RESOLUTION NUMBER 2011-049

A RESOLUTION OF THE KEY WEST PLANNING BOARD GRANTING MAJOR DEVELOPMENT PLAN APPROVAL PER SECTIONS 108-91 AND 108-96 THROUGH 108-957 FOR PROPERTY LOCATED AT HIGGS BEACH PARK (RE# 00058800-000000, 00058790-000100, 00058790-000000), KEY WEST FLORIDA; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the subject property is located in the Public Service and Semipublic service (PS) zoning district; and

WHEREAS, Section 108-91 of the Code of Ordinances provides that outside the Historic District a Major Development Plan is required for the addition of outdoor activity or similar activities equal or greater than 5,000 square feet; and

WHERAS, the applicant proposed a Master Plan with associated Landscape Plan and Civil Drainage Plan to redevelop the Higgs Beach Park; and

WHEREAS, Section 108-196(a) requires the Planning Board to review and approve, approve with conditions, or deny the proposed Major Development Plan; and

Chairman

Planning Director

WHEREAS, this matter came before the Planning Board at a duly noticed public hearing on October 20, 2011; and

WHEREAS, the granting of a Major Development Plan application is consistent with the criteria of the Code of Ordinances; and

WHEREAS, the granting of a Major Development application is in harmony with the general purpose and intent of the Land Development Regulations, and will not be injurious to the neighborhood, or otherwise detrimental to the public welfare; and

NOW, THEREFORE, BE IT RESOLVED by the Planning Board of the City of Key West, Florida:

Section 1. That the above recitals are incorporated by reference as if fully set forth herein.

Section 2. That a Master Plan for redevelopment of Higgs Beach Park located in the PS zoning district per Section 108-91 of the Land Development Regulations of the Code of Ordinances of the City of Key West, Florida (RE# 00058800-000000, 00058790-000100, 00058790-000000), as shown in the attached plans dated August 30, 2011 with the following conditions of approval:

General Conditions:

1. City Commission approval of the Intergovernmental Agreement

_____Chairman

_____Planning Director

2. Staff approval of a composting facility is required by the City's Planning and Engineering Departments. Operations maintenance of the composting center shall be provided by the County and will remain in its adjacent location as proposed on the site plans.
3. The recycling center shall be screened from view by a fence and vegetation approved by the City's Urban Forester.
4. The applicant is responsible for designing and submitting a Signage Plan that is compatible with Section 108-285 of the Code to the Planning Department for approval before implementation.
5. Construction on the site including the development of Nature Visitors Center is required to be consistent with Chapter 255.2575(2). Florida Statutes which requires compliance with an accepted third party environmental standard (see Attachment for the full language of the relevant section of the statute).
6. Lighting shall be designed to "Dark Sky" lighting standards and shall meet energy efficiency standards established by an accepted third party environmental standard consistent with F.S Chapter 255.2575(2).
7. Tree Commission approval is required for each phase of the removal/relocation and replacement of the Landscape Plan.
8. The wetland areas of the Whistling Duck Pond and the F.A.A Tower are required to be noted on the Landscape Plan. An upland/wetland jurisdictional line needs to be set for the area and work within the area requires environmental permitting and possible mitigation.

Chairman

Planning Director

9. Revise design of scooter and bicycle parking areas to separate uses and add additional bollards or bicycle friendly parking areas throughout the park.

Section 3. Full, complete, and final application for all permits required for which this resolution is wholly or partly necessary, shall be submitted in its entirety within 12 months after the date hereof.

Section 4. This Major Development Plan application approval by the Planning Board does not constitute a finding as to ownership or right to possession of the property, and assumes, without finding, the correctness of the applicant's assertion of legal authority respecting the property.

Section 5. This resolution shall go into effect immediately upon its passage and adoption and authentication by the signatures of the presiding officer and the Clerk of the Commission.

Section 6. This resolution is subject to appeal periods as provided by the City of Key West Code of Ordinances (including the Land Development Regulations). After the City appeal period has expired, this permit or development order will be rendered to the Florida Department of Community Affairs. Pursuant to Chapter 9J-1, F.A.C., this permit or development order is not effective for forty five (45) days after it has been properly rendered to the DCA with all exhibits and applications attached to or incorporated by reference in this approval; that within the forty five (45) day review

RMK Chairman

DC Planning Director

period the DCA can appeal the permit or development order to the Florida Land and Water Adjudicatory Commission; and that such an appeal stays the effectiveness of the permit until the appeal is resolved by agreement or order.

Read and passed on first reading at a regularly scheduled meeting held this 20th day of October, 2011.

Authenticated by the Chairman of the Planning Board and the Planning Director.

10/28/2011

Richard Klitenick, Chairman — Date
Key West Planning Board

Attest:

10/28/11

Donald Leland Craig, AICP — Date
Planning Director

Filed with the Clerk:

Cheryl Smith 10-31-11

Cheryl Smith, City Clerk — Date

_____ Chairman

_____ Planning Director

Site Plans

CLARENCE HIGGS BEACH

MASTER PLAN

KEY WEST, FLORIDA

MASTER PLAN TEAM MEMBERS

ARCHITECT:
WILLIAM P. HORN ARCHITECT, P.A.
WILLIAM P. HORN, RA, LEED AP
EVELIA MEDINA, LEED AP
615 EATON ST.
KEY WEST, FL 33040
TEL. (305) 296-8302

PLANNER:
MITCHELL PLANNING & DESIGN
BARBARA MITCHELL, LEED AP
15450 SE 103rd PLACE RD.
OKLAWAHA, FL. 32197
(305) 509-0956

LANDSCAPE DESIGN:
LANDWISE DESIGN
LADD ROBERTS, RLA
9522 TAPESTRY PARK CIRCLE
SUITE 201
JACKSONVILLE, FL 32246
TEL. (904) 343 4104

CIVIL ENGINEERING:
PEREZ ENGINEERING AND DEVELOPMENT INC.
ALLEN E. PEREZ, PE
1010 EAST KENNEDY DRIVE
SUITE 402
KEY WEST, FL 33040
TEL. (305) 293-9440

LIGHTING DESIGN:
INNOVATIVE ENGINEERING GROUP INC.
SUDHIR GUPTA, PE, LEED AP
8532 N.W. 72ND AV.
MIAMI, FL. 33166
TEL. (305) 885-9626

TRAFFIC ENGINEER:
TRAFFIC TECH ENGINEERING
JOAQUIN VARGUS, PE
9400 N. UNIVERSITY DR.
FT. LAUDERDALE, FL 33321
TEL. (954) 882 0699

SURVEYOR:
ISLAND SURVEYING INC.
FREDERICK H. HILDEBRANDT, PE
33152 NORTHSIDE DRIVE #201.
KEY WEST, FL. 33040
TEL. (305) 293-9466

LIST OF DRAWINGS

A-1 COVER SHEET, SITE DATA
A-2 EXISTING SITE PLAN 1" = 60.0'
A-3 PROPOSED SITE PLAN 1" = 60.0'
A-4 PARTIAL SITE PLAN 1/16" = 1'-0"
A-5 PARTIAL SITE PLAN 1/16" = 1'-0"
A-6 PARTIAL SITE PLAN 1/16" = 1'-0"
A-7 VISITOR/NATURE CENTER, PLANS, ELEVATIONS & RENDERINGS
A-7.1 VISITOR/NATURE CENTER, ELEVATIONS & RENDERINGS
A-8 STORAGE BUILDINGS, PLANS, ELEVATIONS, RENDERINGS & SITE DETAILS
E-1 LIGHTING SITE PLAN

C-1 CONCEPTUAL DRAINAGE PLAN
C-2 CONCEPTUAL DRAINAGE PLAN -A
C-3 CONCEPTUAL DRAINAGE PLAN -B
C-4 CONCEPTUAL DRAINAGE PLAN -C

L-1 TREE IMPACT PLAN
L-2 CODE PLANTING & TREE RELOCATIONS
L-3 PLANTING DETAILS & SUGGESTED PLANT PALETTE

SURVEY

SITE DATA

SITE AREA: 762,891 S.F. (17.5 ACRES)

LAND USE: PS (PUBLIC SERVICES INC. RECREATION & OPEN SPACE)

FLOOD ZONE: AE +8.0'/AE +9.0'/AE +10.0'/VE 10/VE 12

SETBACKS:

FRONT SETBACK: (WHITE STREET)
REQUIRED = 20.0'
EXISTING = 25'-4" (WOOD DECK)
PROPOSED= 25'-4" (WOOD DECK)

SIDE SETBACK: (CASA MARINA COURT)
REQUIRED = 15.0'
EXISTING = 123'-9" (COV'D. TABLE IN PLAYGROUND)
PROPOSED= 24'-0" (EQUIPMENT STORAGE)

REAR SETBACK: (REYNOLDS STREET)
REQUIRED = 20.0'
EXISTING = 237'-8" (COVERED BANDSTAND)
PROPOSED= 55'-4" (TENNIS PAVILION)

COASTAL CONST. CONTROL LINE:
REQUIRED = 50'-0"
EXISTING = 11'-5"(WEST MARTELLO)
PROPOSED= 11'-5" (WEST MARTELLO)

FAR: (INTERIOR AND COVERED AREA)
ALLOWABLE: 0.2 MAX. (152,578 S.F.)
EXISTING: 0.02 (19,578 S.F.)
PROPOSED: 0.02 (22,605 S.F.)

HEIGHT:
ALLOWABLE: 25.0'
EXISTING: ____' (WEST MARTELLO)
PROPOSED: 25.0' (NEW VISITOR CENTER)

LOT COVERAGE AREA:

REQUIRED: 305,156 S.F. (40% MAX.)
EXISTING: 29,945 S.F. (3.92%)
PROPOSED: 32,972 S.F. (4.32%)

IMPERVIOUS AREA:

REQUIRED: 381,446 S.F. (50% MAX.)
EXISTING: 230,499 S.F. (30.2%)
PROPOSED: 256,333 S.F. (33.6%)

LANDSCAPE AREA:

REQUIRED: 152,578 S.F. (20%)
EXISTING: 532,392 S.F. (69.78%)
PROPOSED: 506,558 S.F. (66.31%)

OPEN SPACE (INCLUDES RECREATIONAL OPEN SPACE):

REQUIRED: 152,578 S.F. (20%)
EXISTING: 570,362 S.F. (74.7%)
PROPOSED: 544,528 S.F. (71.3%)

PARKING:

EXISTING: 145 SPACES
PROPOSED: 145 SPACES
(INCLUDES 6 HANDICAP SPACES)

BIKE/SCOOTER PARKING:

EXISTING: 60 SPACES (±18 NON CONFORMING)
PROPOSED: 45 SPACES

WILLIAM P. HORN
ARCHITECT, P.A.

615 EATON ST.
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33040

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FAX (305) 296-0227

LICENSE NO.
AA 0003040

HIGGS BEACH
KEY WEST, FL

LANDWISE DESIGN

MITCHELL PLANNING & DESIGN

INNOVATIVE ENGINEERING GROUP INC

TRAFFIC TECH ENGINEERING

ISLAND SURVEYING INC

PEREZ ENGINEERING & DEVELOPMENT INC

SEAL

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DATE
06-22-10
08-30-11 DRC
09-15-11 PL. BD.

REVISIONS
12-30-10
01-06-11
02-25-11

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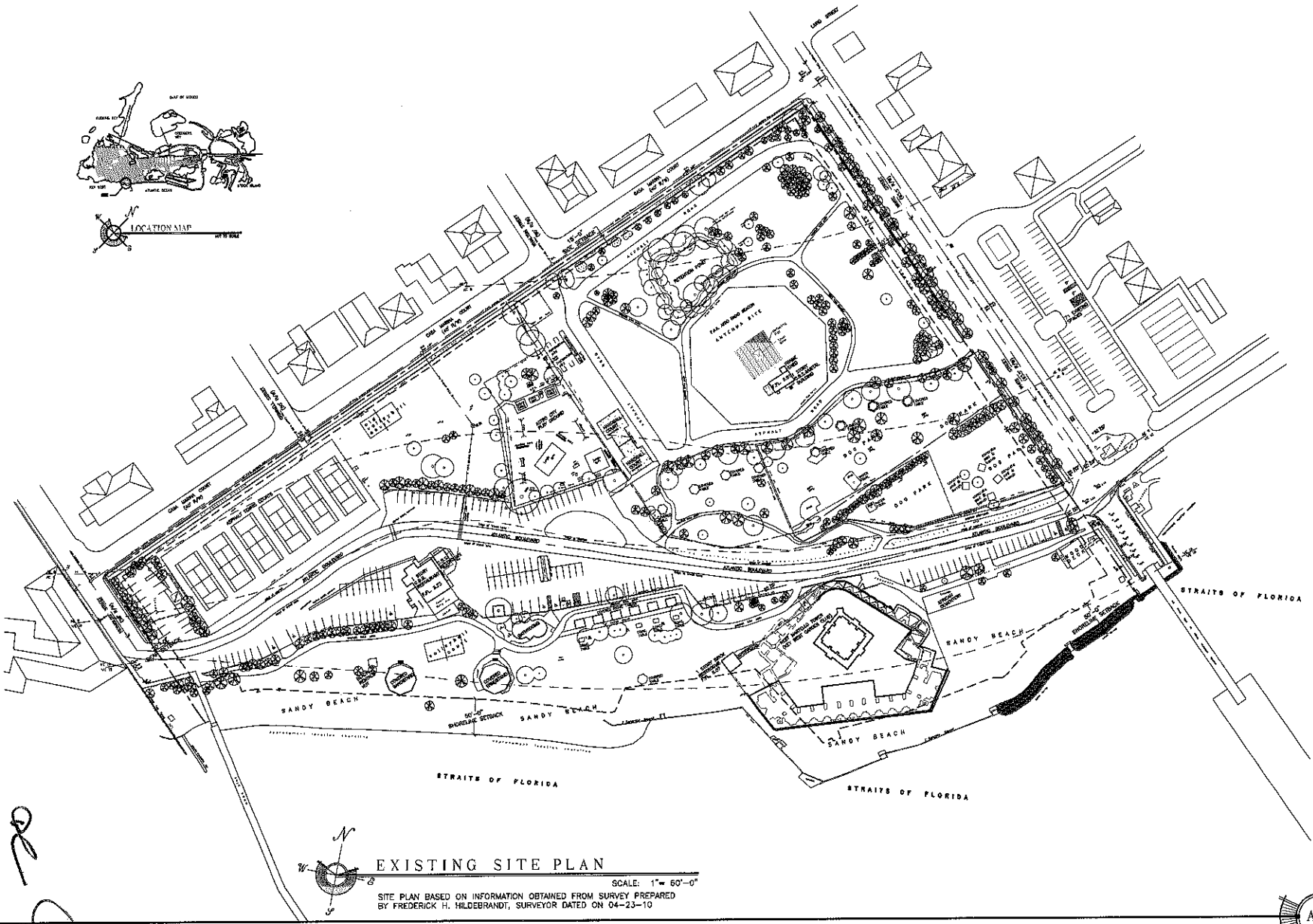
PROJECT NUMBER
1004

A-1



EXISTING SITE PLAN

SCALE: 1"= 60'-0"

SITE PLAN BASED ON INFORMATION OBTAINED FROM SURVEY PREPARED BY FREDERICK H. HILDEBRANDT, SURVEYOR DATED ON 04-23-10

CLARENCE HIGGS BEACH - MASTER PLAN

KEY WEST, FLORIDA

WILLIAM P. HORN
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33040

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AA 0002630

HIGGS BEACH
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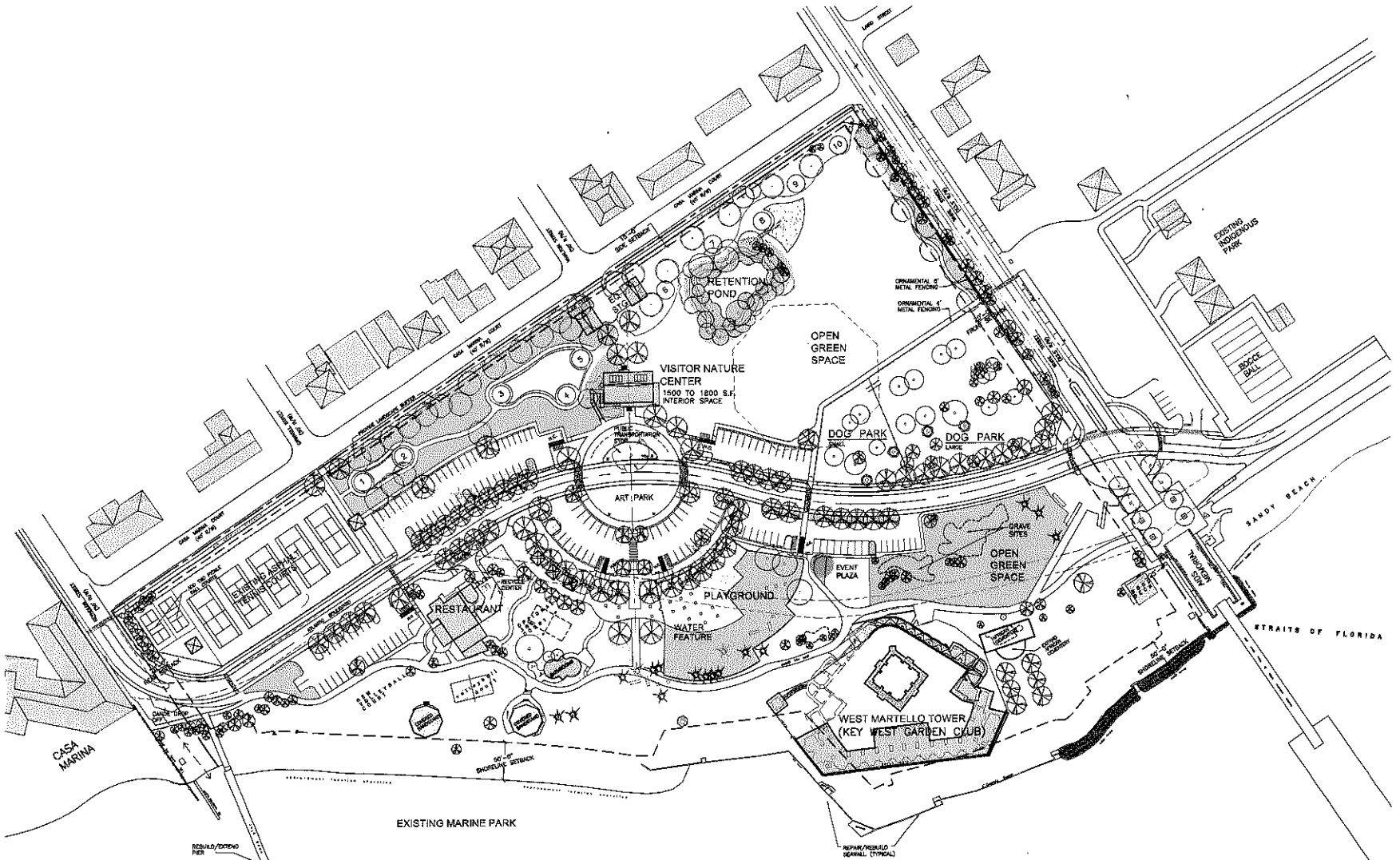

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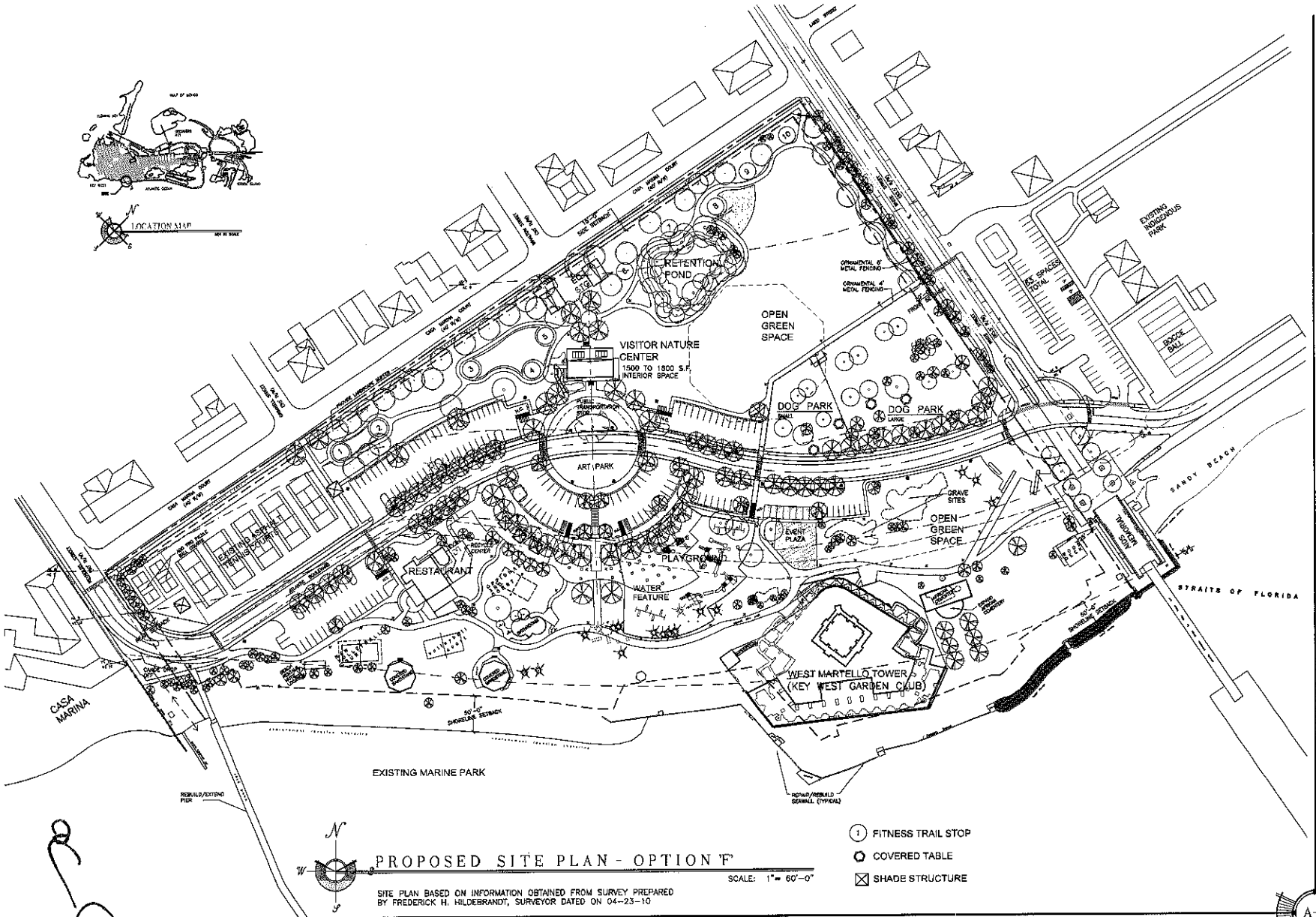

PROPOSED SITE PLAN - OPTION 'F'

SCALE: 1" = 60'-0"

SITE PLAN BASED ON INFORMATION OBTAINED FROM SURVEY PREPARED BY FREDERICK H. HILDEBRANDT, SURVEYOR DATED ON 04-23-10

CLARENCE HIGGS BEACH - MASTER PLAN

KEY WEST, FLORIDA

WILLIAM P. HORN ARCHITECT, P.A.

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TEL: (305) 294-1703
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LICENSE NO. AR 0009340

HIGGS BEACH
KEY WEST, FL.

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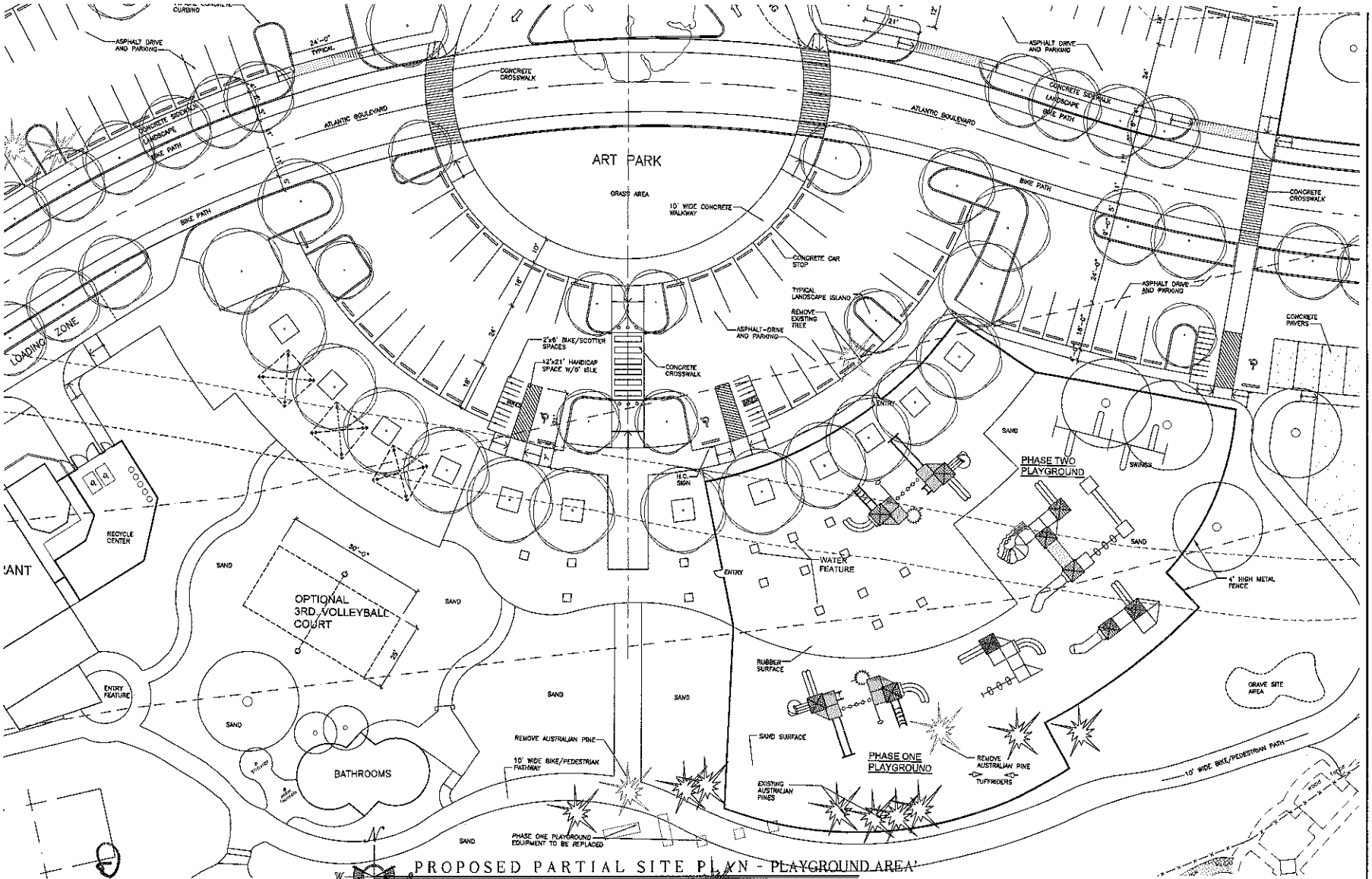

PROPOSED PARTIAL SITE PLAN - PLAYGROUND AREA

SCALE: 1/16"= 1'-0"

SITE PLAN BASED ON INFORMATION OBTAINED FROM SURVEY PREPARED BY FREDERICK H. HILDEBRANDT, SURVEYOR DATED ON 04-23-10

CLARENCE HIGGS BEACH - MASTER PLAN

KEY WEST, FLORIDA

WILLIAM P. HORN ARCHITECT, P.A.

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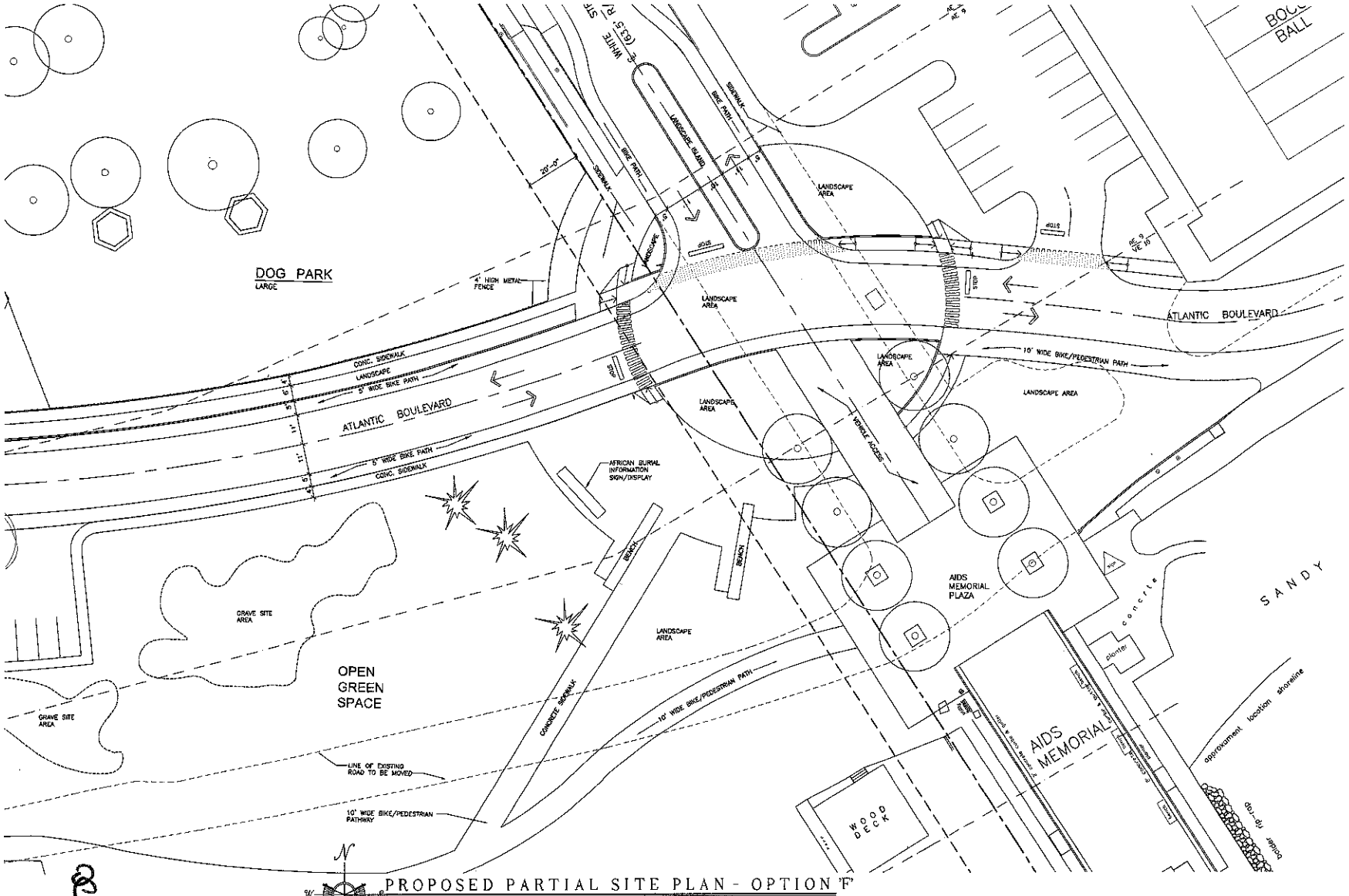

PROPOSED PARTIAL SITE PLAN - OPTION 'F'

SCALE: 1/16"= 1'-0"

SITE PLAN BASED ON INFORMATION OBTAINED FROM SURVEY PREPARED BY FREDERICK H. HILDEBRANDT, SURVEYOR DATED ON 04-23-10

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KEY WEST, FLORIDA

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ARCHITECT, P.A.

KEY WEST,
FLORIDA

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ISLAND SURVEYING INC
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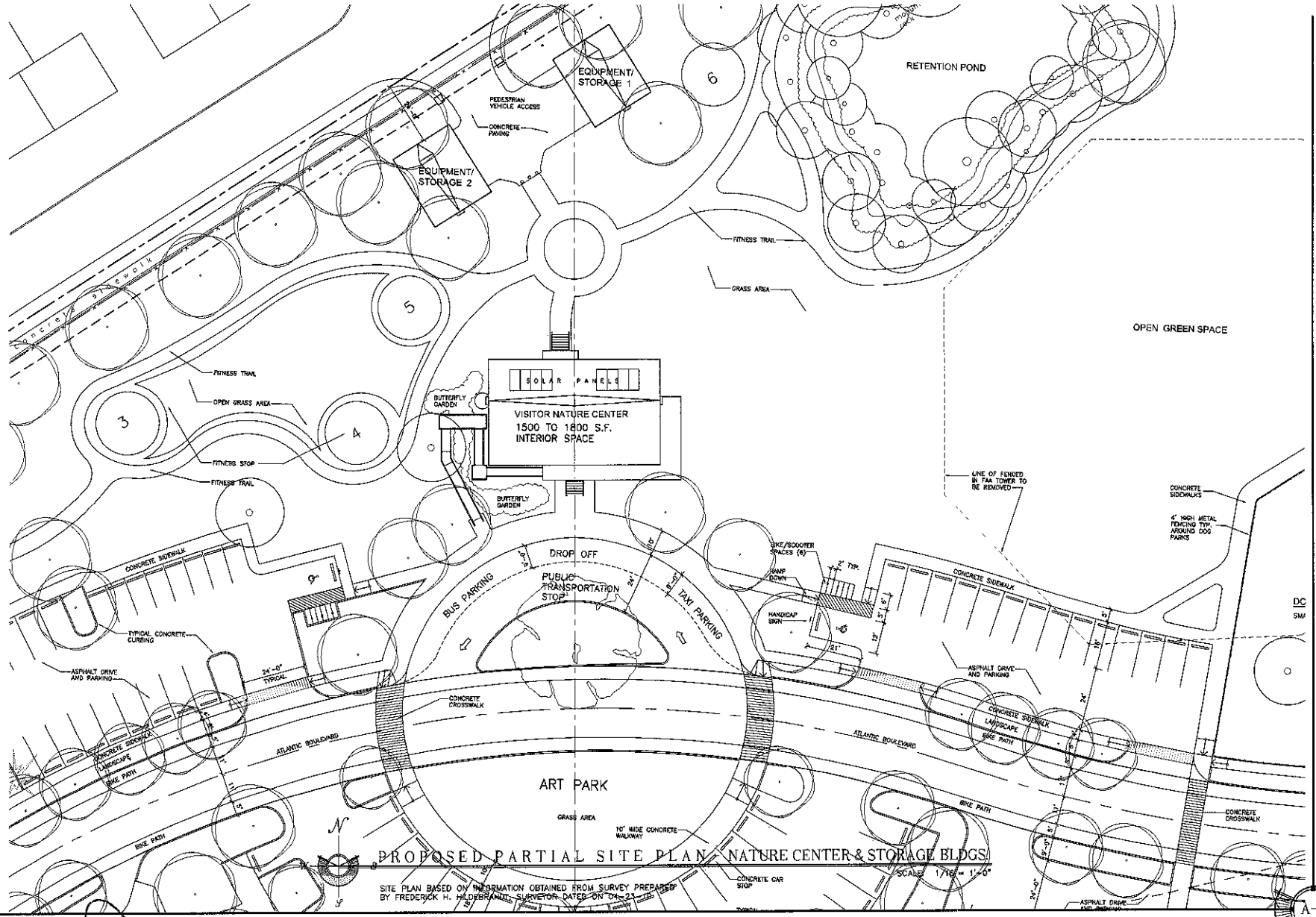
A-5



PROPOSED PARTIAL SITE PLAN - NATURE CENTER & STORAGE BLDGS.

SCALE: 1/16" = 1'-0"

SITE PLAN BASED ON INFORMATION OBTAINED FROM SURVEY PREPARED BY FREDERICK H. HILDEBRANDT, SURVEYOR, DATED ON 04-23-10

CLARENCE HIGGS BEACH - MASTER PLAN

KEY WEST, FLORIDA

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WILLIAM P. HORN ARCHITECT, P.A.

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INNOVATIVE ENGINEERING GROUP INC.
TRAFFIC TECH ENGINEERING
ISLAND SURVEYING INC
FLORES ENGINEERING

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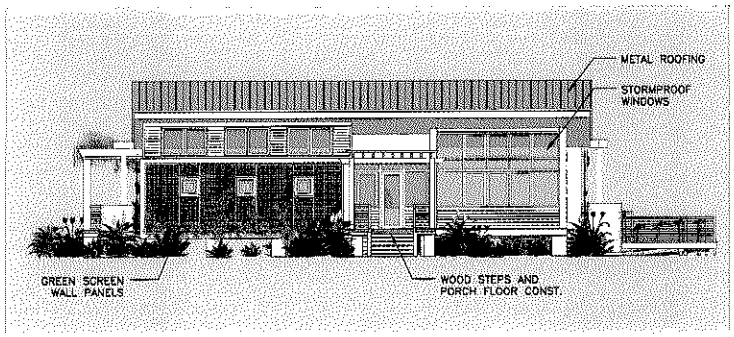
A-6

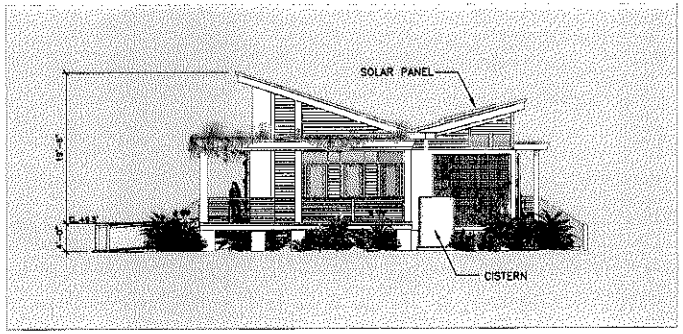
PERSPECTIVE 3 – NORTHEAST

PERSPECTIVE 4 – SOUTHEAST



NORTH ELEVATION - REAR

SCALE: 1/8"=1'-0"



EAST ELEVATION

SCALE: 1/8"=1'-0"

WILLIAM P. HORN
ARCHITECT, P.A.

KEY WEST
FLORIDA

HIGGS BEACH
KEY WEST, FL.

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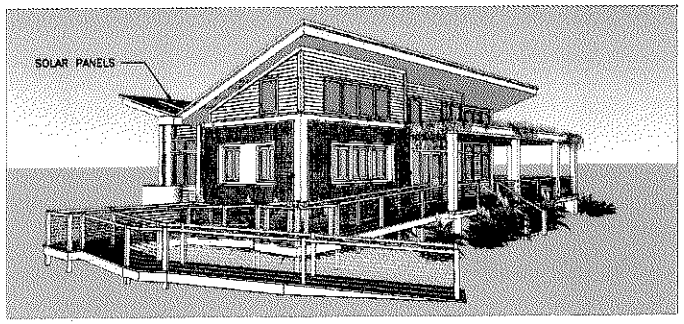
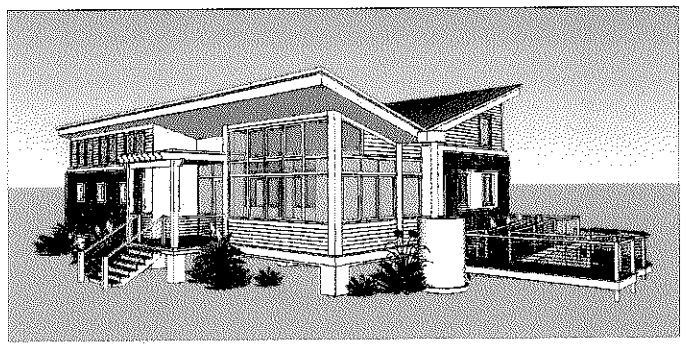
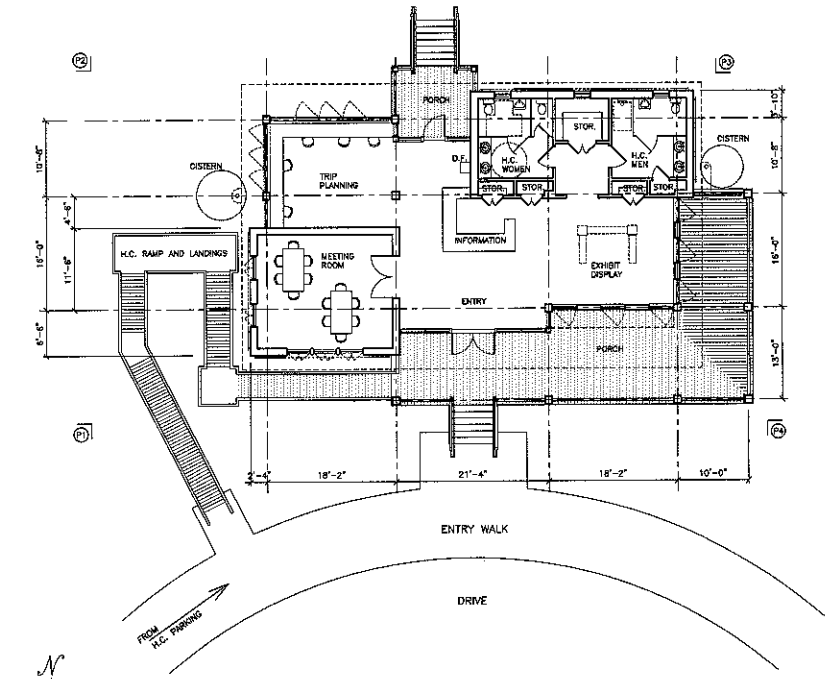


PERSPECTIVE 1 - SOUTHWEST

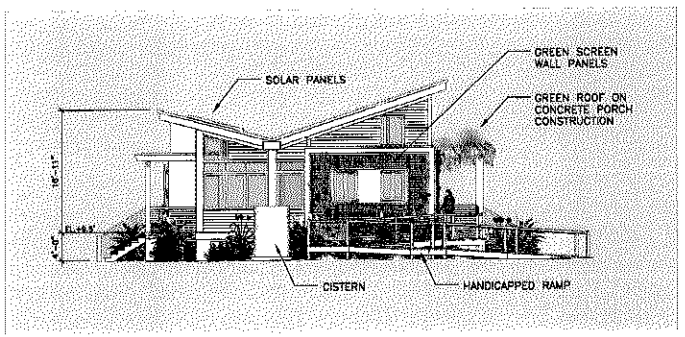


PERSPECTIVE 2 - NORTHWEST



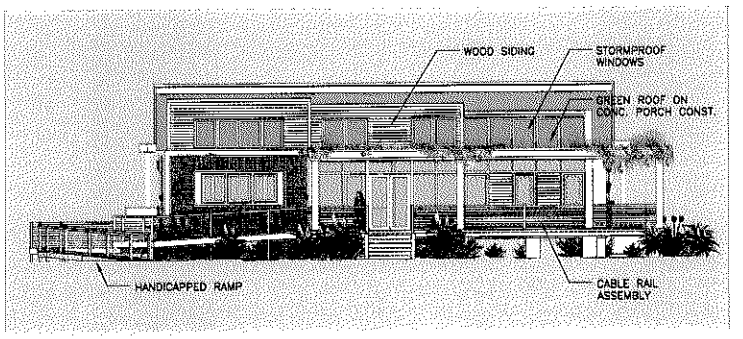
VISITOR - NATURE CENTER

SCALE: 1/8"=1'-0"



WEST ELEVATION

SCALE: 1/8"=1'-0"



SOUTH ELEVATION - FRONT

SCALE: 1/8"=1'-0"

WILLIAM P. HORN
ARCHITECT, P.A.

[illegible] DISTRICT ST.
KEY WEST
FLORIDA
33040

TEL. [illegible]
FAX [illegible]

LICENSE NO.
AA [illegible]

HIGGS BEACH
KEY WEST, FL.

LANDWISE

MITCHELL PLANNING & DERIVE

INNOVATIVE ENGINEERING GROUP INC.

TRAFFIC TECH ENGINEERING

ISLAND SURVEYING INC.

[illegible] ENGINEERING & SURVEYING, LLC

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06-30-11 DRC

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CLARENCE HIGGS BEACH - MASTER PLAN

KEY WEST, FLORIDA

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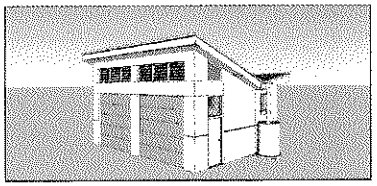
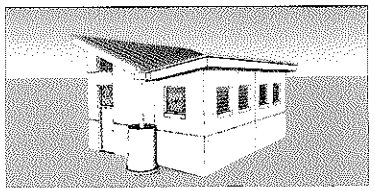
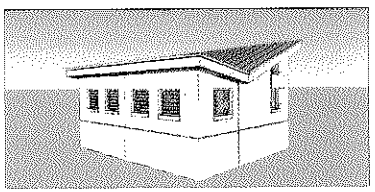
KW Planning Dpt



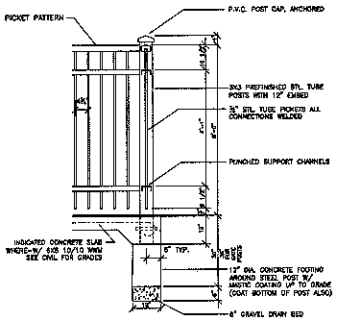
2 A-8 PERSPECTIVE – SOUTH



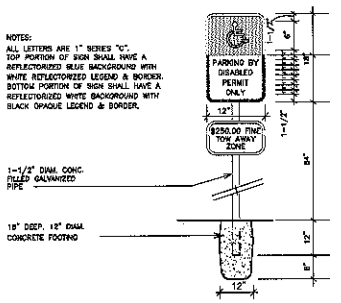
3 A-8 PERSPECTIVE – EAST



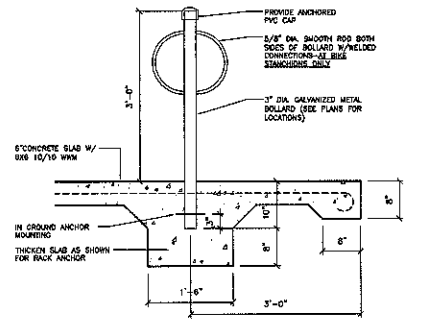
4 A-8 PERSPECTIVE – NORTH



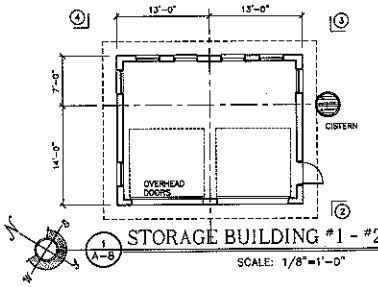
9 A-8 FENCE DETAIL
SCALE: 1/2"=1'-0"



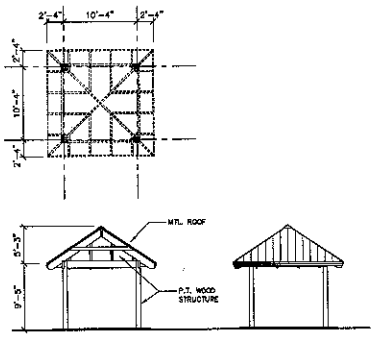
10 A-8 H.C. PARKING SIGN
SCALE: 1"=1'-0"



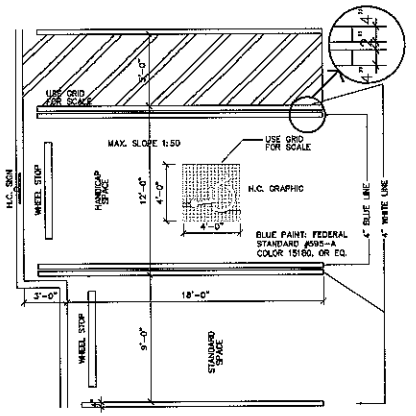
11 A-8 BIKE RACK DETAIL AND BOLLARD SIM.
SCALE: 1"=1'-0"



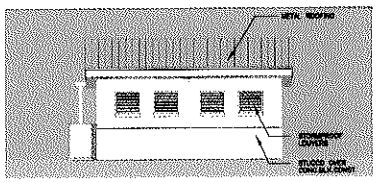
1 A-8 STORAGE BUILDING #1 - #2 SIMILAR
SCALE: 1/8"=1'-0"



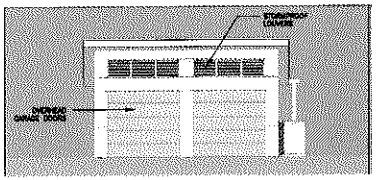
12 A-8 SHADE PAVILION
SCALE: 1/4"=1'-0"



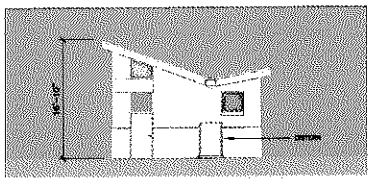
13 A-8 H.C. PARKING DETAIL
SCALE: 1/4"=1'-0"



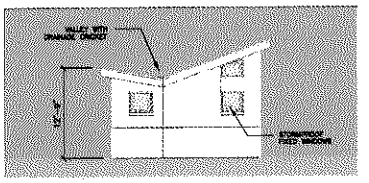
5 A-8 REAR
SCALE: 1/8"=1'-0"



6 A-8 FRONT
SCALE: 1/8"=1'-0"



7 A-8 RIGHT SIDE
SCALE: 1/8"=1'-0"



8 A-8 LEFT SIDE
SCALE: 1/8"=1'-0"

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CLARENCE HIGGS BEACH - MASTER PLAN

KEY WEST, FLORIDA

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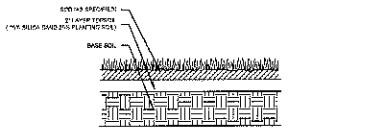
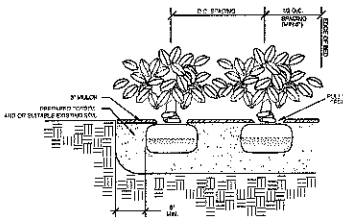
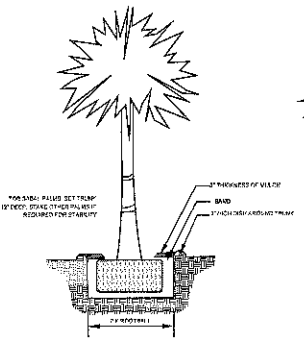


SODDING DETAIL

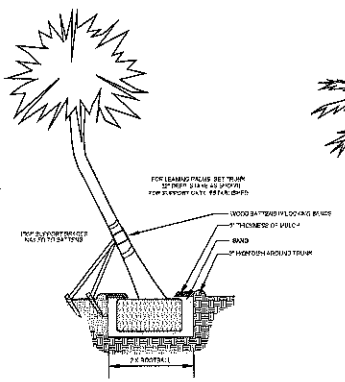


SHRUB PLANTING DETAIL

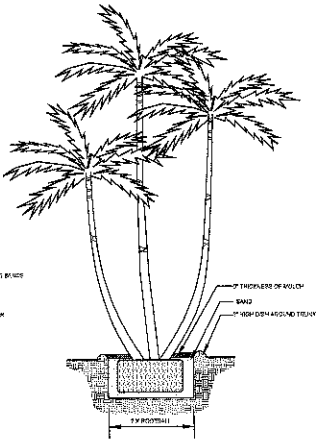
ALL SHRUBS ARE TO BE POSITIONED VERTICALLY REGARDLESS OF THE SLOPE OF THE GROUND IN WHICH THEY ARE PLANTED. WATER RINGS ARE TO BE CONSTRUCTED AT RIGHT ANGLES TO THE TREE OR SHRUB OR IN A MANNER IN WHICH THEY WILL MOST EFFECTIVELY SERVE THE PURPOSE OF RETAINING WATER AT THE BASE OF THE PLANT.



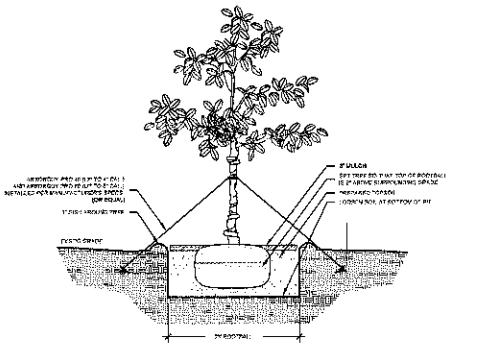
PALM PLANTING DETAIL



LEANING PALM PLANTING DETAIL



MULTI-TRUNK PALM PLANTING DETAIL



TREE PLANTING DETAIL

ALL TREES ARE TO BE POSITIONED VERTICALLY REGARDLESS OF THE SLOPE OF THE GROUND IN WHICH THEY ARE PLANTED. WATER RINGS ARE TO BE CONSTRUCTED AT RIGHT ANGLES TO THE TREE OR SHRUB OR IN A MANNER IN WHICH THEY WILL MOST EFFECTIVELY SERVE THE PURPOSE OF RETAINING WATER AT THE BASE OF THE PLANT.

THE ROOTBALL OF THE TREE SHOULD BE POSITIONED IN THE HOLE SO THAT THE FINISHED GRADE OF THE BACKFILL SOIL AND LANDSCAPE SOIL IS 2" LOWER THAN THE TOP OF THE ROOTBALL. MULCH SHOULD COVER THE EDGE OF THE ROOTBALL, DO NOT MULCH ON TOP OF ROOTBALL.

IRRIGATION NOTES

100% IRRIGATION COVERAGE SHALL BE PROVIDED TO ALL PROPOSED PLANTING AREAS.

SAID SYSTEM SHALL BE DESIGN / BUILD AND DEVISED TO MAXIMIZE WATER CONSERVATION AND SHALL CONFORM TO SUBDIVISION II: SECTION 74 - (295 TO 300) PERMANENT WATER CONSERVATION MEASURES OF THE CITY OF KEY WEST CODE.

CONTRACTOR TO PROVIDE CITY WITH AS-BUILT DRAWINGS OF INSTALLED SYSTEM INCLUDING: VALVE LOCATIONS, HEAD LOCATIONS, PIPE LOCATIONS, CONTROLLER LOCATION, AND BFP LOCATION, ETC...

GENERAL NOTES:

CONTINGENT UPON THE TREE COMMISSION'S DETERMINATION OF REPLACEMENT VALUES FOR VEGETATION REMOVED, THE FINAL LANDSCAPE PLAN SHALL ACCURATELY REFLECT REPLACEMENT QUANTITIES BOTH GRAPHICALLY AND IN A TABLE FORMAT.

AT LEAST 70% OF THE SPECIFIED VEGETATION WILL BE NATIVE MATERIAL AS STIPULATED IN THE MINIMUM NATIVE PLANT REQUIREMENT.

THE PROVIDED PLANS ARE CONCEPTUAL ONLY. FINAL LANDSCAPE PLANS TO BE SUBMITTED FOR REVIEW PRIOR TO INSTALLATION.

100% IRRIGATION COVERAGE SHALL BE PROVIDED TO ALL PROPOSED PLANTING AREAS. SAID SYSTEM SHALL BE DESIGN TO MAXIMIZE WATER CONSERVATION.

SUGGEST PLANT PALETTE (Quantities shall be provided with Final Landscape Plan)

QTY.	COMMON NAME	BOTANICAL NAME	SIZE	NOTE	NATIVE
PALMS					
CANOPY AND UNDERSTORY					
	ROYAL PALM	Roystonia elata	8' to 12' grey wood, Fat Trunks	FL #1	NATIVE
	SABAL PALM	Sabal palmetto	8'-15' clr. trnk.	FL #1	NATIVE
	COCONUT PALM (Relocated Palms)	Cocos nucifera	8'-24' o.h.	FL #1	
	THATCH PALM	Thrinax radiata	8' o.h.	FL #1	NATIVE
	KEY THATCH PALM	Thrinax morrisii	8' o.h.	FL #1	NATIVE
	SILVER PALM	Coccothrinax argentata	4'-8' o.h.	FL #1	NATIVE
TREES					
CANOPY					
	MAHOGANY	Swietenia mahogani	3" cal., 14-16' o.h., 10-12' sprd.	FL #1	NATIVE
	GREEN BUTTONWOOD	Conocarpus erectus	3" cal., 14-16' o.h., 10-12' sprd.	FL #1	NATIVE
	COFFEE COLUBRINA	Colubrina propinqcana	10-14' o.h.	FL #1	NATIVE
	SATIN LEAF	Chrysophyllum oliviformis	3" cal., 14-16' o.h., 10-12' sprd.	FL #1	NATIVE
	PIDGEON PLUM	Coccoloba diversifolia	3" cal., 14-16' o.h., 10-12' sprd.	FL #1	NATIVE
	GUMBO LIMBO	Bursera simaruba	3" cal., 14-16' o.h., 10-12' sprd.	FL #1	NATIVE
UNDERSTORY					
	LIGNUM VITAE	Guaiacum sanctum	6'-8' o.h.	FL #1	NATIVE
	SILVER BUTTONWOOD	Sabal palmetto	10'-12' o.h.	FL #1	NATIVE
	BLACK IRONWOOD	Krugiodendrum ferreum	8'-10' o.h.	FL #1	NATIVE
	CINNECORD	Acacia choriophylla	8'-12' o.h.	FL #1	NATIVE
	SIMPSON STOPPER	Myrcianthes frangrans	6'-8' o.h.	FL #1	NATIVE
	GEIGER TREE	Cordia sebestena	10' o.h., B&B	FL #1	NATIVE
	FIDDLEWOOD	Citharexylum fruticosum	15 gal., 6-8' o.h.	FL #1	NATIVE
	SUGAR APPLE	Annona squamosa	25 gal., 8-10' o.h.	FL #1	NATIVE
	SMALL-LEAF CLUSIA	Clusea guttifera	12'-14' o.h.	FL #1	NATIVE

QTY.	COMMON NAME	BOTANICAL NAME	SIZE	NOTE	NATIVE
SHRUBS					
	JAMAICAN CAPER	Capparis cynophallophora	7 gal., 36"-40" hgt./sprd.	FL #1	NATIVE
	SPANISH STOPPER	Eugenia foetida	7 gal., 36"-40" hgt./sprd.	FL #1	NATIVE
	RED STOPPER	Eugenia rhombea	7 gal., 36"-40" hgt./sprd.	FL #1	NATIVE
	WILD COFFEE	Psychotria nervosa	3 gal., 24-36" o.h.	FL #1	NATIVE
	DWARF WILD COFFEE	Psychotria ligustrifolia	3 gal.,	FL #1	NATIVE
	SILVER PALMETTO	Serenoa repens 'Cinerea'	3 gal., full	FL #1	NATIVE
	COCOPLUM	Chrysobalanus Icaco 'Green'	7 gal.	FL #1	NATIVE
	FAKAHATCHEE GRASS	Tripsacum dactyloides	3 gal., full	FL #1	NATIVE
	SAND CORDGRASS	Spartina bakeri	3 gal., full	FL #1	NATIVE
	MUHLEY GRASS	Muhlenbergia capillaris	1 gal., full	FL #1	NATIVE
	HORIZONTAL COCOPLUM	Chrysobalanus Icaco 'Horizontal'	3 gal., full	FL #1	NATIVE
	LOCUSTBERRY	Byrsonima lucida	3 gal., full	FL #1	NATIVE
GROUNDCOVER					
	DWARF FIREBUSH	Hamelia patens 'Compacta'	3 gal., full	FL #1	NATIVE
	GOONTIE	Zamia floridana	1 gal., full	FL #1	NATIVE
	DWARF LANTANA	Lantna camara 'Dwarf'	1 gal., full	FL #1	NATIVE
	ARGENTINE BAHIA SOD				

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DATE
07-1-10

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CLARENCE HIGGS BEACH - PLANTING DETAILS & SUGGESTED PLANT PALETTE

KEY WEST, FLORIDA

RECEIVED
August 30, 2011
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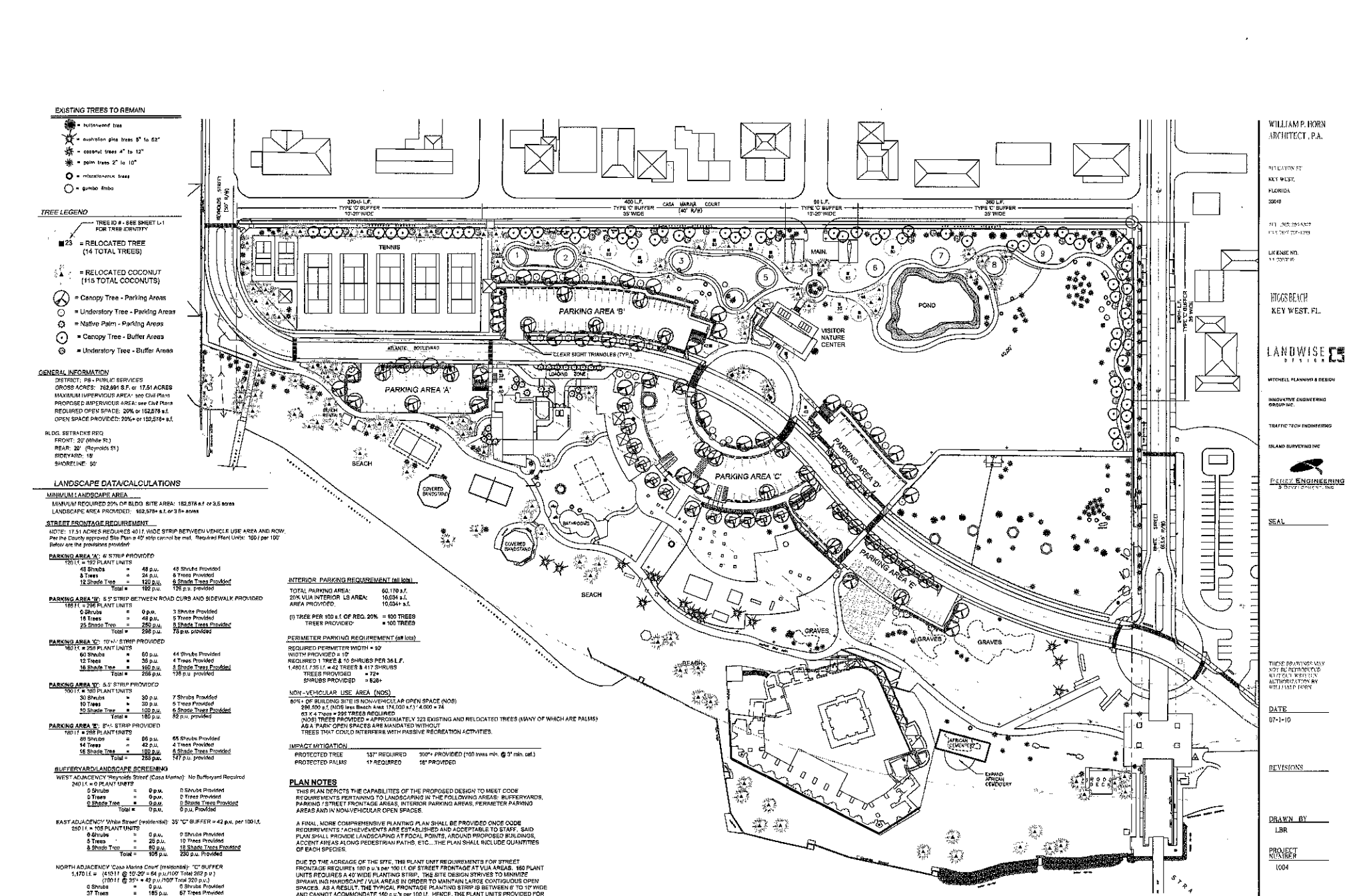
EXISTING TREES TO REMAIN
= buttonwood tree
= australian pine trees 8" to 52"
= coconut trees 4" to 12"
= palm trees 2" to 10"
= miscellaneous trees
= gumbo limbo
TREE LEGEND
TREE ID # - SEE SHEET L-1 FOR TREE IDENTITY
23 = RELOCATED TREE (14 TOTAL TREES)
= RELOCATED COCONUT (115 TOTAL COCONUTS)
= Canopy Tree - Parking Areas
= Understory Tree - Parking Areas
= Native Palm - Parking Areas
= Canopy Tree - Buffer Areas
= Understory Tree - Buffer Areas
GENERAL INFORMATION
DISTRICT: PS - PUBLIC SERVICES
GROSS ACRES: 762,691 S.F. or 17.51 ACRES
MAXIMUM IMPERVIOUS AREA: see Civil Plans
PROPOSED IMPERVIOUS AREA: see Civil Plans
REQUIRED OPEN SPACE: 20% or 152,578 s.f.
OPEN SPACE PROVIDED: 20%+ or 152,578+ s.f.
BLDG. SETBACKS REQ.
FRONT: 20' (White St.)
REAR: 20' (Reynolds St.)
SIDEYARD: 15'
SHORELINE: 50'
LANDSCAPE DATA/CALCULATIONS
MINIMUM LANDSCAPE AREA
MINIMUM REQUIRED 20% OF BLDG. SITE AREA: 152,578 s.f. or 3.5 acres
LANDSCAPE AREA PROVIDED: 152,578+ s.f. or 3.5+ acres
STREET FRONTAGE REQUIREMENT
NOTE: 17.51 ACRES REQUIRES 40 LF WIDE STRIP BETWEEN VEHICLE USE AREA AND ROW.
Per the County approved Site Plan a 40' strip cannot be met. Required Plant Units: 160 / per 100'
Below are the provisions provided:
PARKING AREA 'A': 6' STRIP PROVIDED
120 LF = 192 PLANT UNITS
48 Shrubs = 48 p.u. 48 Shrubs Provided
8 Trees = 24 p.u. 8 Trees Provided
12 Shade Tree = 120 p.u. 6 Shade Trees Provided
Total = 192 p.u. 126 p.u. provided
PARKING AREA 'B': 5.5' STRIP BETWEEN ROAD CURB AND SIDEWALK PROVIDED
188 LF = 298 PLANT UNITS
0 Shrubs = 0 p.u. 3 Shrubs Provided
16 Trees = 48 p.u. 5 Trees Provided
25 Shade Tree = 250 p.u. 8 Shade Trees Provided
Total = 298 p.u. 79 p.u. provided
PARKING AREA 'C': 10'+/- STRIP PROVIDED
160 LF = 256 PLANT UNITS
60 Shrubs = 60 p.u. 44 Shrubs Provided
12 Trees = 36 p.u. 4 Trees Provided
16 Shade Tree = 160 p.u. 8 Shade Trees Provided
Total = 256 p.u. 136 p.u. provided
PARKING AREA 'D': 5.5' STRIP PROVIDED
190 LF = 190 PLANT UNITS
30 Shrubs = 30 p.u. 7 Shrubs Provided
10 Trees = 30 p.u. 5 Trees Provided
10 Shade Tree = 100 p.u. 6 Shade Trees Provided
Total = 190 p.u. 82 p.u. provided
PARKING AREA 'E': 5'+/- STRIP PROVIDED
160 LF = 256 PLANT UNITS
66 Shrubs = 66 p.u. 65 Shrubs Provided
14 Trees = 42 p.u. 4 Trees Provided
16 Shade Tree = 160 p.u. 8 Shade Trees Provided
Total = 268 p.u. 147 p.u. provided
BUFFERYARD/LANDSCAPE SCREENING
WEST ADJACENCY 'Reynolds Street' (Casa Marina): No Bufferyard Required
240 LF = 0 PLANT UNITS
0 Shrubs = 0 p.u. 0 Shrubs Provided
0 Trees = 0 p.u. 0 Trees Provided
0 Shade Tree = 0 p.u. 0 Shade Trees Provided
Total = 0 p.u. 0 p.u. Provided
EAST ADJACENCY 'White Street' (residential): 35' "C" BUFFER = 42 p.u. per 100 LF.
250 LF = 105 PLANT UNITS
0 Shrubs = 0 p.u. 0 Shrubs Provided
5 Trees = 25 p.u. 10 Trees Provided
5 Shade Tree = 80 p.u. 10 Shade Trees Provided
Total = 105 p.u. 230 p.u. Provided
NORTH ADJACENCY 'Casa Marina Court (residential): "C" BUFFER
1,170 LF = (410 LF @ 10'-20' = 64 p.u./100' Total 262 p.u.)
(760 LF @ 35' = 49 p.u./100' Total 320 p.u.)
0 Shrubs = 0 p.u. 0 Shrubs Provided
37 Trees = 185 p.u. 67 Trees Provided
40 Shade Tree = 400 p.u. 46 Shade Trees Provided
Total = 585 p.u. 745 p.u. Provided
PLANT UNIT TOTALS:
TOTAL PLANT UNITS REQUIRED: 1,864
TOTAL PLANT UNITS PROVIDED: 1,541
INTERIOR PARKING REQUIREMENT (all lots)
TOTAL PARKING AREA: 60,170 s.f.
20% VUA INTERIOR LS AREA: 10,034 s.f.
AREA PROVIDED: 10,034+ s.f.
(1) TREE PER 100 s.f. OF REQ. 20% = 100 TREES
TREES PROVIDED = 100 TREES
PERIMETER PARKING REQUIREMENT (all lots)
REQUIRED PERIMETER WIDTH = 10'
WIDTH PROVIDED = 10'
REQUIRED 1 TREE & 10 SHRUBS PER 36 L.F.
1,460 l.f. / 35 l.f. = 42 TREES & 417 SHRUBS
TREES PROVIDED = 72+
SHRUBS PROVIDED = 626+
NON-VEHICULAR USE AREA (NOS)
60%+ OF BUILDING SITE IS NON-VEHICULAR OPEN SPACE (NOS)
296,000 s.f. (NOS less Beach Area 174,000 s.f.) / 4,000 = 74
63 X 4 Trees = 295 TREES REQUIRED
(NOS) TREES PROVIDED = APPROXIMATELY 323 EXISTING AND RELOCATED TREES (MANY OF WHICH ARE PALMS)
AS A PARK OPEN SPACES ARE MANDATED WITHOUT TREES THAT COULD INTERFERE WITH PASSIVE RECREATION ACTIVITIES.
IMPACT MITIGATION
PROTECTED TREE 157' REQUIRED 300'+ PROVIDED (100 trees min. @ 3" min. cal.)
PROTECTED PALMS 17 REQUIRED 18' PROVIDED
PLAN NOTES
THIS PLAN DEPICTS THE CAPABILITIES OF THE PROPOSED DESIGN TO MEET CODE REQUIREMENTS PERTAINING TO LANDSCAPING IN THE FOLLOWING AREAS: BUFFERYARDS, PARKING / STREET FRONTAGE AREAS, INTERIOR PARKING AREAS, PERIMETER PARKING AREAS AND IN NON-VEHICULAR OPEN SPACES.
A FINAL, MORE COMPREHENSIVE PLANTING PLAN SHALL BE PROVIDED ONCE CODE REQUIREMENTS / ACHIEVEMENTS ARE ESTABLISHED AND ACCEPTABLE TO STAFF. SAID PLAN SHALL PROVIDE LANDSCAPING AT FOCAL POINTS, AROUND PROPOSED BUILDINGS, ACCENT AREAS ALONG PEDESTRIAN PATHS, ETC....THE PLAN SHALL INCLUDE QUANTITIES OF EACH SPECIES.
DUE TO THE ACREAGE OF THE SITE, THE PLANT UNIT REQUIREMENTS FOR STREET FRONTAGE REQUIRES 160 p.u.'s per 100 LF OF STREET FRONTAGE AT VUA AREAS. 160 PLANT UNITS REQUIRES A 40' WIDE PLANTING STRIP. THE SITE DESIGN STRIVES TO MINIMIZE SPRAWLING HARDSCAPE / VUA AREAS IN ORDER TO MAINTAIN LARGE CONTIGUOUS OPEN SPACES. AS A RESULT, THE TYPICAL FRONTAGE PLANTING STRIP IS BETWEEN 8' TO 10' WIDE AND CANNOT ACCOMMODATE 160 s.u.'s per 100 LF. HENCE, THE PLANT UNITS PROVIDED FOR THE 'FRONTAGE' CATEGORY ARE LESS THAN REQUIRED BY THE CODE.
REYNOLDS STREET (50' R/W)
320+/- L.F. TYPE 'C' BUFFER 10'-20' WIDE
400 L.F. TYPE 'C' BUFFER 35' WIDE
CASA MARINA COURT (40' R/W)
90 L.F. TYPE 'C' BUFFER 15'-20' WIDE
360 L.F. TYPE 'C' BUFFER 35' WIDE
TENNIS
MAIN
PARKING AREA 'B'
POND
VISITOR NATURE CENTER
ATLANTIC BOULEVARD
CLEAR SIGHT TRIANGLES (TYP.)
LOADING ZONE
PARKING AREA 'A'
BEACH RENTALS
BEACH
COVERED BANDSTAND
BATHHOUSE
PARKING AREA 'C'
PARKING AREA 'D'
PARKING AREA 'E'
GRAVES
AFRICAN CEMETERY
EXPAND AFRICAN CEMETERY
WHITE STREET (50' R/W)
DRIVE L.A. TYPE 'C' BUFFER 35' WIDE
STRA
CLARENCE HIGGS BEACH - CODE PLANTING & TREE RELOCATIONS
KEY WEST, FLORIDA
RECEIVED
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SCALE: 1" = 60'-0"
0 30 60 100
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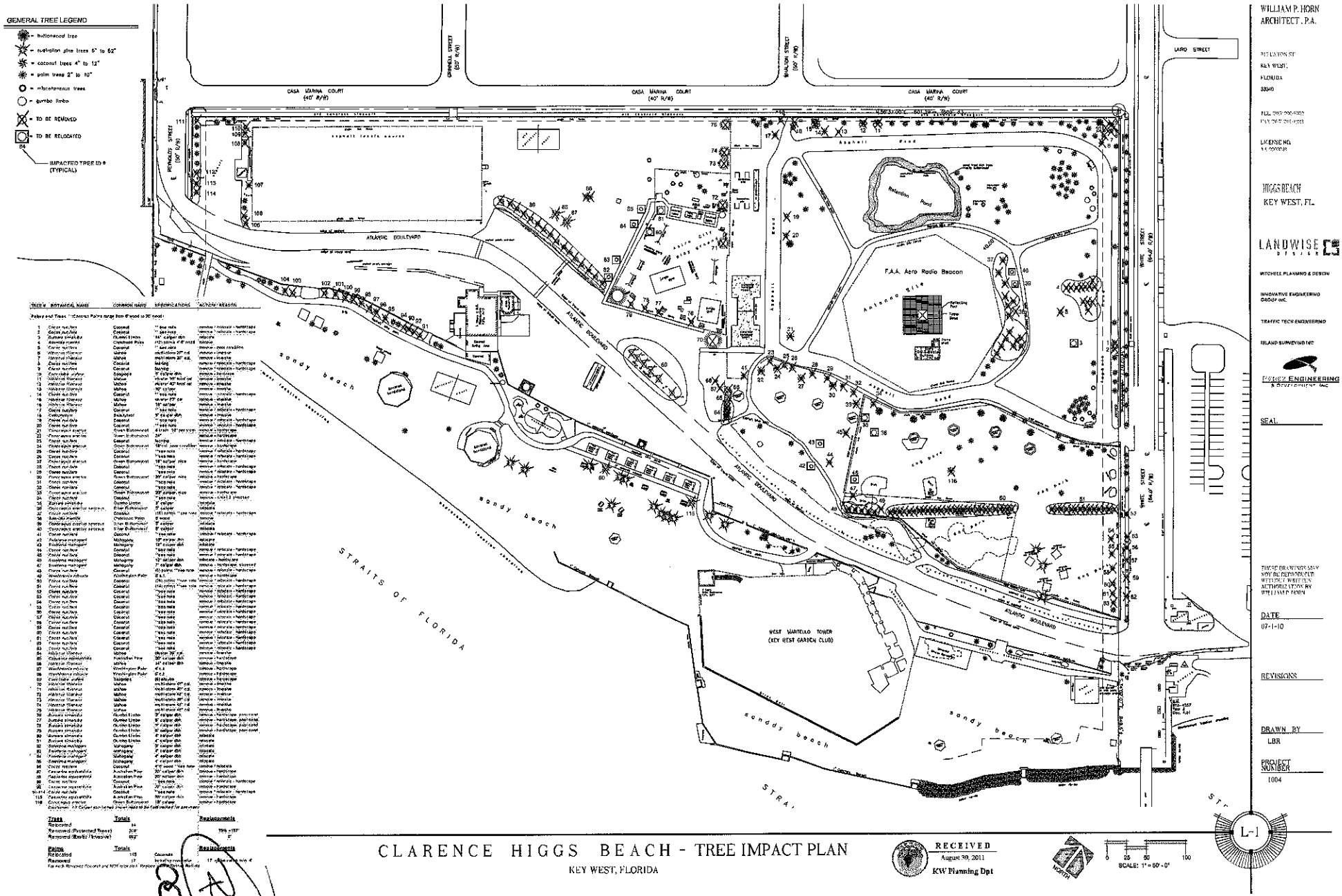

TREE #	BOTANICAL NAME	COMMON NAME	SPECIFICATIONS	ACTION / REASON
Palms and Trees: * Indicates Palms range from 6' wood to 30' wood.				
1	Cocos nucifera	Coconut	11' tree note	remove / relocate - handscape
2	Cocos nucifera	Coconut	11' tree note	remove / relocate - handscape
3	Guiana simaruba	Gumbo Limbo	14" caliper dbh	relocate
4	Adonidia merrillii	Christmas Palm	6' c.t.	remove
5	Cocos nucifera	Coconut	11' tree note	remove - save nearby
6	Hibiscus tiliaceus	Mahoe	multi-stems 20" ea.	remove - invasive
7	Hibiscus tiliaceus	Mahoe	multi-stems 20" ea.	remove - invasive
8	Cocos nucifera	Coconut	Bahama	remove / relocate - handscape
9	Cocos nucifera	Coconut	Bahama	remove / relocate - handscape
10	Carpentaria acuminata	Sentry Palm	6' trunk dbh	remove - handscape
11	Hibiscus tiliaceus	Mahoe	double 18" total cal.	remove - invasive
12	Hibiscus tiliaceus	Mahoe	double 20" total cal.	remove - invasive
13	Hibiscus tiliaceus	Mahoe	30" caliper	remove - invasive
14	Cocos nucifera	Coconut	11' tree note	remove / relocate - handscape
15	Hibiscus tiliaceus	Mahoe	double 20" cal.	remove - invasive
16	Hibiscus tiliaceus	Mahoe	18" caliper	remove - invasive
17	Cocos nucifera	Coconut	11' tree note	remove / relocate - handscape
18	Delonix regia	Poinciana	8" caliper dbh	remove - invasive
19	Cocos nucifera	Coconut	11' tree note	remove / relocate - handscape
20	Cocos nucifera	Coconut	11' tree note	remove / relocate - handscape
21	Roystonea regia	Royal Bahamanensis	4 trunk 18" tree spec.	remove - handscape
22	Phoenix reclinata	Senegal Date	24"	remove - handscape
23	Cocos nucifera	Coconut	burning	remove / relocate - handscape
24	Phoenix dactylifera	Date Bahamanensis	18' c.t. palm condition	remove - landscape
25	Cocos nucifera	Coconut	11' tree note	remove / relocate - handscape
26	Cocos nucifera	Coconut	11' tree note	remove / relocate - handscape
27	Phoenix dactylifera	Royal Bahamanensis	18" surface root	remove - invasive
28	Cocos nucifera	Coconut	11' tree note	remove / relocate - handscape
29	Cocos nucifera	Coconut	11' tree note	remove / relocate - handscape
30	Phoenix reclinata	Senegal Bahamanensis	24" surface note	remove - invasive
31	Cocos nucifera	Coconut	11' tree note	remove / relocate - handscape
32	Cocos nucifera	Coconut	11' tree note	remove / relocate - handscape
33	Phoenix reclinata	Senegal Bahamanensis	24" surface note	remove - invasive
34	Cocos nucifera	Coconut	11' tree note	remove / relocate - handscape
35	Bursera simaruba	Gumbo Limbo	8" caliper	relocate
36	Phoenix reclinata	Senegal Bahamanensis	8" caliper	relocate
37	Cocos nucifera	Coconut	(16) palms, 11' tree note	remove / relocate - handscape
38	Adonidia merrillii	Christmas Palm	6' wood	remove
39	Coccothrinax argentea	Silver Bahamanensis	6' caliper	relocate
40	Coccothrinax argentea	Silver Bahamanensis	6' caliper	relocate
41	Cocos nucifera	Coconut	11' tree note	relocate / relocate - handscape
42	Roystonea regia	Royal Bahamanensis	18" surface note	remove - handscape
43	Swietenia mahogani	Mahogany	10" caliper dbh	relocate
44	Swietenia mahogani	Mahogany	12" caliper dbh	relocate
45	Cocos nucifera	Coconut	11' tree note	remove / relocate - handscape
46	Cocos nucifera	Coconut	11' tree note	remove / relocate - handscape
47	Swietenia mahogani	Mahogany	12" caliper dbh	remove - invasive tree
48	Swietenia mahogani	Mahogany	7" caliper dbh	remove - handscape, topwood
49	Cocos nucifera	Coconut	(5) palms, 11' tree note	remove / relocate - handscape
50	Veitchia merrillii	Christmas Palm	6' c.t.	remove - handscape
51	Cocos nucifera	Coconut	(16) palms, 11' tree note	remove / relocate - handscape
52	Cocos nucifera	Coconut	(14) palms, 11' tree note	remove / relocate - handscape
53	Cocos nucifera	Coconut	11' tree note	remove / relocate - handscape
54	Cocos nucifera	Coconut	11' tree note	remove / relocate - handscape
55	Cocos nucifera	Coconut	11' tree note	remove / relocate - handscape
56	Cocos nucifera	Coconut	11' tree note	remove / relocate - handscape
57	Cocos nucifera	Coconut	11' tree note	remove / relocate - handscape
58	Cocos nucifera	Coconut	11' tree note	remove / relocate - handscape
59	Cocos nucifera	Coconut	11' tree note	remove / relocate - handscape
60	Cocos nucifera	Coconut	11' tree note	remove / relocate - handscape
61	Cocos nucifera	Coconut	11' tree note	remove / relocate - handscape
62	Cocos nucifera	Coconut	11' tree note	remove / relocate - handscape
63	Cocos nucifera	Coconut	11' tree note	remove / relocate - handscape
64	Hibiscus tiliaceus	Mahoe	double 20" cal.	remove - invasive
65	Casuarina equisetifolia	Australian Pine	20" caliper dbh	remove - hardscape
66	Hibiscus tiliaceus	Mahoe	24" caliper dbh	remove - invasive
67	Veitchia merrillii	Christmas Palm	6' c.t.	remove - handscape
68	Veitchia merrillii	Christmas Palm	6' c.t.	remove - handscape
69	Coccothrinax argentea	Silver Palm	6' c.t.	remove - handscape
70	Hibiscus tiliaceus	Mahoe	multi-stems 40" cal.	remove - invasive
71	Hibiscus tiliaceus	Mahoe	multi-stems 40" cal.	remove - invasive
72	Hibiscus tiliaceus	Mahoe	multi-stems 40" cal.	remove - invasive
73	Hibiscus tiliaceus	Mahoe	multi-stems 40" cal.	remove - invasive
74	Hibiscus tiliaceus	Mahoe	multi-stems 40" cal.	remove - invasive
75	Hibiscus tiliaceus	Mahoe	multi-stems 40" cal.	remove - invasive
76	Bursera simaruba	Gumbo Limbo	18" caliper dbh	remove - hardscape, poor root
77	Bursera simaruba	Gumbo Limbo	18" caliper dbh	remove - hardscape, poor root
78	Bursera simaruba	Gumbo Limbo	18" caliper dbh	remove - hardscape, poor root
79	Bursera simaruba	Gumbo Limbo	18" caliper dbh	remove - hardscape, poor root
80	Bursera simaruba	Gumbo Limbo	4" caliper dbh	relocate
81	Bursera simaruba	Gumbo Limbo	4" caliper dbh	relocate
82	Swietenia mahogani	Mahogany	4" caliper dbh	relocate
83	Swietenia mahogani	Mahogany	4" caliper dbh	relocate
84	Swietenia mahogani	Mahogany	4" caliper dbh	relocate
85	Swietenia mahogani	Mahogany	4" caliper dbh	relocate
86	Cocos nucifera	Coconut	11' tree note	remove / relocate
87	Casuarina equisetifolia	Australian Pine	20" caliper dbh	remove - hardscape
88	Casuarina equisetifolia	Australian Pine	20" caliper dbh	remove - hardscape
89	Cocos nucifera	Coconut	11' tree note	remove / relocate - handscape
90	Cocos nucifera	Coconut	11' tree note	remove / relocate - handscape
91-114	Cocos nucifera	Coconut	11' tree note	remove / relocate - handscape
115	Casuarina equisetifolia	Australian Pine	60' caliper dbh	remove - hardscape
116	Cocos nucifera	Green Bahamanensis	28' caliper	remove - hardscape

Palm trees 1-5' C.T. or Clear trunk (check height to be field verified for exemption)

Trees	Totals	Replacements
Relocated	84	
Removed (Protected Trees)	208	1566 +197"
Removed (Exotic/Invasive)	69*	0*

Palms	Totals	Replacements
Relocated	145	
Removed	17	17 relocate min 4'

For each Removed Protected and Non-protected Palm, 1 Replacement Palm will be

CLARENCE HIGGS BEACH - TREE IMPACT PLAN

KEY WEST, FLORIDA

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NORTH

SCALE: 1" = 50' - 0"

L-1

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ARCHITECT, P.A.

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AA 0003018

HIGGS BEACH
KEY WEST, FL.

LANDWISE DESIGN
MITCHELL PLANNING & DESIGN
INNOVATIVE ENGINEERING GROUP, INC.
TRAFFIC TECH ENGINEERING
ISLAND SURVEYING INC
PEREZ ENGINEERING & DEVELOPMENT, INC

SEAL

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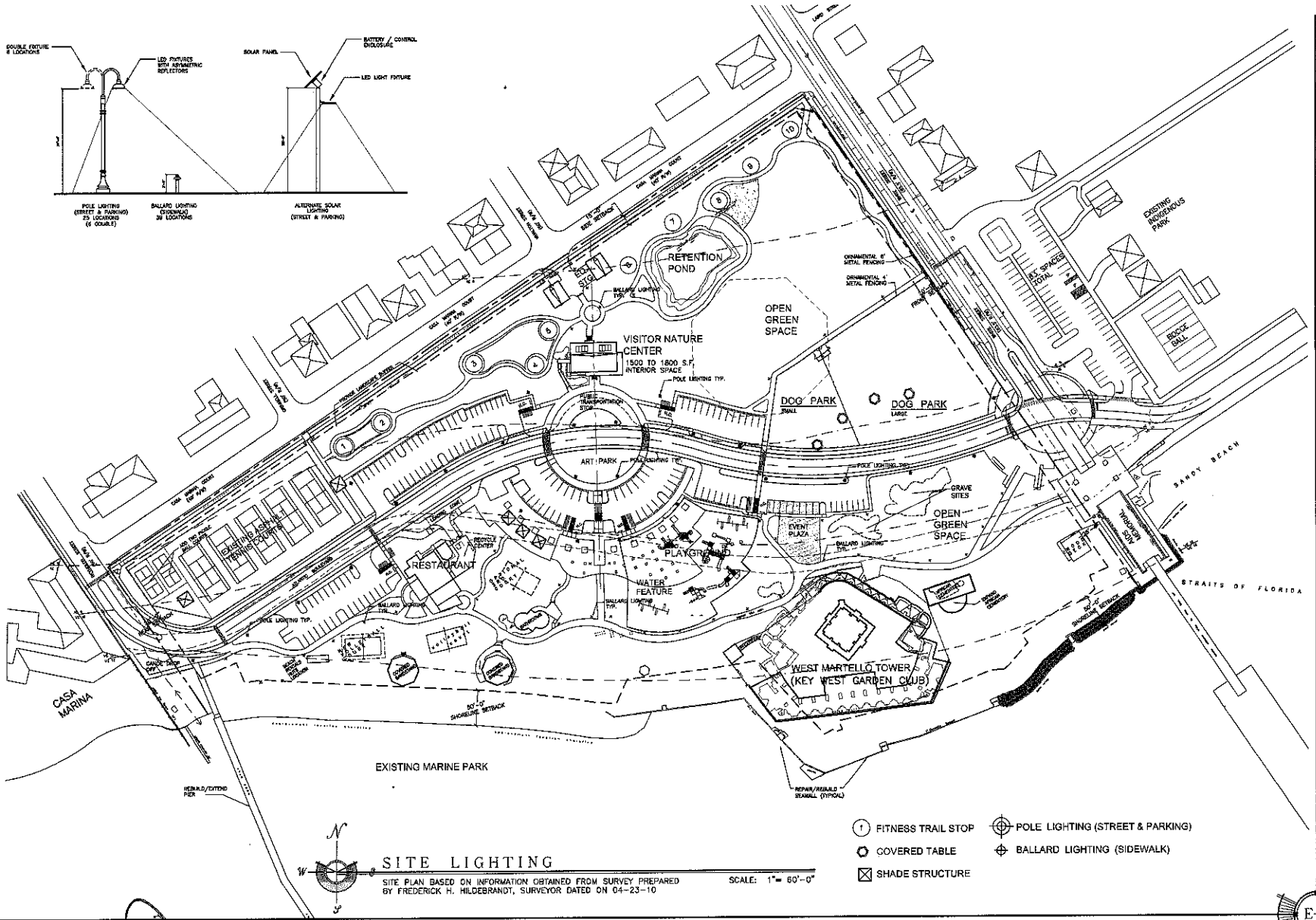
DATE
07-1-10

REVISIONS

DRAWN BY
LBR

PROJECT NUMBER
1004



SITE LIGHTING

SITE PLAN BASED ON INFORMATION OBTAINED FROM SURVEY PREPARED BY FREDERICK H. HILDEBRANDT, SURVEYOR DATED ON 04-23-10

SCALE: 1"= 60'-0"

CLARENCE HIGGS BEACH - MASTER PLAN

KEY WEST, FLORIDA

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E-1

WILLIAM P. HORN ARCHITECT, P.A.
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33040
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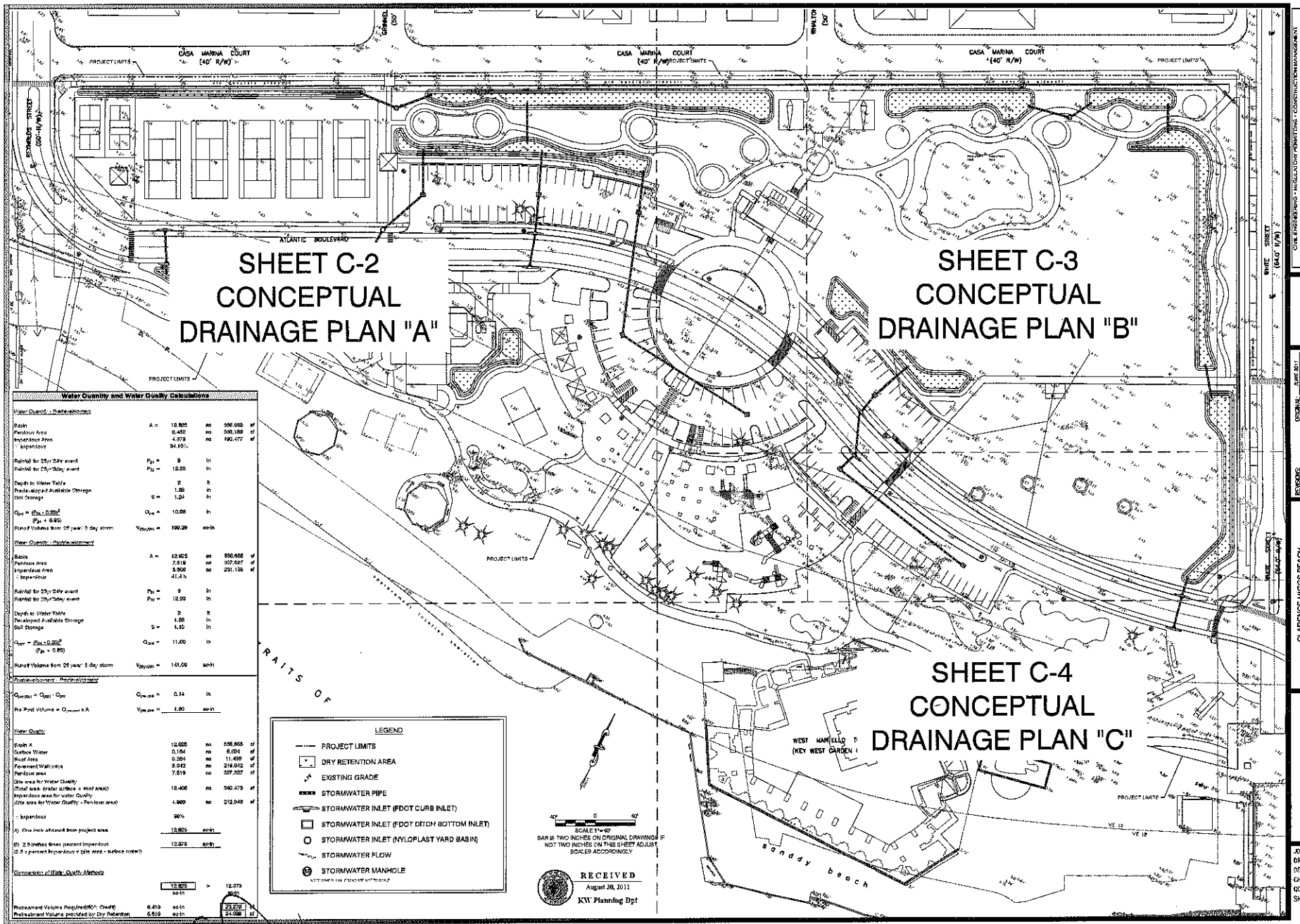
06-22-10
06-30-11 DRC

REVISIONS
12-30-10
01-05-11
03-25-11

DRAWN BY
GNA

PROJECT NUMBER
1004



Water Quantity and Water Quality Calculations

Water Quantity - Predevelopment

Basin	A =	12.805	ac	558,055 sf
Pervious Area		8.432	ac	366,188 sf
Impervious Area		4.373	ac	190,477 sf
% Impervious		34.16%		
Rainfall for 25yr-24hr event	P_{24} =	9	in	
Rainfall for 25yr-3day event	P_{72} =	12.22	in	
Depth to Water Table		2	ft	
Predeveloped Available Storage		1.66	in	
Soil Storage	S =	1.24	in	
$Q_{pre} = \frac{(P_{72} - 0.2S)^2}{(P_{72} + 0.8S)}$	Q_{pre} =	10.98	in	
Runoff Volume from 25 year / 3 day storm	$V_{pre(25)}$ =	199.29	ac-in	

Water Quantity - Postdevelopment

Basin	A =	12.805	ac	558,055 sf
Pervious Area		7.519	ac	327,527 sf
Impervious Area		5.286	ac	230,528 sf
% Impervious		41.3%		
Rainfall for 25yr-24hr event	P_{24} =	9	in	
Rainfall for 25yr-3day event	P_{72} =	12.22	in	
Depth to Water Table		2	ft	
Developed Available Storage		1.08	in	
Soil Storage	S =	1.10	in	
$Q_{post} = \frac{(P_{72} - 0.2S)^2}{(P_{72} + 0.8S)}$	Q_{post} =	11.00	in	
Runoff Volume from 25 year / 3 day storm	$V_{post(25)}$ =	141.09	ac-in	

Postdevelopment - Predevelopment

$Q_{post(25)} = Q_{post} - Q_{pre}$	$Q_{pre-post}$ =	0.14	in
Pre Post Volume = $Q_{pre-post} \times A$	$V_{pre-post}$ =	1.80	ac-in

Water Quality

Basin A		12.805	ac	558,055 sf
Surface Water		0.154	ac	6,694 sf
Roof Area		0.264	ac	11,499 sf
Pavement/Walkways		5.042	ac	219,642 sf
Pervious area		7.519	ac	327,527 sf
Site area for Water Quality (Total area minus surface + roof area)		12.405	ac	540,475 sf
Impervious area for water Quality (Site area for Water Quality - Pervious area)		4.889	ac	212,948 sf
% Impervious		98%		
a) One inch of runoff from project area		12.829	ac-in	
b) 2.5 inches times percent impervious (2.5 x percent impervious x (site area - surface water))		12.079	ac-in	

Comparison of Water Quality Methods

	12.829 ac-in	>	12.079 ac-in	
Retreatment Volume Required(80% Onsite)	6.419	ac-in	23,076	cf
Retreatment Volume provided by Dry Retention	6.519	ac-in	24,096	cf

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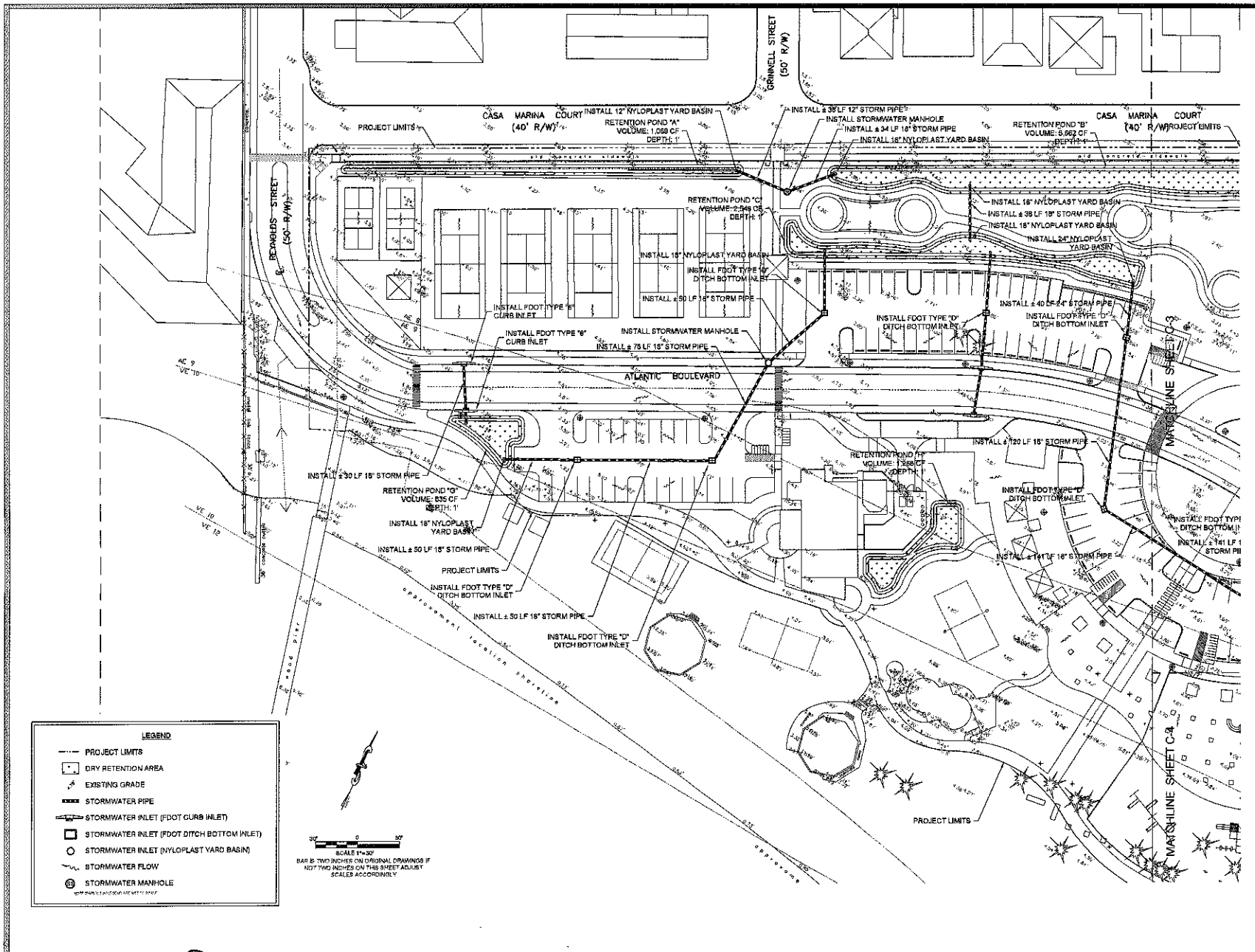
ALLEN E. PEREZ, P.E.
Florida P.E. No. 54988
June 30, 2011

REVISIONS:	ORIGINAL	JUNE 2011	8/30/11
1 RE: KWFPA			
2			
3			
4			
5			
6			

CLARENCE HIGGS BEACH
KEY WEST, FL 33040
CONCEPTUAL DRAINAGE PLAN

JOB NO.	111009
DRAWN	RTM
DESIGNED	AEP
CHECKED	AEP
QC	
SHEET	C-1



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Certificate of Authorization No. 6579

ALLEN E. PEREZ, P.E. Florida P.E. No. 57460 June 30, 2011

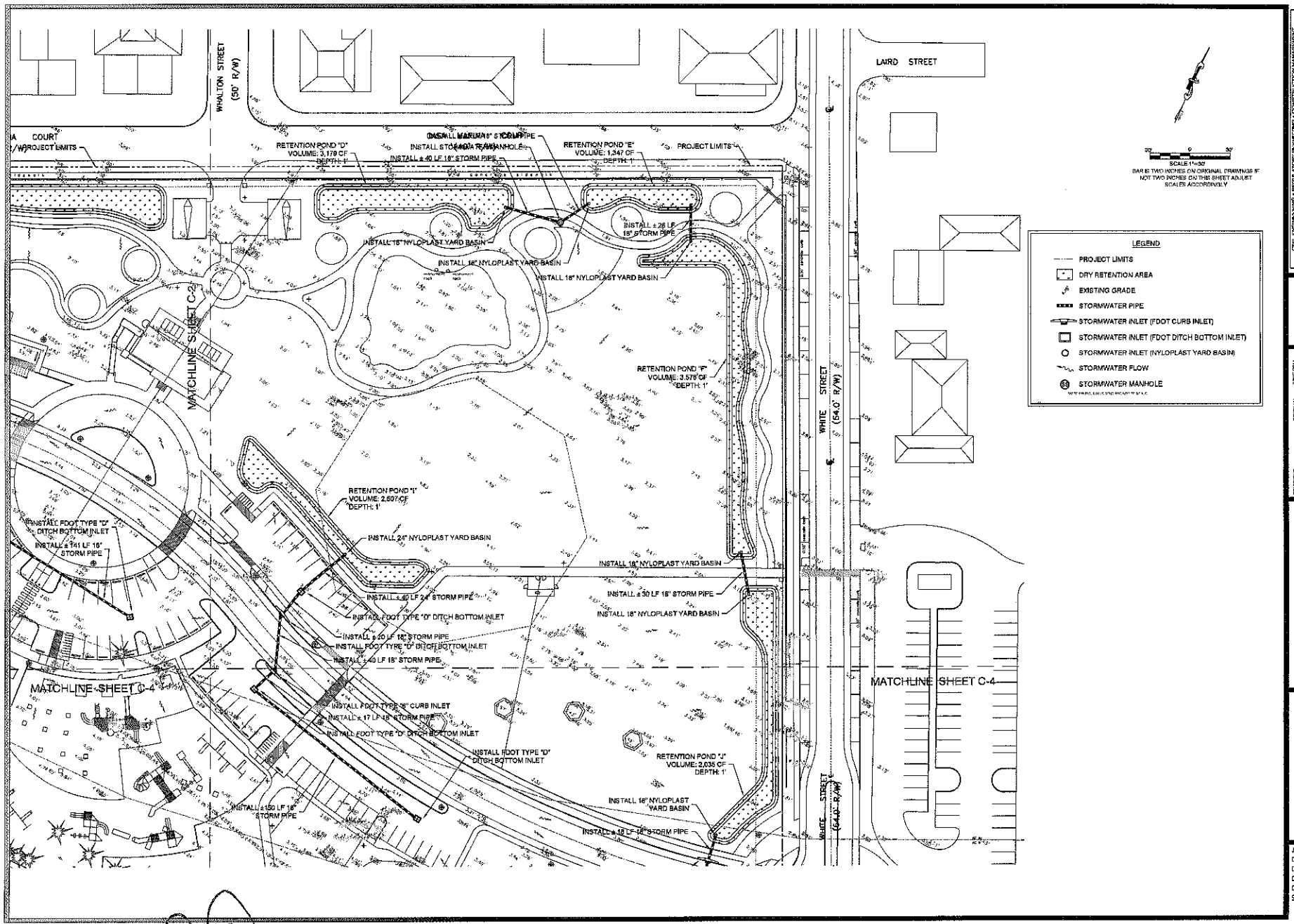
REVISIONS: 1 RE: AGENCY 2 3 4 5 6 ORIGINAL: JUNE 2011

CLARENCE HIGGS BEACH

KEY WEST, FL 33040

CONCEPTUAL DRAINAGE PLAN A

JOB NO. 11-1009
DRAWN RTM
DESIGNED AEP
CHECKED AEP
QC
SHEET C-2



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ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51468
June 30, 2011

REVISIONS:	ORIGINAL: JUNE 2011
1. DRC SUBMITTAL 4/30/12	
2.	
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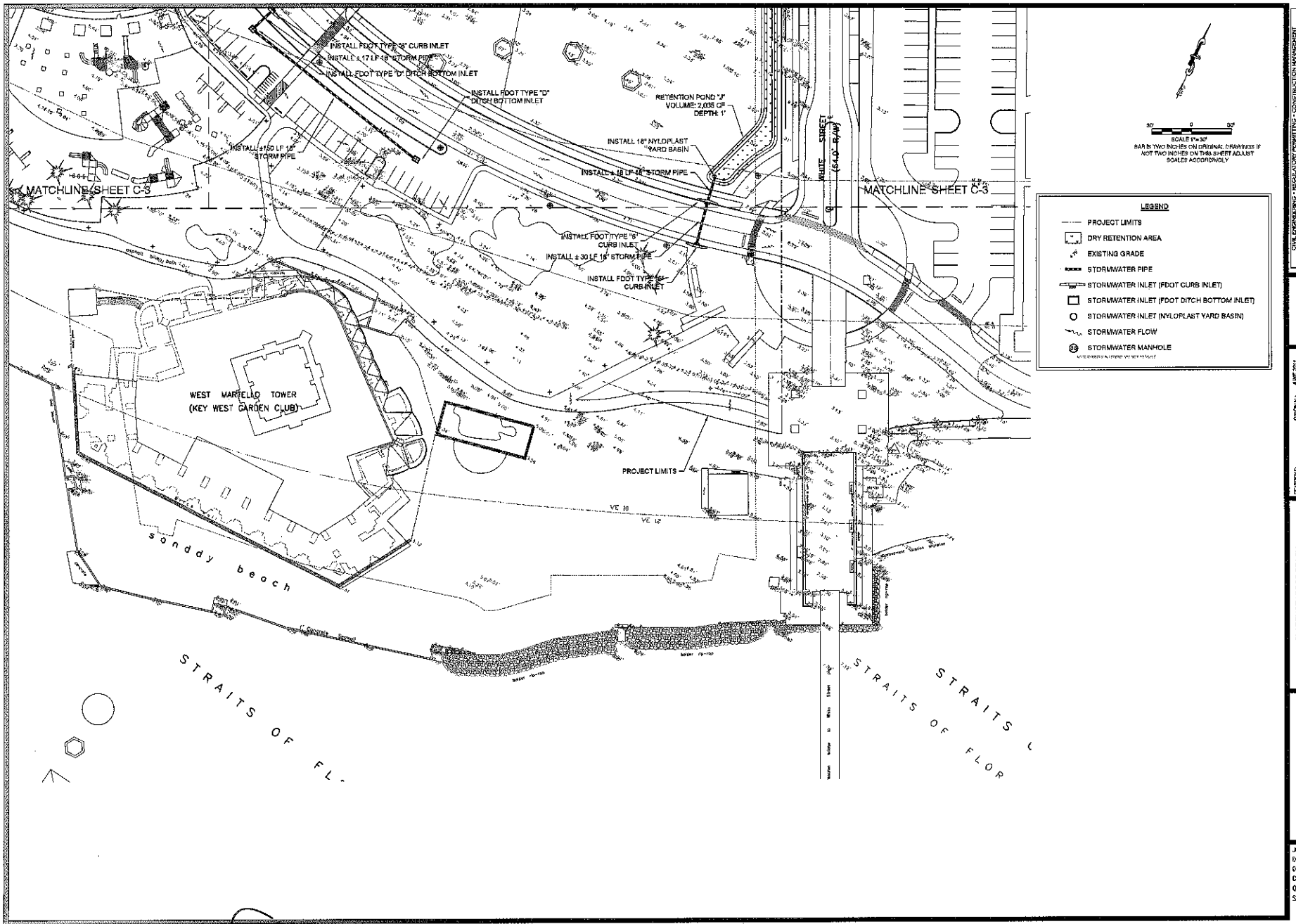
5.	
6.	

CLARENCE HIGGS BEACH

KEY WEST, FL 33040

CONCEPTUAL DRAINAGE PLAN B

JOB NO.	11.009
DRAWN	RTM
DESIGNED	AEP
CHECKED	AEP
QC	
SHEET	C-3



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ALLEN E. PEREZ, P.E.
Florida P.E. No. 51468
Date: 09. 30. 2011

REVISIONS:
1 DEL. SUBMITTAL — ORIGINAL: JUNE 2011 — JV/VR

CLARENCE HIGGS BEACH
KEY WEST, FL 33040
CONCEPTUAL DRAINAGE PLAN C

JOB NO. 111909
DRAWN RTM
DESIGNED AEP
CHECKED AEP
QC
SHEET C-4