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PARKING CONSULTING SERVICES

CITY OF FORT PIERCE
FORT PIERCE, FLORIDA

Prepared for:
CITY OF FORT PIERCE

JUNE 13, 2016

FINAL REPORT



WALKER
PARKING CONSULTANTS

PROJECT NO. 15-2127.00



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ALTERNATIVES ANALYSIS FOR BEACH PARKING



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JUNE 13, 2016

PROJECT # 15-2127.00

ALTERNATIVES ANALYSIS FOR BEACH PARKING

In accordance with our scope of services we are providing the alternatives analysis for the three sites identified by the City as potential options to construct new parking facilities, surface or structured. In our discussion we are touching on both options for each site:

- Building a parking lot
- Building a parking structure

Our analysis is based on the site plot maps provided by the City. At this stage we have not reviewed storm water management, traffic or soils information.

The three sites considered are as follows:

- Site #1: SW Corner of S. Ocean Dr. and Seaway Dr. (Boch A Galup, Inc.)
- Site #2: SW Corner of S. Ocean Dr. and Binney Dr. (Ocean Binney LLC)
- Site #3: SW Corner of S. Ocean Dr. and St. Lucie Ct. (Gallery 34949, Inc.)

ZONING CONSIDERATIONS AND SETBACK LINE

The City of Fort Pierce zoning map shows the sites zoned as C-5, Tourist Commercial Zone, with the exception of Site #3, shown as PUR, Planned Urban Redevelopment. In each case, the reductions allowed by the City of Fort Pierce Code of Ordinances Section 22-187, General Landscaping Requirements for Industrial sites do not apply. The maximum building height allowed is 45 ft.

A parking structure built on Sites #1 and #2 will be subject to the 25 foot setback required for zone C-5, while a parking structure built on Site #3 will be subject to negotiating a reasonable setback as required by the PUR zoning requirements. We will need to confirm with the City the setback required for a parking lot which could be smaller than for a parking structure. Our drawings for each site show the 11 foot "leftover" site (the difference between the 120 foot width of the site and the 109 foot needed for the parking layout in accordance with the City's parking ordinance. This 11 foot "leftover" site is not usable for parking and the City may deem it as adequate setback for a parking lot. For parking structures the 25 foot setback will have a very significant impact, since it will reduce the footprint available for structured parking.

VEHICULAR TRAFFIC

The existing vehicular traffic is mainly eastbound on AIA (Seaway Dr.) from US 1 toward the roundabout located at S, Ocean Dr. Therefore since the three sites are located south of the roundabout, it is anticipated that most users of the parking facilities will be driving south on S. Ocean Dr. upon arrival. The entry/exit points for the new facilities are located on S. Ocean Dr. to facilitate quick entry after making a right turn.

When departing from each site, they will drive north on S. Ocean Drive or Hernando Street. Users can make a left on S. Ocean Dr. if traffic permits or make two right turns to the next intersection and approach Hernando St. and drive north.



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PEDESTRIAN DESTINATIONS

Three main pedestrian destinations were identified to analyze the alternatives:

1. Jetty Park and the Jetty businesses
2. The various beach pedestrian access on S. Ocean Drive
3. Archie's Seabreeze Restaurant and Bar

The sites are shown on the attached drawing labeled "Site".

CONCEPTUAL CONSTRUCTION COSTS

For a surface parking lot a budget of \$3,000 to \$5,000 for the "hard" construction cost may be used. The "soft" cost would be approximately 20% and would include items such as survey, geotechnical studies, A/E design fees and testing/inspection during construction. At this early stage the storm water management requirements from the SFWMD and other reviewing agencies are not defined. They will have an impact on the construction cost. Those requirements are typically better defined once a site is selected and a Civil Engineer/Surveyor performs a survey of the property.

For a parking structure a budget of \$18,000 to \$24,000 per space for "hard" construction cost may be used and soft costs should also be around 15%. These costs account for the fact that the sites will have approximately between 35 and 50 spaces per level (sites # 1 and 3). Respecting the maximum allowable building height of 45 ft. the parking structure on any of these sites would have a total of 4 levels (Ground plus 3 elevated levels).

The location of the building setback line will reduce the space count per level. For our parking structure costs, we have reduced the count shown for the parking lots in Table 1. All counts will need to be verified once a site is selected.

The unit costs mentioned will be significantly impacted by the parking efficiency, which is defined as the square feet per space. The efficiency reflects how well the parking spaces, drive aisles and turning bays are distributed on the footprint. The lower SF/space the better the efficiency. Efficiency is higher (less SF/space) for rectangular sites with aisles shared by two rows of spaces (double loaded bays). Single loaded bays reduce the efficiency since a drive aisle only serves one row of spaces. The three sites being analyzed with parking spaces laid out in compliance with the City's code of ordinances have one single loaded bay and one double loaded bay.

EVALUATION OF ALTERNATIVES

We have found the best way to evaluate the pros and cons of each alternative is to rank them based on a mutually agreeable criterion. Items such as capacity (space count), unit cost, total cost and other relevant items such as walking distances can be used to compare and rank each option. Each item is given a "weight" to reflect the fact that some items may be more important than the others. Table 1 below shows our analysis for building a parking lot on each of the sites. Because the impact of the setback is unknown, we have not gone beyond the unit cost given above for parking structures.

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Table 1: Summary of Parking Options

Criteria	Weight	Site #1		Site #2		Site #3	
		SW Corner of S. Ocean Dr. and Seaway Dr. 120' by 180'		SW Corner of S. Ocean Dr. and Binney Dr. 120' by 125'		SW Corner of S. Ocean Dr. and St. Lucie Ct. 120' by 245' 115' wide on West End	
		(43 SPACES IN NEW PARKING LOT)*		(21 SPACES IN NEW PARKING LOT)*		(59 SPACES IN NEW PARKING LOT)*	
		Rating	Weighted Score	Rating	Weighted Score	Rating	Weighted Score
1. Capacity	5	2	10	1	5	3	15
2. Projected Efficiency / Cost per Space	4	2	8	1	4	3	12
3. Projected total cost	4	2	8	3	12	1	4
4. Trees / SFWMD	4	3	12	2	8	1	4
5. Walking Distance to Jetty Park and Jetty businesses	5	3	15	2	10	1	5
6. Walking Distance to Beach Access	5	1	5	2	10	3	15
7. Walking Distance to Archie's Restaurant	5	1	5	2	10	3	15
Totals		14	63	13	59	15	70
Un-weighted Ranking		2		1		3	
Weighted Ranking			2		1		3
NOTES							

***Space count per level in parking structures may be reduced due to possible setback**

RATING
3=Best
1=Worst

WEIGHT
5 = MOST IMPORTANT, BEST, LOWEST COST
1 = LEAST IMPORTANT, WORST, MOST EXPENSIVE

CONCLUSIONS

1. Site #2, the smallest, may be too small for anything but a small parking lot.
2. Site #3, the largest, has the best rankings for capacity and unit costs. It is the site closest to the beach access and Archie's restaurant and bar. It is rated highest overall.
3. Site #1 was rated 2nd overall, only for a few ranking points behind Site #3, mainly due to its overall cost being less and because it is the closest to Jetty Park and the Jetty businesses.

Upon a completed review of the draft report with City officials and the Parking Committee on April 27th, Walker has learned the City would like to further explore Site #3 for the possible design and construction of a parking structure. To assist with this request, a property survey has been provided. The following section shall provide a detailed analysis of Site #3.

SITE #3 - DETAILED ANALYSIS

According to the City of Fort Pierce zoning map, three of the four parcels identified collectively as Site #3 have been zoned in accordance with Section 22-42, Planned Unit Redevelopment Zone (PUR). The purpose of the PUR zone is intended to encourage comprehensive redevelopment within existing residential and commercial areas of the City. Specifically, PUR zoning is designed to achieve a desirable environment through application of flexible and diversified land development standards in an overall site plan. When compared to the commercial zoning requirements detailed in the C-5 zoning criteria, PUR zoning requirements may be substantially less restrictive.

In our effort to provide a detailed analysis of Site #3, we recognize the need to have all four parcels approved for PUR zoning requirements. At the present, only lots 12-14 are approved for PUR zoning while lot 15 remains approved for C-5 zoning. Prior to proceeding with a parking structure design for Site #3, we recommend city officials approve lot 15 parcel for PUR zoning requirements. Collectively, Site #3 is approximately 250' by 120'. To view the property survey provided by the City for Site #3 please refer to SK-3A.

As previously shown in the Alternatives Analysis section (see SK-3) of this report, using the parking dimensions required by the City's off-street design standards would result in a parking layout for each of the three sites consisting of:

- A 64' bay with parking spaces on both sides of the drive aisle (known as a "double loaded" bay) and
- A 45' bay with parking spaces on only one side of the drive aisle (a single loaded bay)

The City requested our professional opinion on how to make the maximum use of the available footprint within Site #3. We've based our analysis on industry standards and our professional opinion of the optimum for the design of a parking structure on this site that would not exceed the 45' maximum height limit.



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The City defined the setbacks which they would consider appropriate:

- 10' for the east (A1A), south (adjacent property) and west (Hernando) sides of the parcel
- For the north side, the City mentioned a 5' setback may be acceptable and that additional footprint width could be gained if the City decided to abandon St. Lucie Court.

Below is the explanation for the four sketches provided for Site #3.

SK-3

1. Original sketch produced from aerial photos.
2. Layout based in City Parking Ordinance:
 - o 64' double loaded parking bay on the south edge plus
 - o 45' single loaded parking bay on the north edge
3. No setbacks accounted for at this stage
4. Approximately 59 (9'6" by 19')spaces for a parking lot

SK-3A: Shows the survey of site #3 including lot #15.

SK-3B

1. Produced over SK-3A
2. Layout based on an industry standard of
 - o 60' double loaded parking bay on the south edge plus
 - o 60' double loaded parking bay on the north edge
 - o Overall width increased by 2' to account for structural columns.
3. Setbacks accounted for.
4. Widest "out to out" parking structure footprint: 122'.
5. On the north edge, the layout extends beyond the property line. St. Lucie Court would need to be abandoned, as the City is open to considering.
6. Yields the most spaces (78) 9' by 18' spaces per level, roughly 20 spaces more than the original sketch SK-3.
7. A parking facility (ground-level plus three supported levels) would have approximately 300 spaces.

SK-3C

1. Produced over SK-3A
2. Layout based on an industry standard of
 - o 60' double loaded parking bay on the south edge plus
 - o 43' single loaded parking bay on the north edge
 - o Overall width increased by 2' to account for structural columns.
3. Narrower footprint than SK-3B: 105' out to out
4. Fits within the property line.
5. Would not require closing abandoning St. Lucie Court.
6. Yields the least spaces (57) 9' by 18' spaces per level, roughly the same as the original SK-3 sketch.
7. A parking facility (ground plus three supported levels) would have approximately 200 spaces.



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	CITY OF FORT PIERCE, FL Job: ST. LUCIE COURT BEACH PARKING Job No: 15-2127.00 Date: 06.08.16	



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No. **SK-1**

CITY OF FORT PIERCE, FL - ALTERNATE
 Job: ANALYSIS for BEACH PARKING

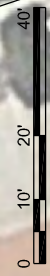
Job No: 15-127.00

Date: 04.22.16



2 SITE 2

20 SPACES @ 9'-6" X 19'-0"
 1 HC SPACE
21 TOTAL



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CITY OF FORT PIERCE, FL - ALTERNATE
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 Date: 04.22.16

No.
SK-2



56 SPACES @ 9'-6"X19'-0"
 3 HC SPACES
 59 TOTAL

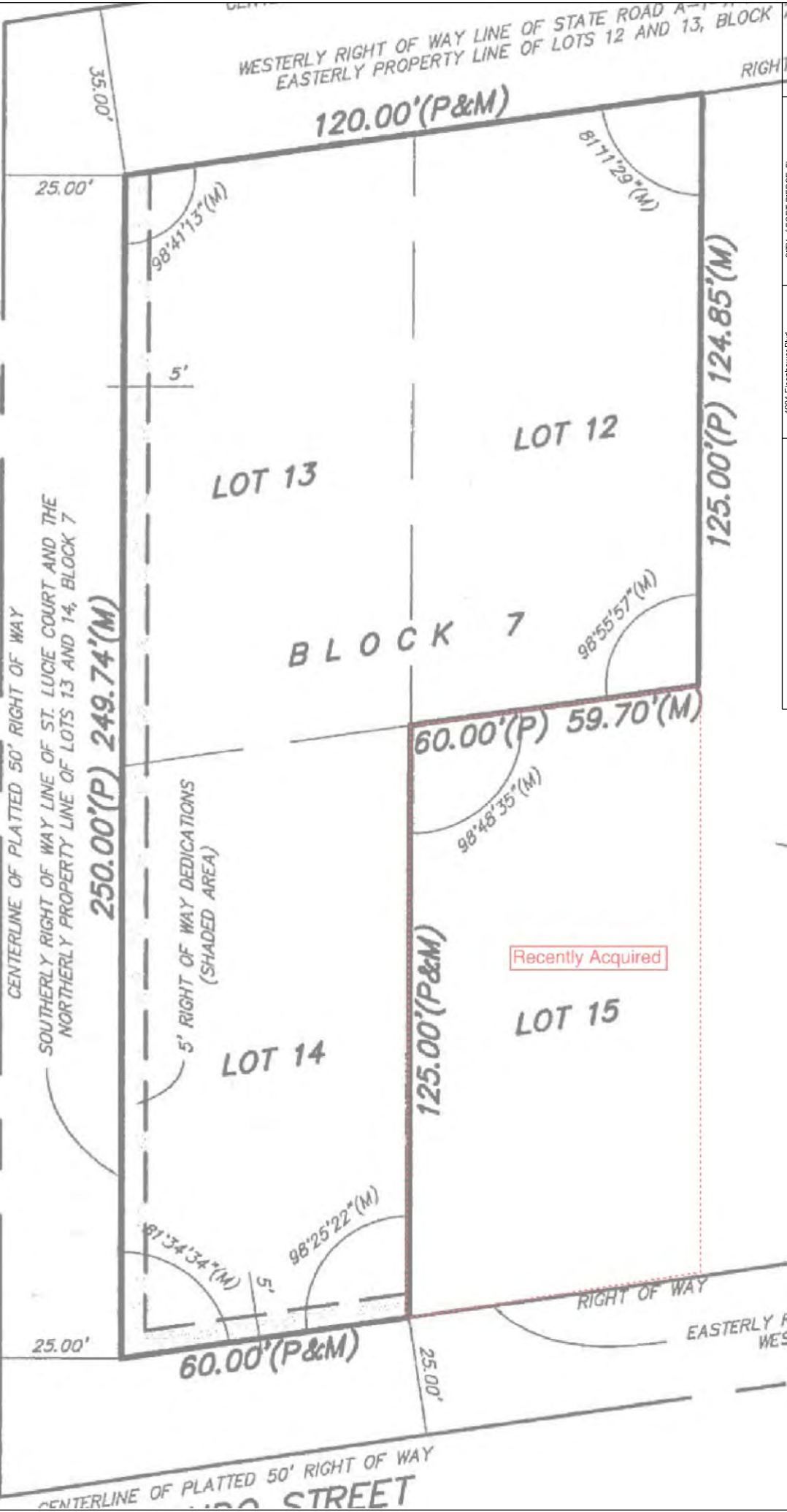
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SK-3

ST. LUCIE COURT



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CITY OF FORT PIERCE, FL
 Job: ST. LUCIE COURT BEACH PARKING
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 Date: 06/08/16

SK-3A

ST. LUCIE COURT

CENTERLINE OF PLATTED 50' RIGHT OF WAY

SOUTHERLY RIGHT OF WAY LINE OF ST. LUCIE COURT AND THE
NORTHERLY PROPERTY LINE OF LOTS 13 AND 14, BLOCK 7

250.00'(P) 249.74'(M)

5' RIGHT OF WAY DEDICATIONS
(SHADED AREA)

LOT 14

LOT 13

BLOCK 7

LOT 15

LOT 12

120.00'(P&M)

125.00'(P&M)

125.00'(P) 124.85'(M)

57 SPACES @ 9'-0"X18'-0"

ST. LUCIE COURT

1A



SCALE: 1" = 20'-0"

WESTERLY RIGHT OF WAY LINE OF STATE ROAD A-1
EASTERLY PROPERTY LINE OF LOTS 12 AND 13, BLOCK 7

CENTERLINE OF PLATTED 50' RIGHT OF WAY
STREET

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CITY OF FORT PIERCE, FL
Job: ST. LUCIE COURT BEACH PARKING
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No.

SK-3C

