



ADDENDUM NO. 2
TO THE CONTRACT DOCUMENTS
for the construction of the

Date: July 9, 2014
Project No.: 439197
ITB#: 014-019, EN-1002

**SEAWALL REPAIRS AT ZERO DUVAL
CITY OF KEY WEST
KEY WEST, FLORIDA**

To All Planholders and/or Prospective Bidders:

The following changes, additions, and/or deletions are hereby made a part of the Contract Documents for the construction of the Seawall Repairs at Zero Duvall dated May 16, 2014 as fully and completely as if the same were fully set forth therein:

BIDDERS QUESTIONS

1. **Question:** We are preparing our bid for the Zero Duval Project. I spoke with Enid Torregosa at HARC who indicated that the relocation and reconstruction aspect of the ticket booth and dock structure will require their approval. This creates a couple of conundrums as the next meeting after the potential award date of the contract is August 27 and until then it remains a complete unknown as to their actions on allowing the design to remain as is. This hanging question makes it very difficult to prepare a proper bid. I cannot find any specific reference to HARC in the bid documents.

I'm not sure how to phrase this as a question but I do seek your guidance regarding HARC approval and its potential to delay the start of the project and change the scope of the removal and restoration of the existing structures as per the bid specs.

Answer: All City permits including Building and HARC will be reviewed at the staff levels. Additionally all City permits shall be submitted through the City engineering department and utilize the permit allowance for any permit fees. All permit application preparations shall be the responsibility of the contactor.

SPECIFICATIONS

PART 1 – PROCURMENT REQUIREMENTS

SECTION 00 21 13, INSTRUCTIONS TO BIDDERS

Page 4, Paragraph F.8, ADD All subcontractors are required to have a temporary or permanent City of Key West license.

PART 2 – CONTRACTING FORMS

SECTION 00 41 13, BID FORM

DELETE in its entirety and REPLACE with the attached.

DRAWINGS

Drawings DELETE and REPLACE the following Drawing Sheets:

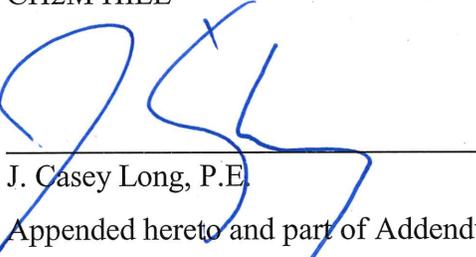
Drawing: DS-100: SITE DEMOLITION PLAN, dated July 9, 2014.

Drawing: DS-101: BULKHEAD LAYOUT PLAN, dated July 9, 2014.

Drawing: DS-503: OUTFALL PIPE DETAILS, dated July 9, 2014.

All Bidders shall acknowledge receipt of Addendum No. 2 in the Bid Form. Bids submitted without this acknowledgement will be considered informal.

CH2M HILL



J. Casey Long, P.E.

Appended hereto and part of Addendum No. 2:

Section 00 41 13, Bid Form, attached.

Drawing: DS-100: SITE DEMOLITION PLAN, attached.

Drawing: DS-101: BULKHEAD LAYOUT PLAN, attached.

Drawing: DS-503: OUTFALL PIPE DETAILS, attached.

END OF ADDENDUM

NOTE TO BIDDER: Use preferably BLACK ink for completing this Bid form.

BID FORM

To: The City of Key West

Address: 3140 Flagler Avenue, Key West, Florida 33040

Project Title: Seawall Repairs at Zero Duval

CH2M HILL Project No.: 439197

City of Key West Project No.: EN-1002

Bidder's person to contact for additional information on this Bid:

Company: _____

Name: _____

Telephone: _____

Email: _____

BIDDER'S DECLARATION AND UNDERSTANDING

The undersigned, hereinafter called the Bidder, declares that the only persons or parties interested in this Bid are those named herein, that this Bid is, in all respects, fair and without fraud, that it is made without collusion with any official of the Owner, and that the Bid is made without any connection or collusion with any person submitting another Bid on this Contract.

The Bidder further declares that he has carefully examined the Contract Documents for the construction of the project, that he has personally inspected the site, that he has satisfied himself as to the quantities involved, including materials and equipment, and conditions of work involved, including the fact that the description of the quantities of work and materials, as included herein, is brief and is intended only to indicate the general nature of the Work and to identify the said quantities with the detailed requirements of the Contract Documents, and that this Bid is made according to the provisions and under the terms of the Contract Documents, which Documents are hereby made a part of this Bid.

The Bidder further agrees, as evidenced by signing the Bid, which if awarded a Contract, the Florida Trench Safety Act and applicable trench safety standards will be complied with.

CONTRACT EXECUTION AND BONDS

The Bidder agrees that if this Bid is accepted, he will, within 10 days, not including Sundays and legal holidays, after Notice of Award, sign the Contract in the form annexed hereto, and will at that time, deliver to the Owner examples of the Performance Bond and Payment Bond required herein, and evidence of holding required licenses and certificates, and will, to the extent of his Bid, furnish all machinery, tools, apparatus, and other means of construction and do the Work and furnish all the materials necessary to complete all work as specified or indicated in the Contract Documents.

CERTIFICATES OF INSURANCE

Bidder agrees to furnish the Owner, before commencing the Work under this Contract, the certificates of insurance as specified in these Documents.

START OF CONSTRUCTION AND CONTRACT COMPLETION TIMES

The Bidder agrees to begin work within 10 calendar days after the date of the Notice to Proceed and to achieve Substantial Completion within 150 calendar days from the date when the Contract Times commence to run as provided in paragraph 2.03.A of the General Conditions, and Work will be completed and ready for final payment and acceptance in accordance with paragraph 14.07 of the General Conditions within 180 calendar days from the date when the Contract Times commence to run.

LIQUIDATED DAMAGES

In the event the Bidder is awarded the Contract, Owner and Bidder recognize that time is of the essence of this Agreement and that Owner will suffer financial loss if the Work is not completed within the times specified in paragraph Start of Construction and Contract Completion Times above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. Owner and Bidder also recognize the delays, expense, and difficulties involved in proving in a legal or other dispute resolution proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Bidder agree that as liquidated damages for delay (but not as a penalty) Bidder shall pay Owner \$3,000.00 per day for each day that expires after the time specified for substantial completion.

After Substantial Completion, if Bidder neglects, refuses, or fails to complete the remaining Work within the Contract Times or any Owner-granted extension thereof, Bidder shall pay Owner \$1,000.00 for each day that expires after the time specified in paragraph Start of Construction and Contract Completion Times, above for completion and readiness for final payment. Liquidated damages shall run concurrent.

Owner will recover such liquidated damages by deducting the amount owed from the final payment or any retainage held by Owner.

ADDENDA

The Bidder hereby acknowledges that he has received Addenda No's. _____, _____, _____, _____, _____, (Bidder shall insert No. of each Addendum received) and agrees that all addenda issued are hereby made part of the Contract Documents, and the Bidder further agrees that his Bid(s) includes all impacts resulting from said addenda.

SALES AND USE TAXES

The Bidder agrees that all federal, state, and local sales and use taxes are included in the stated Bid Prices for the Work. Cash allowances DO NOT include any sales and use tax. Equipment allowance includes taxes as shown in Equipment Suppliers' Bid.

PUBLIC ENTITY CRIMES

“A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.”

LUMP SUM WORK

The Bidder further proposes to accept as full payment for the Work proposed herein the amounts computed under the provisions of the Contract Documents. For lump sum bid items, it is expressly understood that the amounts are independent of the exact quantities involved. The Bidder agrees that the amounts for lump sum work represent a true measure of labor and materials required to perform the Work, including all allowances for overhead and profit for each type of work called for in these Contract Documents. The amounts shall be shown in both words and figures. In case of discrepancy, the amount shown in words shall govern.

UNFORESEEN CONDITION ALLOWANCE

Bidder further agrees that the amount shown is an estimated amount to be included in the Total Base Bid for unforeseen conditions and conflicts. Bidder further acknowledges that payment will be based on actual costs as determined in conformance with the Contract Documents and as authorized by Change Order. The Owner will negotiate with the Contractor how each Allowance will be spent prior to performing the work.

CONCRETE AND UTILITY ALLOWANCE

Bidder further agrees that the amount shown is an estimated amount to be included in the Total Base Bid for concrete and utility coordination. Bidder further acknowledges that payment will be based on actual costs as determined in conformance with the Contract Documents and as authorized by Change Order. The Owner will negotiate with the Contractor how each Contingency Allowance will be spent prior to performing the work.

PERMIT ALLOWANCE

Bidder further acknowledges that this amount shown is an estimated amount to be included in the Total Base Bid for the Permit required by the City of Key West and any Regulatory Agency Permit(s). Bidder acknowledges that payment will be based on actual cost for the permit(s).

SEVERE STORM IMPACT ALLOWANCE

Bidder shall determine and insert in an amount in their bid for use in an instance when the project site is impacted by a Severe Storm. A severe storm is defined as a named storm or hurricane that requires the Contractor to demobilize their marine operations (i.e. Barges, cranes, equipment and tugs) due to severe winds and waves. As part of the relocation the Contractor would relocate to a safe harbor or mooring area. This is not for land side operations and not for use in thunderstorms, etc. where the contractor's equipment can stay at dock. It is assumed that these instances will be covered as part of the Base Bid by the Contractor. The Allowance should be based on a three (3) day window required to secure the site, Demob barge(s) to a safe site, secure it and everything onboard, including but not limited to boats, cranes and other equipment, allow the storm to pass, then remob and reset up the work site to resume work. The amount to be included in the Total Base Bid is an allowance to only be used in the event that such a storm occurs. Bidder acknowledges that payment will be based on actual weather conditions occurring and impacting work(s). Allowance may be used on more than one occasion (if applicable). The same cost identified by the Contractor on Bid form may be applied more than once. [Addendum No. 2]

Breakdown of the lump sum bid as provided below is in accordance with the following schedule:

| LUMP SUM BID SCHEDULE | | |
|------------------------------|--------------------|----------------------------|
| Item No. | Description | Lump Sum Item Price |
| A. | Mobilization | \$ |
| B. | Demolition | \$ |

| LUMP SUM BID SCHEDULE | | |
|------------------------------|--|----------------------------|
| Item No. | Description | Lump Sum Item Price |
| C. | Wooden Deck Demolition/ Reconstruction | \$ |
| D. | Sheet Piles | \$ |
| E. | Tie Backs and Walers | \$ |
| F. | Concrete Cap | \$ |
| G. | Backfill/Flowable Fill | \$ |
| H. | Drainage Pipe Extension and Repair | \$ |
| I. | Misc. General | \$ |
| J. | Project Close Out / Demobilization | \$ |
| K. | Cleats | \$ |
| L. | Unforeseen Condition Allowance | \$ 70,000 |
| M. | Permit Allowance | \$ 20,000 |
| N. | Concrete and Utility Allowance | \$ 50,000 |
| O. | Severe Storm Impact Allowance | \$ |
| | Total Lump Sum Bid (Sum of Items A. – O.) | \$ |

The Bidder agrees to accept as full payment for the Work proposed under this Project, as herein specified and as shown on the Drawings, the following Total Base Bid amount:

Dollars _____ (Amount written in words has precedence)

and _____ Cents \$ _____

SUBCONTRACTORS

The Bidder further proposes that the following subcontracting firms or businesses will be awarded subcontracts for the following portions of the Work in the event that the Bidder is awarded the Contract:

Name

Street City State Zip

Surety

_____ whose address is

Street City State Zip

Bidder

The name of the Bidder submitting this Bid is _____

_____ doing business at

Street City State Zip

which is the address to which all communications concerned with this Bid and with the Contract shall be sent.

The names of the principal officers of the corporation submitting this Bid, or of the partnership, or of all persons interested in this Bid as principals are as follows:

If Sole Proprietor or Partnership

IN WITNESS hereto the undersigned has set his (its) hand this ___ day of _____ 20__.

Signature of Bidder

Title

If Corporation

IN WITNESS WHEREOF the undersigned corporation has caused this instrument to be executed and its seal affixed by its duly authorized officers this ___ day of _____ 20__.

Name of Corporation

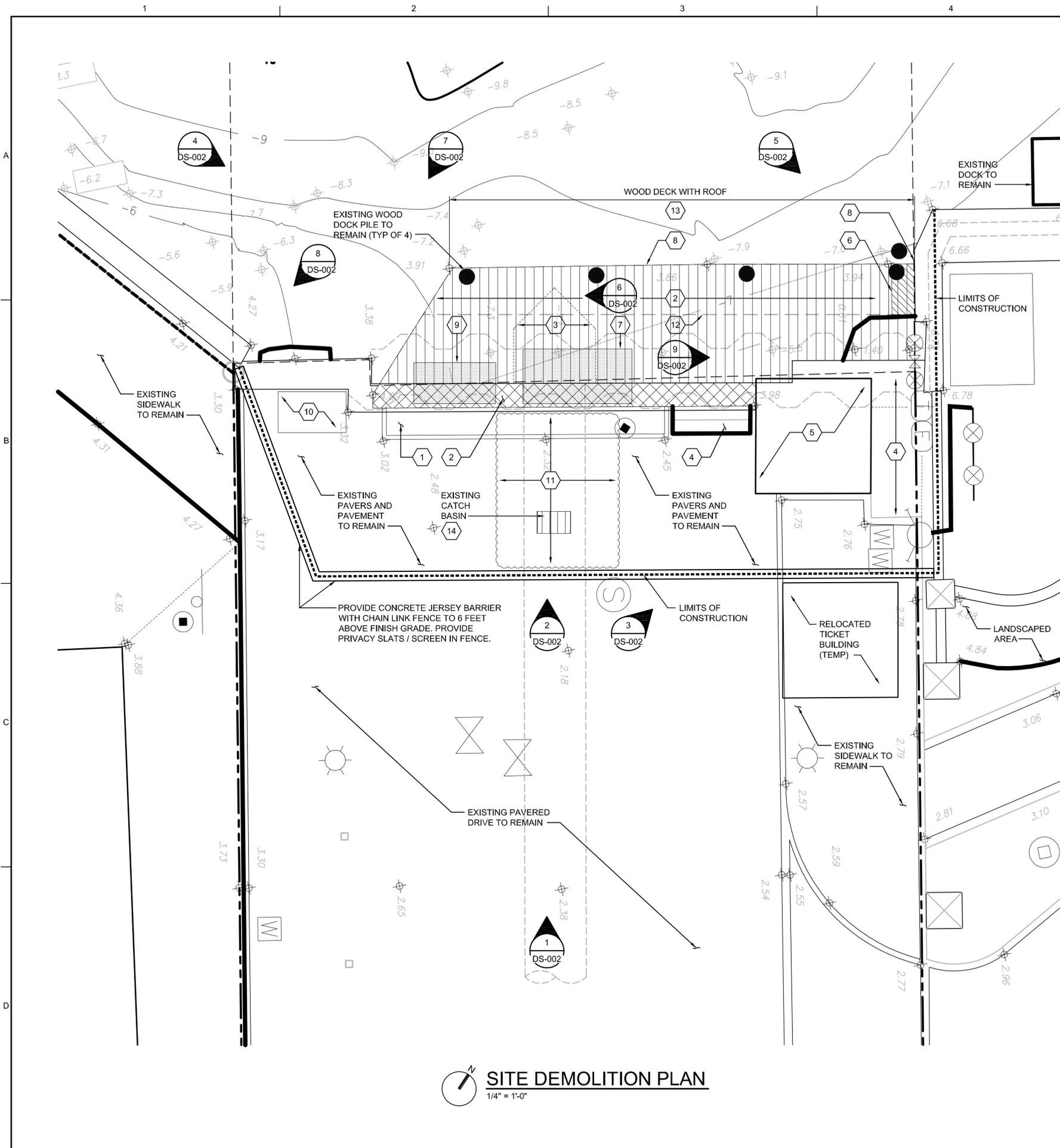
(SEAL)

By: _____

Title: _____

Attest: _____
Secretary

END OF SECTION



SITE DEMOLITION PLAN
1/4" = 1'-0"

GENERAL NOTES:

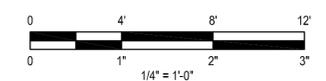
- EXISTING SITE SHALL BE BARRICADED AS INDICATED WITH A CONCRETE PRECAST BARRIER WALL SYSTEM WITH CHAIN LINK FENCE AND PRIVACY SLATS SCREEN. BARRIER WALL SYSTEM SHALL BE COORDINATED WITH THE OWNER FOR THE NECESSARY LOCATION DURING CONSTRUCTION. ALL ITEMS IDENTIFIED TO BE ADDRESSED IN THE KEY NOTES BELOW SHALL BE ADDRESSED. ALL ELEMENTS WITHIN LIMITS OF CONSTRUCTION, NOT IDENTIFIED TO BE REPAIRED, DEMOLISHED OR ADDRESSED BY THE CONTRACTOR SHALL REMAIN UNTOUCHED BUT WILL BE REPAIRED IF DAMAGED DURING CONSTRUCTION. EXISTING PAVERS, CONCRETE CURBS AND OTHER AESTHETIC FEATURES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION UPON COMPLETION OF CONSTRUCTION, IF DAMAGED DURING THE CONSTRUCTION PROCESS.
- UPON RECONSTRUCTION OF THE EXISTING WOOD DOCK, THE CONTRACTOR SHALL RETURN ALL FURNITURE, FURNISHINGS, EQUIPMENT, OTHER ELEMENTS, TO THEIR ORIGINAL LOCATIONS AND CONDITION, INCLUDING ALL UTILITIES AND OTHER CONNECTIONS REMOVED AS A RESULT OF CONSTRUCTION. CONTRACTOR SHALL THOROUGHLY PHOTOGRAPH THE SITE AND AS-BUILT THE AREA PRIOR TO DISMANTLING AND DEMOLITION TO PROVIDE A RECORD OF ELEMENTS TO BE REINSTALLED.

KEYED NOTES:

1. MAINTAIN EXISTING PLANTER IN CURRENT LOCATION DURING CONSTRUCTION UNLESS REQUIRED TO BE RELOCATED FOR THE PURPOSES OF CONSTRUCTION. IF PLANTER IS RELOCATED, IT SHALL BE MOVED BY CONTRACTOR TO A SECURE LOCATION OFF-SITE AND RETURNED AND RESTORED TO ITS ORIGINAL CONDITION BY CONTRACTOR PRIOR TO COMPLETION OF PROJECT.
2. MAINTAIN EXISTING OVERHEAD SIGN FOR THE PROJECT IN ITS CURRENT LOCATION DURING CONSTRUCTION UNLESS REQUIRED BY CONTRACTOR TO BE REMOVED TO IMPLEMENT CONSTRUCTION PROJECT. SHOULD REMOVAL OF SIGN BE REQUIRED, CONTRACTOR SHALL DISASSEMBLE THE SIGN IN ITS ENTIRETY AND STORE IT OFF-SITE. CONTRACTOR SHALL REASSEMBLE SIGN TO ITS ORIGINAL CONDITION UPON COMPLETION OF CONSTRUCTION. CONTRACTOR SHALL RETAIN THE SERVICES OF A LICENSED ENGINEER IN THE STATE OF FLORIDA FOR REVISED ENGINEERING ON SIGN TO MEET CURRENT CODES AND BUILDING DEPARTMENT APPROVAL.
3. REMOVE IN ITS ENTIRETY AND LEGALLY DISPOSE OF OFF-SITE THE EXISTING 5'-8" x 5'-8" SQUARE STEEL PLATE W/ 36" LONG COLLAR AND UNDERWATER RUBBER BAFFLE AT OUTFALL TO STORM WATER SYSTEM. MAINTAIN OUTFALL DURING CONSTRUCTION. DO NOT PLUG.
4. MAINTAIN EXISTING CONCRETE STEPS AND RAMP IN THEIR ENTIRETY DURING CONSTRUCTION. PATCH AND REPAIR STEPS UPON COMPLETION OF CONSTRUCTION. CONTRACTOR SHALL WIDEN STEPS AND RAMP TO COMPLY WITH ADA INCLUDING RAILINGS.
5. REMOVE EXISTING TICKET BUILDING AND RELOCATE TO A LOCATION AS INDICATED ON DRAWING. EXISTING BOOTH SHALL BE MAINTAINED IN FULL OPERATION AT TEMPORARY LOCATION INCLUDING WATER AND POWER DURING THE CONSTRUCTION OF BULKHEAD. CONTRACTOR SHALL COORDINATE TEMPORARY WATER AND POWER CONNECTIONS FOR BUILDING AS WELL AS PROVIDE HURRICANE TIE-DOWNS AND FOUNDATION SUPPORTS FOR BUILDING DURING BULKHEAD CONSTRUCTION. UPON COMPLETION OF CONSTRUCTION, BUILDING SHALL BE RETURNED TO ITS ORIGINAL LOCATION AND TIED DOWN TO GROUND AS REQUIRED UNDER CURRENT BUILDING CODE. ALL FOUNDATIONS, ELECTRICAL AND WATER SHALL BE RESTORED TO ITS ORIGINAL CONDITION. CONTRACTOR SHALL RETAIN THE SERVICES OF A LICENSED ENGINEER IN THE STATE OF FLORIDA FOR REVISED ENGINEERING ON BUILDING AND FOUNDATION TO MEET CURRENT CODES AND BUILDING DEPARTMENT APPROVAL.
6. CONTRACTOR SHALL REMOVE EXISTING WOOD STORAGE. BOX FROM TOP OF WOOD DECK, INCLUDING ALL ITEMS STORED WITHIN. BOX SHALL BE TRANSPORTED AND STORED OFF-SITE BY CONTRACTOR FOR REINSTALLATION UPON COMPLETION OF CONSTRUCTION. COORDINATE WITH TENANT AND OWNER WITH RESPECT TO THE CONTENTS OF BOX AND THE FINAL LOCATION UPON COMPLETION OF WOOD DECK CONSTRUCTION. BOX SHALL BE FASTENED TO FINISHED WOOD DECK.
7. CONTRACTOR SHALL COORDINATE WITH TENANT FOR REMOVAL OF EXISTING WOOD STORAGE LOCKER FROM TOP OF WOOD DECK, INCLUDING ALL ITEMS STORED WITHIN. BOX SHALL BE TRANSPORTED AND STORED OFF-SITE BY CONTRACTOR FOR REINSTALLATION UPON COMPLETION OF CONSTRUCTION. COORDINATE WITH TENANT AND OWNER WITH RESPECT TO THE CONTENTS AND THE FINAL LOCATION UPON COMPLETION OF WOOD DECK CONSTRUCTION. BOX SHALL BE FASTENED TO FINISHED WOOD DECK.
8. CONTRACTOR SHALL REMOVE EXISTING WATER MAIN, CAP AND PLUG AT POINT OF CONNECTION, AND PROVIDE A NEW VALVE AT REMOVAL POINT. UPON COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL RE-INSTALL WATER LINE FROM VALVE TO ORIGINAL ALIGNMENT AND TERMINATION POINT. WATER SHALL BE RESTORED TO ORIGINAL / NORMAL OPERATION.
9. CONTRACTOR SHALL COORDINATE WITH TENANT FOR REMOVAL OF EXISTING REFRIGERATOR FROM TOP OF WOOD DECK, INCLUDING ALL ITEMS STORED WITHIN. REFRIGERATOR SHALL BE TRANSPORTED AND STORED OFF-SITE BY CONTRACTOR FOR REINSTALLATION UPON COMPLETION OF CONSTRUCTION. COORDINATE WITH TENANT AND OWNER WITH RESPECT TO THE CONTENTS AND THE FINAL LOCATION UPON COMPLETION. RE-INSTALL ALL ELECTRICAL POWER SOURCE FOR REFRIGERATOR UPON COMPLETION OF CONSTRUCTION OF WOOD DECK AND RETURN REFRIGERATOR TO FULL OPERATION. REFRIGERATOR SHALL BE FASTENED TO FINISHED WOOD DECK.
10. CONTRACTOR SHALL REMOVE EXISTING STORAGE BOX / LOCKER FROM TOP OF EXISTING PAVEMENT, INCLUDING ALL ITEMS STORED WITHIN. BOX / LOCKER SHALL BE TRANSPORTED AND STORED OFF-SITE BY CONTRACTOR FOR REINSTALLATION UPON COMPLETION OF CONSTRUCTION OF PROJECT. COORDINATE WITH TENANT AND OWNER WITH RESPECT TO THE CONTENTS AND THE FINAL LOCATION UPON COMPLETION. BOX SHALL BE FASTENED TO FINISHED PAVEMENT.
11. CONTRACTOR SHALL REMOVE EXISTING PAVERS IN THEIR ENTIRETY WITHIN THE AREA SHOWN AND EXPOSE OUTFALL PIPE TO BOTTOM OF PIPE. EXAMINE CONDITION OF PIPE WITH OWNER AND ENGINEER AND REPAIR OPEN JOINT WITH FILTER CLOTH WRAP AND A CONCRETE COLLAR (6" x 12" x CONTINUOUS) AND CRACKS IN PIPE WITH GROUT AND EPOXY INJECTION, BACKFILL AND COMPACT SITE TO A MAXIMUM OF 2% SLOPE, BACKFILL HOLE WITH FLOWABLEFILL. BACKFILL AND COMPACT OTHER AREAS WITH NEW SUBGRADE MATERIAL (98% MODIFIED PROCTOR) AS REQUIRED TO REMOVE POTHOLES AND BUMPS. RE-INSTALL EXISTING PAVERS AS NECESSARY TO PROVIDE A COMPLETE SLOPED GRADE TO DRAIN. PROVIDE A MINIMUM OF 12" OF FLOWABLE FILL BELOW ALL REINSTALLED PAVERS.
12. CONTRACTOR SHALL CUT AND TRIM EXISTING EXPOSED AND UNDERWATER STEEL SHEET PILE BULKHEAD (AS REQUIRED) TO CONSTRUCT NEW STEEL PILE BULKHEAD AND OUTFALL STRUCTURES. ITEMS SHALL BE LEGALLY DISPOSED OF OFF-SITE.
13. CONTRACTOR SHALL REMOVE EXISTING WOOD DECKING STRUCTURE BOTH FLOOR AND ROOF IN ITS ENTIRETY AND SALVAGE FOR RE-INSTALLATION MEETING CURRENT DESIGN CODES UPON COMPLETION OF CONSTRUCTION OF NEW BULKHEAD. EXISTING WOOD PILING SHALL REMAIN IN PLACE. EXISTING WOOD PLANKING, JOISTS, PURLINS, GIRTS, AND ROOF FRAMING SHALL BE MAINTAINED AS PART OF THE DEMOLITION PROJECT. DAMAGED ELEMENTS SHALL BE REPLACED BY CONTRACTOR AS PART OF THE BASE BID. CONTRACTOR SHALL RETAIN THE SERVICES OF A LICENSED ENGINEER IN THE STATE OF FLORIDA FOR REVISED ENGINEERING ON SIGN TO MEET CURRENT CODES AND BUILDING DEPARTMENT APPROVAL.
14. PROVIDE FILTER CLOTH AND HAY BALES ON EXISTING CATCH BASIN DURING CONSTRUCTION.

LEGEND:

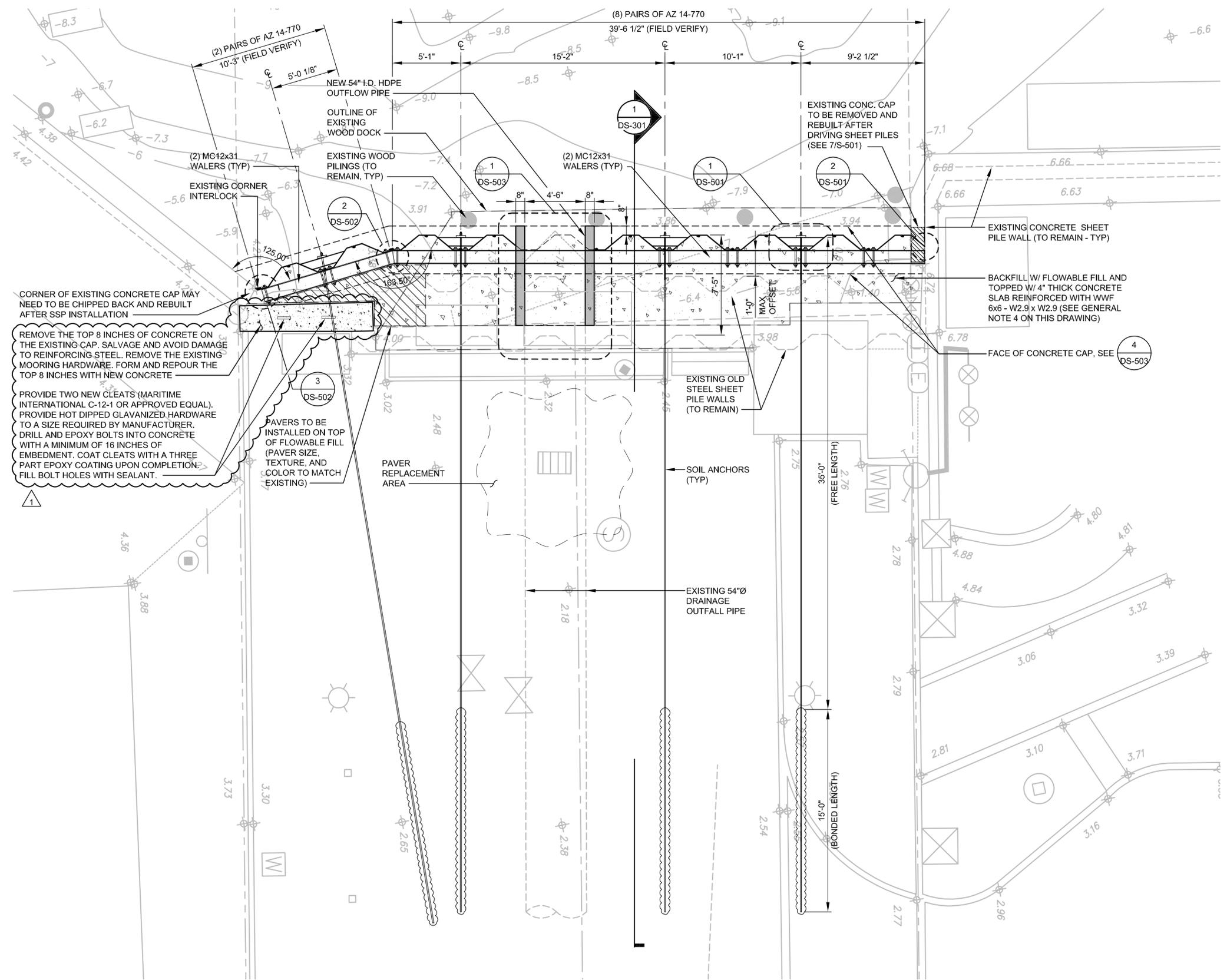
- 1 DS-001 REFERENCE PHOTO INDICATOR. ARROW INDICATES DIRECTION OF PHOTO. SEE DRAWING DS-001.



| | | | | | |
|--|--|--|--|--|--|
| CH2MHILL 3001 PGA BLVD, SUITE 300 PALM BEACH GARDENS, FL 33410 EB0000072 AAC001982 | | SEAWALL REPAIR AT ZERO DUVAL FOR CITY OF KEY WEST, FLORIDA | | SITE DEMOLITION PLAN | |
| | | DATE: MAY 16, 2014 PROJ: 439197 DWG: DS-100 | | VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING. | |
| 07/09/14 NO. 1 DSGN | | A. VANHOOSER DR | | J.C. LONG APVD | |
| 07/09/14 NO. 1 DSGN | | A. ARTHUR DR | | J.C. LONG APVD | |
| 07/09/14 NO. 1 DSGN | | A. VANHOOSER DR | | J.C. LONG APVD | |
| 07/09/14 NO. 1 DSGN | | A. VANHOOSER DR | | J.C. LONG APVD | |

1 2 3 4 5 6

A
B
C
D



CORNER OF EXISTING CONCRETE CAP MAY NEED TO BE CHIPPED BACK AND REBUILT AFTER SSP INSTALLATION

REMOVE THE TOP 8 INCHES OF CONCRETE ON THE EXISTING CAP. SALVAGE AND AVOID DAMAGE TO REINFORCING STEEL. REMOVE THE EXISTING MOORING HARDWARE. FORM AND REPOUR THE TOP 8 INCHES WITH NEW CONCRETE

PROVIDE TWO NEW CLEATS (MARITIME INTERNATIONAL C-12-1 OR APPROVED EQUAL). PROVIDE HOT DIPPED GALVANIZED HARDWARE TO A SIZE REQUIRED BY MANUFACTURER. DRILL AND EPOXY BOLTS INTO CONCRETE WITH A MINIMUM OF 16 INCHES OF EMBEDMENT. COAT CLEATS WITH A THREE PART EPOXY COATING UPON COMPLETION. FILL BOLT HOLES WITH SEALANT.

PAVERS TO BE INSTALLED ON TOP OF FLOWABLE FILL (PAVER SIZE, TEXTURE, AND COLOR TO MATCH EXISTING)



NOTE: MAINTAIN OUTFALL FLOW DURING CONSTRUCTION. DO NOT PLUG.

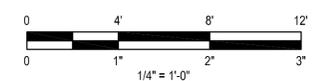
- GENERAL NOTES:**
- BATHYMETRY DATA SHOWN REFER TO MEAN LOW WATER. MLW ELEVATION = (-) 0.18 FEET (NGVD 29).
 - TOPOGRAPHIC ELEVATIONS SHOWN IN FEET BASED ON BENCHMARK ELEVATION = 6.391 FEET (NGVD 29).
 - ANY MUCK THAT IS EXCAVATED TO ACCOMMODATE THE PIPE MUST BE DISPOSED OF AT AN APPROVED LOCATION OFFSITE.
 - FLOWABLE FILL MUST BE VIBRATED IN AND MIXED WITH EXISTING MUCK DOWN FOR 5 FEET TO ELEVATION -12.0 FEET. ALL MUCK THAT COMES TO TOP MUST BE DISPOSED OF AT AN APPROVED LOCATION OFFSITE. CONCRETE SLAB SHALL ONLY BEAR ON CLEAN FLOWABLE FILL.
 - ALL SHEET PILES AND INTERLOCKS SHALL BE EPOXY COATED AS SPECIFIED DOWN TO ELEVATION -27.0 FEET.
 - ALL SHEET PILES AND INTERLOCKS SHALL BE ASTM A572, GRADE 50 (U.N.O.).
 - ALL STRUCTURAL SHAPES, CHANNELS, PLATES, AND MISCELLANEOUS STEEL SHALL BE ASTM A572, GRADE 50 (U.N.O.).
 - ALL BOLTS AND RELATED HARDWARE SHALL BE ASTM A325.
 - CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO ORDERING OR FABRICATING ANY MATERIALS.
 - CONTRACTOR IS RESPONSIBLE FOR LOCATION OF EXISTING UTILITIES.

LEGEND:

— EXISTING CONSTRUCTION (TO REMAIN)

— NEW CONSTRUCTION

BULKHEAD PLAN
1/4" = 1'-0"



| | | | | | | | | | |
|------------|-----|------|----------|----|-----------|-----|--------------|------|-----------|
| NO. | 1 | DATE | 07/09/14 | DR | A. ARTHAY | CHK | A. VANHOOSER | APVD | J.C. LONG |
| REVISION | | | | | | | | | |
| APPENDUM 2 | | | | | | | | | |
| BY | JCL | APVD | | | | | | | |

3001 PGA BLVD, SUITE 300
PALM BEACH GARDENS, FL 33410
EB0000072 AAC001992

SEAWALL REPAIR AT
ZERO DUVAL
FOR
CITY OF KEY WEST, FLORIDA

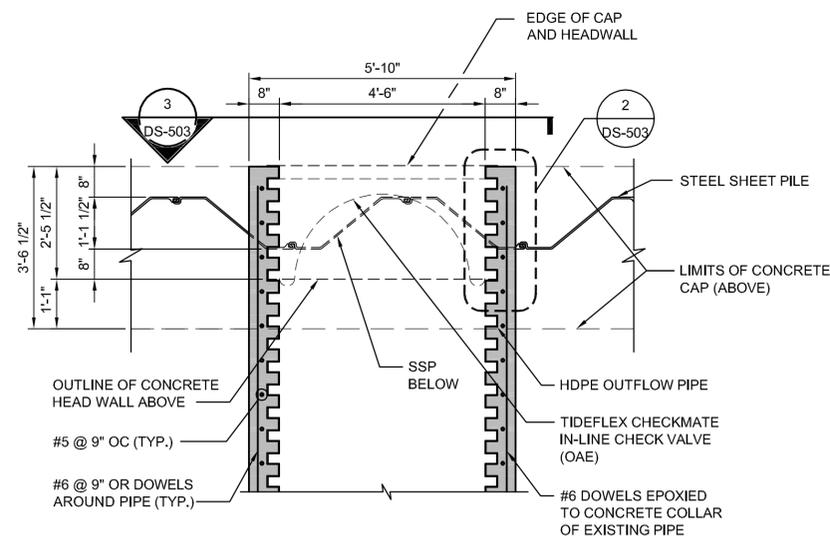
CH2MHILL

SITE
**ZERO DUVAL
BULKHEAD LAYOUT PLAN**

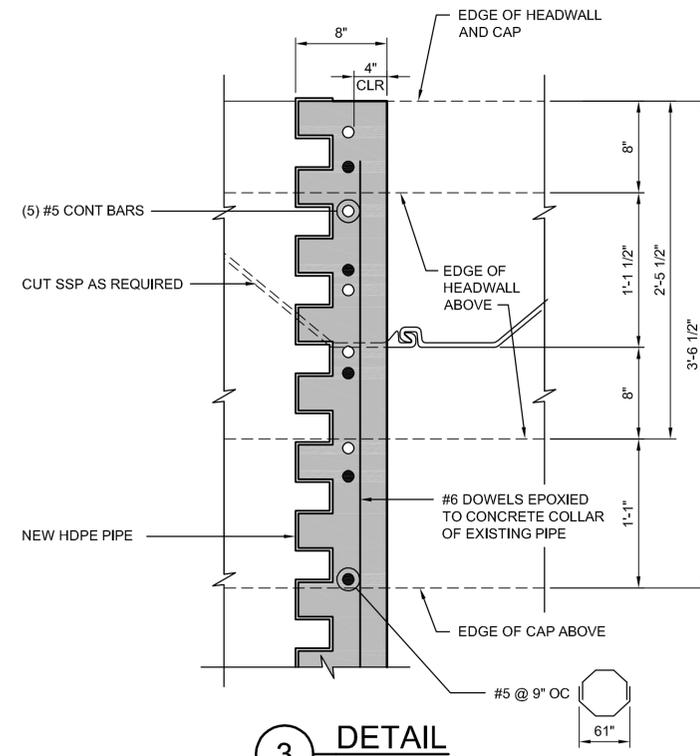
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
1/4" = 1'-0"

DATE MAY 16, 2014
PROJ 439197
DWG **DS-101**

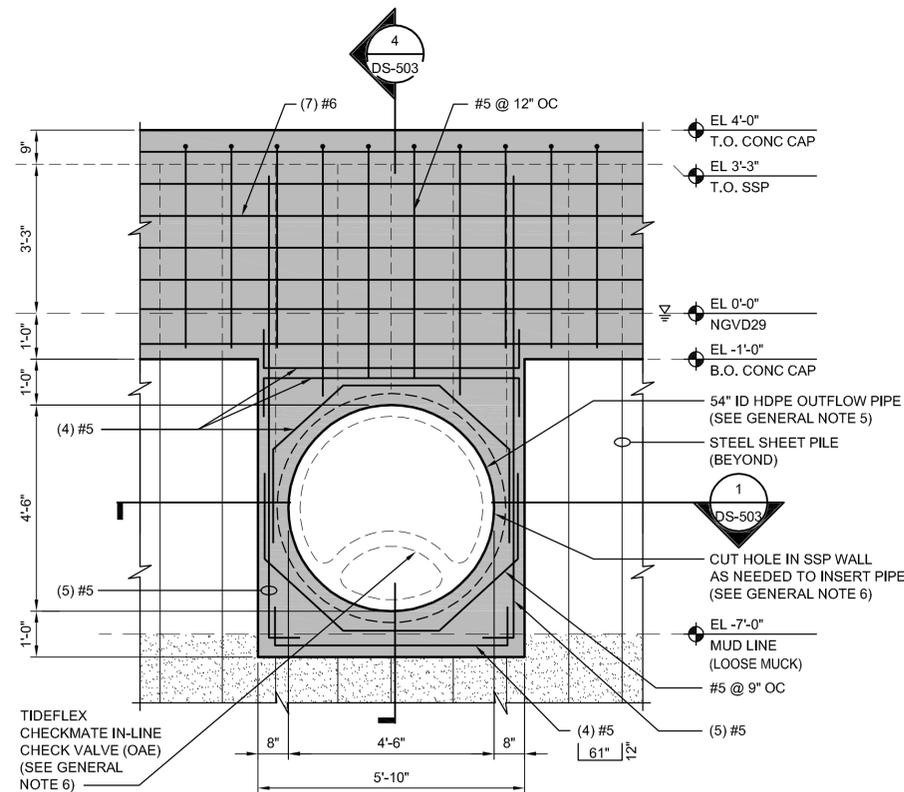
100% REVIEW SET - REVISED - AUGUST 6, 2013 REUSE OF DOCUMENTS: THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL. © CH2M HILL 2012. ALL RIGHTS RESERVED.



1 OUTFLOW PIPE PLAN
1/2" = 1'-0"



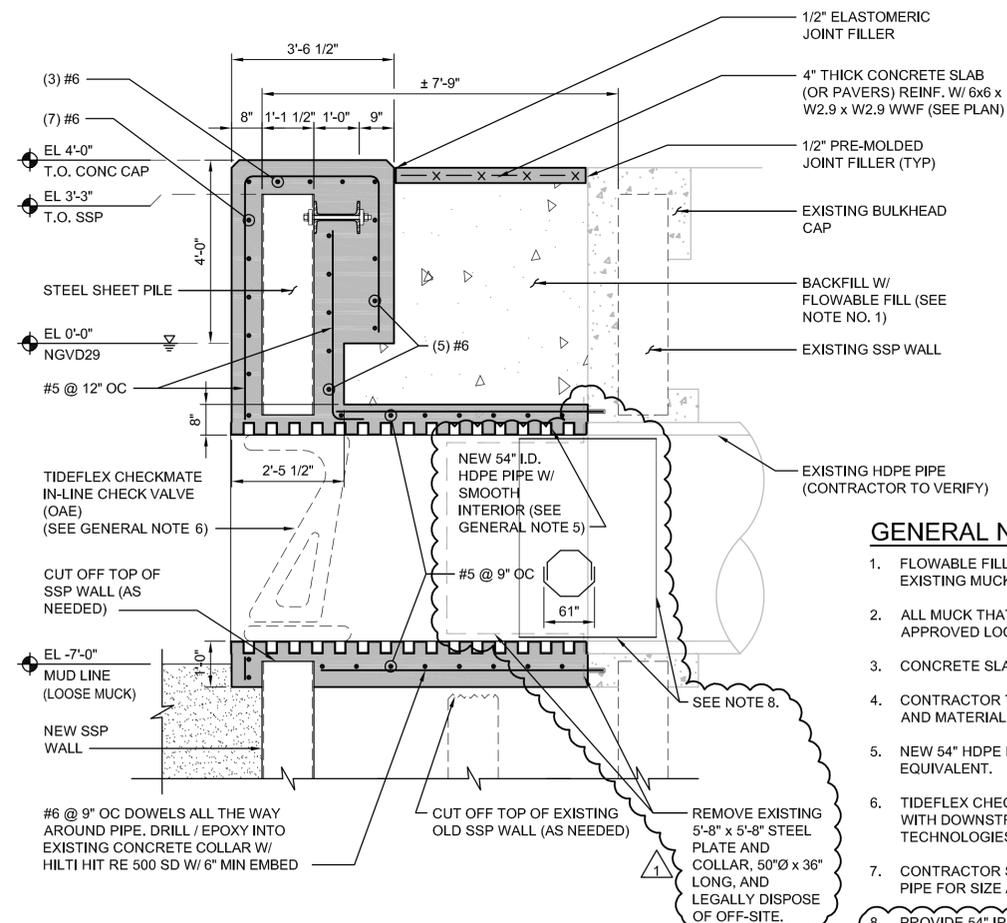
3 DETAIL
1-1/2" = 1'-0"



2 OUTFLOW PIPE ELEVATION
1/2" = 1'-0"

NOTES:

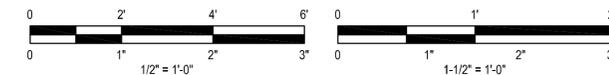
- CONTRACTOR SHALL INSTALL AN ANCHORING SYSTEM TO COUNTERACT BUOYANCY IN CONCRETE PRIOR TO POURING CONCRETE ENCASEMENT AROUND NEW HDPE PIPE.
- CONTRACTOR TO VERIFY PIPE I.D. PRIOR TO ORDERING TIDEFLEX VALVE.



4 OUTFLOW PIPE SECTION
1/2" = 1'-0"

GENERAL NOTES:

- FLOWABLE FILL MUST BE VIBRATED IN AND MIXED WITH EXISTING MUCK DOWN FOR 5 FEET TO ELEVATION -12.0 FEET.
- ALL MUCK THAT COMES TO TOP MUST BE DISPOSED OF AT AN APPROVED LOCATION OFFSITE.
- CONCRETE SLAB SHALL ONLY BEAR ON CLEAN FLOWABLE FILL.
- CONTRACTOR TO VERIFY EXISTING 54" STORM PIPE FOR SIZE AND MATERIAL PRIOR TO ORDERING NEW PIPE.
- NEW 54" HDPE PIPE SHALL BE EAGLE CORR PE (DUAL WALL) OR EQUIVALENT.
- TIDEFLEX CHECKMATE IN-LINE VALVE SHALL BE 54" MOUNTED WITH DOWNSTREAM CLAMP, MANUFACTURED BY TIDEFLEX TECHNOLOGIES, CARNEGIE, PA (412-279-0044).
- CONTRACTOR SHALL COORDINATE CHECK VALVE WITH HDPE PIPE FOR SIZE AND FIT UP.
- PROVIDE 54" IPS HDPE 32.5DR SPLICE SLEEVE. INSERT 18" INTO EXISTING PIPE AND 18" INTO NEW TO BRIDGE CONNECTION BETWEEN EXISTING AND NEW OUTFALL PIPES.



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| 3001 PGA BLVD, SUITE 300 PALM BEACH GARDENS, FL 33410 EB0000072 AAC001992 | | SEAWALL REPAIR AT ZERO DUVAL FOR CITY OF KEY WEST, FLORIDA | | STRUCTURAL ZERO DUVAL OUTFLOW PIPE DETAILS | |
| NO. 1 | | DATE 07/09/14 | | DR A. VANHOOSER | |
| DGN | | CHK | | APVD J.C. LONG | |
| REVISION | | ADDENDUM 2 | | BY J.C. LONG | |
| 1 | | JCL | | APVD | |
| 2 | | AJV | | BY | |
| 3 | | JCL | | APVD | |

100% REVIEW SET - REVISED - AUGUST 6, 2013

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