THE CITY OF KEY WEST
3140 Flagler St,
Key West, FL 33040

ADDENDUM #1
Project: OM19001601
Mole Pier Boat Washdown Facility
Invitation to Bid: ITB 17-006
October 13, 2016

This Addendum is issued as supplemental information to the bid package for clarification of certain matters of both general and technical nature. The referenced bid package is amended as follows:

1. The Bids Due Date and Time are not changed by this Addendum#1.
2. Attached is the sign-in sheet (1 page) listing confirmed attendees of the non-mandatory pre-bid site visit.
3. Attached are minutes (4 pages) from the pre bid meeting including Contractor questions and Owner-provided answers.
4. Replace Part 5 – Performance Specification with the attached version (29 pages) reflect 16' interior clearance height and page footers have been updated.
5. Replace conceptual drawing S-3 with the attached revised version indicating a corrected interior clearance height of 16'.

All Bidders shall acknowledge receipt and acceptance of this Addendum No. 1 by acknowledging Addendum No. 1 in their proposal. Bids submitted without acknowledgement or without this Addendum may be considered non-responsive.

CITY OF KE[illegible]ST — O[illegible] 1601 BOAT W[illegible]WN FACILITY — 10/11/2016

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MINUTES

Pre-Bid meeting: ITB 17-006 Mole Pier Boat Washdown Facility
Date/time: 10/11/2016 13:30 Location: NASKW Mole Pier Port Operations Complex

Introduction

Mole pier Boat Washdown Facility

This is a pre-bid conference for ITB 17-006.

Bids are due November 2, 2016 before 3:00pm at City Clerk's Office.

Cone of Silence

Communications between bidders and City personnel, both Commission and Staff, is limited by ordinance 2-773.

Cone of silence limits communication between City Commission/Staff and potential bidder from the time a bid is advertised until the Commission votes to award the contract.

No verbal communication outside publicly advertised meetings such as this pre-bid.

Any and all questions about this ITB should be submitted in writing (email OK) on or before deadline of 10/26/2016 at 5:00pm. All questions so submitted will be answered in writing by issuance of Addenda which will be emailed to all attendees who provide email addresses and published on the City's website www.cityofkeywest-fl.gov and at www.demandstar.com

The first addendum will be issued to publish minutes and the attendee list from this pre-bid meeting.

Bidder Qualifications

Licensed contractor in the State of Florida.

Licensed to do business in the City of Key West prior to Notice to Proceed.

Designer of Record (DOR) a Florida-licensed PE.

Superintendent experience per specifications.

QC manager has NAVFAC or COE QC certification & experience,

SSHO qualified and experienced with EM385-1.

Superintendent can wear multiple hats (SSHO and QC) with requisite qualifications.

Superintendent on-site at all times when work is taking place.

Design Highlights & Scope of Work

Design-build project.

Drawings included in this bid package are to indicate conceptual intent.

Contractor's design team shall consider this a starting point with no feature that can't be improved upon.

Design approval: Concept, In-progress and Pref-final drawing submittals (timing per agreement upon initial design conference).

OWNER will review and respond to each submittal within seven calendar days.

Contractor responsible to comply with all applicable codes as provided by the Whole Building Design Guide website. Structural design shall meet ASCE7-10 wind loading criteria for Occupancy Category II Exposure D.

Tenant coordination with LCDR Fairweather, Port Operations Commander.

Service outages - two weeks notice (NASKW-PWD)

RapidGATE or One-day passes required for all workers and subcontractors.

Cruise ship operations: Construction should not impact cruise ship operations.

Driveway aprons relative to ramp should account for turning radius needed to haul 35' boat and trailer through washdown facility without difficulty or driving off the apron.

Utility connections.

- Electric: Will be fed from existing transformer at fueling station.
- Water: Will be fed from existing 4" main adjacent to the project site.
- Sewer: Sanitary sewer will be a gravity line connecting to a grinder pump/lift station to the east of the project site approximately 200 linear feet from the facility. The bid form will be modified in a subsequent Addendum to include a utility fee allowance for the cost of the lift station installation. Neither design nor installation of the lift station will otherwise be a part of the project's scope.

Safety

Accident Prevention Plan shall be site- and project-specific.

Task-specific Hazardous Activity Analyses.

Safety officer (SSHO) may also be QC and/or Superintendent with required qualifications.

Permitting

No CKW building permits required.

Excavation permit required from NASKW-PWD.

Contractor responsible for location of all existing utilities.

Hot work permit for any welding or open flame. Obtrain from NASKW-FD.

Insurances

No maritime/longshoremans/Jones Act insurance requirements.

Submittals

Recycled water recover system likely a long-lead item. Submittal should commence early.

Contractor to prepare and maintain submittal log.

Schedule

Simplified approach to schedule maintenance:

- Overall Gantt-style schedule
- Three-week look-ahead updated for each prog. meeting.

240-day duration after NTP.

LDs = $250 / day.

Progress meetings

At City construction trailer near PAL Gym (Mounted Police Division)

Weekly unless agreed by all to be bi-weekly.

Q & A

Q Will there be an unforeseen conditions allowance?

A No. There is funding in this project's budget should unforeseen conditions be encountered that warrant a cost change order. Any change order over $20,000 or 5% of the contract amount (whichever is less) will be presented to the City Commission for approval.

Q What is the applicable design wind speed for this project?

A Please refer to Part 5—Performance Specification, Chapter 6 Section B10 Superstructure and the applicable structural specifications at WBDG.org, particularly UFC 3-301-01. In addition, calculations performed per ASCE7-10 shall indicate Exposure Category D.

Q Is a construction field office required?

A No.

Q Will a construction laydown area be provided?

A Prior to mobilization, the successful bidder should prepare for review and Owner approval a submittal depicting a securely fenced, lockable laydown area.

Q Will temporary power be provided?

A The Contractor should make the request to the Contracting Officer concurrently with the laydown submittal showing location of temporary power panel. Once approved, and with the Contractor having already placed a code-compliant panel and disconnect, Navy personnel will provide 240/120 single-phase service from the wood pole closest to the project area.

Q May the Project Superintendent also serve as the QC Manager and the Site Safety & Health officer (SSHO)?

A Yes, but only if the Superintendent meets the qualification requirements for each function/position.

Q Has geotechnical investigation been performed at the project site?

A No. It will be the Contractor's responsibility to investigate existing soil conditions for foundation design.

PART 5 – PERFORMANCE SPECIFICATION

TABLE OF CONTENTS

1.0 PROJECT DESCRIPTION

This project shall provide for the design/build construction of a new single story, single bay, 1,250 square foot, drive-through boat wash facility measuring approximately 25' wide by 50' long by **16'** high internal clearance and located in the Truman Harbor Port Operations area of NASKW. One longitudinal building wall shall be reinforced concrete masonry and other shall be beam and column system; roof shall be metal deck over steel beam or web joist framing. Reinforced concrete foundation wash pad shall be designed to contain and drain all wash down wastewater into sump pump and filtration/recycling system.

The closed-loop recycled water and filtration system needs to:

- capture heavy solids on the wash pad.
- capture heavy materials in a dedicated settling tank.
- capture finer (100 micron) materials in the entry filters before they enter the dedicated storage tank.
- capture 10 micron materials in the recirculation filter.
- eliminate trace metals and oils in the mediums filter outside the tank enroute to the spray equipment.

Provide four (4) min. 100 ft. length hoses for spray equipment. Settling tanks shall permit the periodic removal of solids. Provide overhead area lighting inside building. Power source for the facility shall be the existing transformer serving the nearby small-vessel fueling station.

This building will have occupancy of less than 10 and those occupants are not in the building on a regular basis. This is a low occupancy building. See part 7 of this ITB package for scope clarifications, conceptual design drawings, and additional details.

2.0 PROJECT OBJECTIVES

2.1 Mission Statement

The mission of NASKW Surface/Subsurface Operations NASKW is ....

2.2 Facility Function

The project facility will enable operators to easily access boat washing facilities in order to maintain clean vessels in good working order to consistently be mission ready. This facility is needed due to the large number of boats actively involved in training missions. This facility will provide full wash down service due to the capture and recycle closed-loop system.

2.3 Project Specific Priorities

2.3.1 Sustainable Design and Construction

Design and construct project per sustainablity requirements identified in Section 01 33 29.05 20, *Sustainability Reporting for Design-Build*. Additional specific sustainability requirements are found in ITB 17-006 Part 2, PART 5, and Part 4 sections.

2.3.2 Storm Water Management - Low Impact Development (LID)

Not applicable.

2.3.3 Energy Efficiency

Energy efficiency must be in accordance with UFC 1-200-02, High Performance Sustainable and Building Requirements.

2.3.4 Building Commissioning

Provide commissioning to meet requirements identified in UFGS Section 01 91 00.00 40, provided in Part 6 of the contract documents.

2.3.5 Accessibility Requirements

Provide barrier-free design in accordance with UFC 1-200-01 , *General Building Requirements*.

2.3.6 Antiterrorism Criteria

Facility will have an occupancy designated as low occupancy and UFC 4-010-01 does not apply.

Facility is within a controlled perimeter.

2.4 Appropriate Design

UFC 1-300-09N	Design Procedures
UFC 3-301-01	Structural Engineering
UFC 3-400	Mechanical Engineering
UFC 3-420-01	Plumbing Systems
UFC 3-501-01	Electrical Engineering
UFC 3-580-01	Telecommunications
UFC 3-580-10	NMCI Standard Practices
UFC 3-600-01	Fire Protection Engineering
UFC 4-010-01	ATFP
UFC 1-200-01	General Building Requirements

Comply with all applicable Unified Facilities Criteria (UFC) for planning and design requirements for this project.

2.5 Workflow Process

2.5.1 Hours Of Operation

The facility will be available for use 24/7.

2.5.2 Staffing/Occupancy

The number of occupants specified in the ITB are identified for programming purposes. Occupancy used to design building features, such as structural, egress, and plumbing fixtures must be determined as required in applicable building or life safety codes.

Type of Occupancy	No. of Persons	Description of Activity
Maximum Occupancy	Less than 10	

The building will have occupancy of less than 10 and those occupants are not in the building on a regular basis. The building will be only occupied during boat wash operation.

2.6 Special Design Challenges

Not used

2.7 Adaptability and Flexibility

Not used

3.0 SITE ANALYSIS

3.1 Existing Site Conditions

The proposed project is located along the access road for Pier 8 and within the footprint of previously demolished Building 149.

The proposed project site is not located within or adjacent to any known underground storage tanks, Department of the Navy Installation Restoration (IR) sites, or solid waste management units. However, the project site does have an active 18" stormwater pipe, electrical, communications, and water pipes within footer/wash pad/ driveway site. Contractor is to verify location with NAVFAC Utilities and establish depth by soft-digs at possible conflict locations.

Debris will be managed and disposed of in accordance with applicable federal, state, city, and local regulation.

Refer to Part 7 (CATEX) of this ITB for additional information.

3.2 Site Development Requirements

The location of the closed-loop recycled water and filtration system must be adjacent to the proposed wash pad and enclosed with chain link fencing for protection and lockable gates shall be provided for maintenance access. The water and filtration system shall be on a concrete pad, sized be per the system requirements. Location of the system shall be determined during the design phase of the project.

4.0 BUILDING REQUIREMENTS

4.1 Space Tabulation

Space Name	# of spaces	Unit SF (Net)	Total SF (Net)	Total SQM (Net)	Remarks
Boat wash pad/open bay	1	1250.00	1250.00	116.00	
Subtotal Net Area			1250.00	116.00	
Net to Gross Factor			1.00	1.00	
TOTAL GROSS AREA			**1250.00**	**116.00**	
The design build contractor shall provide actual area in both square feet and square meters in proposals.					

4.2 Spatial Relationships

Refer to Part 7 of this ITB for conceptual design drawings.

4.3 Exterior Character

The exterior color palette shall be provided as a submittal for Owner approval during the design phase.

BOAT WASH FACILITY

Space Characteristics

Function/adjacencies:

Special Dimensions:
Ideal Plan Dimensions: see concept plan
Minimum Ceiling Height and Fixture Vertical Clearance: **16'**

Acoustics: n/a

Access: entry driveway and exit driveway, see concept plan

Number of Occupants: As Required

Other/Special Requirements:

Uniformat Section	Description	Qty	Size	Specific Requirements
[redacted]				Provide sealant
C3020	Flooring	As Req'd	As Req'd	Concrete Pad wash rack
C3030	Ceiling	As Req'd	As Req'd	Exposed structural framing
D5020002	Lighting	As Req'd.	As Req'd.	Provide a surface mounted lights

6.0 ENGINEERING SYSTEM REQUIREMENTS

A10 FOUNDATIONS

SYSTEM DESCRIPTION

Provide the building foundation system in accordance with UFC 3-301-01, *Structural Engineering* and UFC 3-220-01 *Geotechnical Engineering*. Foundation shall be designed to suit subsurface conditions, and shall be capable of transmitting all building loads to the ground. Design foundation to incorporate boat wash pad design standards such as: proper grade, drain trench, etc. as shown in Part 6.

See Section B10, *Superstructure*, for additional loading criteria.

A10 GENERAL

The Contractor, under supervision of their Engineer shall perform all necessary subsurface investigations required to develop an approved foundation plan. Contractor shall bear all costs associated with the Engineer and site investigation.

SEISMIC DESIGN

Not applicable.

A1010 STANDARD FOUNDATIONS

As determined by the Designer of Record to be applicable, provide a Standard foundation. The foundation construction may include continuous footings, spread footings, grade beams, and foundation walls. Do not use masonry unit footings, steel grillage footings, timber footings, or wood foundations. Standard foundations shall not be placed on undocumented and/or uncertified earth fill. Any earth fill which was placed without the oversight and written approval documenting the soil's ability to support standard foundations, by a licensed civil or geotechnical engineer, is classified as undocumented and/or uncertified fill. Performing soil borings or other field/laboratory testing to certify undocumented and/or uncertified fill for the support of standard foundations must be approved by the Engineer. Where undocumented and/or uncertified earth fill is encountered use SPECIAL FOUNDATIONS.

A1020 SPECIAL FOUNDATIONS

As determined by the Designer of Record to be applicable, provide a Special foundation. Special Foundations include driven piles and cast-in-drilled-hole piles. As Special Foundation techniques or systems typically require the use of specialty contractors, a Professional Engineer shall establish installation and acceptance criteria and supervise the installation. Perform pile load tests as recommended by the Contractor's Geotechnical Engineer and as required by all applicable building codes. Load test(s) are required for driven piles and cast-in-place piles with a design capacity of 40 tons or greater and shall be performed in accordance with either ASTM D 1143 or ASTM D 4945. Additional load test requirements are stated in Part 4 of this ITB. The allowable stresses for special foundation elements shall not exceed those limitations specified in UFC 1-200-01.

Piles shall not be required by any specific code and shall only be deemed necessary by the DOR as determined by calculated loads, including wind loads.

A102090 OTHER SPECIAL FOUNDATIONS

The use of special foundations other than driven piles and cast-in drilled-hole piles must be approved by the government geotechnical reviewer prior to design. The Designer of Record shall submit justification for use, including acceptable evidence of previous successful installation in similar conditions, methods and equipment used in their installation, proposed testing and inspection to be used, supporting test data, calculations and any other information related to the structural properties and load capacity of such system.

A1030 SLAB ON GRADE

As determined by the Designer of Record to be applicable, provide a standard concrete slab on grade. Slab on grade includes conventionally reinforced concrete slabs, prestressed concrete, and mat slabs. Slab on Grade foundations shall not be placed on undocumented and/or uncertified earth fill. Any earth fill which was placed without the oversight and written approval documenting the soil's ability to support standard foundations, by a licensed civil or geotechnical engineer, is classified as undocumented and/or uncertified fill. Performing soil borings or other field/laboratory testing to certify undocumented and/or uncertified fill for the support of standard foundations must be approved by the Engineer. Where undocumented and/or uncertified earth fill is encountered use SPECIAL FOUNDATIONS. Where slab on grade is below the existing adjacent exterior grade, provide water/ dampproofing and a perimeter drainage system to remove ground water from the area immediately adjacent to the buildings. Provide perimeter insulation.

A103001 STANDARD SLAB ON GRADE

As determined by the designer of record to be applicable, provide a standard concrete slab on grade. Where slab on grade is below the existing adjacent exterior grade, provide water/ dampproofing and a perimeter drainage system to remove ground water from the area immediately adjacent to the buildings. Provide perimeter insulation.

A103001 1. 1 SPECIAL SLAB ON GRADE

Special slab on grade includes mat foundations. Mat foundations shall have a minimum thickness of 10 inches with steel reinforcement top and bottom, both ways. Mat foundations shall have turned down edges to be embedded a minimum depth of 12 inches below the undisturbed ground surface. Where slab on grade is below the existing adjacent exterior grade, provide water/ damp proofing and a perimeter drainage system to remove ground water from the area immediately adjacent to the buildings. Provide perimeter insulation.

A10302 STRUCTURAL SLAB ON GRADE

As determined by the Designer of Record to be applicable, provide a structurally supported slab. Provide for support of all utilities that may be adversely affected by soil consolidation or expansive soils. Provide stainless steel supports sized adequately to support the in-service utility. Where the structural slab on grade is below the existing adjacent exterior grade, provide water/damp proofing and a perimeter drainage system to remove ground water from the area immediately adjacent to the buildings. Provide perimeter insulation.

--End of Section--

B10 SUPERSTRUCTURE

SYSTEM DESCRIPTION

Provide the building framing system in accordance with UFC 3-301-01, *Structural Engineering*.

For new, unusual, or innovative materials, systems or methods not specifically provided for in the code, the Contractor shall inform the Government of the proposed use at or before the concept design submittal. New, unusual, or innovative materials, systems or methods proposed at or beyond the concept stage shall not be considered.

Valid and current (within 2 years) evaluation reports for the new, unusual, or innovative materials, systems or methods from the International Code Council – Evaluation Services (ICC-ES), or other Government-accepted testing and evaluation service, shall be submitted for approval at or before the concept design submittal.

Use of new, unusual, or innovative materials, systems or methods not specifically provided for in the code must be approved in writing by the Contracting Officer prior to design incorporation.

All design and construction shall be compliant with applicable Codes and UFC criteria in-effect at the time of Notice To Proceed (NTP) issuance.

In addition, design the structure in accordance with the following loading criteria: Live Loads

Live loads for occupancies or uses not provided in UFC 3-301-01 shall be as follows:

Occupancy or Use: Boat washing facility

Mezzanine Uniform Live load: 125 psf.

Concentrated Live Load: 2000 lbs.

Importance Factors

Use Occupancy Category II in Table 2-2 of UFC 3-301-01 for determining Importance Factors for seismic, snow, and wind design.

Wind Exposure

Wind design shall be based on ASCE7 Exposure D

B1020 ROOF CONSTRUCTION

The roof construction shall include peak with sloped metal deck over steel beam or web joist framing system. The roof deck and framing shall be supported by longitudinal reinforced masonry wall and beam/column system.

--End of Section—

B20 EXTERIOR ENCLOSURE

SYSTEM DESCRIPTION

This system consists of the exterior shell of the facility, which includes all vertical and horizontal exterior closure such as exterior walls, exterior windows, and exterior doors. This system includes roofing and exterior longitudinal walls. Structural frame elements at exterior such as columns, beams, and spandrels are included in Superstructure. Finishes to the inside face of walls which are not an integral part of the wall construction will be included in System C30, *Interior finishes*.

GENERAL SYSTEMS REQUIREMENTS

B2010 EXTERIOR WALLS

The primary exterior material of the building shall be reinforced concrete masonry for spray wall, steel beam and column system for other longitudinal wall. See Part 6.

B201002 EXTERIOR WALL BACKUP CONSTRUCTION

Provide load-bearing reinforced CMU walls, beams, columns, bracing, fastenings, and other accessories necessary for complete installation. Framing members shall have the structural properties indicated. Where physical structural properties are not indicated, they shall be as necessary to withstand all imposed loads.

B201009 EXTERIOR PAINTING AND COATINGS

Provide field applied exterior coatings for all items that are not prefinished, and to prefinished items when required to provide a color other than a standard prefinished color.

B201010 EXTERIOR JOINT SEALANTS

--End of Section—

B30 ROOFING

B30 GENERAL SYSTEM DESCRIPTION

Built-in gutter systems where drainage passes through an interior space or is concealed in the exterior cavity wall shall be prohibited.

Refer to UFC 3-110-03, *Roofing*, and UFC 3-100-10N, *Architecture*, for additional roofing requirements.

B301002 LOW SLOPE ROOFING SYSTEMS

Wind Uplift - The complete roof covering assembly shall be rated to meet UL90 standards.

B301003 ROOF INSULATION AND FILL

Not used.

B301004 FLASHINGS AND TRIM

Flashing and sheet metal work shall include scuppers, splash pans, and sheet metal roofing. Flashings shall be Steel Sheet, Zinc-Coated (Galvanized) - ASTM A 653/ A 653M Galvanized steel items shall have a baked-on, factory applied finish of polyvinylidene fluoride or an equivalent fluorocarbon coating or Pre-Finished Aluminum. Finish shall be baked-on factory applied color coating of polyvinylidene fluoride (PVF2) or other equivalent fluorocarbon coating with a minimum thickness of 0.8 to 1.3 mils.

B301005 GUTTERS AND DOWNSPOUTS

Provide gutters and downspouts compatible with roofing material and finish. Concealed (interior) gutters and downspouts are prohibited.

B301006 ROOF OPENINGS AND SUPPORTS

No openings in roof.

--End of Section—

C10 INTERIOR CONSTRUCTION

SYSTEM DESCRIPTION

No interior construction.

C20 STAIRS

SYSTEM DESCRIPTION

No stairs are to be constructed.

C30 INTERIOR FINISHES

SYSTEM DESCRIPTION

Interior finishes include wall finishes, floor finishes, wall base finishes, and ceiling finishes.

C3010 WALL FINISHES

Provide waterproof sealant to interior and exterior of CMU walls.

--End of Section—

D20 PLUMBING

Provide self-contained, closed loop recycled water system to contain and clean contaminated water from wash pad. The closed-loop recycled water and filtration system needs to: capture heavy solids on the wash pad, capture heavy materials in a dedicated settling tank, capture finer (100 micron) materials in the entry filters before they enter the dedicated storage tank, capture 10 micron materials in the recirculation filter, and eliminate trace metals and oils in the mediums filter outside the tank enroute to the spray equipment. Size system capacity to accommodate two boats at approx. 25 ft. long. Provide point of connection, main shut-off valve, backflow preventer and new water supply for two (2) exterior hose bibs and exterior deep sink.

D204002 Roof Drains

Provide roof drains that are compatible with the roofing system.

--End of Section—

6. ENGINEERING SYSTEMS REQUIREMENTS

D50 ELECTRICAL

SYSTEM DESCRIPTION

Provide an interior electrical system consisting of Service Entrance Wiring and Equipment, Distribution and Lighting Panelboards**,** Conduits, Feeder and Branch Circuits, Motor Control Equipment, Lighting and Branch Wiring, and Grounding, including accessories and devices as necessary and required for a complete and usable system. This section covers installations out to the building 5 foot (1.5 meter) line.

The interior distribution system shall consist of insulated conductors in conduit.

GENERAL SYSTEM REQUIREMENTS

Provide an Electrical System complete in place, tested and approved, as specified throughout this ITB, as needed for a complete, usable and proper installation. All equipment shall be installed per the criteria of PTS Section D50 and the manufacturer's recommendations. Where the word "should" is used in the manufacturer's recommendations, substitute the word "shall".

Comply with the following criteria, the latest edition
UFC 3-501-01 Electrical Engineering
UFC 3-520-01 Interior Electrical Systems
UFC 3-550-01 Exterior Electrical Power Distribution
NAVFAC SW Utility Standard 2009
UFC 3-575-01 Lightning & Static Electricity Protection Systems
UFC 3-530-01 Design Interior & Exterior lighting controls
FC 1-300-09N Design procedures
UFC 3-580-01 Telecommunications Building Cabling Systems Planning & Design
UFC 3-580-10 Navy & Marine Corps Intranet (NMCI) Standard Construction Practices
UFC 4-021-02 Electronic Security Systems
2011 National Electrical Code (NEC)

Design electrical system after a thorough site investigation and meetings with the City and NASKW personnel. Present a complete and coordinated package of design documentation including calculations for acceptance by the Government prior to ordering materials, fabrication, or installation.

Building outages shall be coordinated with the Public Works Department (PWD) and NASKW Port Operations. Any disruption or removal of electrical equipment and services to areas during construction shall be restored or replaced.

All installed equipment shall be tested in accordance with the latest edition of NETA (inter-National Electrical Testing Association), ATS (Acceptance Testing Specifications) by a NETA member engineering and testing firm.

The design and construction shall conform to all of the applicable Unified Facilities Criteria (UFC), Building Codes, and base regulations.

Exterior equipment shall be designed for coastal and high humidity areas. Enclosures for all electrical equipment/devices installed outdoors shall be stainless steel.

D5010 ELECTRICAL SERVICE AND DISTRIBUTION

D501001 MAIN TRANSFORMERS

Point of Connection from electrical power system and service main transformer(s) is defined in Section G40, *Site Electrical Utilities*.

D501002 SERVICE ENTRANCE EQUIPMENT

All service(s) into the facility shall be underground.

Provide a main distribution panel as service entrance equipment. Distribution panel enclosure and hardware shall be stainless steel.

Feeder circuit shall be sized to the maximum rating of the service entrance equipment.

D501004 PANELBOARDS

Provide distribution and branch circuit panelboards to serve loads as required per design and applicable codes.

All distribution boards and panelboards shall have entirely copper busses and all circuit breakers shall be the bolt-on type.

D501005 ENCLOSED CIRCUIT BREAKERS

Provide enclosed circuit breakers for as required per design and applicable codes.

D501006 MOTOR CONTROL CENTERS

Provide motor control centers, individual motor starters with disconnect switches, combination motor starters, variable speed drives, reduced voltage controllers, and/or manual motor starters, for motor controls as required by mechanical equipment. Provide all circuits and connections for motors.

D5020 LIGHTING AND BRANCH WIRING

Provide electrical connections for all systems requiring electrical service.

Provide power and connections for the boat wash water filtration/recycling system.

Provide lighting and general purpose receptacles throughout all spaces as required per design and applicable codes.

D502001 BRANCH WIRING

All branch wiring shall be insulated conductors in conduit.

All new conductors shall be copper, minimum size shall be #12 THHN/THWN2.

All exterior mounted conduits shall be PVC coated rigid galvanized steel (RGS).

All conduit connectors shall be the compression or threaded type.

D502002 LIGHTING EQUIPMENT

Provide a complete lighting system consisting of interior and exterior area lighting consisting of LED lighting including switches and automatic and/or manual controls.

D5090 OTHER ELECTRICAL SERVICES

D509001 GENERAL CONSTRUCTION ITEMS (ELECTRICAL)

Provide General Construction Items (Electrical) including, but not necessarily limited to, all connections, fittings, boxes and associated equipment needed by this and other sections of this ITB as required for a complete and usable system.

D509003 GROUNDING SYSTEMS

Provide a complete grounding system for the facility electrical system.

--End of Section--

E20 FURNISHINGS

SYSTEM DESCRIPTION

No furnishings

--End of Section—

F10 SPECIAL CONSTRUCTION

SYSTEM DESCRIPTION

Special construction to include concrete wash pad with correct drainage to sump pump and water filtration/recycling system

--End of Section—

G10 SITE PREPARATION

SYSTEM DESCRIPTION

The site preparation system consists of site clearing, demolition, salvage, relocation, earthwork, and hazardous waste remediation necessary to ready the site for other work associated with the project.

GENERAL SYSTEM REQUIREMENTS

Develop the project site and perform all off-site work necessary to meet the requirements of the project, antiterrorism criteria, local codes, reference standards, technical specifications and performance criteria.

The Contractor is required to perform a survey of the project area that will be impacted by his work. This survey shall be included in the contractor's design plans. Prior to starting work, physically verify the location of all existing utilities and obtain all additional survey data required to provide a quality final design. The existence, size and/or location of the utilities are not guaranteed by the surveys provided. The Contractor shall verify the location of all utilities prior to construction. Electronic files of the surveys will be provided to the Contractor only after award of the contract.

Unless otherwise noted, provide new facilities at the locations indicated on the drawings in Part 7 of this ITB.

Minimize the impact of construction activity on operations and neighboring facilities.

Identify and obtain all permits to comply with all federal, state, and local regulatory requirements associated with this work. The contractor shall submit a complete "Permits Record of Decision" (PROD) form with the first design submittal package. A blank PROD form can be obtained at the Download Tab of Part 6 of the NAVFAC Design-Build website at the following link http://www.wbdg.org/ndbm/Download/Down_Additional.html?Section=AdditionalInfo . Contractor shall determine correct permit fees and pay said fees. Copies of all permits, permit applications, and the completed PROD form shall be forwarded to the Government's Civil Reviewer and Environmental Reviewer.

All tidal and non-tidal wetlands work shall be performed in accordance with the permits obtained as required by UFC 3-200-10N, *Civil Engineering*. Coordinate and obtain the Resident Officer In Charge of Construction's (ROICC) approval for proposed haul route(s), work site access point(s), employee parking location(s) and material laydown and storage area(s).

Refer to Site Analysis and Building Requirements sections for additional site preparation functional program information.

As a minimum, the successful bidder's Geotechnical Engineer shall perform the necessary amount of borings and supplementary laboratory classification of soils encountered, on the building site to support the foundation design and/or subsequent pile driving analysis.

Personnel under the supervision of a registered Professional Engineer shall provide inspection of excavations and soil/groundwater conditions throughout construction. The Engineer shall be responsible for performing pre-construction and periodic site visits throughout construction to assess site conditions. The Engineer, with the concurrence of the Contractor and the Contracting Officer, shall update the excavation, sheeting, shoring and dewatering plans as construction progresses to reflect actual site conditions and shall submit the updated plan and a written report (with professional stamp) informing the Contractor and Contracting Officer of the status of the plan and an accounting of Contractor adherence to the plan; specifically addressing any present or potential problems. The Engineer shall be available to meet with the Contracting Officer at any time throughout the contract duration. The Contractor shall bear all costs of the Engineer.

G1010 SITE CLEARING

G101001 CLEARING

Burning will not be allowed.

G101006 DEBRIS DISPOSAL

All grubbing and clearing residue, demolished material, rubbish and debris generated by this project shall be hauled off-site and off station and properly disposed of by the Contractor.

G1020 SITE DEMOLITION & RELOCATIONS

G102001 BUILDING MASS DEMOLITION

G102003 UNDERGROUND SITE DEMOLITION

Preserve the following underground site elements: all existing utilities required for proposed project.

Abandonment of utility systems shall be done in a manner that conforms to applicable codes and regulations, removes their presence from the ground surface and clearly indicates that they have been abandoned. Utilities shall not be abandoned in place underneath or within 10 feet (3.0 m) of any new facilities. Remove and relocate existing utility piping, conduits, and utility structures under the proposed building.

All conduits to be abandoned shall have wiring removed.

All piping to be abandoned shall be removed and filled with flowable fill. Piping shall be removed and

filled with flowable fill under pavements subject to potential vehicle loadings.

Remove existing utility structures to 3 feet (900 mm) below existing or new adjacent grade, whichever is greater. Break up bases to permit drainage. Fill with clean sand.

G102005 UTILITY RELOCATION

Comply with the requirements of the utility provider concerning the utility relocation: NAVFAC Southeast Utilities.

G1030 SITE EARTHWORK

G103001 GRADING

Finish floor elevations for new facilities shall be above the 100year flood elevation. Provide elevations for mechanical/electrical equipment pads above the 100year flood elevation. Location is in FEMA-FIRM Zone AE8.

G103002 COMMON EXCAVATION

G103003 ROCK EXCAVATION

Blasting will not be permitted.

G103004 FILL & BORROW

Borrow and select fill shall come from off-base sources.

G103008 SOIL TREATMENT

Treat the area around the entire foundation of each building for termite control in accordance with manufacturer's instructions.

G1040 HAZARDOUS WASTE REMEDIATION

A contaminated soil/groundwater report is not provided to support this project. Prior to starting work, conduct any additional testing that may be needed to provide a final design and comply with all applicable federal, regional, state and local regulations. Refer to UFC 3-800-10N, *Environmental Engineering for Facility Construction*, for additional requirements and criteria.

G1040 1.1 EXCAVATION

Non-contaminated water may be disposed of on-site.

G1040 1.3 CLEAN FILL

Soils that are determined as clean fill via testing shall be backfilled and compacted in accordance with the requirements listed in this section.

G1040 1.4 SPILLS

In the event of a spill or release of hazardous substances, pollutant, contaminant or oil, notify the Contracting Officer immediately. Containment/Control actions shall be taken immediately to minimize the effect of any spill or leak. Clean up shall be performed at the Contractor's expense in accordance with:

UFC 3-800-10N: Appendices for regulations and standards.

State and Local Regulations

G1040 1.5 DISPOSAL

All waste materials shall become the property of the Contractor and shall be transported, disposed of or recycled in accordance with:

UFC 3-800-10N: Appendices for regulations and standards

State and Local Regulations

--End of Section--

G20 SITE IMPROVEMENTS

SYSTEM DESCRIPTION

The site improvements system consists of pavements and pavement related features, and other exterior site development work related to this project. Pavement design shall be performed by a licensed Professional Engineer familiar with conditions local to the project site.

GENERAL SYSTEMS REQUIREMENTS

Provide site improvements as required to make a useable facility that meets functional and operational requirements, incorporates all applicable anti-terrorism, force protection and physical security requirements and blends into the existing environment.

Provide site improvements in conformance with applicable requirements of the Uniform Federal Accessibility Standards.

Identify and obtain all permits to comply with all federal, state, and local regulatory requirements associated with this work. The contractor shall complete the "Permits Record of Decision" (PROD) form with the first design submittal package. A blank PROD form can be obtained at the Download Tab of Part 6 of the NAVFAC Design-Build website at the following link http://www.wbdg.org/ndbm/Download/Down_Additional.html?Section=AdditionalInfo . Contractor shall determine correct permit fees and pay said fees. Copies of all permits, permit applications, and the completed PROD form shall be forwarded to the Government's Civil Reviewer.

Provide improvements as required to conform to all applicable anti-terrorism and physical security requirements.

Minimize the impact of construction activity on operations and neighboring facilities.

Locate new site improvements at locations indicated on the drawings in another part of this ITB. If specific locations are not provided, site the improvements to develop appropriate and positive relationships with other facilities and to conform to existing development patterns.

Refer to Site Analysis and Building Requirements Sections for additional site improvement functional program information.

G201001 BASES & SUBBASES

The following materials will not be allowed for base or subbase courses: bituminous concrete.

G201002 CURBS & GUTTERS

Not required.

G201004 MARKING & SIGNAGE

Provide signage to match adjacent existing facilities.

G205002 EROSION CONTROL MEASURES

Prevent erosion from occurring by providing erosion control measures as required by city, state and federal requirements.

--End of Section--

G30 SITE CIVIL/MECHANICAL UTILITIES

SYSTEM DESCRIPTION

Provide underground domestic water utility supply for exterior hose bibs and deep sink.

--End of Section--

G40 SITE ELECTRICAL UTILITIES

SYSTEM DESCRIPTION

Provide new electrical service to the boat wash facility.

The site electrical utility system consists of all power and telecommunications and fiber optic cabling from the existing distribution system point of connection including all connections, accessories and devices as necessary and required for a complete and usable system. This section covers installations of up to within 5 feet (1.5 meters) of new (or existing) building location.

GENERAL SYSTEM REQUIREMENTS

Provide an Electrical System complete in place, tested and approved, as specified throughout this ITB, as needed for a complete, usable and proper installation. All equipment shall be installed per the criteria of PTS Section G40 and the manufacturer's recommendations. Where the word "should" is used in the manufacturer's recommendations, substitute the word "shall".

Comply with UFC-3-501-01 Electrical Engineering latest edition and with NAVFAC SOUTHWEST UTILITIES STANDARD SPECIFICATIONS AND DETAILS.

An outage request will be required and submitted for all new equipment installation, inspection and acceptance regardless of customer/facility affected or impacted. Outage request should be submitted and confirmed received 14 days minimum in advance to NASKW Public Works Director. Contractor should schedule and request outages with this clearly in mind. Outage requests are reviewed for any high voltage operation, installation of new equipment, and cutover/energize. Utilize e-mail submission for tracking purposes and cc: Contracting Officer on all such correspondence.

10 days before scheduled outage request date contractor will submit a 5-day notice of equipment inspection to be provided along with test results of equipment and pad to be energized. Equipment inspection by NAVFAC Southwest Utilities will be held five days prior to schedule outage date in order to identify any discrepancies and allow contractor to make corrections prior to schedule outage date. Equipment submittals and final design drawings shall be made available during the inspection.

G4010 ELECTRICAL DISTRIBUTION

Connect to the existing 208Y/120 volt three phase, four wire, 60 Hertz electrical power system.

The low voltage connection point shall be at the existing pad-mounted 75kVA 13.8kV~208/120Y transformer adjacent to the existing small-vessel fueling station and the service extended to the project site underground in a concrete-encased duct bank.

The available fault current at the point of connection shall be assumed to be an infinite bus.

Contractor required to coordinate and schedule with NAVFAC Southeast GPS editor directly to field visit and GPS **ALL** NAVFAC Southeast utilities operated and maintained utilities (water/sewer/electrical) contained in a project.

G401006 UNDERGROUND ELECTRIC CONDUCTORS

Provide a 208/120Y three-phase underground electrical service entrance system to meet the connection requirements as indicated in paragraph G4010 "Electrical Distribution".

G401007 DUCTBANKS, MANHOLES, HANDHOLES AND RACEWAYS

Provide a system of concrete encased ductbanks, handholes and manholes for all underground power wiring.

G401008 GROUNDING SYSTEMS

Provide a complete grounding system for the electrical power distribution system.

G401009 METERING

Provide a demand meter and housing for the new feeder circuit. Meter and all its accessories shall be per NASKW PWD specifications for the existing AMI system, which currently calls for a Schneider Electric ION8650 meter.

G401011 EQUIPMENT REQUIREMENTS FOR COASTAL, CORROSIVE, AND HIGH HUMIDITY AREAS

Provide exterior equipment designed for coastal, corrosive and high humidity areas.

The special design requirements listed below apply when electrical equipment is routinely subjected to salt spray (such as installations at piers and wharves) or is installed in locations exposed to condensing humidity that has historically caused premature rusting and degradation of equipment enclosures.

Entire transformer assembly shall be corrosion resistant and be fabricated of stainless steel.

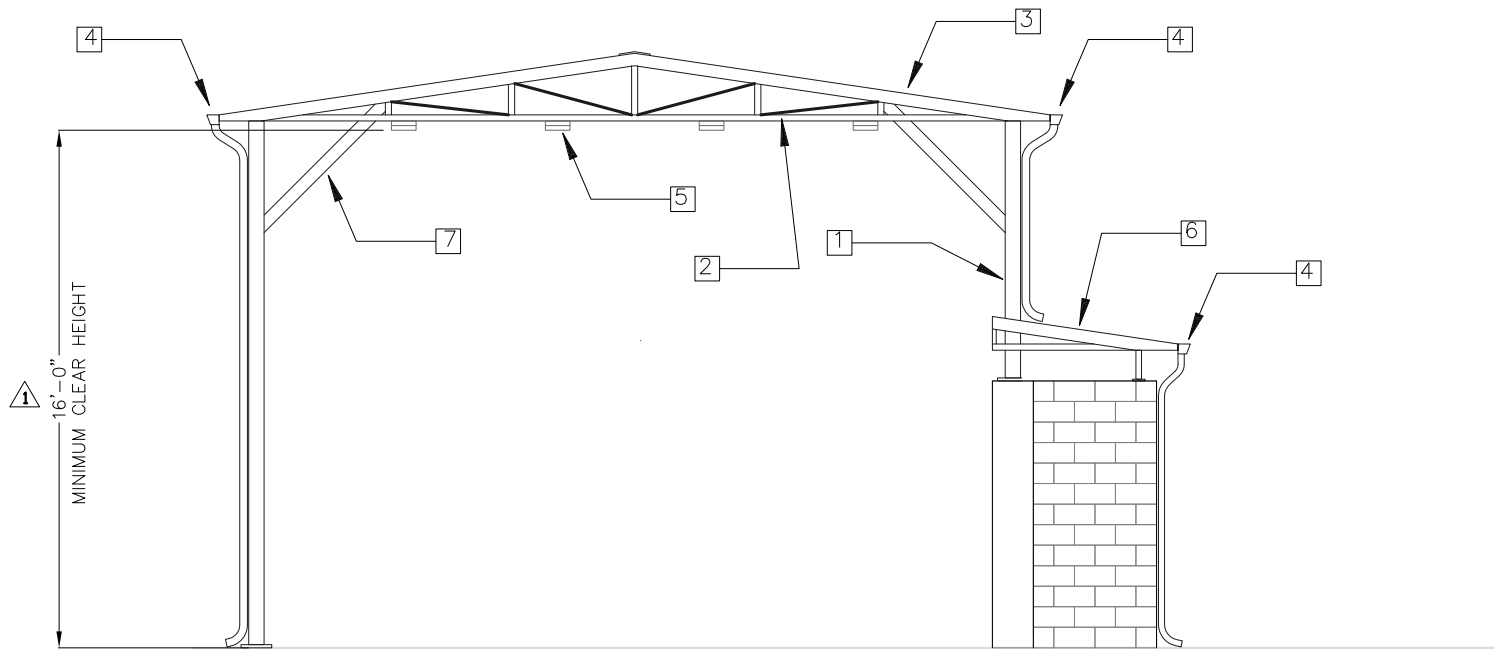
Use stainless steel cabinets and hardware for pad-mounted switchgear, switchboards, and sectionalizing termination cabinets.

Use stainless steel enclosures and hardware for exterior safety switches and other electrical equipment.

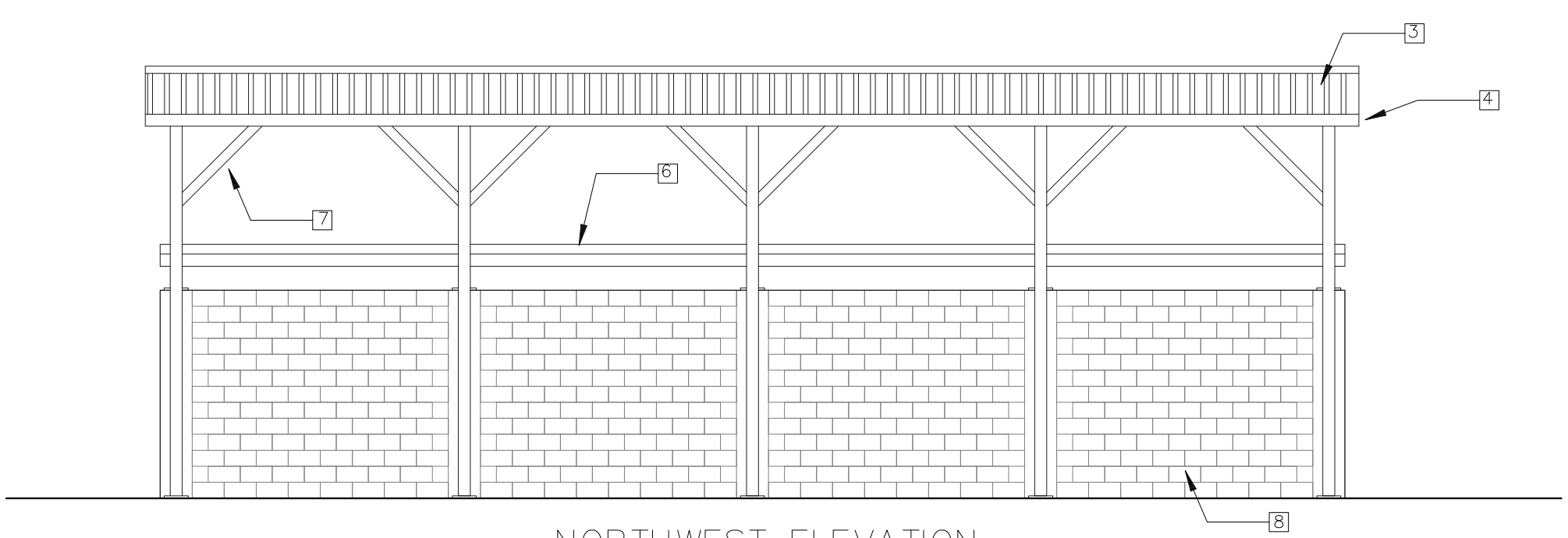
Do not use aluminum-conductor steel-reinforced (ACSR) overhead conductors.

When feasible, equipment enclosures can be designed to comply with NEMA 4X non-metallic enclosure requirements instead of stainless steel if the enclosures are not subject to physical or structural integrity damage.

-- End of Section --



SOUTHWEST ELEVATION



NORTHWEST ELEVATION

GENERAL NOTES

1. EPOXY PRIME AND PAINT OR HOT-DIP GALVANIZE (HDG) ALL EXPOSED NON-STAINLESS STEEL.
2. ALL FASTENERS, FIXTURES, AND EQUIPMENT SHALL BE SUITABLE FOR A HIGH-EXPOSURE SALTWATER MARINE ENVIRONMENT.

KEYNOTES

NOTE: KEYNOTES APPLY TO THIS SHEET ONLY.

1. SHORT SECTION OF HSS COLUMNS FROM TOP OF CMU
2. MOMENT FRAME OR TRUSS SYSTEM
3. METAL ROOF DECKING
4. RAIN GUTTERS & DOWNSPOUTS
5. OVERHEAD LIGHTING, TYP.
6. ROOF COVER OVER SHOWER AND SINK BAYS.
7. DIAGONAL BRACING OR MOMENT FRAME AS REQ'D.

   BAY FOR ELECTRICAL PANEL, PUMP AND FILTRATION EQUIPMENT.

GRAPHIC SCALE

0 5 10 20

REVISIONS

SYMBOL	DESCRIPTION	BY	DATE	APPRVD
1	ITB026-16	TKJ	29AUG16	
2	Addendum#1	TKJ	13OCT16	

SATISFACTORY TO DATE

DIRECTOR DATE

APPROVED DATE

ENGR:
DRAFTER: T.K. JUSTICE
E.I.C.:
FIRE:
SECURITY:
SAFETY:
DEPT. HEAD:

NAVAL AIR STATION KEY WEST
KEY WEST FLORIDA

ITB 026-16, DESIGN-BUILD BOAT WASHDOWN FACILITY
MOLE PIER - PORT OPERATIONS

ELEVATIONS

SIZE D

SIZED FOR REPRODUCTION ON A 22" x 34" SHEET

CODE ID #

PROJECT LOCATION

CONST. CONTR. #

SHEET 5 OF 6

S-3

ADDENDUM #1
Project: OM19001601
Mole Pier Boat Washdown Facility
Invitation to Bid: ITB 17-006
October 13, 2016

End of Addendum #1