

CONSTRUCTION PLANS  
FOR  
RETAINING WALL  
AND WASTE MANAGEMENT AREA

SITE LOCATION



LOCATION MAP:

CITY OF KEY WEST  
PURCHASE ORDER: 088053  
(DATED 10/25/2018)  
ARTIBUS DESIGN TASK ORDER #1804

PROJECT LOCATION:  
631 GREENE ST,  
KEY WEST, FL 33040

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SIGNATURE AND ORIGINAL SEAL


DRAFT

SIGNATURE:

DATE:

SERGE MASHTAKOV  
PROFESSIONAL ENGINEER  
STATE OF FLORIDA  
LICENSE NO 71480

REV:	DESCRIPTION:	BY:	DATE:
STATUS:		FINAL	

**ARTIBUS DESIGN**  
ENGINEERING AND PLANNING

ARTIBUS DESIGN  
3706 N. ROOSEVELT BLVD  
SUITE I-208  
KEY WEST, FL 33040  
(305) 304-3512  
WWW.ARTIBUSDESIGN.COM  
CA # 30835

CLIENT:	CITY OF KEY WEST ENGINEERING DEPARTMENT 1300 WHITE ST, KEY WEST, FL 33040		
PROJECT:	RETAINING WALL AND WASTE MANAGEMENT AREA		

SITE:	631 GREENE ST, KEY WEST, FL 33040		
TITLE:	COVER		

SCALE AT 11x17:	DATE:	DRAWN:	CHECKED:
AS SHOWN	12/04/18	SAM	SAM
PROJECT NO:	DRAWING NO:	REVISION:	
1811-07	G-100	1	

GENERAL REQUIREMENTS:

1. PRIOR TO STARTING ANY WORK THE CONTRACTOR SHALL REVIEW THESE PLANS AND SITE CONDITIONS AND NOTIFY THE ENGINEER IF ANY DISCREPANCIES ARE DISCOVERED.
2. THE ENGINEER IS NOT RESPONSIBLE FOR THE SUPERVISION OF THE CONTRACTOR NOR HIS EMPLOYEES DURING THE CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE MEANS AND ESTABLISH METHODS OF THE CONSTRUCTION TO MEET REQUIREMENTS OF ALL APPLICABLE CODES, INDUSTRY STANDARDS AND REQUIREMENTS OF THESE PLANS.
3. QUALITY OF THE WORK SHALL MEET OR EXCEED INDUSTRY STANDARD PRACTICES.
4. ANY DEVIATIONS FROM THESE PLANS SHALL BE REVIEWED AND APPROVED BY THE ENGINEER.

DESIGN DATA:

1. APPLICABLE BUILDING CODE: FBC 6TH EDITION (2017)
  2. APPLICABLE DESIGN LOADS: PER ASCI/SEI 7-10
    - FLOOR LIVE LOAD: 250 PSF
    - ROOF LIVE LOAD: N/A
    - BASIC WIND SPEED: 180 MPH
    - EXPOSURE: D
    - STRUCTURAL CATEGORY: II
- FLOOD ZONE: AE9  
FLOOD RESISTANT DESIGN AND CONSTRUCTION PER ASCI 24-14  
FLOOD DESIGN CLASS 2,

ALL PRESSURES SHOWN ARE BASED ON ASD DESIGN WITH A LOAD FACTOR OF 0.6

SOILS AND FOUNDATIONS:

FOUNDATIONS SHALL BE PLACED ON A "SEDIMENTARY AND FOLIATED ROCK" WITH A ALLOWABLE LOAD BEARING PRESSURE OF 3,000 PSF. NOTIFY THE ENGINEER OF SOIL CONDITIONS ARE DIFFERENT.

1. ALL FOUNDATIONS, SLABS AND FOOTERS SHALL BE PLACED ON STABILIZED UNDISTURBED SUBGRADE SOIL.
2. MINIMUM FOUNDATION DEPTH SHALL BE 24" UNLESS OTHERWISE IS SPECIFIED ON THE PLANS. IF OVER-EXCAVATED - FILL SHALL NOT BE PLACED BACK INTO THE TRENCH UNLESS APPROVED BY THE ENGINEER.
3. FILL UNDER THE FOUNDATIONS SHALL BE USED ONLY IF APPROVED BY THE ENGINEER. CLEAN FILL MATERIAL SHALL BE PLACED IN 6"-8" LAYERS AND COMPACTED TO 98% DENSITY USING THE MODIFIED PROCTOR TEST.
4. FILL MATERIAL SHALL BE CLEAN GRANULAR SAND OR LIMEROCK MIX WITHOUT ANY ORGANIC MATERIALS, CLAY, MUCK AND ROCKS LARGER THAN 4". BACKFILL SHALL NOT CONTAIN ANY WOOD OR CELLULOSE DEBRIS.

CONCRETE

1. APPLICABLE CODE ACI 318 LATEST EDITION AND ACI 301.
  2. ALL CONCRETE ELEMENTS SHALL HAVE A MIN. COMPRESSIVE STRENGTH OF 4000 PSI UNLESS OTHERWISE IS SHOWN ON THE PLANS. WATER CEMENT RATIO SHALL NOT EXCEED W/C=0.40.
  3. ALL CAST-IN-PLACE CONCRETE SHALL BE CURED AND PROTECTED FROM OVERDRYING PER ACI 305R-10 "HOT WEATHER CONCRETING".
  4. ALL EXPOSED EDGES SHALL HAVE 1/2" CHAMFERS.
  5. NO COLD JOINTS ARE ALLOWED UNLESS OTHERWISE APPROVED BY THE ENGINEER.
  6. TESTING: ALL FIELD AND LABORATORY TESTING SHALL BE PERFORMED BY THE INDEPENDENT SPECIALIZED COMPANY.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL SCHEDULING, COORDINATION AND COST OF TESTING COMPANY.  
THREE (3) SAMPLES SHALL BE TAKEN AND TESTED EACH TIME.  
MINIMUM SAMPLING FREQUENCY:  
A) EACH DAY OF CONCRETING FOR EVERY CONCRETE MIX;  
B) EVERY 50 CUBIC YARDS;  
C) EVERY 2000 SQ.FT. OF SLAB AREA.

ALL TESTING SHALL BE PER LATEST ACI AND ASTM REQUIREMENTS.  
LABORATORY SHALL SUPPLY THREE (3) ORIGINAL SIGNED&SEALED REPORT RESULTS TO THE ENGINEER.

7. CAST-IN-PLACE AND PRECAST MEMBERS ERECTION TOLERANCES SHALL BE AS SPECIFIED IN TABLE 8.2.2 OR IN SECTION 8.3 OF "PCI DESIGN HANDBOOK/SIXTH EDITION".

REINFORCEMENT

1. ALL REBAR SHALL BE DEFORMED CARBON-STEEL ASTM A615/A615M-13 GRADE 60 UNLESS OTHERWISE SPECIFIED ON THE PLANS.
2. ALL REQUIREMENTS FOR PLACEMENT, COVER, TOLERANCES, ETC. SHALL BE PER ACI 318-11.
3. ALL HOOKS AND BENDS SHALL BE FACTORY MADE UNLESS FIELD BENDS ARE APPROVED BY THE ENGINEER.
4. ONLY PLASTIC CHAIRS AND CENTRALIZERS SHALL BE USED FOR REBAR SUPPORT.

STRUCTURAL LUMBER

1. ALL WOOD MEMBERS SHALL MEET OR EXCEED REQUIREMENTS SPECIFIED IN "ANSI/AF&PA NATIONAL DESIGN SPECIFICATION (NDS) FOR WOOD CONSTRUCTION" AND ALL REFERENCED STANDARDS.
2. ALL WOOD MEMBERS SHALL BE SOUTHER PINE NO2 OR GREATER KILN DRIED AS SPECIFIED IN THE STANDARDS, UNLESS OTHERWISE SPECIFIED.
3. ALL WOOD MEMBERS EXPOSED TO EXTERIOR, IN DIRECT CONTACT WITH CONCRETE OR STEEL SHALL BE PRESSURE-TREATED (PT) UC4B GRADE PER AWWA STANDARDS.
4. ALL FIELD CUTS IN PT LUMBER SHALL TREATED ON SITE.
5. NAILING SHALL BE IN ACCORDANCE WITH FBC 2017. NAILS AND OTHER FASTENERS FOR PT WOOD SHALL BE STAINLESS STEEL OR ACQ APPROVED TREATED.

HARDWARE

1. HARDWARE SHALL BE 316 STAINLESS STEEL OR BETTER OR ZMAX GALVANIZED FOR NON EXPOSED SIMPSON PRODUCTS, UNLESS OTHERWISE SPECIFIED.
2. ALL CONNECTORS SHALL HAVE STAINLESS STEEL SCREWS AND FASTENERS OR ACQ APPROVED TREATED (FOR NON EXPOSED LOCATIONS).

STRUCTURAL STEEL

1. STRUCTURAL STEEL COMPONENTS SHALL BE AS DESCRIBED IN "SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS" AISC 2005 OR LATER EDITION.
2. HSS SHAPES (STRUCTURAL TUBING) SHALL BE ASTM A500 (FY=46 ksi).
3. STEEL PLATES, FLANGES AND MISCELENIQUS ELEMENTS SHALL BE ASTM A36 (FY=36 ksi) UNLESS NOTED OTHERWISE ON THE PLANS.
4. W-SHAPES, C-SHAPES AND OTHER FORMED STEEL SHALL BE ASTM A36 (FY=36 ksi).
5. ALL WELDING SHALL BE IN CONFORMANCE WITH THE LATEST SPECIFICATIONS AWS D1.1/D1.1M:2014, STRUCTURAL WELDING CODE - STEEL.
6. BOLTS: HOT DIP GALVANIZED. A325N, A563DH HEX NUTS, F436 WASHERS.
7. ANCHOR BOLTS: HOT DIP GALVANIZED. A307 GRADE A, A563DH HEX NUTS, F844 WASHERS.

STRUCTURAL STEEL COATING

1. ALL SURFACES SHALL BE ABRASIVE BLAST CLEANED TO NEAR-WHITE METAL (PER SSPC-SP10)
- EXPOSED STEEL:
2. ALL SURFACES SHALL BE PRIMED WITH POLYAMIDE EPOXY - ONE COAT (8.0 MILS DFT).
  3. APPLY SEALANT AT ALL LOCATIONS WHERE STEEL IS WELDED, LAPPED ETC. SEALANT MATERIAL SHALL BE COMPATIBLE WITH THE PAINTING SYSTEM.
  4. TOP LAYER SHALL BE TWO (2) COAT POLYURETHANE (3.0 MILS DFT EACH).
  5. TOP PAINT SHALL BE UV RESISTANT OR HAVE A UV RESISTANT COATING.
  6. COLORS SHALL MATCH EXISTING OR TO BE SELECTED BY THE OWNER.
- NON-EXPOSED STEEL (INTERIOR):
7. 2 COATS OF "SUMTER COATINGS" UNIVERSAL PRIMER (6.0 MILS DFT) OR APPROVED EQUAL.

ALUMINUM COMPONENTS

1. TYPE 6061-T6 ALUMINUM.
2. MIG WELDED ALL JOINTS W/ CONTINUOUS 1/8" WELD. USE 5356 FILLER WIRE ALLOY.
3. ALL ALUMINUM IN CONTACT WITH CONCRETE, PT WOOD, DISSIMILAR METALS AND OTHER CORROSIVE MATERIALS SHALL COATED WITH COAL-TAR EPOXY OR PROTECTED BY OTHER ENGINEER APPROVED METHOD.

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ARTIBUS DESIGN

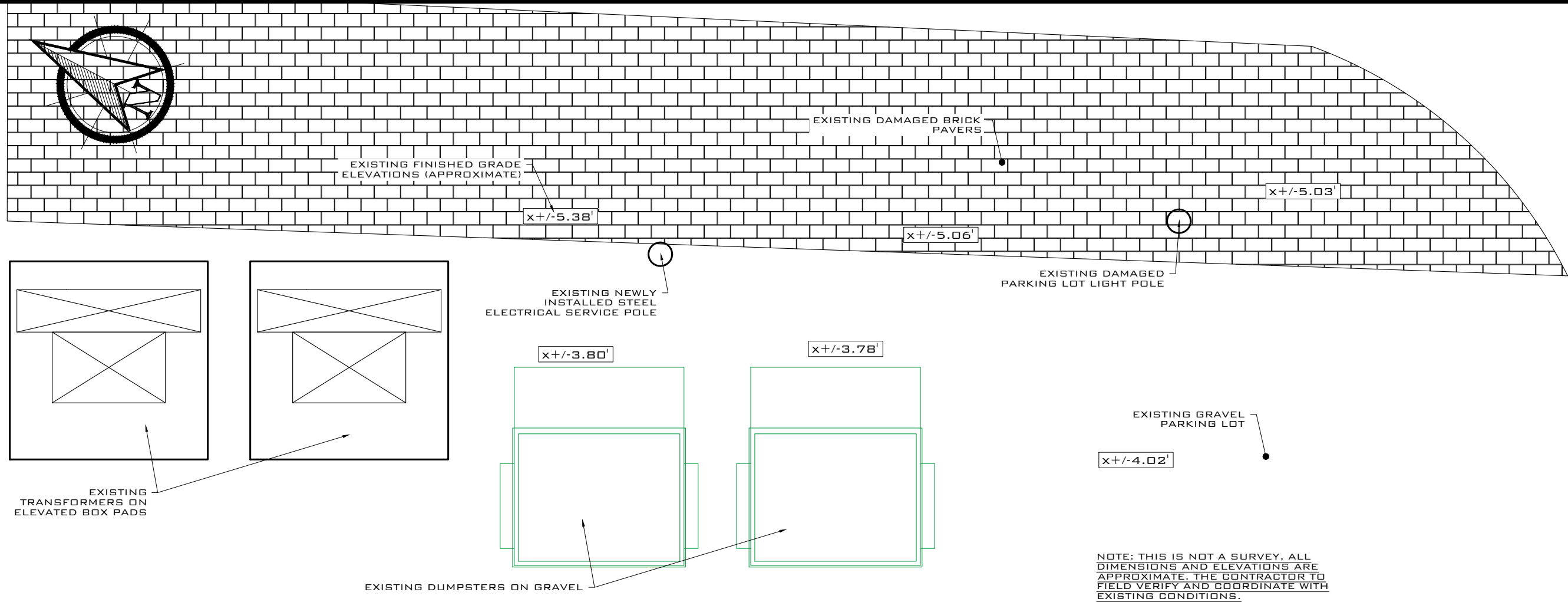
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**SITE MAP**  
SCALE: NTS

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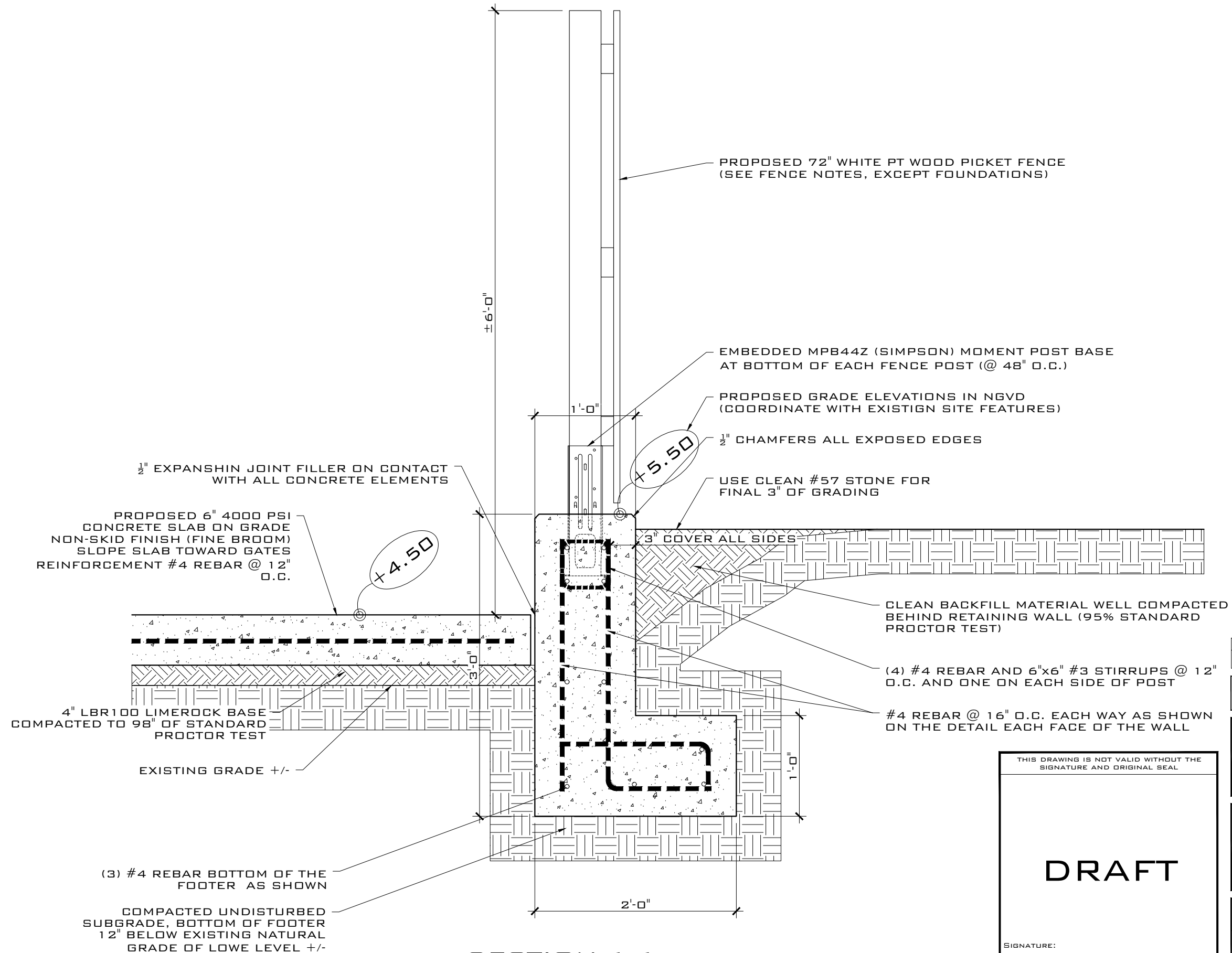
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SITE:	631 GREENE ST, KEY WEST, FL 33040
TITLE:	SITE MAP EXISTING PLAN

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**SECTION 1-1**  
SCALE: 1-1" = 1'-0"

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