

Exhibit D
Concurrency Reports

Mr. William P. Horn
William P. Horn Architects
915 Eaton Street
Key West, Florida 33040

June 9, 2011

Re: Higgs Beach – Traffic Impact Statement

Dear Bill:

Traf Tech Engineering, Inc. has completed the following three tasks associated with the proposed enhancements to Clarence Higgs Beach located in the City of Key West in Monroe County, Florida.

- o Trip Generation
- o Existing Level of Service on Atlantic Boulevard
- o Traffic Safety

Clarence Higgs Beach is a recreational beach located on the Atlantic Ocean along Atlantic Boulevard between Reynolds Street and White Street on the south area of the City of Key West. Figure 1 on the following page depicts the location of the subject recreational beach. The total area designated to Higgs Beach is approximately 15 acres. The beach is bifurcated by Atlantic Boulevard. The sandy beach areas are located on the south side of the roadway as well as a restaurant, a pedestrian walkway, beach tables, parking areas, and other beach amenities. On the north side of Atlantic Boulevard, six asphalt tennis courts, two small parking lots, a playground, a dog park, and an FAA antenna site are found. Volleyball courts are provided on the north and south sides of Atlantic Boulevard. Attachment A contains a site plan depicting the existing conditions on Higgs Beach.

Trip Generation

The trip generation for the existing conditions at Higgs Beach was based on information contained in the Institute of Transportation Engineer’s (ITE) *Trip Generation* manual (8th Edition). According to the subject ITE manual, the most appropriate “land use” category for the subject beach is ITE’s Land Use 415 – Beach Park. Table 1 documents the existing trip generation for Higgs Beach.

TABLE 1 Trip Generation Summary Clarence Higgs Beach – Key West, Florida				
Land Use	Size	Vehicle Trips per Day		
		Weekday	Saturday	Sunday
Beach Park	15 acres	450	1,000	1,030

SOURCE: ITE Trip Generation Manual (8th Edition)



FIGURE 1
Higgs Beach
Key West, Florida

BEACH LOCATION MAP

Traf Tech
ENGINEERING, INC.

As indicated in Table 1, it is estimated that Higgs Beach is currently generating approximately 450 daily trips on regular weekdays, approximately 1,000 trips per day on Saturdays, and approximately 1,030 daily trips on Sundays.

Since the proposed enhancements to Higgs Beach (refer to Attachment A) consist of improvements to the parking areas, additional pedestrian walkways, open green space, a visitors center, and improved beach amenities, the proposed enhancements to Higgs Beach are not anticipated to increase traffic flow along Atlantic Boulevard or nearby local streets.

The trip generation equations for the existing Higgs Beach, given by ITE, are:

BEACH PARK (Land Use 415)

Weekday Daily Trips

$$T = 29.81 (X)$$

Where T = average weekday vehicle trip ends (vehicle trips per day)

X = size in acres

Saturday Daily Trips

$$T = 66.47 (X)$$

Where T = average Saturday vehicle trip ends (vehicle trips per day)

X = size in acres

Sunday Daily Trips

$$T = 68.52 (X)$$

Where T = average Sunday vehicle trip ends (vehicle trips per day)

X = size in acres

Existing Level of Service on Atlantic Boulevard

According to FDOT records, Atlantic Boulevard near Higgs Beach carries approximately 5,400 vehicles per day (refer to Attachment B). Based on FDOT's *Generalized Annual Average Daily* capacity tables¹, Atlantic Boulevard has a level of service "D" capacity of approximately 10,700 vehicles per day. Therefore, Atlantic Boulevard is currently operating at approximately 50% of its vehicular carrying capacity, which is considered to be excellent. Therefore, the proposed enhancements to Higgs Beach are not anticipated to degrade the operating conditions of Atlantic Boulevard or nearby local streets.

Traffic Safety

As shown in the existing conditions site plan (refer to Attachment A), all parking areas (north and south sides of the roadway) can be accessed from any point along Atlantic Boulevard, which is undesirable from a safety standpoint. Moreover, the driveway that provides access to the small parking lot located west of the tennis courts has restricted

¹ 2009 FDOT Quality/Level of Service Handbook

sight visibility (a vehicle exiting from the subject parking lot cannot see traffic heading south on Reynolds Avenue). This condition is undesirable from a safety standpoint.

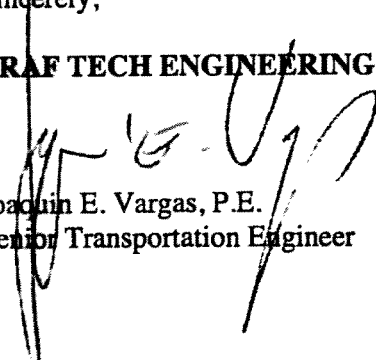
The proposed enhancements to Higgs Beach eliminate the existing safety concerns described above. All parking areas are well defined and are accessed via well-spaced driveways. Driveways located north and south of the roadways either align with each other or are well spaced in order to eliminate undesired conflicts. In short, the proposed beach enhancements provide significant safety improvements to traffic traveling along Atlantic Boulevard or accessing the various parking areas located north or south of the roadway.

In summary, the proposed enhancements to Higgs Beach are not anticipated to increase traffic flow along Atlantic Boulevard, are not anticipated to degrade the operating conditions of Atlantic Boulevard or nearby local streets, and will significantly improve safety to traffic traveling along Atlantic Boulevard or accessing the various parking areas located north or south of the roadway.

Please give me a call if you have any questions relative to the information provided herein.

Sincerely,

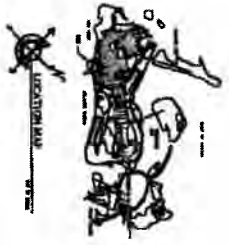
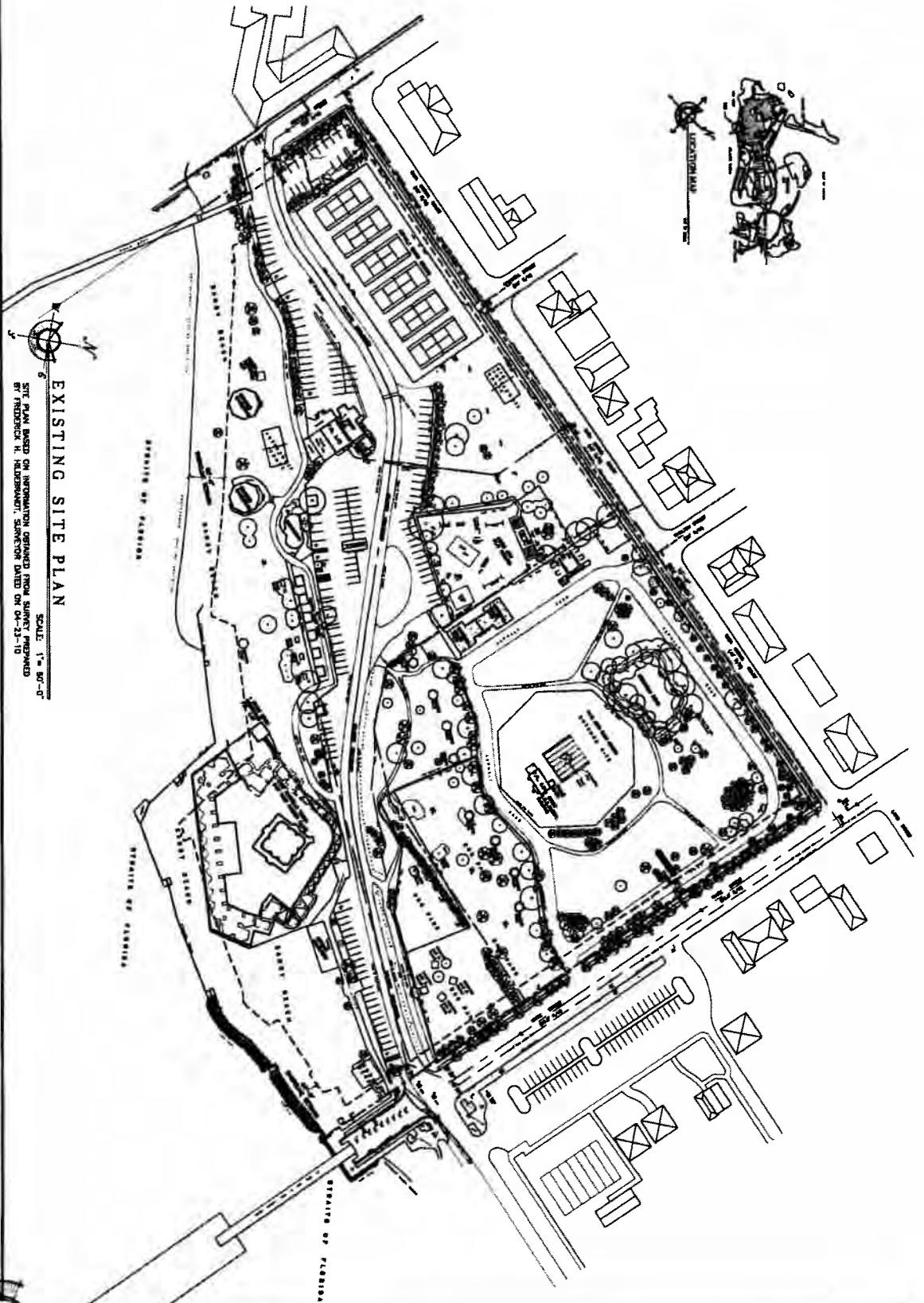
TRAF TECH ENGINEERING, INC.



Joaquin E. Vargas, P.E.
Senior Transportation Engineer

ATTACHMENT A

**Clarence Higgs Beach – Site Plans
(Existing and Proposed Conditions)**



EXISTING SITE PLAN
 SCALE: 1" = 50'-0"
 SITE PLAN BASED ON INFORMATION OBTAINED FROM SURVEY PROVIDED
 BY ARCHITECT H. HARRISON, SENIOR SURVEYOR ON 04-23-10

CLARENCE HIGGS BEACH - MASTER PLAN
 NEW WEST, FLORIDA



WILLIAM P. NEW
 ARCHITECT, P.A.

DATE: 04-23-10
 PROJECT: CLARENCE HIGGS BEACH
 SHEET: EX-1

HARRISON
 NEW WEST, FL.

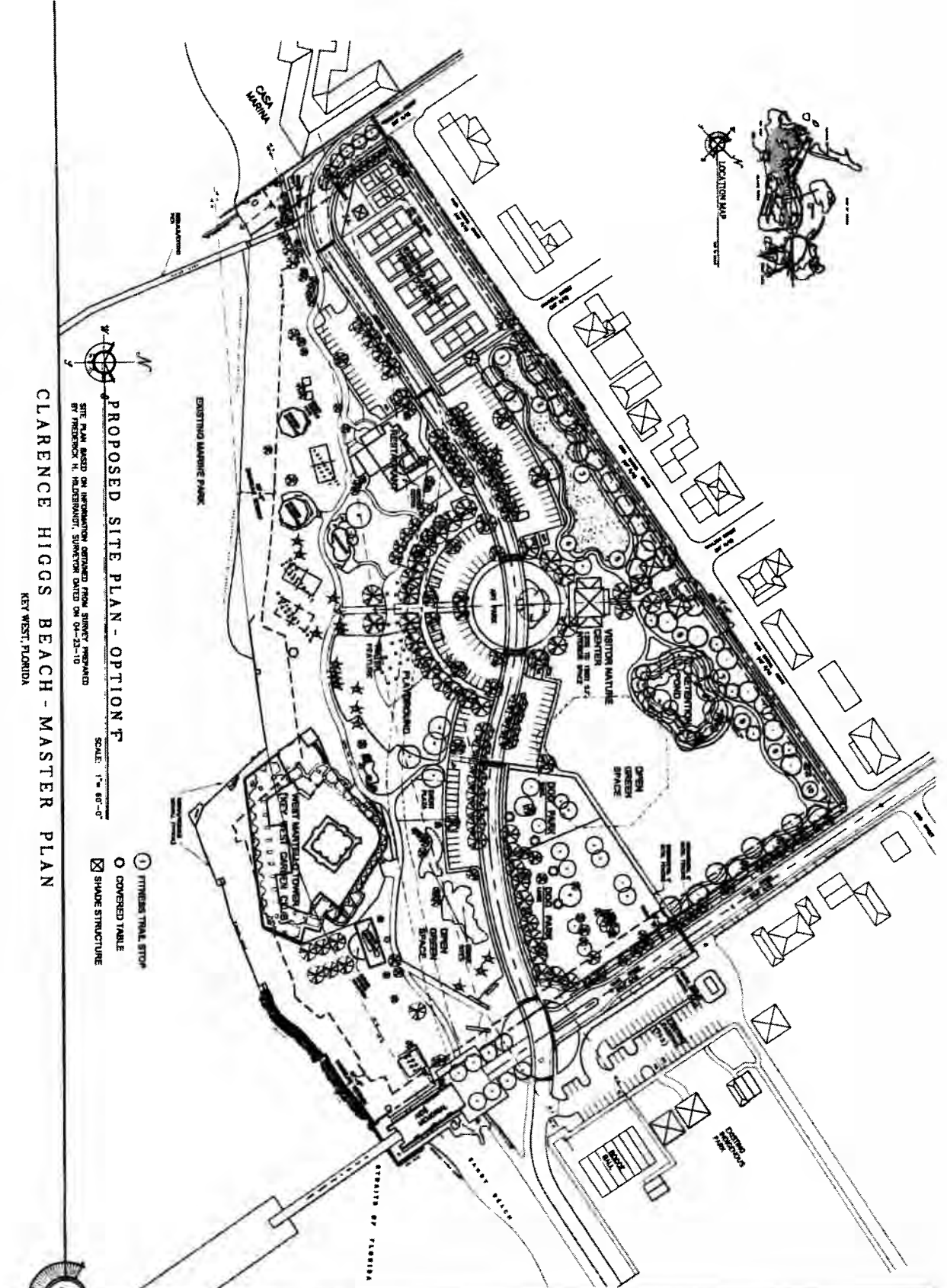
SCALE: 1" = 50'-0"
 NORTH ARROW
 EXISTING BUILDINGS
 EXISTING PARKING
 EXISTING LANDSCAPE
 EXISTING UTILITIES
 EXISTING ROADS

DATE: 04-23-10
 PROJECT: CLARENCE HIGGS BEACH
 SHEET: EX-1

PLANNED BY: HARRISON
 DRAWN BY: [Name]

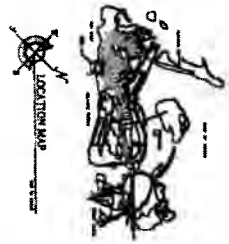
PROJECT: CLARENCE HIGGS BEACH
 SHEET: EX-1

SCALE: 1" = 50'-0"



PROPOSED SITE PLAN - OPTION F
 SITE PLAN BASED ON INFORMATION OBTAINED FROM SURVEY PROVIDED
 BY FREDERICK H. HALDENBORN, SURVEYOR DATED ON 04-23-10
 SCALE: 1" = 60'-0"
CLARENCE HIGGS BEACH - MASTER PLAN
 KEY WEST, FLORIDA

- ① FITNESS TRAIL STOP
- COVERED TABLE
- ☒ SHADE STRUCTURE



WILLIAM P. HIRON
 ARCHITECT, P.A.
 800 BAYVIEW BLVD
 KEY WEST, FLORIDA 34290
 TEL: 305-854-8888
 FAX: 305-854-8888
 WWW.WPHIRON.COM
 LICENSE NO. 10000
 ARCHITECT
 DATE: 04-23-10
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 PROJECT: CLARENCE HIGGS BEACH - MASTER PLAN
 SHEET: A-3

ATTACHMENT B
Traffic Counts (Source: FDOT)

County: 90
 Station: 0004
 Description: ATLANTIC BLVD, 200' E WHITE ST
 Start Date: 01/20/2009
 Start Time: 0000

Time	Direction: E					Direction: W					Combined Total	
	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total		
0000	9	5	5	5	24	2	2	1	3	8	32	
0100	3	3	2	1	9	2	0	2	1	5	14	
0200	5	2	4	2	13	0	1	0	2	3	16	
0300	3	2	1	3	9	2	1	0	1	4	13	
0400	1	2	5	6	14	2	1	2	2	7	21	
0500	2	6	6	4	18	2	3	3	6	14	32	
0600	3	9	14	17	43	5	8	19	28	60	103	
0700	17	20	24	15	76	35	36	35	58	164	240	
0800	26	33	28	35	122	67	79	68	65	279	401	
0900	32	28	47	44	151	36	39	33	52	160	311	
1000	39	39	67	61	206	45	44	36	45	170	376	
1100	49	57	38	50	194	32	58	47	34	171	365	
1200	35	44	44	61	184	56	45	55	42	198	382	
1300	54	56	54	57	221	53	40	53	52	198	419	
1400	47	44	61	70	222	48	59	49	39	195	417	
1500	66	52	53	66	237	47	33	52	53	185	422	
1600	68	72	62	67	269	42	45	41	56	184	453	
1700	86	76	55	49	266	45	38	37	44	164	430	
1800	38	35	36	32	141	36	45	22	38	141	282	
1900	18	36	22	18	94	19	18	12	16	65	159	
2000	23	25	23	20	91	18	19	13	12	62	153	
2100	14	28	23	21	86	13	12	5	4	34	120	
2200	23	12	14	9	58	6	5	2	2	15	73	
2300	14	14	3	4	35	8	4	6	2	20	55	
24-Hour Totals:					2783						2506	5289

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	0915	158	0800	279	0800	401
P.M.	1630	291	1330	212	1615	474
Daily	1630	291	0800	279	1615	474

County: 90
 Station: 0004
 Description: ATLANTIC BLVD, 200' E WHITE ST
 Start Date: 01/21/2009
 Start Time: 0000

Time	Direction: E					Direction: W					Combined Total	
	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total		
0000	11	4	4	8	27	5	4	3	2	14	41	
0100	5	3	3	1	12	1	0	2	1	4	16	
0200	2	0	3	2	7	0	0	0	0	0	7	
0300	1	1	4	2	8	2	1	0	3	6	14	
0400	2	2	5	2	11	2	0	0	2	4	15	
0500	1	7	6	6	20	1	4	6	7	18	38	
0600	5	7	10	10	32	5	11	21	13	50	82	
0700	20	8	18	25	71	32	46	45	58	181	252	
0800	37	42	38	35	152	67	64	76	45	252	404	
0900	43	30	31	37	141	42	52	43	42	179	320	
1000	38	51	53	45	187	35	38	46	43	162	349	
1100	55	50	62	68	235	42	63	52	55	212	447	
1200	45	39	51	50	185	44	41	52	50	187	372	
1300	55	53	47	60	215	58	42	65	51	216	431	
1400	47	58	63	52	220	56	45	48	37	186	406	
1500	65	60	62	68	255	34	56	45	48	183	438	
1600	65	71	72	80	288	42	45	31	33	151	439	
1700	96	67	65	39	267	52	43	52	45	192	459	
1800	58	40	29	28	155	31	36	25	18	110	265	
1900	25	26	32	25	108	7	4	6	15	32	140	
2000	26	27	23	11	87	12	13	12	18	55	142	
2100	22	20	15	28	85	19	18	5	9	51	136	
2200	22	12	13	9	56	8	9	8	5	30	86	
2300	9	10	10	3	32	6	5	3	2	16	48	
24-Hour Totals:					2856						2491	5347

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	0815	158	0745	265	0745	407
P.M.	1615	319	1330	217	1645	488
Daily	1615	319	0745	265	1645	488

County: 90
 Station: 0004
 Description: ATLANTIC BLVD, 200' E WHITE ST
 Start Date: 01/22/2009
 Start Time: 0000

Time	Direction: E					Direction: W					Combined Total
	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	
0000	7	5	3	1	16	3	3	3	2	11	27
0100	4	1	2	3	10	3	4	3	2	12	22
0200	1	4	0	0	5	1	1	1	1	4	9
0300	1	2	1	2	6	1	1	0	1	3	9
0400	4	1	0	5	10	2	1	2	1	6	16
0500	3	5	6	2	16	1	2	3	5	11	27
0600	7	4	15	9	35	9	7	11	19	46	81
0700	21	19	21	20	81	25	43	46	65	179	260
0800	32	28	33	24	117	78	79	68	57	282	399
0900	38	22	36	38	134	47	38	43	43	171	305
1000	49	44	54	42	189	42	55	54	46	197	386
1100	64	47	57	53	221	45	38	57	44	184	405
1200	49	46	68	50	213	46	55	48	32	181	394
1300	44	44	62	53	203	36	55	48	49	188	391
1400	49	59	61	52	221	55	46	48	39	188	409
1500	65	62	67	59	253	43	42	45	54	184	437
1600	60	76	76	46	258	46	55	48	32	181	439
1700	97	75	69	59	300	37	44	56	45	182	482
1800	51	50	41	28	170	21	28	32	33	114	284
1900	31	26	26	24	107	22	12	14	16	64	171
2000	26	23	25	21	95	18	20	13	12	63	158
2100	21	22	25	22	90	8	9	11	8	36	126
2200	16	20	16	14	66	7	9	8	5	29	95
2300	17	10	6	4	37	5	4	4	7	20	57
24-Hour Totals:	2853					2536					5389

	Peak Volume Information					
	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	0915	145	0745	290	0745	403
P.M.	1700	300	1315	207	1700	482
Daily	1700	300	0745	290	1700	482

Concurrency Analysis

II. Proposed Development:

The Development Team has prepared 24" x 36" drawings as the site is over 10,000 square feet. As shown on the drawings, the following development is proposed for Higgs Beach.

Building Summary:

Existing Building to Remain:	SF	Existing Building to Remove:	SF
Salute Restaurant	4,868	Astro City Covered Picnic Tables	334
- Consumption Area Only	2,250	FAA Concrete Maintenance Building	665
Covered Bandstand (2)	2,616	Covered Picnic Tables (6)	993
Bathroom	1,883	Dog Park Covered Table (4)	556
East Martello Tower	17,724		
Beach Rental Huts (2)	268		
Dog Park Covered Table (4)	556		
New Building:			
Visitor Nature Center	3,070		
Maintenance/Equipment Storage	1,500		
Retail Kiosk (3)	675		
Small Shade Structures (2)	612		

Setbacks:

Type	Required	Existing	Proposed
Front (White Street)	20'	25'4"	25'4"
Side (Casa Marina Court)	15'	123'9"	24'0"
Rear (Reynolds Street)	20'	237'8"	55'4"
Coastal Construction	50'	11'5"	11'5"

Parking:

There are 145 existing parking spaces. The Master Plan proposes to maintain 145 spaces. However, these spaces have been reconfigured to enhance safety and access to the internal travel lanes in the park. Of the 145 spaces, 123 are standard parking spaces, 16 are compact and 6 are handicap accessible. In addition there are spaces for 45 bicycles and/or scooters.

Access:

Atlantic Blvd has been shifted to the north to accommodate community consensus to increase the beach area and relocate the playground to the south side of the road. During the course of the Master planning process, an archeological survey using ground-penetrating radar was conducted. This survey located additional gravesites of African refugees who died on the island in 1860 as a result of the slave trading activity occurring in the area. It is anticipated that once the current roadbed has been removed, additional gravesites will be discovered and will be incorporated into the proposed memorial. The relocation of the road provides a safety buffer from the old road and

the West Martello Garden and eliminates an unsafe condition since the Fort is currently located within five feet of the existing roadway. The new design of the road includes a gentle curve to provide for traffic calming and to encourage a reduction in vehicular speed. The entrance to Higgs Beach from White Street has been sifted to the north as shown on the plans.

Project Statistics:

Zoning	PS (PS) Public and Semi Public Service	
Size	762,891 s.f or 17.5 acres	
Units	No Residential Units	
Floor Area	0.03 Existing (29,945 s.f)	0.04 Proposed (32,972 s.f.)
Consumption Area	Salute Restaurant 2,250 s.f.	
Impervious Area	30.2 % Existing (230,499 s.f)	33.6% Proposed (256,333 s.f.)
Lot Coverage	3.92% Existing (29,945 s.f)	4.32% Proposed (32,972 s.f.)

Building Elevations:

Please see attached.

Drainage Plan:

Please see attached.

Landscape Plan:

Please see attached.

III. **Solutions Statement:**

The Higgs Beach Master Plan was developed with significant community input. Throughout the past year, a master planning process, that included three public meetings and multiple smaller neighborhood meetings with park stake holders was conducted on behalf of the Monroe County Board of County Commissioners (BOCC).

The Major Development Plan for Higgs Beach addresses not only code compliance requirements but safety and welfare issues as well. The following will summarize how the proposed changes to Higgs Beach address community issues.

Stormwater Runoff:

A Stormwater Master Plan has been developed to maintain the stormwater on site as required by City Code. The redesign and relocation of Atlantic Blvd will provide the opportunity to engineer the roadway to capture the stormwater generated by the impervious surface. Parking lots have been relocated further from the shoreline and will be

engineered to City standards for stormwater containment. Furthermore, innovative containment practices are proposed that will direct the stormwater for reuse where possible to provide water for landscape areas.

Potable Water:

The Visitor Nature Center will include cisterns to capture rainwater and make it available for landscape plantings. This building is designed to LEED standards that will reduce and minimize the amount of potable water required. Grey water reuse is planned for the Visitor Nature Center.

Waste Disposal:

A recycling center is proposed adjacent to the Salute Restaurant. It is anticipated the recycling area will provide for recycling of solid waste as well as provide an area for composting of vegetation generated by the restaurant. Currently there are recycling collection boxes in the park and will be reused.

Energy Conservation:

The Nature Center has been designed to reduce energy needs. Four members of the Design Team are LEED Accredited Professionals. The Visitor Nature Center has the potential to be awarded enough credits to achieve LEED Gold Certification. Design components of the building include 100% solar hot water, collection of grey water for reuse, green walls and green roof as shown on the elevations, cross ventilation to reduce or eliminate the need for air conditioning, white reflective roof material, solar electric panels, ultra low flow plumbing fixtures, and low VOC interior materials.

The maintenance buildings are designed to take advantage of natural ventilation and sun control.

Energy efficient lighting will be incorporated as part of the outdoor lighting plan. Opportunities include LED lighting or solar lights for the street outdoor lighting fixtures.

The landscaping proposed incorporates native plant material, clustering of plant material for water conservation, use of salt tolerant grasses, and installation of canopy trees for surface heat reduction.

Affordable Housing:

This is a community park and does not include a residential component.

Neighborhood impacts:

The neighbors immediately adjacent to the park participated in the Master Planning process. Their concerns were considered and addressed to the greatest extent practicable. The development team sought to balance the concerns of the immediate neighbors with the desires of the overall community. For instance the Pickleball court was relocated to the west

of the existing tennis courts and two tennis courts were removed. Passive activities such as the PAR Fitness course are located adjacent to the residential neighborhood. Astro City has been located closer to the beach and away from the center of the park. The footprint of the proposed Nature Center has been reduced in response to the neighbor's concerns.

The current parking lots are unsafe and not consistent with City Code requirements. Vehicles back into travelways and there are multiple conflict areas with pedestrian walkways. The proposed plan provides parking lots with dedicated access points to the relocated Atlantic Blvd. The size of the parking spaces is compliant with City regulations and provisions for scooter, bicycles and handicap spaces have been made. Atlantic Blvd has been redesigned to accommodate bicycle traffic with dedicated lanes on both sides of the road. Other ADA standards have been incorporated in to the plan. Perimeter landscaping around the parking areas is proposed to shield automobile lights from adjacent uses.

A traffic impact report was prepared as part of this process and is included as Appendix A. As noted in the report, the proposed enhancements to Higgs Beach "are not anticipated to increase traffic flow along Atlantic Blvd, are not anticipated to degrade the operating conditions of Atlantic Blvd or nearby local streets and will significantly improve safety to traffic traveling along Atlantic Blvd or accessing the various parking areas located north or south of the roadway."

The BOCC is making every effort to remove and relocate the FAA Tower currently located with in the park. The FAA recognized the County's desire to renovate the park and is in the process of preparing Feasibility Study to accommodate relocation. The FAA recognizes the tower is out of date. Appendix B provides documentation from the FAA that identifies an Airspace Case Number to this project as well as a draft Preliminary Design Reimbursable Agreement. The Site Plan has been designed such that many components of the Master plan can be implemented prior to the relocation of the Tower.

Section 108-230. Other Project Information

Phasing:

Implementation of the Higgs Beach Master Plan is a long-term goal for the BOCC. As funding sources become available portions of the Master Plan will be implemented. Balancing on going maintenance issues with future renovations shall be accommodated as much as possible. Currently, the ASTRO City Playground needs new equipment. Funds have been allocated to install new playground equipment as part of a Phase I for the Astro City playground renovation.

Although some renovations can be completed, the majority of the changes to the park will be not initiated until Atlantic Blvd has been relocated. The BOCC is in the process of submitting a grant request to the Florida Department of Transportation for Community Enhancement Funds that would be used to relocate the road. If successful, funding for this task will be available in fiscal year 2015.

The BOCC has mandated the improvements to the park be self funded when possible.