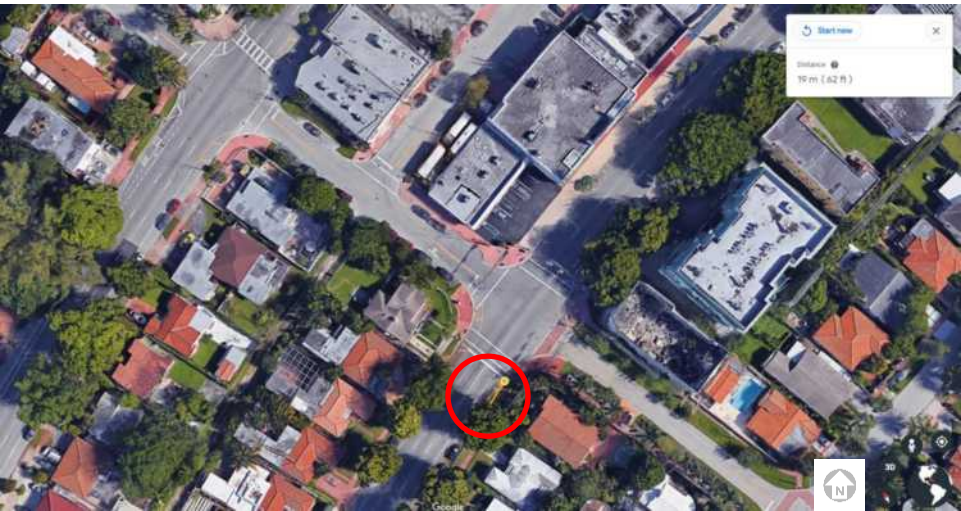
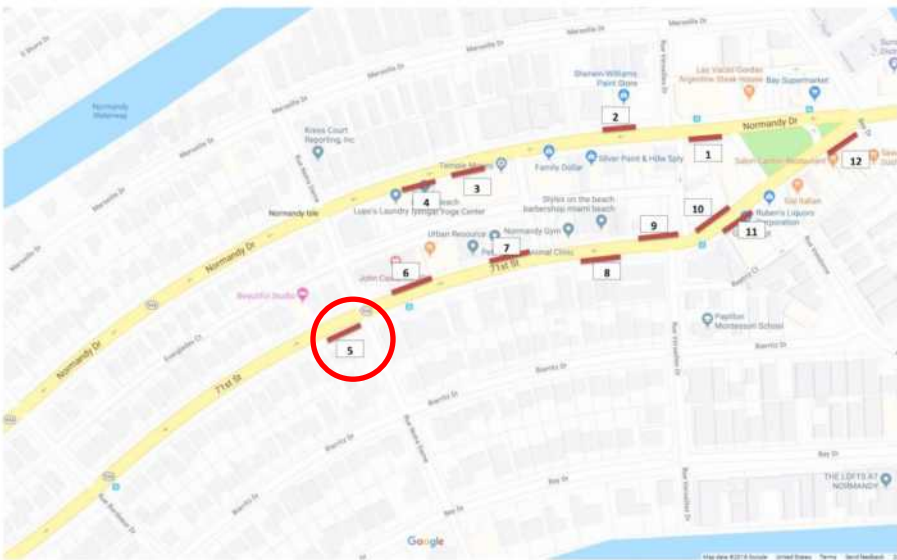
Location 4 – West of Vichy Drive

- Possible gain of 1 parking space
- Resize existing spaces to 20'
- Resize hatched locations



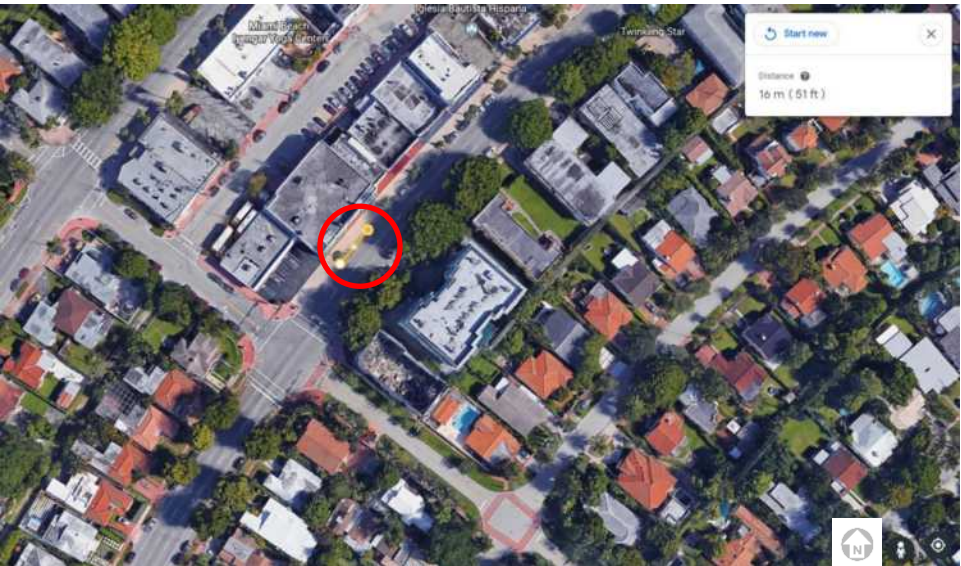
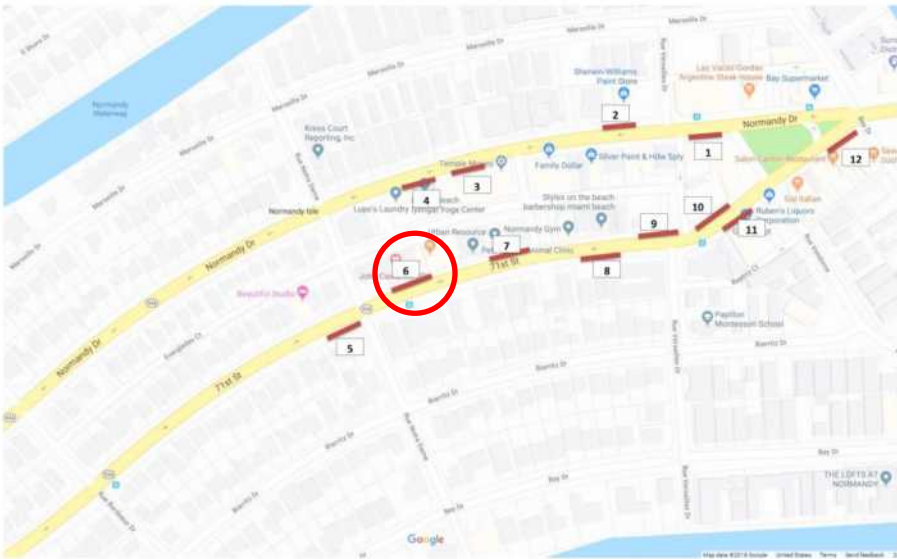
Location 5 – South West Corner of 71st and Rue Notre Dame

- Possible gain of 1 parking space
- Resize hatched locations



Location 6 – North East Corner of 71st and Rue Notre Dame

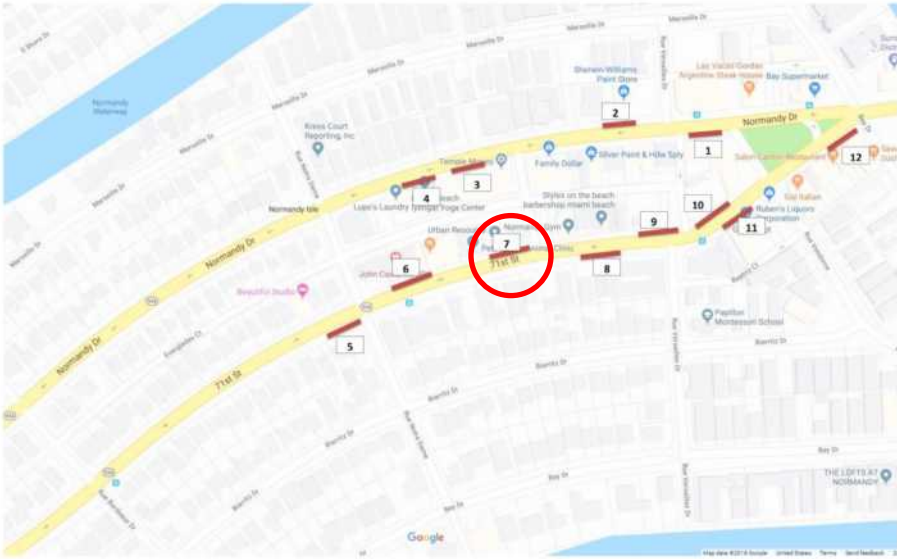
- Possible gain of 1 parking space – open space in front of Health Center
- Resize hatched locations



PARKING REPLACEMENT ANALYSIS | Possible Replacement Lots as identified by City of Miami Beach

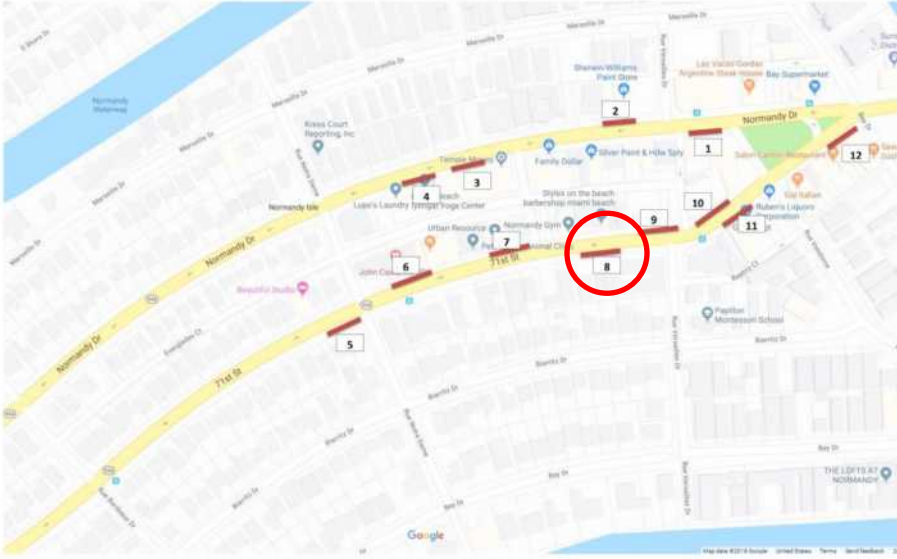
Location 7 –

- Possible gain of 1 parking space – open space
- Repurpose hatched location



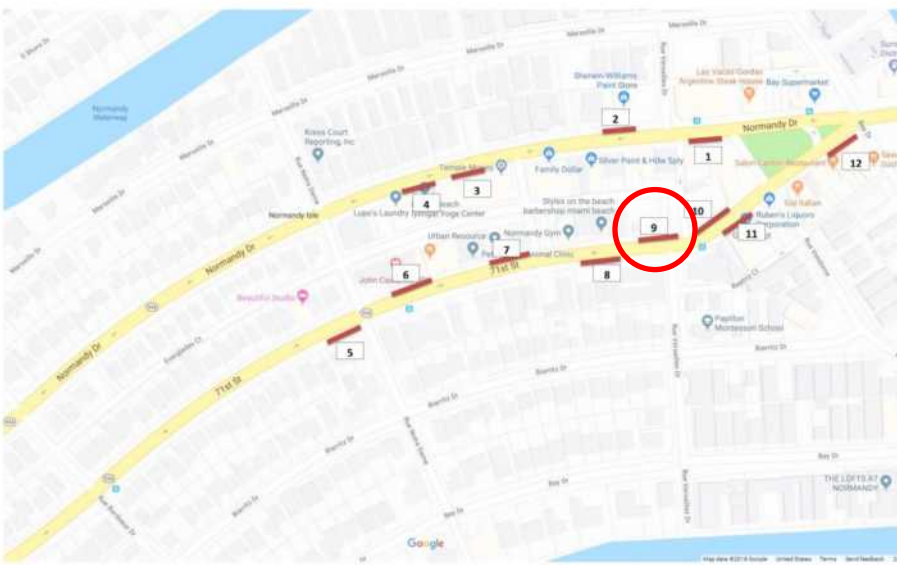
Location 8 – South West Corner of Rue Versailles DR and 71st

- Possible gain of 1 parking space
- Resize hatched location



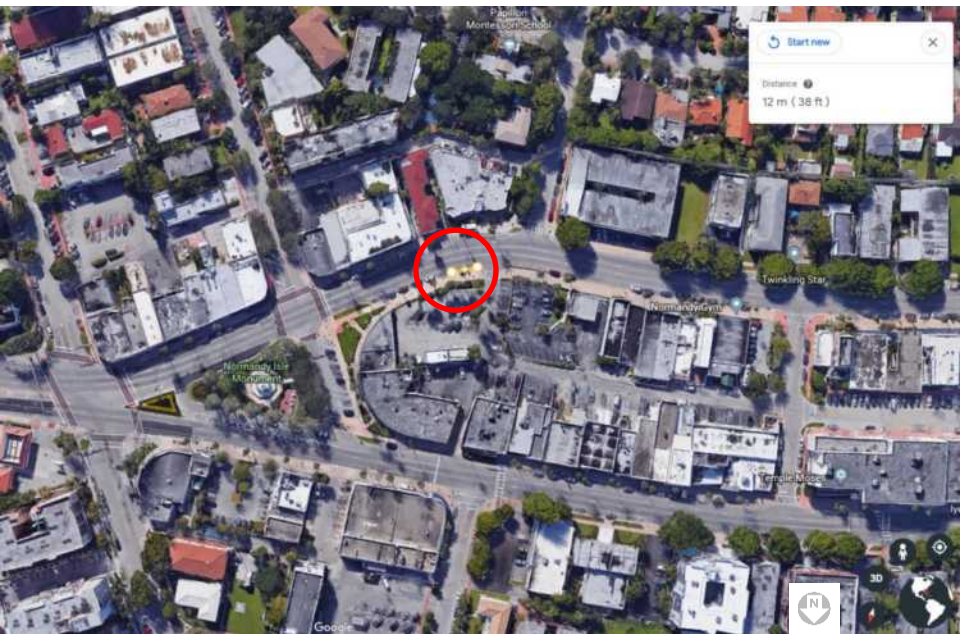
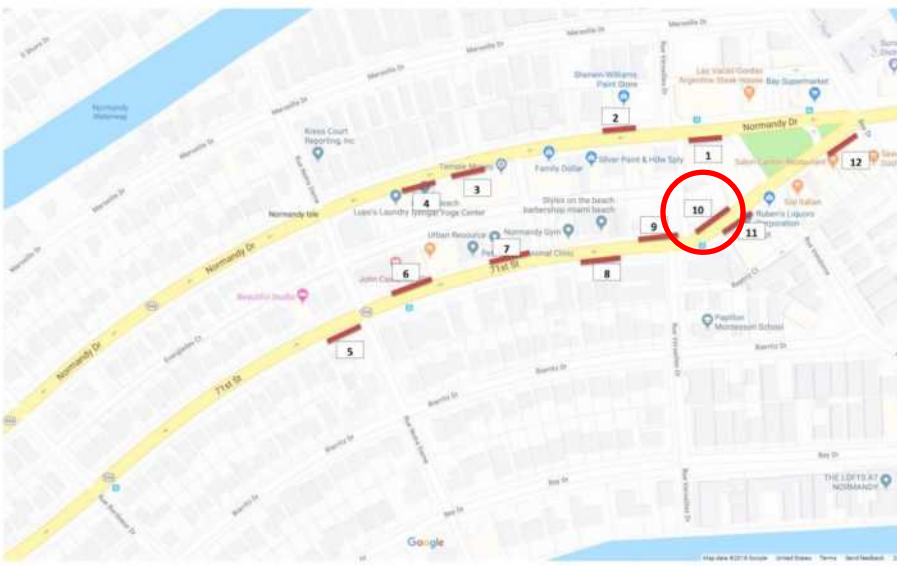
Location 9 – North West Corner of Versailles Court

- Possible gain of 1 parking space
- Resize hatched location - Curb redesign possibly not taken into account



Location 10 – North East Corner of Versailles Court

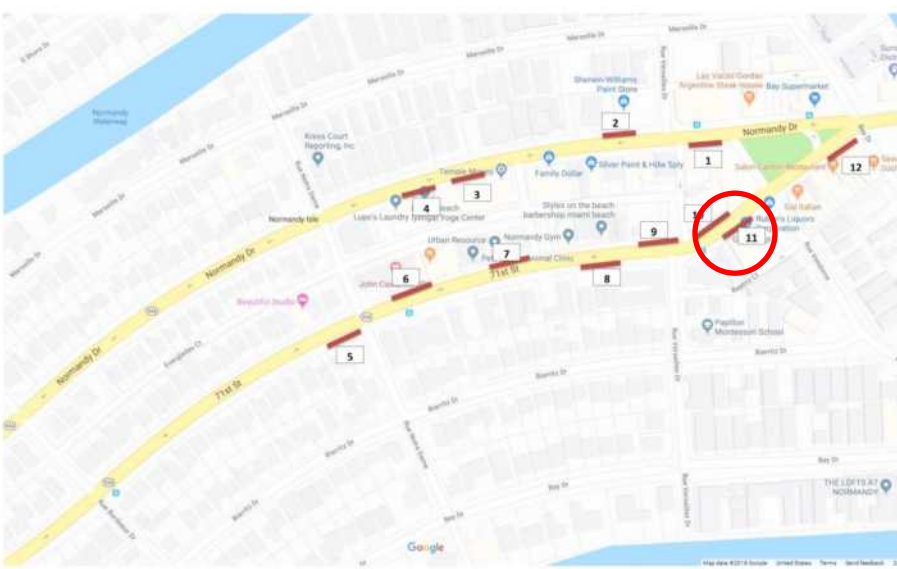
- Possible gain of 1 parking space
- Resize hatched location - Curb redesign possibly not taken into account



PARKING REPLACEMENT ANALYSIS | Possible Replacement Lots as identified by City of Miami Beach

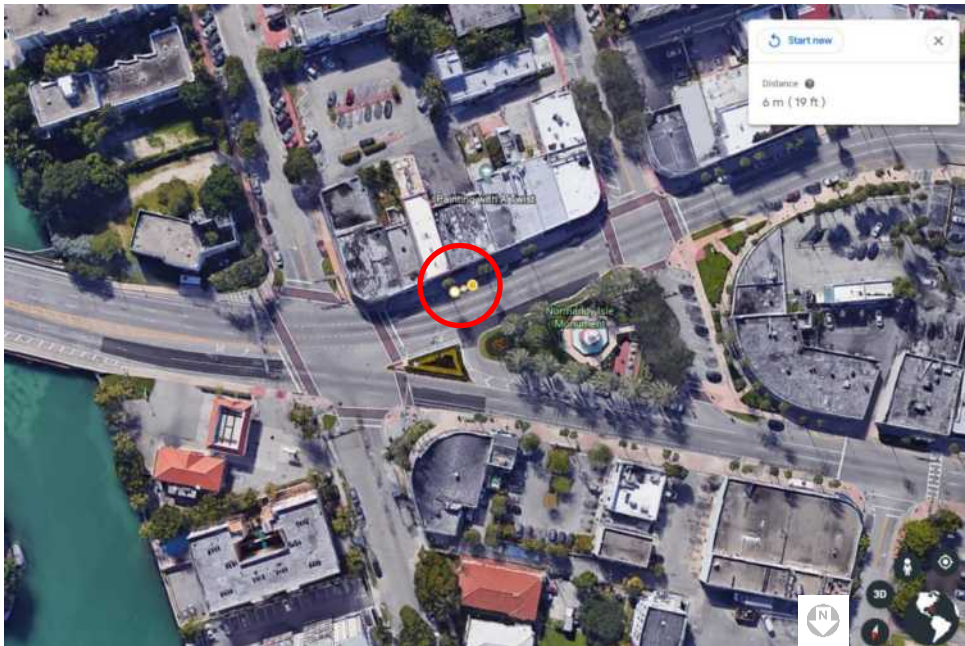
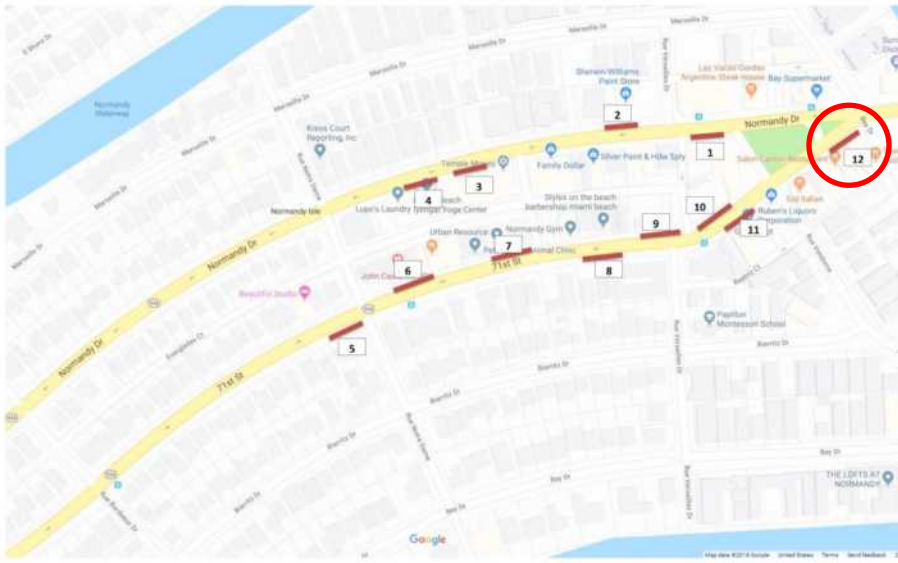
Location 11 – South West Corner of Rue Vendome and 71st Street

- Possible gain of 1 parking space
- Resize hatched location - Bus Bay



Location 12 – South West Corner of Bay Drive and 71st Street

- Possible gain of 1 parking space
- Resize hatched location



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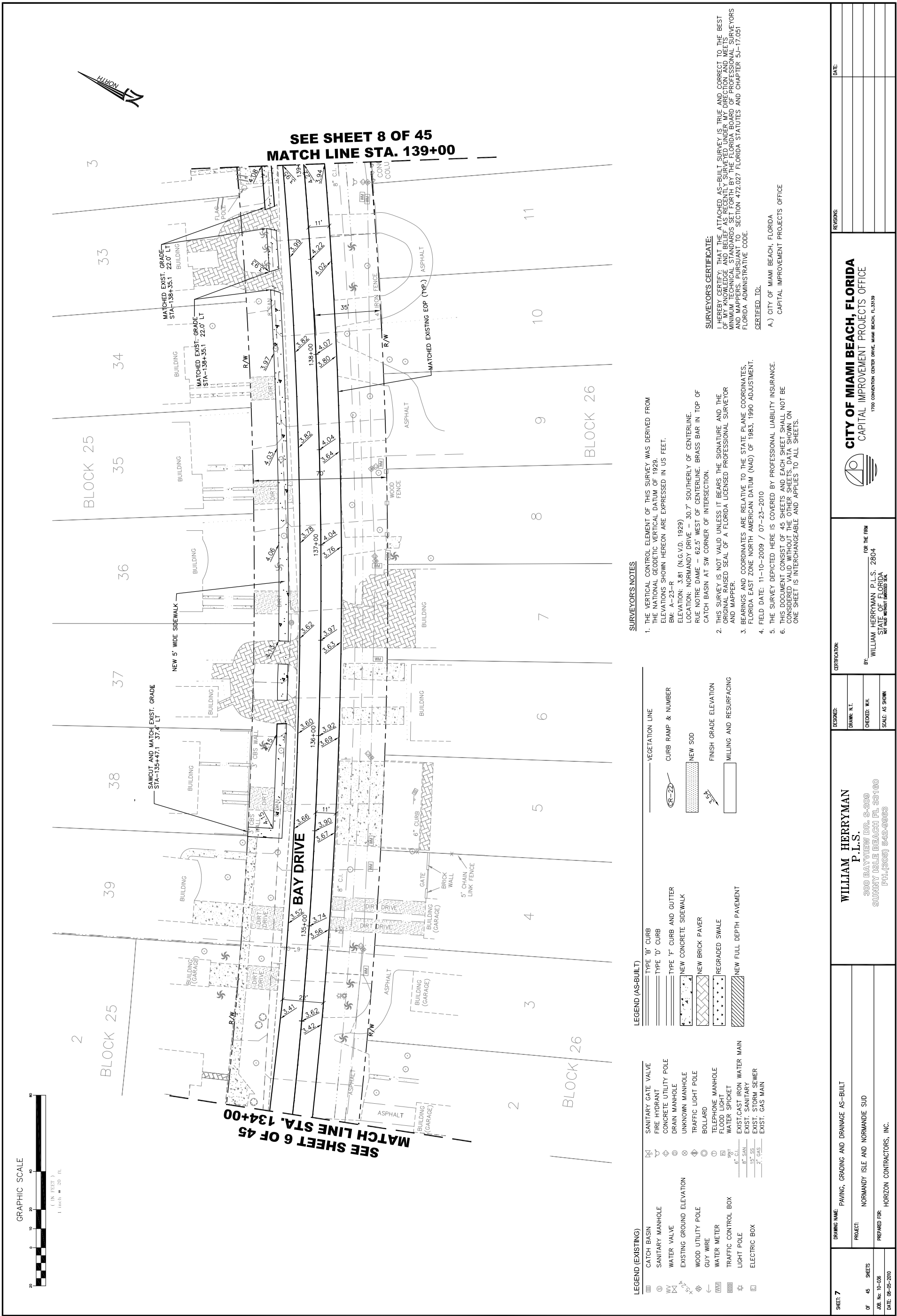
Source: City of Miami Beach

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NEIGHBORHOOD GREENWAYS | Summary of Meetings

Meeting Type	Meeting Date	Topics Discussed	Attendees	Recommendations
1. Public Meeting 01	August 7, 2017	To present the study to the public and invite community feedback. The response from the community was positive.	Community representatives	
2. Concept Review Meetings – (4) total	July 19, 2017 October 25, 2017 November 6, 2017 March 19, 2018	Developing Concepts were refined and reviewed extensively with Transportation staff and internal Miami Beach stakeholders.	Attendees included representatives from Capital Improvement Projects, Emergency Management, Parking, Planning, Public Works, Tourism, Culture, and Economic Development (TCED).	
3. Site Tour	December 07, 2017	Transportation toured the site area with TCED staff.	TCED Staff	
4. Review Meeting with Florida Department of Transportation – District 6 (FDOT)	February 23, 2018	Bay Drive Neighborhood Greenways proposals. Normandy Drive and 71 st Street proposals.	FDOT	<ul style="list-style-type: none">• Input on bicycle box placement and incorporated into the design. Bicycle crossing concepts were finalized during the design process.• 71st / Normandy Drive Roadway Reclassification - Based on the existing context and the City’s proposed new zoning district for the 71st Street area to the east of the canal bridge, existing travel lane widths along 71st Street and Normandy Drive west of the canal can be proposed to be reduced from 11’-0” to 10’-6” pending FDOT roadway classification in the Spring 2018.• FDOT shared information on the FHWA Separated Bike Lane Planning Guide which is now incorporated into FDOT’s FDM by reference.• FDOT indicated that any of the facilities detailed in FHWA guide require District approval for their application on the State highway system as well as coordination with FDOT’s Central Office staff.• Note for proposed two-way shared use path bike facility, 12’ is preferred width.
5. Review Meeting with Miami-Dade County Department of Transportation and Public Works (DTPW)	April 11, 2018	Bay Drive Neighborhood Greenways proposals.	DTPW Miami-Dade TPO Miami Beach Transportation	<ul style="list-style-type: none">• Focus is traffic calming and traffic diversion not traffic reduction• Input was received on bicycle box placement and incorporated into the design. Bicycle crossing concepts were finalized during the design process.
6. Design Concepts Review Meetings (2) total	April 19, 2017 June 11, 2018	The Transportation, Parking and Bicycle Facilities Committee reviewed the Neighborhood Greenways concepts on April 9, 2017 and June 11, 2018.	Transportation, Parking and Bicycle Facilities Committee	

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ZYSCOVICH
ARCHITECTS