



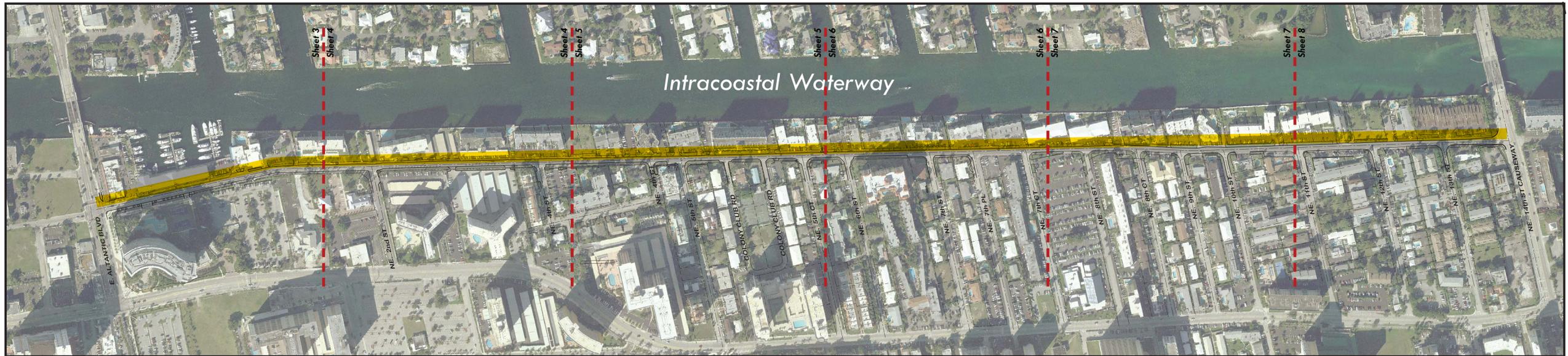
# City of Pompano Beach North Riverside Drive Concept Plan



**Orlando**  
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Submittal Date: 07/15/2016



**GENERAL**

**CORRIDOR CONSIDERATIONS**

- Speed limit reduces from 30 mph to 25 mph to help slow traffic
- Speed humps or speed cushions (preferred by emergency responders to accommodate wheels of larger vehicles) installed at approximately 1/4 mile intervals along corridor to help slow traffic
- Roadway width narrows to help slow traffic (Note: Location of existing and proposed roadway edges is shown on individual sheets to indicate how roadway shifts in proposed concept)
- All existing parking, either on-street or part of private development, is maintained
- All existing driveways are maintained
- Turning radii at intersections reduced to shorten pedestrian crossing distance and help slow traffic - wider radii often are treated as a yield condition and vehicles do not stop before pedestrian crossings
- Crosswalks added at all intersections and mid-block crossing locations
- Pedestrian-scale lighting or bollards added along sidewalk on primary pedestrian walkway on east side of roadway (suggestion matched existing lighting along SR A1A beach sidewalk)
- Wayfinding program expanded to Riverside Drive to sign parking, parks, and water taxi locations
- Paved swales replaced with grassed or vegetated (with groundcover) swales to visually narrow roadway, create buffer between vehicles and pedestrians, and provide storm runoff filtering benefit
- Street trees added where possible to enhance existing vegetated definition of the roadway edge. Trees should be spaced approximately 40' apart - tree spacing may vary to accommodate other elements within the right-of-way, but should be no closer than 15' or no further than 60'
- New sidewalk on east side of roadway will necessitate relocation of storm inlets. This Plan does not design those improvements, but recognizes that coordination will need to be done through the Engineering Department to move inlets to grassed or vegetated areas to provide drainage function.
- Consider LID or other sustainability measures at high visibility locations such as parks where they can be seen and identified as community education. Note: these areas require additional maintenance to maintain function.

**SHEET 3**

SHEET LIMITS

- E. Atlantic Boulevard (start corridor) to south side of library / Harbor House

ROADWAY NOTES

- Outer southbound right-turn lane at Atlantic has been eliminated (this has been previously approved by City)
- New on-street parking (11 spaces) has been added on the west side of the roadway in front of the Sands Yachtel property (Pompano Dive Center building)
- A choker median with textured crosswalk has been added at the north end of Sands Yachtel to slow traffic and connect existing sidewalks
- Existing roadway width (29') is maintained from Atlantic to the curve just south of Harbor House, where the roadway transitions down to 21'
- On-street parking in front of Harbor House remains, although it shifts to accommodate new sidewalk
- New on-street parking (4 spaces) has been added on the east side of the roadway between the fire station and library entrances

EAST SIDE NOTES

- The existing sidewalk is maintained in front of Oceanside 1
- Starting at the north end of Oceanside 1, the existing sidewalk width increases from 6' to 9' (new width added on east side; maintain curb face)

WEST SIDE NOTES

- New 9' sidewalk added adjacent to Taha Marine property (flush with building)
- New handicap ramp located to better match sidewalk in SE corner of Taha Marine
- Sidewalk in front of Sands Yachtel increases from 5' to 9' (new width added on east side and matches new on-street parking)
- From the north parking entrance to Sands Yachtel northward, new 6' sidewalk added
- New sidewalk in front of Harbor House makes vehicle exit from passenger side easier now (not against block wall as now exists)

OTHER NOTES

- New street trees added to fill voids and increase effect of vegetated street wall

**Sheet 4**

SHEET LIMITS

- South side of library/Harbor House to north of NE 4th Street

ROADWAY NOTES

- Roadway width is 21'
- Textured crosswalks added at NE 2nd Street
- Specialty intersection pavement or a textured speed table should be considered at NE 2nd Street intersection
- Roadway shifts to west north of NE 2nd Street to establish preferred cross section
- On-street parking for Marine Terrace (at NE 4th Street intersection) maintained

EAST SIDE NOTES

- 9' grassed or vegetated buffer between roadway and sidewalk
- New 9' sidewalk added
- Existing row of young palms should be saved and transplanted to new locations

WEST SIDE NOTES

- New 6' sidewalk connects to existing sidewalk (terminates halfway between NE 2nd Street and NE 4th Street)
- Paved area shown adjacent to sidewalk at North Riverside Park - this could be a waiting area for transportation for water taxi users, area for art or monument, and/or a location for bike share

OTHER

- City is developing plans for NE 2nd Street to tie the park, Riverside Drive and A1A together - this Concept should incorporate that Plan when finalized
- Whether included in above plans or not, North Riverside Park should be enhanced and pedestrian amenities added - tie into library as well as water taxi stop
- New street trees added to fill voids and replace existing trees that will be impacted

**SHEET 5**

SHEET LIMITS

- North of NE 4th Street to north of NE 5th Court

ROADWAY NOTES

- Roadway width is 21'
- Roadway begins to shift to east in preparation for cross section change on Sheet 5-5 to preserve existing parking on the west side of the roadway between NE 5th Court and NE 6th Street (these locations have been identified and discussed previously with City staff)
- Location for potential future on-street parking (6 spaces) on west side of roadway near Colony Club Road has been indicated

EAST SIDE NOTES

- 9' grassed or vegetated buffer between roadway and sidewalk
- New 9' sidewalk added

WEST SIDE NOTES

- New grassed or vegetated areas added that also help define parking areas
- Remove palm tree that has grown up into power lines

OTHER

- New street trees added to fill voids and replace existing trees that will be impacted

**Sheet 6**

SHEET LIMITS

- North of NE 5th Court to north of NE 7th Court

ROADWAY NOTES

- Roadway width is 21'
- Roadway shifted to east to preserve existing parking that encroaches into R/W on west side of roadway (near NE 6th Street)
- Location for potential on-street parking (3 spaces) on west side of roadway near NE 7th Court has been indicated

EAST SIDE NOTES

- Grassed or vegetated buffer between roadway and sidewalk varies between 4' and 8' with roadway shifts
- New 9' sidewalk added

WEST SIDE NOTES

- Remove palm tree that has grown up into power lines

**Sheet 7**

SHEET LIMITS

- North of NE 7th Court to south of NE 11th Street

ROADWAY NOTES

- Roadway width is 21'
- Roadway shifts to transition back to typical cross section
- Textured crosswalks added at NE 8th Court

EAST SIDE NOTES

- Transition back to 9' grassed or vegetated buffer between roadway and sidewalk
- New 9' sidewalk added

WEST SIDE NOTES

- Existing 5' sidewalk maintained in front of Riverside Grande property
- Remove 3 palm trees that have grown up into power lines and replace with understory trees or vegetation

OTHER

- New street trees added to fill voids and replace existing trees that will be impacted

**Sheet 8**

SHEET LIMITS

- South of NE 11th Street to NE 14th Street Causeway (end corridor)

ROADWAY NOTES

- Roadway width is 21'
- Textured crosswalks added at NE 12th Street
- Specialty intersection pavement or a textured speed table should be considered at NE 12th Street intersection
- Location for potential on-street parking (9 spaces) on west side of roadway near NE 13th Street has been indicated
- Standard transverse marked crosswalk at NE 14th Street converted to textured crosswalk

EAST SIDE NOTES

- 9' grassed or vegetated buffer between roadway and sidewalk
- New 9' sidewalk added
- Large gap in sidewalk between NE 11th Street and NE 12th Street (existing angled parking) should be striped or identified as sidewalk with icons or sign so that vehicles do not park within pedestrian realm

WEST SIDE NOTES

- Paved area shown adjacent to roadway at Scott Winters Memorial Park - this could be a waiting area for transportation for water taxi users, area for art or monument, and/or a location for bike share
- Paved area at park replaces existing evergreen hedge - this area should now transition into a new entrance for the park that is highly visible from the street (park is hidden now)

OTHER

- New street trees added to fill voids and replace existing trees that will be impacted
- Existing Palm trees at SW corner of Riverside/NE 14th intersection need to be pruned or removed to improve visibility of vehicles coming over causeway and hopefully reduce accidents at this location
- Scott Winters Memorial Park should be enhanced with pedestrian amenities

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**North Riverside Drive**

Prepared for:  
The City of Pompano Beach

**VICINITY MAP**

**CONTEXT**

N. Riverside Drive is a cut-through street for locals who want to avoid the seasonal beach congestion along SR A1A. The wide straight roadway creates an environment that tempts drivers to exceed the speed limit. The large radius intersections often create more of a “yield” condition than a “stop” condition. There are long stretches of residential parking that back out directly into the roadway, creating conflicts for both vehicles and pedestrians. Additionally, the pedestrian network has deficiencies in both sidewalk connections and maintenance, making walking hazardous in several areas.

**PROJECT OBJECTIVE**

The objective of this project is to create a Concept Plan that uses a “complete streets” approach to consider appropriate design modifications to the N. Riverside Drive corridor to encourage slower vehicular speeds, accommodate vehicular parking, increase pedestrian safety and the walking experience, improve mobility options, enhance sustainability and provide beautification that complements land uses.

**IMPROVEMENT ACTIONS**

The Concept Plan suggests a variety of specific design and implementation actions that will make N. Riverside Drive a better street for all users. They have been developed in consideration of a well-connected transportation system that encourages travel options for all people and multiple connections to destinations along the corridors and in adjacent areas such as SR A1A. These strategies are outlined below and are shown graphically or in more detail on the other Concept Plan sheets as follows:

**A – Install Traffic Calming Features**

While modifying and redefining roadway edges will help slow traffic, familiarity with the corridor for local drivers and delivery personnel means that traffic calming devices may need to be installed to help enforce slower vehicular speeds. This will be accomplished using the following transformation measures:

- Lower posted speed limit from 30 mph to 25 mph
- Locate speed humps or speed cushions at regular intervals (approximately ¼ mile) along the corridor to keep driver acceleration (and increased speed) to a minimum
- Install textured crosswalks (match existing style at Atlantic Boulevard) at key intersections to alert drivers to the potential presence of pedestrians at key crossing locations
- Install speed tables at key intersections (NE 2nd Street and NE12th Street) with higher pedestrian volume so that the sidewalk effectively extends across the street to bring vehicles to the level of people moving on foot or bicycle

**B – Ease Parking Concerns**

Parking is a key issue for this project. With the many short- and long-term stay projects along and adjacent to the corridor, availability of spaces to accommodate guests, visitors and locals is at a premium. Therefore, it is paramount that all existing parking within the right-of-way and all access to private parking is maintained and new options be added where feasible. This will be accomplished using the following transformation measures:

- Maintain all existing on-street parking and access to private parking areas
- Adjust the roadway alignment within the existing right-of-way so that no parking spaces that currently exist within the public right-of-way are lost
- Add new on-street parking spaces near potential mixed-use redevelopment areas to accommodate future street activity and help slow traffic
- Indicate potential locations for future on-street parking that can help alleviate future demands

**C – Enhance Aesthetics**

Simple aesthetic improvements can help establish a more unified and distinct look along the corridor. N. Riverside Drive has a variety of development types, a physical setting along the ICW and a large volume of pedestrians and bicyclists who travel the roadway both day and night. More activity is expected in the near future with Pier Street streetscape improvements, enhanced connections to SR A1A and the beach core, and new water taxi stops. Aesthetic improvements along the corridor can help create an identity and make N. Riverside Drive a more inviting place for residents and visitors. This will be accomplished using the following transformation measures:

- Create a gateway feature (such as a vertical monument) to give the corridor an entrance identification
- Incorporate art in public spaces to provide interest – make installations part of the larger City program
- Enhance vegetative screening to better differentiate public and private areas and provide buffering of parking lots and service areas
- Perform regular landscape maintenance to pick up trash, clean public spaces, remove debris from vegetated swales, trim branches growing into sidewalk areas or utility boxes, prune trees encroaching on utility lines, and replace screening vegetation that has turned “leggy”
- Reduce width of paved entrances to define driveway entrances and create new green spaces

**D – Improve Urban Resiliency**

Urban resilience is an umbrella term for planning and design strategies that can help deal with shocks and stresses on the urban infrastructure associated with a variety of public safety and health concerns

such as climate change and natural disasters. While this scale of preparedness is beyond the scale of this project, a variety of sustainability measures can be implemented into the corridor improvements to further resilience goals of Pompano Beach. This will be accomplished using the following transformation measures:

- Reduce urban heat island effect by removing materials that store and absorb heat (such as concrete and asphalt) and replacing them with natural cover (grasses, groundcover, shrubs and trees)
- Utilize trees to provide shade, absorb solar energy and improve air quality
- Replace non-porous surfaces with porous surfaces or green space to create more areas for storm water infiltration and buffering
- Propose green and/or cool roofs for new development or redevelopment
- Encourage undergrounding of utility systems to eliminate service disruption during storms

**E – Modify Roadway Edges**

The pavement width and (in many places) undefined travel lane edge create an illusion of a wider roadway, which negatively influences a driver’s speed behavior and caution. One of the key transformation measures for this project will be slowing the speed of vehicles traveling along the corridor. This will be accomplished using the following transformation measures:

- Narrow travel lanes by removing pavement and installing grass or groundcover vegetation, increasing the green buffer between vehicles and pedestrians
- Narrow travel lanes by removing paved surface runoff conveyance and creating grassed or vegetated swales, increasing the buffer between vehicles and pedestrians, as well as increasing the filtering and detention capacities of the storm drainage system
- Reduce turning radius distance at intersections (removing pavement and creating green space) to meet the intent and guidance of the “Complete Streets Design Manual”

**F – Improve Pedestrian Accessibility**

There are many areas along the corridor where sidewalks are absent, walk paths are ill-defined or maintenance is needed to improve the pedestrian experience. One of the objectives of the Concept Plan is to improve the pedestrian experience. By creating pedestrian facilities on both sides of the road between Atlantic Boulevard and NE 2nd Street and on the east side of the road between NE 2nd Street and NE 14th Street Causeway, accessibility along the N. Riverside Drive corridor is not only improved, but better linked into the adjacent SR A1A corridor and the core beach areas. This will be accomplished using the following transformation measures:

- Install new sidewalk sections to close any gaps in pedestrian connectivity
- Add crosswalks at all intersections per guidance in the “Complete Streets Design Manual”
- Place striping and/or pedestrian symbols to define walkways across large parking areas (majority of a block length); this would improve pedestrian awareness and help drivers park vehicles without blocking walkways
- Perform maintenance along the corridor to fill holes formed from erosion (both along sidewalks and at storm inlets) and trim vegetation that has grown into sidewalk space

**G – Add Streetscape Amenities**

Complete streets have features that make people feel comfortable and safe, increasing use among all ages and abilities. They also complement adjacent land uses, provide a visually appealing environment and improve the overall pedestrian experience. This will be accomplished using the following transformation measures:

- Add street furniture such as benches, trash receptacles and bicycle racks (at parks/water taxi stops) and solar or low voltage accent lighting/bollards (at sidewalk/street intersections)
- Incorporate wayfinding information such as signage (along the roadway) and kiosks (at parks/water taxi stops) to direct visitors to area destinations
- Develop hierarchy of base and accent paving hardscape to define park entrances, create spaces for gathering and provide spaces to accommodate public art

**H – Incorporate Landscape Plantings**

Landscaping is not only an integral component of the urban aesthetic, scale and the pedestrian experience, but it has also an important contributor towards safer streets. Although there is an abundance of greenery existing along the corridor, there are several locations where the addition of well-placed landscape elements can further the objectives of this Concept Plan. This will be accomplished using the following transformation measures:

- Plant street trees as needed to complete a framing of the roadway; trees not only slow vehicular speeds but provide a buffer (from vehicles) and shade for pedestrians
- Incorporate canopy trees near sidewalks to provide shade for pedestrians – make sure branching will not interfere with utility lines and that trees are limbed up to provide clearance, as appropriate, for pedestrians and vehicles
- Plant median vegetation to slow traffic and identify areas of pedestrian crossing
- Plant screening vegetation to hide utility infrastructure and soften the appearance of architectural features

- Remove trees that are growing into utility poles and line junctions, and remove trees that are growing into powerlines and replace them with smaller understory trees

**I – Enhance Stormwater System Function**

In urban conditions where most of the land has been developed or paved, stormwater runoff contains oil, gasoline, pesticides, fertilizers, bacteria, and/or sediment. Most of the runoff from N. Riverside Drive drains directly into the Intracoastal Waterway, posing a threat to water quality and degradation of fragile ecosystems. Incorporation of elements that mimic natural drainage functions can reduce stress on the existing system, improve water quality and reduce the rate and volume of runoff. This will be accomplished using the following transformation measures:

Remove paved drainage swales and replace with grassed or vegetated swales to increase infiltration, improve filtering and slow the rate of runoff into the system. Retrofit or replace storm drainage boxes with flow-through technologies that allow stormwater to pass while holding pollutants and solids for settling and removal. Create a LID (low impact development) sustainability demonstration project such as a bioswale, an open and sloped vegetated channel designed for treatment and conveyance of stormwater runoff

**GENERAL NOTES**

The following notes apply to all work within the project corridor. While they may be more suited towards inclusion on construction documents, they will be incorporated into any project created from this Concept Plan; their acknowledgement at this stage of design is meant for general information, to clarify intent and to provide information for consideration as part of the organization of the Concept Plan and the larger planning process.

- Erosion control measures for wind, water, material stockpiles and tracking shall be implemented on all projects prior to construction activities and shall be maintained at all times until such time as the project is accepted as complete and in a stable condition. Site inspections shall be conducted on a regular basis and after rain events. This is very important with the multitude of residential development and surface parking.
- Existing trees shall be protected during construction activities. Protective fencing shall be established around the perimeter of trees per Urban Forestry Division requirements. No vehicles shall be parked, construction materials stored or harmful substances placed within the tree protection zone at any time. Creating a framework of street trees and shade is an important part of this Concept Plan.
- Existing site features (other than trees) shall be protected during construction activities. Any protected item that is damaged shall be repaired or replaced to original condition. Special care should be taken to protect existing pavement from damage.
- Locations for all proposed work, including utility locations, shall be verified in the field prior to commencing construction activities. The actions proposed with this Concept Plan may require existing utility lines, cables, pipes, boxes, etc... to be carefully worked around, relocated (horizontally) or adjusted (vertically).
- N. Riverside Drive shall remain open during construction activities. Vehicular traffic may need to be diverted or travel lanes and/or intersections may need to be closed for short periods to accommodate construction activities. Maintenance of traffic measures shall conform to FDOT standard practices.
- All street design and other improvements shall comply with the Americans with Disabilities Act (ADA).
- Any construction activities proposed for areas outside of public rights-of-way shall be coordinated with the City and the affected property owner.
- Signage (both wayfinding and regulatory) shall be located so it does not interfere with pedestrian traffic, block roadway signage or obstruct views of roadway traffic. Signage shall not overhang into the roadway (maintain a minimum distance of two-feet from the edge of the sign panel to the edge of the roadway). Signage shall be no lower than seven-feet above the walking surface. Signage shall be placed on the right side of the roadway perpendicular to approaching traffic. They should be positioned so there is a clear line-of-sight well before the point at which direction must be changed or action taken.

05/13/2016																			

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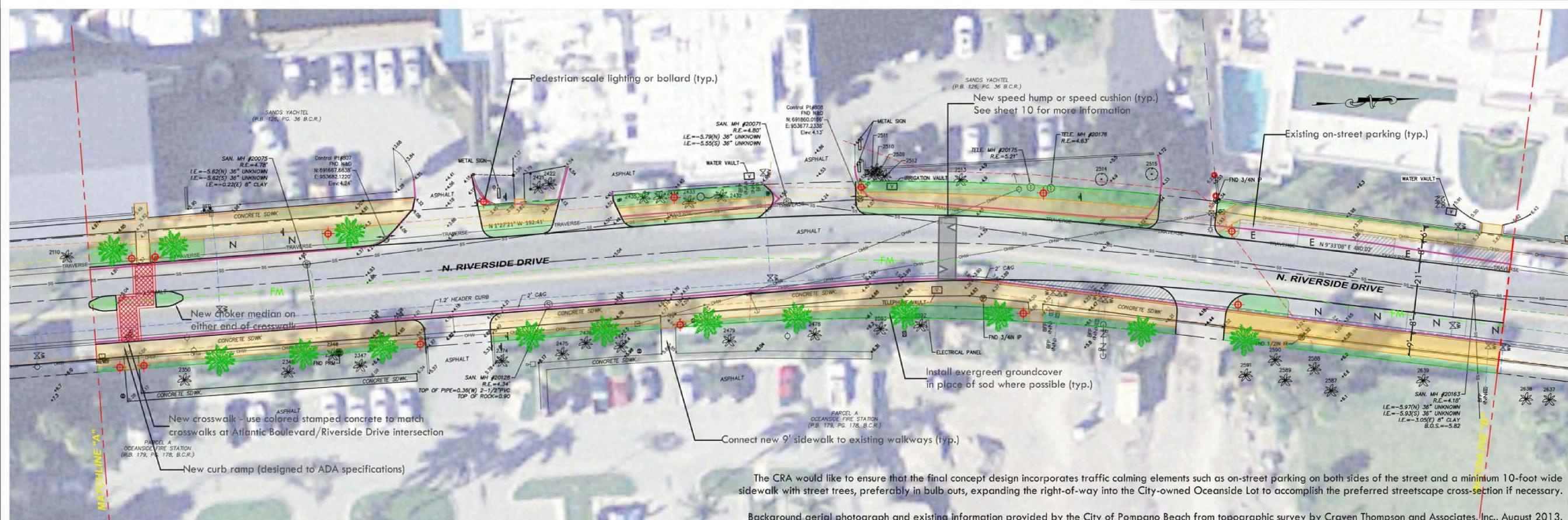
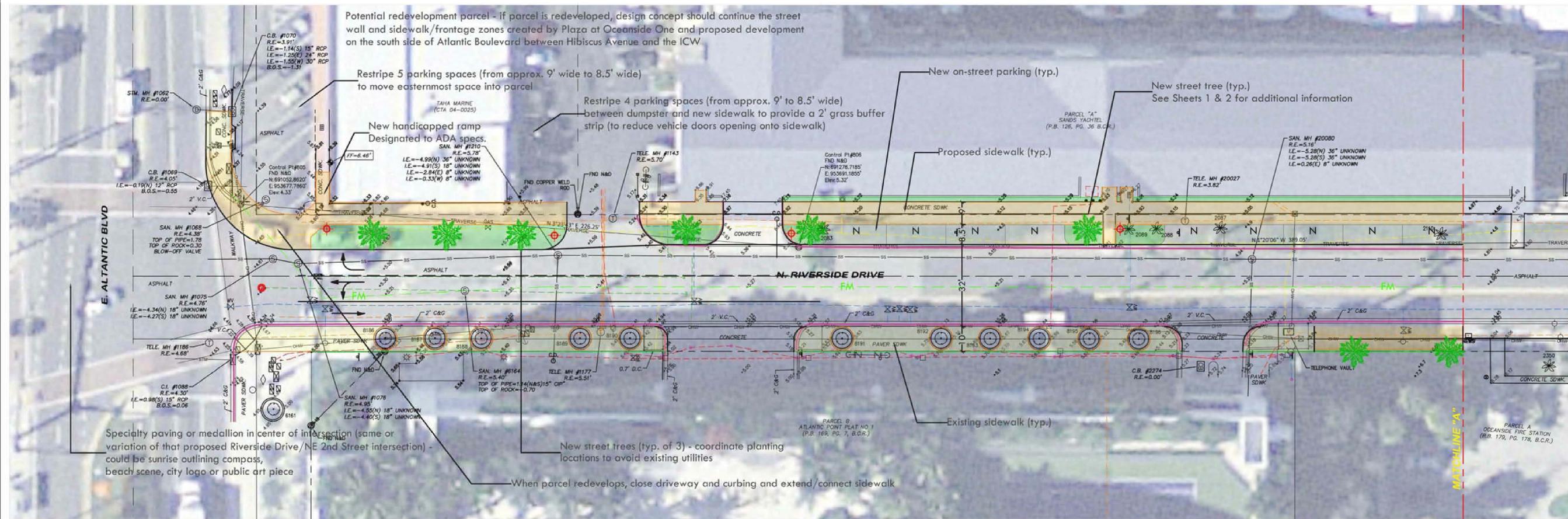
**North Riverside Drive**

Prepared for:  
The City of Pompano Beach

**OBJECTIVES**

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# CONCEPT PLAN



The CRA would like to ensure that the final concept design incorporates traffic calming elements such as on-street parking on both sides of the street and a minimum 10-foot wide sidewalk with street trees, preferably in bulb outs, expanding the right-of-way into the City-owned Oceanside Lot to accomplish the preferred streetscape cross-section if necessary.

Background aerial photograph and existing information provided by the City of Pompano Beach from topographic survey by Craven Thompson and Associates, Inc., August 2013.

DATE	SCALE	DESCRIPTION
07/06/2016	1" = 20'	On-Street Parking
	1.5	Existing
	3	New

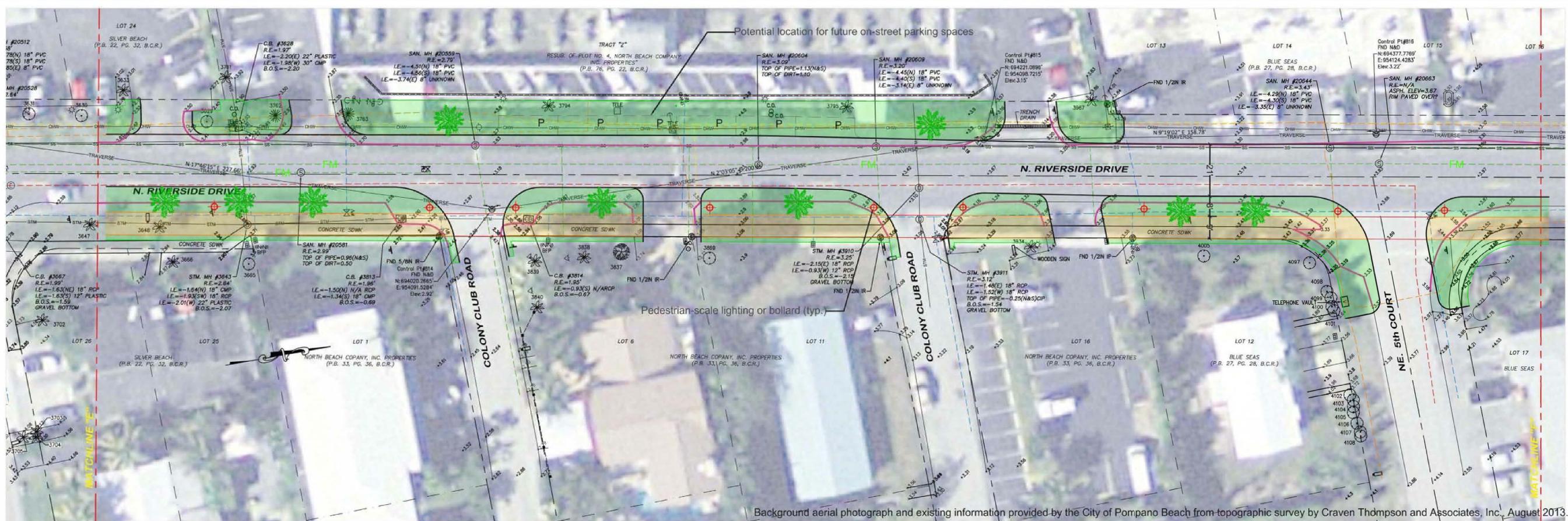
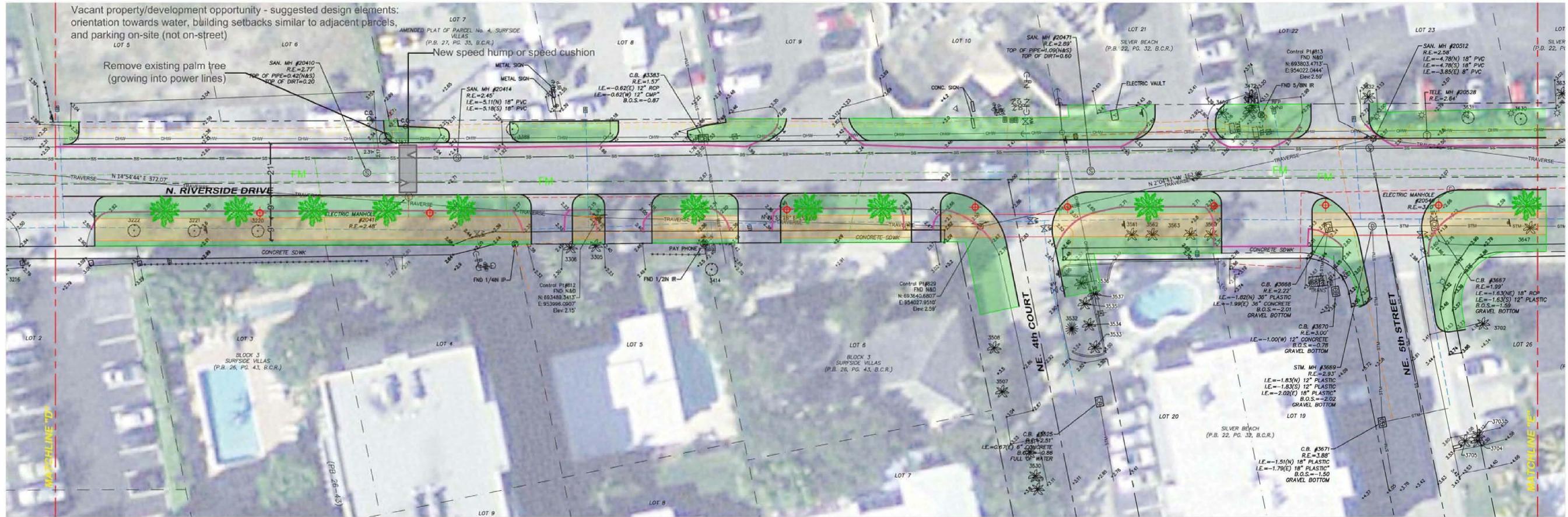
CALCULATIONS	EXISTING	NEW
On-Street Parking	3	1.5
Linear Ft. New Sidewalk	565	565
Linear Ft. Existing Sidewalk	565	565
Linear Ft. New On-Street Parking	340	340
Linear Ft. Existing On-Street Parking	340	340

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**North Riverside Drive**  
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**CONCEPT PLAN**



# CONCEPT PLAN



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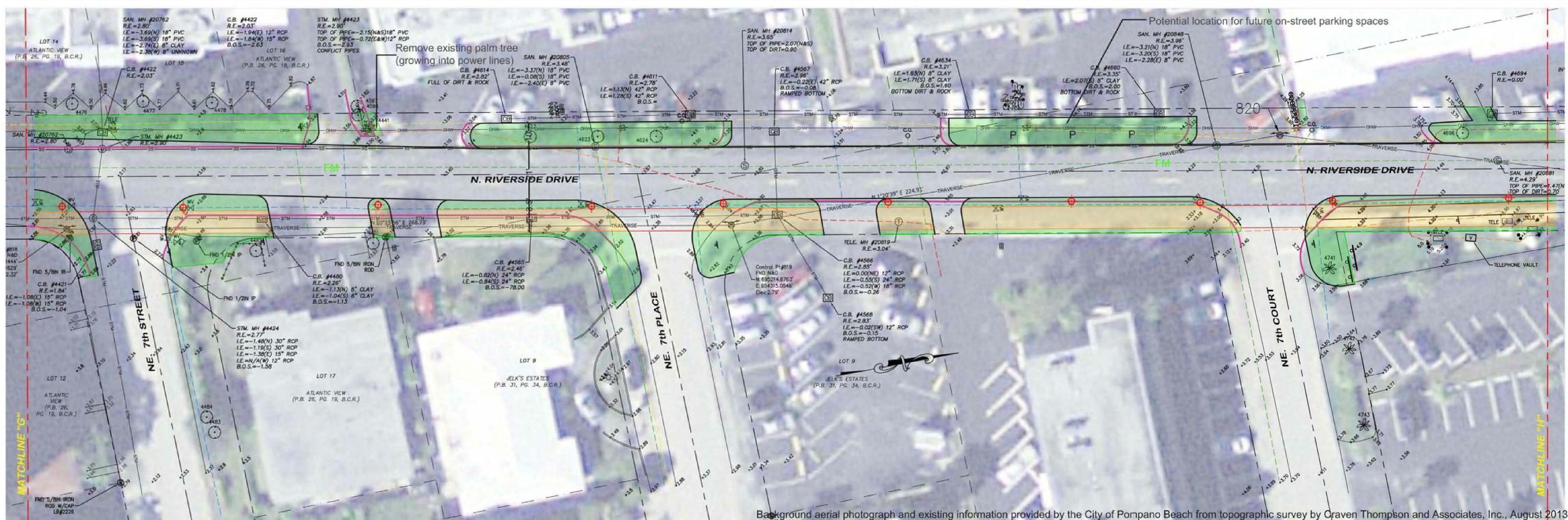
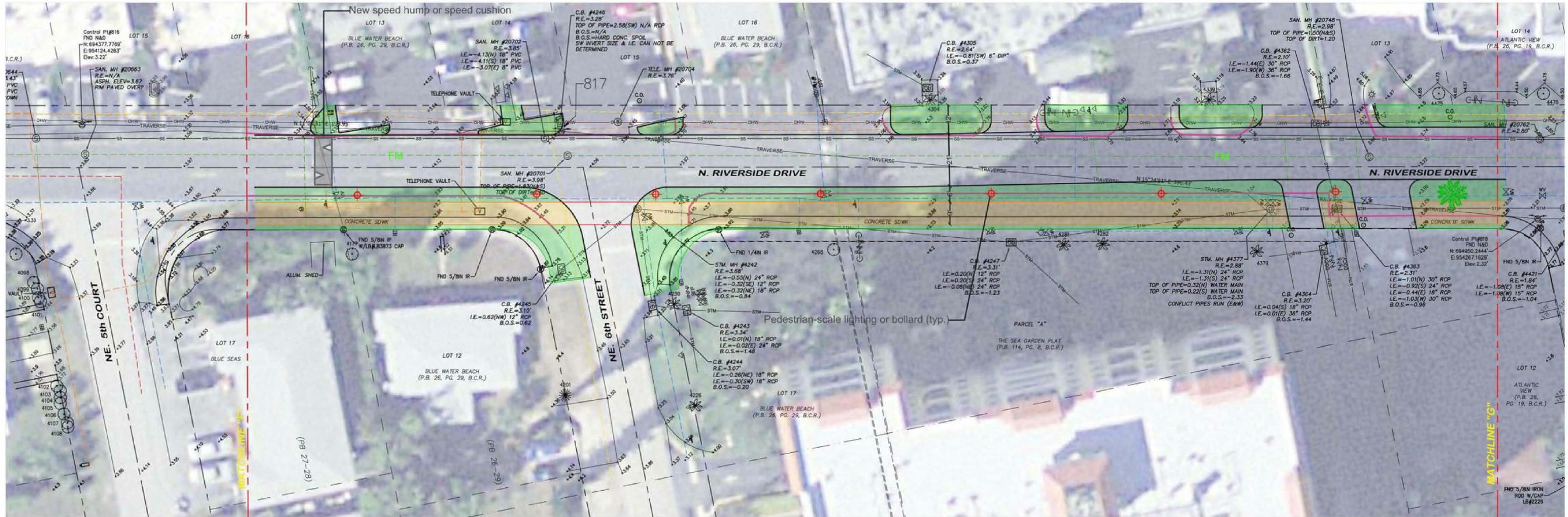
DATE:	11/1/2013
SCALE:	1" = 20'
CALCULATIONS	0
On-Street Parking	6
Existing:	
New (Potential):	
Linear S.F. New Sidewalk	0
6' (West side of Riverside Dr):	0
15' (East side of Riverside Dr):	910

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## North Riverside Drive

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**CONCEPT PLAN**

# CONCEPT PLAN



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DATE:	03/20/20
SCALE:	1" = 20'
CALCULATIONS	0
On-Street Parking	3
Existing:	
New (Potential):	
Linear S.F. New Sidewalk	0
6' (West side of Riverside Dr):	0
9' (East side of Riverside Dr):	880

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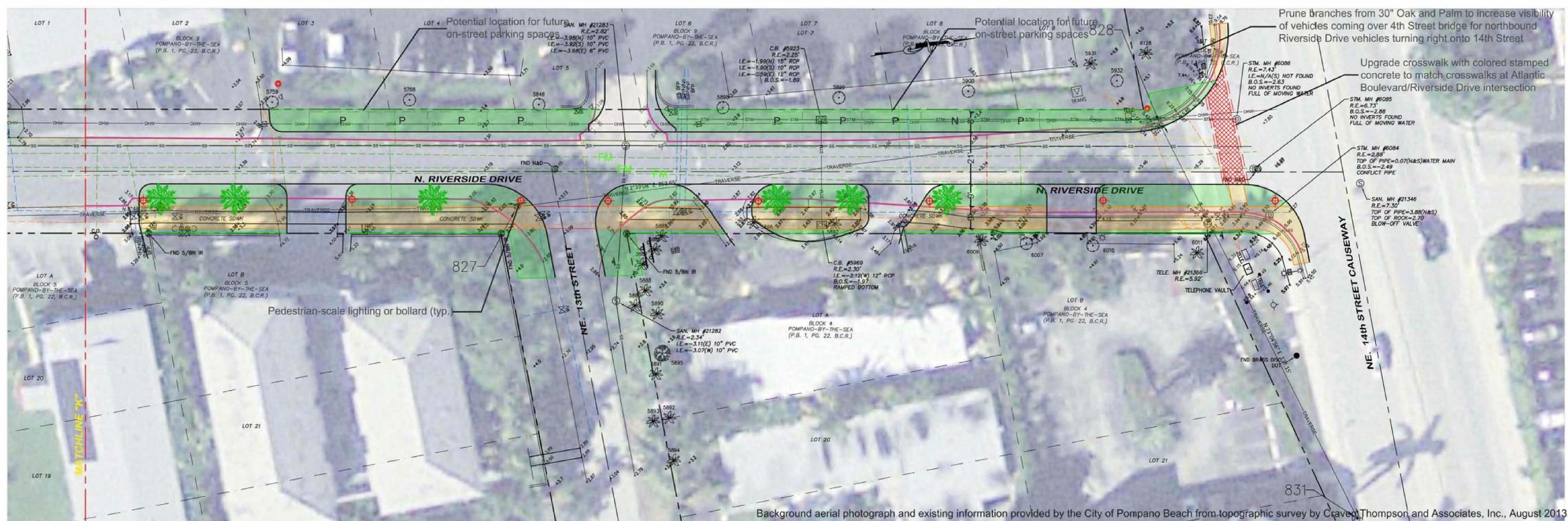
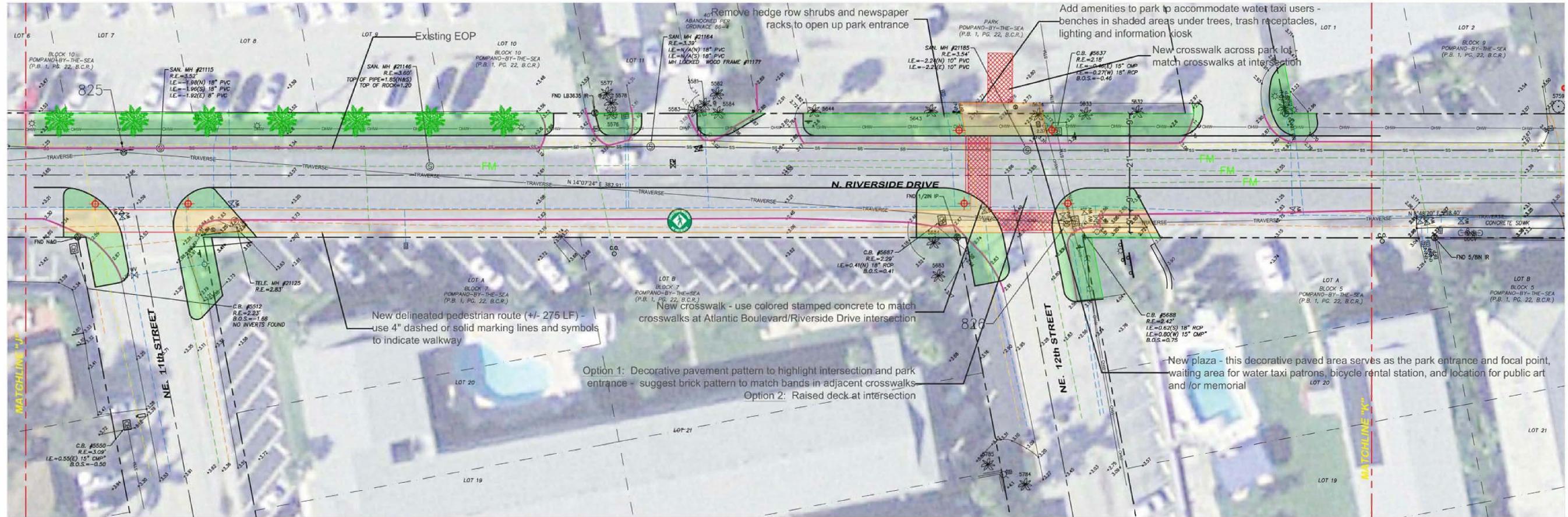
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## CONCEPT PLAN



# CONCEPT PLAN



Background aerial photograph and existing information provided by the City of Pompano Beach from topographic survey by Craven Thompson and Associates, Inc., August 2013.

DATE:	05/15/2016
SCALE:	1" = 20'
CALCULATIONS	0
On-Street Parking	9
Existing:	
New (Potential):	
Linear S F New Sidewalk	0
8' (West side of Riverside Dr)	510
9' (East side of Riverside Dr)	

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