SPECIFICATIONS

FOR

RUBB/BIG TOP BUILDING FOUNDATION

BOARD OF TRUSTEES OF THE GALVESTON WHARVES (PORT OF GALVESTON)

GALVESTON, TEXAS



Prepared by Port of Galveston Galveston, Texas February 2015

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Milestone	Period End Date	
Release of Bid Sunday, March 1, 2015		
Pre-Bid Meeting Tuesday, March 10, 2015, 10:30 a.m.		
End of Question and Answer Period Wednesday, March 11, 2015, 5:00 p.		
Bid Submissions Due Friday, March 20, 2015, 10:00 a.m.		
Note: All times are Central Daylight Time.		

RUBB/BIG TOP BUILDING FOUNDATION BID REQUIREMENTS CHECKLIST

- ➤ In order to receive consideration, make all bids in accordance with the following. Any omission(s) may result in immediate bid rejection:
- > Submit complete documents listed below:

Section II:

- Business Name and Submittal Date shown on Bid
- ♦ Lump Sum for RUBB/Big Top Building Foundation and related services requested in the Bid
- ♦ Working days to substantially complete all work
- Workers Compensation Experience Modification Rate as requested in the Bid
- ♦ Cashier's check or bid bond in the amount of 5% of the total bid amount
- ♦ Company name, address, name and title of person signing Bid
- ♦ Signature of person signing bid
- ♦ Witness signature
- ♦ Corporate seal (if corporation)
- ♦ Addenda number and date (if any)

Attachment B

♦ Client Reference List

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♦ Submit bid in a sealed envelope properly marked as instructed in Notice to Bidders

SEALED FORMAL BIDS WILL BE RECEIVED UNTIL 10:00 AM, CDT (GALVESTON, TEXAS TIME) FRIDAY, MARCH 20^{TH} , 2015.

BIDS NOT SUBMITTED ON THE INCLUDED BID FORM WILL BE REJECTED

SECTION I NOTICE TO BIDDERS RUBB/BIG TOP BUILDING FOUNDATION

- 1. Sealed bids, original and three (3) copies, addressed to the Board of Trustees of the Galveston Wharves, Attention: Sandy J. Sabatier, Purchasing Agent, 123 Rosenberg Avenue 8th Floor, Galveston, Texas 77550 or P.O. Box 328, Galveston, Texas 77553, will be received until 10:00 A.M., CDT (Galveston, Texas Time) Friday, March 20, 2015, and then publicly opened and read aloud, for furnishing all plans, labor, material and equipment and performing all work required for RUBB/Big Top Building Foundation at the Port of Galveston, Galveston, Texas (hereinafter called Owner).
- 2. The work shall include the RUBB/Big Top Building Foundation as specified herein and shown on the plans.
- 3. Bids shall be submitted in sealed envelopes upon the blank bid form furnished. Sealed envelopes shall be marked in the lower left hand corner as follows:

"Do Not Open in Mail Room Bid for RUBB/Big Top Building Foundation To be Opened and Read Aloud in Public at 10:00 A.M., CDT, Friday, March 20, 2015"

- 4. All bids shall be accompanied by a **Cashier's Check** upon a nationally recognized bank in the amount of 5% of the "Total Bid Amount" made payable to the order of the Galveston Wharves, Galveston, Texas, or a bid bond from a Corporate Surety satisfactory to the Owner, as a guarantee that the bidder will enter into a contract and execute performance and payment bonds within ten (10) days after **Notice of Acceptance of the Bid.**
- 5. All checks will be returned to the unsuccessful bidders within fifteen (15) days after **Notice of Acceptance.**
- 6. The successful bidder must furnish separate performance and payment bonds upon the Owner's standard forms in the amount of 100% of the contract price from a Corporate Surety satisfactory to the Owner
- 7. The right is reserved, as the interest of the Owner may require, to reject any and all bids, and to waive any informality in bids received.
- 8. Plans, specifications, and bidding documents may be secured at www.portofgalveston.com (under the 'About Us' tab, then the 'Bids' tab) or from the Purchasing Agent, of the Galveston Wharves, Galveston, Texas.
- 9. It is the Bidders responsibility to carefully examine the plans, specifications and other documents, posted at www.portofgalveston.com, visit the site of the work, and fully inform themselves as to all conditions and matters, which can in any way affect the cost of the work thereof. Should a bidder find discrepancies in, or omissions from, the plans, specifications or other documents, or should they be in doubt as to their meaning, they should at once notify the Purchasing Agent, of the Galveston Wharves, Galveston, Texas, and obtain clarification prior to submitting any bid.
- 10. All questions must be submitted in writing to <u>ssabatier@portofgalveston.com</u>. Deadline for questions is Wednesday, March 11, 2015.
- 11. There will be a pre-bid conference held at 10:30 A.M. on Tuesday, March 10, 2015 at 123 Rosenberg Avenue (25th Street), Shearn Moody Plaza, 8th Floor, Galveston, Texas. Parking is available at the Shearn Moody Plaza Garage. Interested bidders will be asked to follow Port staff the site. Attendance is not mandatory, but is highly encouraged.

SECTION II BID FORM RUBB/BIG TOP BUILDING FOUNDATION

	ss Name as Registered e Secretary of State of				
Date:					
	of Trustees of the Galveston Wharves ton, Texas				
Gentle	men:				
Perform (f) Spe Buildin utilities workm A. B A *Lump required	dersigned, being familiar with the contract documnance Bond and Labor and Material Payment Bocial Conditions and (g) Technical Specifications, and Foundation does hereby propose to furnish as and transportation services necessary to perform an an anticording to the plans and specifical temporal temporal temporal temporal temporal temporal and appurtenances, as per the approved ents, General and Special Conditions, and Technical Services.	ond, (d) (d) (d) and haviall labor are cations researched.	Construction ng examined nd material, complete the ferred to abo and functional on Drawings	Contract, (e) G I the plans for the necessary tools, e work of the eve, for the follow. This includes al	eneral Conditions, ne RUBB/Big Top equipment and all entire project in a wing price:
Item No.	Item Description	Unit	Quantity	Unit Price	Extended Price
1	Reinforced Concrete Foundation and ramps including installation of hot-dipped galvanized anchor bolts for building erection, concrete, reinforcement, curing compounds, concrete finishing, and related materials, labor, and equipment. Complete-in-place.	LS	1		
TOTAI	L BASE BID PRICE: \$			_	
	Frame: The undersigned agrees, if awarded the of ter the date of Notice to Proceed . Note: See Sec				
DOLL	the Contractor fail to complete the work in the ARS (\$500.00) per day, not as a penalty, but a bering supervision, shall be deducted from the con	as liquida			
award specific respons	Bids must set forth full, accurate, and coreject a bid as not responsive if all information of a contract, consideration will be given to eations of the bid in the scheduled period, the expansibility of the bidder. The Workers' Compensa and past two years is:	requested the price perience i	d is not furni e bid, the a in this field,	shed. In determ bility of the bi client references	nining the eventual idder to meet the s, and the financial
Curren Is this	t Year:, Past Year:, Company certified as a Historically Underutilized	and d Business	Two Yea s (HUB)? Y	rs Ago: or No	 0

SECTION II BID FORM RUBB/BIG TOP BUILDING FOUNDATION

Enclosed herewith is a **Cashier's Check** in the amount of 5% of the lump sum bid, or a bid bond from a Corporate Surety acceptable to the Owner in the same amount, guaranteeing the execution of the contract and furnishing of the required bond.

The undersigned also agrees as follows:

(C 11 C 1 :// 1

If written **Notice of the Acceptance** of this bid is mailed, faxed or delivered to the undersigned within sixty (60) days after the date of opening of the bids, the undersigned will within ten (10) days after the date of such mailing, telegraphing or delivering such notice, execute and deliver a Contract and furnish to the Owner satisfactory performance and payment bonds each in the sum of the full amount of the bid and in the forms as shown in the **(Bond Section III)**, which is made a part of this Contract, guaranteeing the faithful performance of the work and further guaranteeing payment of laborers and material as required by Chapter 2253, Texas Government Code and will start work within ten (10) days of **Notice to Proceed.**

The undersigned is the duly authorized agent of said company and has been duly authorized to execute this bid, and that this company, corporation, firm, partnership or individual has not prepared this bid in collusion with any other Bidder, and that the contents of this bid as to prices, terms or conditions of said bid, have not been communicated by the undersigned nor by any employee or agent of said company to any other person engaged in this type of business or to any Galveston Wharves employee prior to the official opening of this bid. The undersigned hereby designates as his office to which such **Notice of Acceptance** may be emailed, mailed, faxed or delivered:

Respectfully Submitted,	
Business Name:	
Office Address:	
City, State, Zip Code:	
Signed By:	
Printed Name:	
Title:	
Email Address:	
Telephone Number: ()	Fax Number: ()
Witness Signature:	
Printed Name of Witness:	
SEAL If Bidder is a Corporation	
The following Addenda have been received and are i	ncluded in this Bid: : : : :

SECTION III PERFORMANCE BOND RUBB/BIG TOP BUILDING FOUNDATION

AMOUNT OF BOND:	BOND NUMBER:
KNOW ALL MEN BY THESE PRESENTS:	
firmly bound and obligated to pay to the BOARD OF full Amount of Bond as described above, the paymen	on, as Principal and, as ds in the State of Texas, hereby acknowledge ourselves F TRUSTEES OF THE GALVESTON WHARVES the nt of which in the City of Galveston, Texas, and we bind essors and assigns, jointly and severally, to perform all
perform and fulfill each undertaking, covenant, term, county and between such Principal and the Board of Trustees of the contract is, in all its terms and provisions, incorpor modifications, amendments, and extensions thereof. I Contract, such Principal shall perform and fulfill all of	tion that if the above bound Principal shall well and truly ondition, and agreement of the Construction Contract by of the Galveston Wharves, which by reference is dated oundation for the Port of Galveston, which Construction rated herein and made a part hereof by reference, and all if having entered upon performance of such Construction duties and obligations imposed upon such Principal by the se to be of force and effect; otherwise, it shall remain in full
the work thereunder or in paying therefore agreed to b	in the above mentioned contract or in the method of doing by the parties to such contract or forbearance by one party atter hereby in advance consenting that any and all of such ereon.
It is further expressly stipulated that successive recovenamed.	eries may be had hereon to the full extent of amount above
The Principal and Surety expressly intend that this ins of the Texas Government Code, as it may from time to	strument fully comply with the provisions of Chapter 2253 time be amended.
EXECUTED thisday of, 2015.	
	PRINCIPAL
By:	
Name:	
Title:	
	SURETY:
By:	
Name:	
Title:	

SECTION III PAYMENT BOND RUBB/BIG TOP BUILDING FOUNDATION

AMOUNT OF BOND:	BOND NUMBER:
KNOW ALL MEN BY THESE PRESENTS:	
Bonds in the State of Texas, hereby acknowledge ourse direct contractual relationship with the Principal or a st of the work described in the Construction Contract d	, a Texas corporation, as Principal, and, as Surety, a corporation authorized to write Surety elves bound and obligated to pay to all persons who have a ubcontractor to supply labor or material in the prosecution escribed herein, the full Amount of Bond described above, on, Texas, and we bind ourselves, our heirs, executors, rally, to perform all obligations of this Bond.
payment to all persons supplying labor or material in tecontract by and between the Principal and the Board is dated for RUBB/Big Top Build Construction Contract is, in all its terms and provened reference, and all modifications, amendments, and ex such Construction Contract, such principal shall proprosecution of such contract, such obligation shall cease force and effect. It is expressly stipulated that any change or alteration is the work thereunder or in paying therefore agreed to be to the other shall release the Surety on this bond, the lathings may be agreed to without notice to the Surety has	
It is further expressly stipulated that successive recovabove named.	reries may be had hereon to the full extent of the amount
The Principal and Surety expressly intend that this instruction of the Texas Government Code, as it may from time to	trument fully comply with the provisions of Chapter 2253 time be amended.
EXECUTED this day of, 2015	5.
	PRINCIPAL
By:	
Name:	
Title:	
	SURETY:
By:	
Name:	
Title:	

SECTION IV CONSTRUCTION CONTRACT RUBB/BIG TOP BUILDING FOUNDATION

THE STATE OF TEXAS

COUNTY OF GALVESTON

THIS AGREEMENT is entered into by and between	, for convenience below
called "Contractor" and the BOARD OF TRUSTEES OF THE GALVESTON	WHARVES, a separate
utility and agency of the City of Galveston, Texas, for convenience below called "Own	ier".

WITNESSETH

1.

For the consideration hereinafter named, Owner agrees to employ Contractor and Contractor binds and obligates itself to furnish all labor, including proper and expert supervision, together with all necessary equipment and materials, and to perform in accordance with good accepted practice in strict conformity to specifications prepared by Owner and the following, which are, by reference, incorporated herein and made a part of this contract:

Notice to Bidders, Proposal, General Conditions, Special Conditions, Technical Specifications, and Plans and all Exhibits or Addenda thereto, all as set forth in Specifications for RUBB/Big Top Building Foundation at the Port of Galveston, Galveston, Texas, prepared by Port of Galveston, Galveston, Texas, March 2015, (collectively as amended or modified, the "Bid Package") covering the furnishing of labor, material and equipment necessary for RUBB/Big Top Building Foundation for the Galveston Wharves, Galveston, Texas.

- (a) The **Bonds of Contractor** attached hereto.
- **(b)** Contractor's Bid Form.

All of the documents described above are collectively referred to herein as the "Contract Documents". All capitalized terms not defined in this Agreement have the meanings given to them in the Contract Documents. All contractual terms set forth in the Contract Documents are incorporated herein by reference.

2

The work herein contracted for shall be upon the site selected by Owner, upon Owner's properties, as outlined in the Contract Documents. The Contract shall include all work as described in the Contract Documents relating to **Unit Prices Bid Items and Lump Sum Bid Items** in Contractor's Bid Form (herein called the "Work").

3.

Except when extended for cause as provided in Paragraph 4 hereof, the Work shall commence within ten (10) calendar days after **Notice to Proceed** and shall be completed in a good and workmanlike manner, free from defects, both patent and latent, in workmanship and materials within the working days stated in **The Contractor's Bid.**

4.

(a) The time for the completion of the Work shall be extended for such number of working days during which commencement of the Work, or during which Work is actually delayed, by Act of God, casualty, lockout, strike or cause beyond control of Contractor other than non-availability of labor and materials, or inclement weather on working days. No extension of time shall be granted because of weather conditions on any working day except such working day on which the Work is prevented by one-half or more of Contractor's force by the weather for more than four hours in Contractor's eight-hour working day.

Section IV Construction Contract RUBB/Big Top Building Foundation

In order to obtain extensions of time because of delays due to any one or more of the above stated causes, Contractor in each instance, shall make written claim therefore to the Owner within five (5) days after the occurrence of each delay, and upon Contractor's failure to do so, its right, if any, to such extension will be considered as waived. Owner shall render its decision in writing, granting or refusing said application for extension, within ten (10) days after receipt of said application.

- **(b)** Contractor warrants that all equipment, material, tools and incidentals necessary to complete the Work under this Contract are available and now either on order or will immediately be placed on order by Contractor.
- (c) It is understood and agreed that Owner has relied upon the warranty of Contractor, as above expressed, as a primary inducement to the making of this Contract with Contractor.

5.

Contractor agrees that at its expense, it will obtain all necessary permits and licenses to perform the work.

6

All drawings, plans, tracings, blueprints, specifications and engineering data pertaining to the Work shall be and remain the property of the Owner.

7.

Contractor shall be fully and solely responsible for all materials except those furnished by the Owner, used in the performance of this Contract, as well as the entire Work, until final acceptance of the entire Work has been made by Owner, which acceptance shall not be unreasonably withheld.

8.

- (a) Owner shall not be liable for any extra work performed under the Contract unless Owner first authorizes same in writing.
 - **(b)** The Contractor shall begin the Work as outlined in the Contract Documents.

9.

- (a) Owner shall not be liable or responsible for, and shall be saved and held harmless by Contractor from and against any and all suits, actions, losses, damages, claims, or liability of any character, type, or description, including all expenses of litigation, court costs, and attorney's fees for injury or death to any person, or injury to any property, received or sustained by any person or persons or property, arising out of, or occasioned by, directly or indirectly, the performance of Contractor under this agreement, including claims and damages arising in whole or in part from the negligence of Owner.
- **(b)** IT IS THE EXPRESS INTENT OF THE PARTIES TO THIS AGREEMENT THAT THE INDEMNITY PROVIDED FOR IN THIS SECTION IS AN INDEMNITY EXTENDED BY CONTRACTOR TO INDEMNIFY AND PROTECT OWNER'S OWN NEGLIGENCE WHETHER THAT NEGLIGENCE IS THE SOLE OR CONTRIBUTORY CAUSE OF THE RESULTANT INJURY, DEATH OR DAMAGE.

10.

- (a) For the completion of all of the Work covered hereby in place, free from defects, both patent and latent, and the full performance by Contractor of all duties and obligations imposed upon Contractor by the terms and provisions of this Contract, Contractor shall be paid by Owner, at Galveston, Texas an amount equal to the Work actually performed by the Contractor (whether more or less than the estimated quantities as set forth in Contractor's Bid) at the unit prices for such Work as set forth in Contractor's Bid. Partial payments thereof shall be made as the Work covered by the Contractor progresses, as follows: On or before the fifth day of each calendar month, Contractor shall furnish to Owner, a certified estimate, in triplicate, setting forth in detail the quantity of the Work performed, and on or before the 20th day of the calendar month in which the estimate is submitted, a sum equal to ninety percent (90%) of such estimate, as approved by the Owner, less any previous payments, shall be paid to the Contractor.
- **(b)** Owner shall be authorized and empowered to deduct from the amount which would otherwise be due and payable to contractor on any estimate an amount sufficient to cover any defective Work or materials which have not been remedied and replaced to the Owner's satisfaction; however, failure to so withhold any part of such money cannot constitute a waiver of any valid claim of the Owner against the Contractor.
- (c) Upon completion of the entire Work in every detail, free from defects, both patent and latent, in workmanship and materials, and Owner has accepted all of such Work, which acceptance shall not be unreasonably withheld, and Owner has been furnished by the Contractor with satisfactory evidence showing that all claims for labor and materials furnished, or caused to be furnished by Contractor in the prosecution of the Work hereunder, have been paid in full and that no laborer, sub–contractor, mechanic or materialman has any sum due or owing to them, Owner shall pay Contractor the balance of the contract price in accordance with the Contract Documents. In no event shall Owner be obligated to pay such amount until the expiration of thirty (30) days after such completion of the Work.

11.

All covenants and agreements herein contained shall be extended to and binding upon the successors and assigns of Owner and the successors, executors or legal representatives of Contractor. It is further provided that the Contractor may not assign this contract or any money to become due and payable hereunder, except with the written consent of Owner.

12.

No waiver by Owner of any breach on the part of Contractor of any of the obligations herein contained shall constitute a waiver of any breach of the same or any other obligations.

13.

In the event of any conflict between any term or provisions expressed in this Contract and any term or provisions in any of the other Contract Documents, the terms or provisions of this instrument shall govern to the extent of the conflict.

14.

The City of Galveston shall never be liable to respond in damages or make indemnity or compensation of any character from any source other than the income and revenues arising from the operation of the property operated by the Board of Trustees of the Galveston Wharves by reason of, or due to, or caused by the operation of the Galveston Wharves. The members of the Board of Trustees of the Galveston Wharves, either singularly or collectively, shall not be personally liable to anyone by reason of, or due to, or caused by the management of the Galveston Wharves.

Section IV Construction Contract RUBB/Big Top Building Foundation

EXECUTED , in duplicate originals, at Galvest	ton, Texas, this day of, 2015.
Owner:	
	BOARD OF TRUSTEES OF THE GALVESTON WHARVES
	By:
	Michael Mierzwa, Port Director
Approved as to form:	
Counsel to the Board of Trustees of the Galveston Wharves	Contractor:
	Ву:
ATTEST:	

THE STATE OF TEXAS

COUNTY OF GALVESTON

BEFORE ME, the undersigned authority, on this day personally appeared Michael Mierzwa, Port Director of the **Board of Trustees of The Galveston Wharves**, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purpose and consideration therein expressed in the capacity therein stated, as the act and deed of the **Board of Trustees of The Galveston Wharves**.

Section IV Construction Contract RUBB/Big Top Building Foundation

KODD/Dig Top Dununig Fo	unuation		
GIVEN UNDER MY	HAND and SEAL of office this	day of	, 2015.
	NOTARY PUBLIC, STATE OF T	EXAS	
THE STATE OF TEXAS			
COUNTY OF GALVESTO	N		
, known to me acknowledged to me that he	rsigned authority on this day personally ape to be the person whose name is subset executed the same for the purposes and act and deed of	cribed to the forego	
GIVEN UNDER MY	Y HAND and SEAL of office this	day of	, 2015.
	NOTA DV BUDI IC CTATE OF T	ENV. A.C.	
	NOTARY PUBLIC, STATE OF T	LAAS	

SECTION V GENERAL CONDITIONS RUBB/BIG TOP BUILDING FOUNDATION

1. SCOPE OF CONTRACT

Contract Documents shall be the Bidder's Bond, Performance Bond, Labor and Material Payment Bond, the Construction Contract, General Conditions, Special Conditions, Technical Specifications and addenda thereto, if any. Galveston Wharves' prescribed forms of the several documents may be procured from the Galveston Wharves upon application. Unfamiliarity with or failure to procure copies of any such document shall be at Bidder's and Contractor's risk and responsibility.

In the event of any conflict between any provision or provisions of the standard form of Contract and any provision or provisions of any other Contract Document, the provision or provisions of the form of Contract shall prevail.

The GENERAL CONDITIONS, in conjunction with the other Contract Documents, all of which constitute a part of the CONTRACT, are each intended to be cooperative, a provision occurring in one is as binding as though occurring in all, and are intended to describe and provide a finished piece of work, complete in every detail and executed with material and workmanship of first quality.

The complete execution of the work described herein and all operations incidental thereto, shall be included in the contract to be entered into, except such details as are specifically excluded.

All work included is to be executed for the Board of Trustees of the Galveston Wharves, and the party to whom the Galveston Wharves has awarded the contract shall be referred to hereinafter as the "Contractor". Sub–contractors, as such, will not be recognized. No sub–contractor shall, under any circumstances, relieve the Contractor of his liabilities and obligations under this contract, should such sub–contractor fail to perform the work undertaken by him in a satisfactory manner.

The Contractor shall at all times be represented on the work in person or by a foreman or duly designated agent who shall be conclusively presumed to be authorized to receive and execute instructions or notices given by Engineer or Galveston Wharves. Instructions and information given by the Engineer to the Contractor's foreman or agent on the work shall be considered as having been given to the Contractor. When two or more Contractors are engaged on installation or construction work in the same vicinity, the Engineer shall be authorized to direct the manner in which each shall conduct his work, so far as it affects other Contractors.

Each Contractor, firm, or corporation having a contract with Galveston Wharves must have an office or agent in Galveston during the period of construction. The location of this office or the post office address of the agent must be filed with the Engineer and notice delivered to Contractor's foreman or other agent at the job—site or sent to such office or agent at the address on file in the office of the Engineer, or said Galveston Wharves, will be considered full and sufficient notice under the provisions hereof.

For all purposes of this Contract it is agreed and understood that written notice to Contractor will be assumed to have been received on the day when delivered in person to the Contractor or at his designated office to the foreman or other person in charge at the site of the work or on the second day after date of letter written by the Galveston Wharves, said letter being mailed to Contractor's address as shown in the Contract Documents or to the last known address of the Contractor.

All Contractors and their employees are positively forbidden to give or lend money, or other thing of value, to any officer of employee of the Galveston Wharves, and should it appear that this provision has been violated, the Galveston Wharves, at its option, may terminate any contract that may exist between said Contractor and the Galveston Wharves.

The Galveston Wharves will be represented on the work by its Engineer or his authorized assistants, whose authority in all matters shall be defined in the Contract Documents. On all questions concerning the acceptability of material or machinery, the classification of material, the execution of work, conflicting interest of contractors performing related work and the determination of costs, the decision of Engineer shall be final.

Inspectors are required to see that all the provisions of the contract and specifications are faithfully adhered to. Any inspector may, if authorized by the Engineer, stop the work entirely if there is not sufficient quantity of suitable and approved material on the ground to carry it on properly, or for any other good and sufficient cause. Any work done in the absence of an inspector may be ordered opened up for thorough examination, and must be rebuilt or replaced at the Contractor's sole expense. But no approval by an inspector shall be construed into an acceptance of defective or improper work for material, which must be rebuilt or properly replaced whenever discovered, at any stage of the work during guaranteed period. Inspectors do not have the power to give orders or directions under any possible circumstances, except as herein defined and provided, and on authority of the Engineer. In case of dispute or misunderstanding, no verbal arrangement or agreement will be considered and Contractor must produce written authority in support of his contentions.

2. FORM OF BID, FILING-ACCEPTANCE OR REJECTION:

Bids or proposals shall be filed on the form provided. Blank spaces therein shall be properly filled without change in phraseology and without addition thereto. Unauthorized conditions, limitations, or provisos attached or added to a bid or proposal will render it informal and may cause it rejection. Changes or alterations to amounts placed on the bid form are not allowed (i.e. white out or line through amount). No bid filed after the designated hour will be received or considered. No telegraphic bid or telegraphic modification of a bid will be considered by the Galveston Wharves. The Galveston Wharves reserves the right to reject all bids not made on the blank form furnished by it to bidders, the right to accept or reject any or all bids or parts of bids, and to waive formalities as may best serve the public interest.

Bidders shall place requested copies of the bid in the same envelope, seal and mark on the outside of the envelope what the bid is and the date to be filed. Mark envelope clearly "Do Not Open In Mail Room". Submit all bids to the Galveston Wharves' office at 123–25th Street, Galveston, Texas, not later than the date and hour set out in the bid form or specifications.

If the bid is made by an individual it shall be signed with the full name and address shall be given; if it is made by a firm it shall be given; and if it is made by a corporation it shall state the state of incorporation, the address thereof, shall be signed by an officer of the corporation, the signature to be attested with the impress of the corporate seal and the names and titles of the corporate officers shall be given.

Bidders are invited to be present at the opening of bids or proposals.

Bidders shall insert in the blank spaces provided in the bid form the prices at which the material called for will be delivered, all charges prepaid, to the location and place specified in the bid form or detailed specifications; or if the bid is for material and labor at the unit prices or specified sum thereof, as the case may be, for each item specified. If the unit price and the total price named by a bidder for any item do not agree, the unit price alone will be considered as representing the bidder's intention.

The quantities noted in the bid or schedule are approximations for comparing bids and no claim shall be made against Galveston Wharves for excess or deficiency therein, absolute or relative. Payment at the prices agreed upon will be in full for the completed work, and will cover materials, supplies, labor, tools, machinery and all other expenditures incident to satisfactory compliance with the contract.

No oral interpretations shall be made to any bidder as to the meaning of any of the contract documents, or be effective to modify any of the provisions of the contract documents. Every request for an interpretation shall be made in writing and addressed to the Purchasing Agent, of the Galveston Wharves, Galveston, Texas.

3. **DEPOSIT:**

The bid shall be accompanied by a cashier's or certified check or a bidder's bond executed by a responsible corporate surety authorized to do business in Texas, in the amount of five percent (5%) of the total amount of the bid, payable to the Galveston Wharves, as a guarantee that the bidder will, if awarded the contract, enter into a contract with the Galveston Wharves as provided herein. Only one deposit or bond is required with the bid. If the bid is based upon alternates, such deposit or bond must be at least five percent (5%) of the highest amount for which the bidder offers to do all or any part of the work bid upon.

If bidder files a bidder's bond, it shall be conformable to Galveston Wharves' standard form; therefore, subject only to such eliminations from, additions to or changes in the provisions thereof as may necessarily result from any particular terms of work as covered by any or all of the Contract Documents. The corporate surety on such bond shall fulfill all qualification requirements set out in Paragraph 6 hereof for corporate surety on the contract performance bond in Paragraph 6 provided for.

Deposits will be returned to all unsuccessful bidders upon award of the contract and to the successful bidder when he has signed the contract and the surety bond furnished, as required hereinafter, has been approved by Galveston Wharves' Counsel.

Bids not accompanied by deposit or bond will be subject to automatic rejection.

4. CONTRACT:

The contractor shall be required to enter into a Contract with the Galveston Wharves on the standard form of contract of the Galveston Wharves and in accordance with the Contract Documents and Contractor's Bid.

Any bidder whose bid shall be accepted shall be required to appear at the office of the Executive Director in person, or if a firm or corporation, a duly authorized representative shall so appear, to execute the contract within ten (10) days after notice that the contract has been awarded to him, and failure or neglect to do so shall constitute a breach of agreement effected by the acceptance of the bid. The damages of the Owner for such breach will include loss from interference with his construction program and other items whose accurate amount will be difficult or impossible to compute. The amount of the certified check or bidder's bond accompanying the bid of such bidder shall be retained by the Galveston Wharves as liquidation damages for such breach. In the event any bidder whose bid shall be accepted shall fail or refuse to execute the contract as herein before provided, the Executive Director may at his option, determine that such bidder has abandoned the contract and thereupon his bid and the acceptance thereof shall be null and void and the Owner shall be entitled to liquidation damages as above provided.

A corporation to which an award of the work is made may be required, when such requirement is deemed proper by the Galveston Wharves, before the contract is executed by the Galveston Wharves, to furnish a certificate of its corporate existence and of its good standing, and evidence that the officers signing the contract for the corporation is each duly authorized to do so.

5. NON-LIABILITY OF THE CITY OF GALVESTON AND BOARD OF TRUSTEES OF THE GALVESTON WHARVES:

It is understood and agreed that members of the Board of Trustees of Galveston Wharves are contracting here only in their capacity as members of the Board, and neither they nor the City of Galveston shall be liable hereunder for any amount of money, except insofar as same may be paid from the revenues of the Galveston Wharves.

6. BONDS:

The bidder to whom the contract is awarded shall furnish, without cost to the Galveston Wharves, a Performance Bond and a Labor and Material Payment Bond written by a bonding company authorized by law to do business in the State of Texas, written by an agency and local representative located in the State of Texas, and with surety satisfactory to the Galveston Wharves, in the amount of one hundred percent (100%) of the total amount of the contract. The Corporate Surety on said bonds shall execute the same by and through a duly authorized Attorney-in Fact, who is a resident of, or doing business in, Galveston, Galveston County, Texas, unless Contractor can obtain said Surety on said bonds shall execute the same by and through a duly authorized Attorney-in-Fact, who is a resident of, or doing business in, Galveston, Galveston County, Texas, unless Contractor can obtain said bonds at less premium by having the Corporate Surety execute the same by and through an Attorney-in-Fact, who is not a resident of, nor doing business in Galveston, Galveston County, Texas. This is to guarantee to the Galveston Wharves the proper performance by the Contractor of all and singular the obligations assumed by said Contractor. These bonds shall be conformable to Galveston Wharves' form therefore, subject only to such elimination from, additions to or changes in the provisions therefore as may necessarily result from any particular terms of the work as covered by any or all the Contract Documents. These bonds will be canceled and sureties released upon completion and acceptance of the work described covered by the Contract Documents.

Bonding companies whose name appears on the current list published by the (United States) Treasury Department of accepted sureties on Federal bonds need not submit with the bonds any proof of their being so qualified and licensed by the Texas Board of Insurance Commissioners, but any company which is not on such Treasury Department's current list desiring to become a surety upon any such performance bond and payment bond must submit with the bonds at the time it is tendered to the Galveston Wharves for approval and acceptance a certificate by the Texas Board of Insurance Commissioners, bearing date no more than five (5) days prior to the date the bond is so tendered for approval, to the effect that the company in question is so licensed and qualified under such statutory provisions, express attention being called to the fact that a bonding company which instead of being qualified and licensed under the statutes just referred to above holds merely a license as a "trust company" under applicable law will not be approved as a surety upon such performance bond.

To insure prompt approval of such performance bonds, the agent or attorney executing the bonds for the bonding company will, whether the company is or is not on the Treasury Department's approved list, attach to the bonds or insert in the document immediately following the bonds, his power of attorney or other appropriate proof of his authority to have executed bond.

In any case, in which the performance bond is in a penal sum in excess of \$50,000.00 and in which the bonding company is not on the Treasury Department's approved list, the Galveston Wharves reserves the right to require that the bonds be signed by two surety companies.

7. TERMS:

Whenever in the specifications the following terms are used, the meaning shall be as follows:

OWNER:

Whenever the word Owner, or the expression Party of the First Part, or First Party, is used in the Contract, it shall be understood as referring to the Board of Trustees of the Galveston Wharves.

CONTRACTOR:

Whenever the word Contractor, or the expression Party of the Second Party, or Second Party, is used, it shall be understood to mean the person, persons, co-partnership or corporation who or which has agreed to perform the work embraced in this contract or to his, their, or its legal representatives, successors and assigns.

SPECIFICATIONS:

Shall be understood to mean the Documents listed in Paragraph 1, Section IV, Construction Contract, as well as all sections describing materials and construction methods and attached to this contract as listed on the index sheet enclosed.

ENGINEER:

Except as otherwise expressly provided herein to the contrary, the term Engineer shall be deemed to designate and refer to the Project Manager with Shelmark Engineering; and Inspector shall be deemed to designate and refer to an assistant or representative of said Project Manager.

8. INTERPRETATION OF PHRASES:

Whenever the words "directed", "required", "permitted", "designated", "considered necessary", "prescribed", or words of like import are used, it shall be understood that the direct, requirement, permission, order designation or prescription of the Engineer is intended, and similarly, the words "approval", "acceptable", satisfactory", or words of like import shall mean: Approved by or acceptable or satisfactory to the Engineer. Whenever in the specifications or drawings accompanying this agreement, the terms or description of various qualities relative to finish, workmanship, or other qualities of similar kind which cannot from their nature, be specifically and clearly described and specified, but are necessarily described in general terms, the fulfillment of which must depend on individual judgment, then, in all cases, any questions of the fulfillment of said specifications shall be decided by the Engineer, and said work shall be done in accordance with his interpretations of the meanings of the words, terms or clauses defining the character of the work.

9. KEEPING OF PLANS AND SPECIFICATIONS ACCESSIBLE:

Upon request, the contractor shall be furnished with two copies of all plans and specifications, and shall keep one copy of the same constantly accessible to the work.

10. RIGHT OF ENTRY:

The Owner reserves the right to enter the property or location in which the work, herein contracted for, is to be constructed or installed, by such agent or agents as it may elect, for the purpose of inspecting the work, for the purpose of constructing or installing such collateral work as said Owner's Lessees may desire.

11. METHOD OF PAYMENT AND ACCEPTANCE OF WORK:

About the last day of each month, the Engineer will make an estimate of the work theretofore done by the Contractor and of the value thereof, based upon the unit bid price (or otherwise estimated by him where the work involves an entire structure, at a lump sum without the unit prices). Such monthly estimate will be approximate only, and no attempt will be made to make exact measurements or determination of exact quantities until the final completion of the work. Based upon the Engineer's monthly estimate of work and the value thereof done by the Contractor, the Contractor shall be entitled to receive a payment upon such estimate in such amount that when taken together with previous such payments to him on estimates, the amount paid will aggregate the value of the work therefore done less 10% percent to be retained by the Galveston Wharves as security that the entire work will be completed in accordance with the contract and the plans and specifications therefor. In addition to the amount which the Contractor shall be entitled to be paid from month to month in accordance with the foregoing provisions for payments to the extent of 90 percent of the value of the work done, he shall be entitled to have included any monthly estimate 90 percent of the value of acceptable nonperishable materials delivered on the site of right-of-way of the work and which have not been used in the work prior to such estimate; provided that the payment to him of such additional amount on account of materials delivered on the job but of yet used, shall be subject to his furnishing to the Engineer certified copies of invoices and freight bills covering the material in question. The inclusion at his request in any monthly estimate of such 90 percent credit for materials not yet used shall operate to affect a passage of the title to such materials to the Galveston Wharves as fully as if a bill of sale covering the same had been executed and delivered by the Contractor of the Galveston Wharves. Thereafter in making up of monthly estimate based on work actually performed, the engineer will, as such materials are from time to time used, appropriately adjust the estimates to avoid a double credit on account of such materials. The fact that an estimated value of any work may have been included in monthly estimates shall not be deemed a cause for including it in any subsequent estimate, if subsequent investigation shall have shown the work to have been unsatisfactory and not in accordance with the specifications.

On completion of the Contract, all portions of the work must be gone over carefully by the Contractor personally, or by a member of the firm or an officer of the corporation holding the Contract, who shall satisfy himself that every item is completed and all defects made good, and that all surplus materials, refuse, dirt, or rubbish is cleaned, removed and/or disposed of as the Engineer may direct, and that the whole work is in a finished, satisfactory, neat and tidy condition and ready in all respects for acceptance by the Galveston Wharves. A sworn statement that the condition of the work is as just stated will be required from the contractor, in addition to the report of the Engineer, before the work will be accepted by the Galveston Wharves, and the Galveston Wharves shall not be held to have accepted the work until the Galveston Wharves passes a resolution to that effect.

Upon the entire completion of the work, the Engineer shall proceed with due diligence to measure up and inspect the work and shall render to the Galveston Wharves and to the Contractor a final estimate of all work performed and materials used or furnished, based upon which the Contractor shall be entitled to be paid the remainder of the contract price payable to the unit prices bid, or the balance lump sum price and without unit prices, subject to the furnishing by him to the Galveston Wharves of satisfactory proof that all bills for labor, material and equipment rental in connection with the work have been paid, which proof shall consist of the contractor's affidavit to that effect, upon the form therefore required by the Galveston Wharves; but if the Galveston Wharves is dissatisfied with such proof, or has reason to believe that in fact all such bills have not been paid, it may require further proof including waiver or release of lien or claims from laborers or materialmen or the renters or the furnishers of equipment. The Engineer will, when he deems it necessary, make test cuts at any place he may select to determine the character of the material and workmanship, and to check dimension, before approving any monthly estimate or the final estimate; and if the work is not in accordance with the specifications, both monthly and final estimates may be held in abeyance until the work is put into satisfactory shape.

12. TIME, ORDER OF COMPLETIONS, DELAYS, EXTENSION OF TIME:

The Contractor further agrees that he will commence work within ten (10) calendar days after the date of written notice to do so shall have been given to the Contractor, and will complete the work or in the case of material purchases, to complete delivery within the time specified in the Bid Form, such time beginning on the day written notice to deliver is received, or as otherwise provided by Bid Form or Contract. Contractor must not begin work before he receives written notice to do so.

A "working day" is defined as a calendar day, excluding Saturdays, Sundays, or any Galveston Wharves holiday (unless otherwise defined in the Special Conditions or Bid Form).

It is the meaning and intent of this Contract, unless otherwise herein specifically provided that the Contractor shall be allowed to prosecute his work at such time and seasons, in such order of precedence, and in such manner as shall be more conducive to economy of construction; provided, however, that the order and time of prosecution shall be such that the work shall be completed in accordance with the Contract, plans and specifications, and within the time of completion designated in this paragraph; provided, also, that when the Galveston Wharves is having other work done, either by Contractor or his own force, the Engineer may direct the time and manner of constructing work done under this Contract so that conflict will be avoided and the construction of the various works being done for the Galveston Wharves shall be harmonized.

Time is of the essence in this contract, it being important that this public improvement be quickly completed. The contractor and Galveston Wharves understand and agree that a breach of this contract as to completion on time will cause damage to the Galveston Wharves, but further agree that such damages cannot be accurately measured or that the ascertainment will be difficult. Therefore, the parties agree that for each and every working day the work, or any portion thereof shall remain uncompleted after the expiration of the time limit set in the contract, or as extended by the Galveston Wharves, the contract price will be reduced daily at the rate shown in the Bid Form for every day until completion.

However, the foregoing agreement as to liquidate damages constitutes only an agreement by the Galveston Wharves and the Contractor as to the minimum amount of damages, which the Galveston Wharves will sustain in any event by reason of the Contractor's failure to complete the work within the specified time. Should Galveston Wharves suffer damages over and above the minimum amount specified, by reason of the Contractor's failure to begin the work when ordered, carry it forward uninterruptedly after beginning or complete it within the specified time in strict accordance with the plans and specifications, the Galveston Wharves may recover such additional amount. The Galveston Wharves shall have the right to deduct and withhold the amount of any and all such damages, whether it be the minimum amount agreed upon or otherwise, from any moneys owing by it to said Contractor or the Galveston Wharves may recover such amount from the Contractor and the sureties on the bond; all of such remedies shall be cumulative and the Galveston Wharves shall not be required to elect any one nor be deemed to have made an election by proceeding to enforce any one remedy.

The Contractor shall receive no compensation for delays or hindrances to the work, except when direct and unavoidable extra cost to the Contractor is caused by the failure of the Galveston Wharves to provide information or materials, if any, which is to be furnished by the Galveston Wharves. When such extra compensation is claimed a written statement therefore shall be presented by the Contractor to the Engineer and if by him found correct shall be approved and referred by him to the Galveston Wharves for final approval or disapproval; and the action therefore by the Engineer to stop work, or by the performance of extra work, or by the failure of the Galveston Wharves to provide material necessary instructions for carrying on the work, then such delay will entitle the contractor to an equivalent extension of time, his application for which shall, however, be subject to the approval of the Galveston Wharves; and no such extension of time shall release the Contractor or the surety on his performance bond from all his obligations hereunder which shall remain in full force until the discharge of the Contract.

Section V General Conditions Rubb/Big Top Building Foundation

The time for the completion of the work herein called for shall be extended for such number of working days during with commencement of the work, or which work is actually delayed, by Act of God, a casualty, lockout, strike or cause beyond control of Contractor. Non-availability of labor and materials, tides normal to season, or inclement weather will not be considered cause for extension of time. No extension of time shall be granted because of weather conditions on any working day except such working days on which the contract work is prevented by one –half or more of his force by the weather for more than four hours in Contractor's eight—hour working day. In order to obtain extension of time because of delays due to any one or more of the above stated causes, Contractor in each instance, shall make written claim thereof to the Owner within five (5) days after the occurrence of each delay, and upon Contractor's failure to do so, its right, if any, to such extension will be considered as waived. Owner shall render its decision in writing; granting or refusing said application for extension, within ten (10) days after receipt of said application.

When in the opinion of the Engineer, weather or other conditions are such that the utility of the project might be endangered if the work were continued; he may order cessation of work during such time, the Contractor shall not be required to request a corresponding extension of time covering the period for which he is directed to cease work; but the days on which he has been so ordered to cease or discontinue the work shall not be charged against the specified completion time.

The Engineer may order the contractor to suspend any work that may be damaged by climatic conditions. When delay is caused by an order to suspend work given on account of climatic conditions that could have been reasonably foreseen, the Contractor will not be entitled to any extension of time on the account of such order.

13. CHANGES AND EXTRA WORK:

The Engineer may, without notice to the surety on the Contractor's bond, make such changes in the dimension, line, grade, form, shape, design, materials, or machinery or the plans for installation or construction or other quality or character of the work or materials required as he may find necessary to the accomplishment of the general purpose of the work or construction contracted for; and within the general purpose of the work or construction contracted for; and within the general scope and sort of work or construction covered by the Contract, the Engineer may, without notice or the surety on the Contractor's bond, order such work and materials and equipment rental not covered by the plans and specifications as he may find necessary to the accomplishment of the general purpose of the work or obstruction contracted for. Such changes may include modifications to suit conditions disclosed as the work progresses. Any such change or extra work shall be ordered in writing by the Engineer.

a) If such changes or alterations ordered as herein above provided diminish the quantity of the work to be done the same shall not constitute the basis for a claim for damages on anticipated profits on the work that may be dispensed with. If such changes or alterations increase the amount of work and the increased work can fairly be classified under the specifications, such increase shall be paid for according to the quantity actually done and at the unit price established for such work under this Contract; otherwise, such additional work shall be paid for as provided for hereinafter. In case the Galveston Wharves shall make such changes or alterations as shall make useless any work already done or material already furnished or used in said work, then the Galveston Wharves shall recompense the actual expenses incurred in preparation of the work as originally planned. In those instances in which Contractor's bid includes a bid of a unit price upon established quantities or units for any work or materials, the cost of such extra work or materials so furnished within and to the extent of the established quantities thereof as so established by the Engineer and so bid upon by the contractor, shall not be considered as an additional contract price.

The computation of the amount of the allowance to the Contractor for extra work or the computation of the amount to be added to or deducted from a lump sum bid on account of a change order shall not be affected by the fact that the work involved is done by a sub-contractor; but the allowance to the Contractor shall be computed in exactly the same manner as if the extra work or the changed work in question were done by him.

Extra work ordered in writing by the Engineer under the provisions of this paragraph shall be paid for on the basis of the Engineer's computation of the aggregate of labor, materials, truck hire and equipment rental entering into the performance thereof, and the determination by the Engineer in respect thereof shall be final and conclusive; provided, however, that any claim by the Contractor for compensation for extra work in addition to the amount computed or allowed by the Engineer any claim of an insufficient addition to or an excessive deduction from a lump sum bid on account of a change order beyond the amount computed or allowed by the Engineers must be made in writing by the Contractor to the Engineer within ten (10) days after the Engineer's computation or calculation is made known to the Contractor, and unless such written claims is so presented it shall be conclusively held that the Contractor has waived such claim and shall not be allowed to claim or receive any additional payment for such items over or above the amount allowed by the Engineer.

b) Deduction from or addition to the contract price for any lump sum bid item on account of a change order or extra work made or done in accordance with this paragraph shall be determined as follows:

Method (A) – By agreed unit prices; or Method (B) – By agreed lump sum; or

Method (C) – If neither Method (A) nor Method (B) be agreed upon before the extra work is commenced, the Contractor shall be paid the "actual field cost" of the work, plus fifteen percent (15%).

In the event said extra work be performed and paid for under Method (C), then the provisions of this paragraph shall apply and the "actual field cost" is hereby defined to include the cost of all workmen; such as foremen, timekeeper, mechanics, and laborers, and materials, supplies, teams, trucks, rental on machinery and equipment for the time actually employed or used on such extra work, plus actual transportation charges necessarily incurred, if the kind of equipment or machinery be not already on the job, together with all power, fuel, lubricants, water and similar expenses, also all necessary incidental expenses incurred directly on account of such extra work, including Social Security, Old Age Benefits and other payroll taxes, and a ratable proportion of premiums on Labor and Materials Bonds, Public Library and Property Damage and Workmen's Compensation, and all other insurance as may be required by any law or ordinance, or directed by the Engineer or Owner, or by them agreed to. The Engineer may direct the form in which accounts of the "actual field cost" shall be kept and may also specify in writing, before the work commences, the method of doing the work and the type and kind of machinery and equipment to be used, otherwise these matters shall be determined by the Contractor.

14. SCALE AND FIGURES; ERRORS AND OMISSIONS:

In the execution of the work, the drawings must be accurately followed to the scale but preference shall be given in all cases to the figured dimensions over scale measurements and to details and general drawings. Where any discrepancies may occur between the figured dimensions and the scale or between details and general drawings, the same must be referred to the inspector for explanation and instructions as to which is to govern the work before proceeding, and departure from the drawings or specifications in the execution of the work without the Engineer's written order or consent will be at the contractor's sole risk and expense and he will be held responsible for all consequences.

The Contractor will not be allowed to take advantage of any error or omission in the specifications. Suitable instructions will be given by the Engineer to Contractor when such error or omissions discovered by Engineer or when requested of Engineer by the contractor, upon who shall rest, at all times, the duty to detect or discover any errors and omissions and make appropriate request in respect thereof. The Contractor shall keep on the work a copy of the specifications and drawings, and shall at all times give the Engineer access.

15. EXAMINATION OF SITE – LOCAL CONDITIONS:

Bidders shall satisfy themselves as to local conditions affecting the work, and no information derived from the maps, plans, specifications, profiles or drawings, or from the Engineer or his assistants, will relieve the Contractor for any risk or from fulfilling all of the terms of his contract. The accuracy of the interpretation of the facts by other preliminary investigations is not guaranteed. Each bidder or his representative should visit the site of the work and familiarize himself with local conditions; failure to do so when intelligent preparation of bids depend on a knowledge of local conditions may be considered sufficient cause for rejecting a bid.

16. MATERIALS, WORKMANSHIP, BRANDS OR TRADE NAMES, TESTING AND INSPECTION:

All materials must be of the specified quality and equal to submitted samples that have been approved. All work shall be done and completed in a thorough, workmanlike manner, notwithstanding any omission from the specifications or the drawings. All materials furnished and all work done must be satisfactory to the Engineer. Work not in accordance with these specifications, in the opinion of the Engineer, shall be made to conform thereto. Unsatisfactory materials will be rejected and, if so ordered by the Engineer, shall at the Contractor's expense, be immediately removed from the vicinity of the work.

Materials delivered on or near the site of the work shall be neatly, safely and compactly piled up in such manner satisfactory to the Engineer as to cause the least hazard, interference, inconvenience and damage to property owners, users of Galveston Wharves property or facilities, Galveston Wharves employees and the general public, and shall be not closer than three feet to any fire hydrant, and public and private access—ways, drives and streets shall be kept open. Shade trees and other structures shall be protected from any damage by stone, earth, materials, or otherwise.

Damage to access—ways drives, street, or other improvements must be made good by the Contractor to the satisfaction of the Engineer.

All materials furnished and work done under this contract will be subject to rigid inspection. The Engineer shall at all times have access to all parts of the shop where materials under this inspection are being manufactured. Material that does not conform to the specifications accepted through oversight or otherwise, may be rejected at any stage of the work. Whenever the Contractor on installation or construction is permitted or directed to do night work, or to vary the period during which work is carried on each day, he shall give the Engineer due notice, so that inspection may be provided for. Such work shall be done without extra compensation and under regulations to be furnished in writing by the Engineer.

Should the Engineer require it, the Contractor shall, at any time during the construction of work contracted for, make such openings and to such extent through any part of said work as the Engineer may direct, and he shall make the same good again, the satisfaction of the Engineer. Should the work be found to be, in the opinion of the Engineer, faulty in any respect, all such faulty work shall be replaced by the Contractor, and the whole of the expense thereby incurred shall be defrayed by the contractor, but if otherwise, the expense of the replacement shall be borne by the Galveston Wharves.

The Contractor, without cost to Galveston Wharves, shall furnish the Engineer reasonable facilities of obtaining such information as he may desire respecting the character of the materials and the progress and manner of the work, including all information necessary to determine its cost, such as the number of men employed, their pay, the time during which they worked on the various classes of construction, etc.

Expense of testing and inspection, if required by the specifications, or special conditions, except certification of welders, shall be borne by Galveston Wharves. Expense of test necessary to qualify welders shall be done by the Contractor.

17. FINANCIAL EXPERIENCE AND RESPONSIBILITY:

The financial responsibility of the bidder shall be established to the satisfaction of the Galveston Wharves by the bidder filing with Galveston Wharves, either along with the bid, or prior to the letting of any contractor, bidder's latest certified financial statement or other evidence of financial responsibility satisfactory to the Galveston Wharves. In the event a certified financial statement or other evidence of financial responsibility is presently on file with the Galveston Wharves and is as of a date not more than six months prior to the opening date of this bid, no further financial information will be required.

Bidders, if required, shall present satisfactory evidence that they have been regularly engaged in furnishing material and machinery and constructing such work as they propose to execute, and that they are fully prepared with necessary capital, machinery and material to begin the work properly and to conduct it as required by these specifications.

The Contractor shall promptly make payments to all persons supplying labor and material or furnishing him any equipment in the execution of the contract and a condition to this effect shall be incorporated in the contractor's bond.

The Contractor shall be responsible for any material furnished him and for the care of all work, until its completion and final acceptance, he shall, at his own expense, replace damaged or lost material and repair damaged parts so the work or the same may be done at his expense by the Galveston Wharves. He shall take all risks from floods and casualties, and shall make no charge for delay from such causes. He may, however, be allowed a reasonable extension of time on account of such delay, subject to the conditions herein before specified. The Contractor shall remove from the vicinity of the completed work all plant, buildings, rubbish, unused material, concrete forms, etc. belonging to him or used under this direction during construction, and in the event of his failure to do so, the same may be removed by the Galveston Wharves at his expense.

The Contractor will be held responsible for and required to make good, at his own expense all damages to persons or property caused by carelessness or neglect on the part of the Contractor, his agents or employees.

Contractor agrees to indemnify and hold harmless the Galveston Wharves from any and all liabilities and/ or claims whatsoever, growing out of any injury to or death of any and all persons (including, but not limited to, sub-contractors, officers, agents, servants, employees, licenses and invitees, whether Contractor or Owner) or damage to or destruction of property caused entirely, or in part, by any failure to observe any law, ordinance or governmental regulation, or caused entirely, or in part, by any negligence or fault of said Contractor, his agents or employees, any sub-contractor, his agents or employees, or of the Galveston Wharves, its agents or employees, in the execution, furtherance or performance of said Contractor, or in any manner whatsoever connected therewith, arising therefrom or related thereto.

Contractor also agrees, and shall be required, to pay any Judgment with costs, which may be obtained against Owner, growing out of or in any manner connected with such claim, liability, injury or damage. Contractor further agrees to reimburse Owner for all Attorneys' fees and other expenses incurred by Owner in connection therewith.

Contractor further agrees to indemnify and hold harmless the Galveston Wharves from any and all claims whatsoever growing out of demands of sub-contractors, laborers, workmen, mechanics, materialmen and furnishers of machinery an parts thereof, equipment, power tools and all supplies, including commissary, incurred in the furtherance of the performance of this Contract. When so desired by Owner, Contractor shall furnish satisfactory evidence that all obligations of the nature hereinabove designated have been paid, discharged or waived.

The Contractor shall employ all day and night guardsmen and erect barricades and lights, and shall use all due and proper precaution, which will tend to the security of all persons or property.

Barricades and lights: During the entire progress of the work, the Contractor must erect and maintain barricades with suitable warning language thereupon to warn and protect all persons against collisions with, falling into or otherwise being injured by or on account of the work, including but without limitation thereto, ditches or other excavations, and equipment or material placed or stood upon or along the right—of—way near the job site or elsewhere in connection therewith. Between one—half hour before sunset and one—half hour after sunrise there shall also be placed and kept lighted colored warning lanterns or flares sufficient to so protect all persons. The Contractor will not only so place, erect and maintain any barricade or warning light when he is directed to do so by the Engineer or any Inspector, but will also at his own risk determine the necessity for said warnings elsewhere, and he and his surety will protect and hold harmless the Galveston Wharves, its officials and employees against any liability, claim or demand arising from the Contractor's failure to erect and maintain any barricade or to place and keep lighted any warning light.

The contractor will be held responsible for any damages to water, gas, drainage pipes, sidewalks, conduits and like structures encountered in or adjacent to the work.

The cost of removing obstructions erecting barricades, posting notices, unless otherwise provided, shall be included in the price bid for the various parts of the improvement.

Unless otherwise provided in any item of the specification, the Contractor will at his cost procure any license or permit which is required for the use of any patented invention, article, process, or means, method of instrumentality wrought into, used in upon or in any manner connected with the construction, erection or maintenance of the work or any part thereof, as embraced in the contract or in these specifications; and shall pay all fees or royalties required for any such use of license; and such fees shall, unless otherwise provided by the Contractor in these specification, be included in the price stipulated in the contract for the work; and the Contractor and the surety on his bond shall protect and hold harmless the Galveston Wharves and its officers and agents against any and all demands arising from the Contractor's failure to comply with the foregoing undertakings on his part.

18. INSURANCE AND INDEMNITY REQUIREMENTS:

Contractor shall procure and maintain the insurance coverage, and otherwise strictly comply with each covenant regarding insurance and indemnification, described on <u>Attachment A</u>, which is attached and incorporated by reference. The cost of such insurance shall be included in the Contractor's bid.

19. STAKING OUT WORK:

Unless specifically provided otherwise, work to be done will be staked out by the Contractor, who will notify Engineer thereof and call for check, verification or correction by Engineer.

Benchmarks, base lines and survey stakes will be preserved by the Contractor, and in case of their destruction or removal by him or his employees, they will be replaced by the Engineer at the Contractor's expense.

20. ABANDONMENT BY CONTRACTOR:

In case the Contractor should cease work, and fail or refuse to resume work within ten (10) days after written notification from the Owner, or if the Contractor fails or refuses to perform the contract work in accordance with the plans and specifications after five (5) days notice from the owner specifying the manner in which Contractor is so failing or refusing to so perform the contract work, it shall be considered that Contractor has abandoned his contract; and the Surety on the bond shall be notified in writing and directed to complete the work, and a copy of said notice shall be delivered to the Contractor.

After receiving said notice of abandonment the Contractor shall not move from the work any machinery, equipment, tools, materials, or supplies then on the job, but the same, together with any materials and equipment under contract for the work, may be held for use on the work by the Owner of the Surety on the construction bond, or another contractor, in completion of the work; and the contractor shall not receive any rental or credit therefore; it being understood that the use of such equipment and materials will ultimately reduce the cost to complete the work and be reflected in the final settlement.

In case the Surety should fail to commence compliance with the notice for completion hereinbefore provided for, within then ten (10) days after the service of such noticed, then the Owner may provide for completion of the work in either of the following elective manners:

- (a) The Owner may thereupon employ such force of men and use such machinery, equipment, tools, materials and supplies as said Owner may deem necessary to complete the work and charge the expense of such labor, machinery, equipment, tools and materials supplied to said Contractor, and the expense so charged shall be deducted and paid by the Owner out of such moneys as may be due, or that may hereafter at any time become due to the Contractor under and by virtue of the Agreement. In case such expense is less than the sum which would have been payable under this contract, if the same has been completed by the Contractor, then said Contractor shall receive the difference. In case such expense is greater than the sum which would have been payable under this contract, if the same had been completed by said Contractor, the contractor and/or his Surety shall pay the amount of such excess to the Owner; or
- **(b)** The Owner under sealed bids, after five (5) days notice published one or more times in a newspaper having a general circulation in the county of the location of the work, may let the contract for the completion of the work under substantially the same terms and conditions which are provided in this Contract. In case of an increase in cost to the Owner under the new contract as compared to what would have been the cost under this Contract, such increase shall be charged to the Contractor and the Surety shall be and remain bound the payment thereof.

When the work shall have been substantially completed, the Contractor and his Surety shall be so notified and Certificate of Acceptance, as provided in the **Construction Contract**, **Section IV**, **Paragraph 10**, shall be issued. A complete itemized statement of the contract accounts, certified by the Owner as being correct, shall then be prepared and delivered to the Contractor and his Surety, whereupon the Contractor and/or his Surety, or Owner, as the case may be, shall pay the balance due as reflected by said statement within fifteen (15) days after the date of such Certificate of Completion.

In the event the statement of accounts shows that the cost to complete the work is less than that which would have been the cost to the Owner had the work been completed by the contractor under the terms of this contract; or when the contractor and/or his Surety shall pay the balance shown to be due by them, to the Owner, then all machinery, equipment, tools, materials or supplies left on the site of the work shall be turned over the contractor and /or his Surety. Should the cost to complete the work exceed the contract price, and the Contractor and/or his Surety shall fail to copy the amount due the Owner within the time designated hereinabove, and there remains machinery, equipment, tools, materials or supplies on the site of the work, notice thereof, together with an itemized list of such equipment, and materials, shall be mailed to the Contractor and his Surety at the

respective addresses designated in this Contract; provided, however, that actual written notice given in manner will satisfy this condition. After mailing or other giving of such notice, such property shall be held at the risk of the Contractor and his Surety subject only to the duty of the Owner to exercise ordinary care to protect such property. After fifteen (15) days from the date of said notice the Owner may sell such, machinery, equipment, tools, materials, or supplies and apply the net sum derived from such sale to the credit of the contractor and his Surety. Such sale may be made at either public or private sale, with or without notice, as the Owner may elect. The Owner shall release any machinery, equipment, tools, materials, or supplied which remain on the work and belong to persons other than the contractor or his Surety, to their proper Owners.

21. ABANDONMENT BY OWNER:

In case the Owner shall fail to comply with the terms of this contract and should fail or refuse to comply with said terms within ten (10) days after written notification by the Contractor, then the contractor may suspend or wholly abandon the work, and may remove wherefrom all machinery, tools and equipment, and all materials on the ground that have not been included in payments to the Contractor and have not been brought into the work; and thereupon the Owner shall make an estimate of the total amount earned by the Contractor, which estimate shall include the value of all work actually completed by said Contractor, the value of all partially completed work at a fair and equitable price, and the amount of all Extra Work performed at the price agreed upon, or provided for by the terms of this contract, and reasonable sum to cover the cost of any provisions made by the Contractor to carry the whole work to completion and which cannot be utilized. The Owner shall then make a final statement of the balance due the Contractor by deduction from the above estimate of all previous payments by the Owner and all other sums that may be retained by the Owner under the terms of this agreement and the Owner shall pay the Contractor on or before thirty (30) days after the date of the notification by the Contractor the balance due shown by said final statements as due the Contractor under the terms of the Agreement.

22. CORRECTION OF WORK AFTER FINAL PAYMENT:

Neither the final certificate of acceptance, nor payment, nor any provision of the contract documents shall relieve the contractor of the responsibility for faulty material, or workmanship, and he shall remedy any defects thereto and pay for any damages to other work resulting therefrom which shall appear within a period of one (1) year from the date of final acceptance. The Owner shall give notice of observed defects with reasonable promptness.

23. PREFERENCE FOR LOCAL CONTRATORS:

Additional consideration, not to exceed 5%, will be given to bidders whose principal place of business is within the city limits of Galveston in those cases where the contract bid price does not exceed \$100,000.00.

24. GOVERNMENT REGULATIONS:

All government regulations pertaining to the Contractor's method of operation shall be the Contractor's responsibility and the Owner shall not be made liable.

25. CHARACTER OF WORKMEN; POLICING BY CONTRACTOR; SANITATION:

None but skilled foreman and workmen shall be employed on work requiring special qualifications, and when required by the Engineer, the Contractor shall discharge any person who commits trespass, or is in the opinion of the Engineer, disorderly, dangerous, insubordinate, incompetent or otherwise objectionable. Such discharge shall not be the basis of any claim for compensation or damages against the Galveston Wharves or any of its officers.

Section V General Conditions Rubb/Big Top Building Foundation

Contractor shall comply with all federal, state, local and municipal law, rules, regulations, orders and ordinances, and shall not cause, suffer or permit the erection, existence of continuance of a nuisance, public or private, in, on or about the site of the work.

26. PROJECT DESCRIPTION

Construction of reinforced concrete slab including hot-dipped galvanized (HDG) anchor bolts for RUBB/Big Top building with concrete access ramps. Contractor shall prepare existing subgrade prior to setting of forms. (Erection of building and backfill between new concrete slab and existing pavement shall be by Others.) Contractor shall be responsible for removal of all forms, excess construction materials, and debris.

SECTION VI SPECIAL CONDITIONS RUBB/BIG TOP BUILDING FOUNDATION

1. GENERAL CONDITIONS:

The General Conditions of the Galveston Wharves shall apply to all work of this Contract except as they may be supplemented, amended, voided or superseded by the terms of the Special Conditions set herein.

2. LOCATION OF SITE:

The site of the work herein specified is located within the Galveston Wharves property, Galveston, Texas.

3. <u>BIDDER'S RESPONSIBILITY:</u>

It shall be the responsibility of each Bidder to examine the site and to determine what existing physical conditions will affect his work. No extra compensation will be made by reason of the Contractor not being aware of such conditions.

It shall be the responsibility of each Bidder to ascertain that he has a complete set of plans and specifications and has received all addenda that may be issued. A complete set of plans and specifications, together with the addenda, is on file at the office of the Engineer and available to all Bidders for comparison.

4. DISCREPANCIES:

Wherever there are discrepancies, ambiguities or omissions of needed information in the drawings, in the specifications, Bidders are requested to inform the Purchasing Agent, in writing, not later than five (5) business days prior to time for submissions of bids so that addenda may be issued, if necessary, to all Bidders. Otherwise, the Contractor shall estimate upon and also furnish the better quality or greater quantity of materials or work called for.

5. TEMPORARY SERVICES:

All labor, materials, fees and other costs, including temporary equipment and connections therefore, required to provide temporary utility services necessary for the satisfactory execution of the work under this Contract shall be furnished by the Contractor. This shall include water, electrical, telephone and other utility services as the Contractor may require or deem necessary for this proper execution of this work. During the course of preparing his bid, the Contractor shall determine whether or not such Utilities are presently available on or adjacent to the site, and if presently available, the cost of connection thereto, and shall satisfy himself as to procurement of such necessary utilities in any case where they are not presently available on or near the site.

Owner shall pay for the cost of water used from existing water main the Contractor shall make all connections to utilities at the time and place designated by the serving utility company or the Engineer. When temporary services are no longer required, the Contractor shall remove all temporary connections and equipment, and the premises and all existing permanent apparatus shall be left in as good condition as existent prior to making the temporary connections.

6. CONTROL OF SPECIAL CONDITIONS:

The Special Conditions shall govern and control over General Conditions in event of irreconcilable conflict, but except in such event and to avoid possibility of such conflict, every construction of provisions shall be that each is in aid to or supplementary to, or complementary of each others provisions, to control and secure for the Owner the completion of the entire work in an expeditious, orderly and coordinated manner.

7. BUILDING INSPECTION AND PERMIT FEES:

The Contractor shall procure all permits and give all notices necessary and incidental to the due and lawful prosecution of the work. All building permit fees and inspection fees payable to the City of Galveston shall be for the Owner's account. All other fees, if any shall be for the Contractor's account.

8. <u>CODE REGULATIONS</u>:

Where the requirements of the local building code or other laws, regulations or rules promulgated by governmental agencies having jurisdiction, conflict with the specifications and are mandatory, they shall be followed the same as if specially set out herein in full. Provisions of the Technical Specifications which are more severe or restrictive than the minimum requirements of such codes or regulations shall be followed, and no requirement of the specifications may be modified or voided because it is not specifically required by such codes and regulations.

9. FIELD OFFICE:

The Contractor is not required to provide field office facilities other than those required for his own use. However, the Engineer or his representative shall have the privilege of use of the Contractor's facilities as needed at no cost.

10. SANITARY FACILITIES:

The Contractor shall provide sanitary facilities for use of the workmen, and shall maintain same in a clean and sanitary condition for the duration of the contract, at which time they shall be removed. All health laws and regulations of the City of Galveston Health Department shall be compiled with.

11. MATERIAL STORAGE:

Materials for use in the work shall be so stored at the site that damage and deterioration is prevented since materials that have been damaged, or in any way become unfit for use, will not be accepted in the work. At the completion of the work, all unused materials, and storage facilities shall be removed by the Contractor.

12. CLEANING:

The Contractor shall at all times during the progress of the work maintain the site and structure free of accumulations of waste materials, debris, or rubbish. At the completion of the contract he shall remove from the site any such debris as well as all unused materials, temporary facilities, tools, and the like, leaving the area "broom clean" insofar as his work is concerned.

13. TESTING:

The testing and inspection of material as required by the specifications, or as deemed necessary or advisable by the Engineer, unless specified otherwise herein, will be performed by a commercial laboratory employed and paid directly by the Owner.

The Contractor shall cooperate with the laboratory to the end that all required testing may be accomplished with no delay of or interference with the work. He shall provide the laboratory with all test specimens required at his own expense.

14. MATERIALS AND WORKMANSHIP:

All materials to be incorporated in the finished work shall be new, and of the best grade of standard manufacture. Where materials are specified by brand name, trade mark, or manufacturer, equal materials by other manufacturer will be acceptable. The judgment of the equality of materials or products rests with the Engineer, and his decisions shall be final.

15. **GUARANTEES**:

The Contractor shall guarantee, in writing to the Owner, all work under this contract, against defective material and/or workmanship for a minimum period of two (2) years or for the period(s) stated in the Technical Specifications from the date of final acceptance of the work by the Owner.

16. DRAWINGS AND SPECIFICATIONS:

Upon request, the Contractor will be furnished two (2) sets of the drawings and specifications at no cost. One complete set of each, including approved shop drawings, shall be maintained in good order and condition and constantly accessible at the site. Should additional copies of the drawings and specifications be desired, an electronic version will be furnished upon request and cost of reproduction will be responsibility of Contractor.

17. PROTECTION OF PROPERTY:

The Contractor shall at all times protect the property of the Galveston Wharves and other companies and individuals.

The Contractor shall be responsible for damage caused by his operations to Galveston Wharves property and to private property, and shall replace property to make satisfactory restitution at no cost to the Owner thereof or the Galveston Wharves.

18. LAWS TO BE OBSERVED:

The Contractor shall make himself familiar with and at all times shall observe and comply with all Federal, State and local laws, ordinances, and regulations which in any manner affect the conduct of the work, and shall indemnify and save harmless the Galveston Wharves against any claim arising from the violation of any such law, ordinance or regulation, whether by himself or by his employees.

19. SCHEDULE OF COSTS AND OTHER REPORTS:

The Contractor shall submit to the Engineer progress schedules, payrolls, day log reports, estimates and records and such other data as the Engineer may require from time to time, covering the work performed in connection with this contract. Information submitted shall be in such form and detail as the Engineer may direct.

20. PLANNING OF WORK AND PROGRESS SCHEDULE:

The Contractor, after award of contract and before any work is done, shall furnish for review and approval by the Engineer, one (1) hard copy and an electronic copy of proposed Progress Schedule for performance of work required by this contract.

The Progress Schedule shall state the sequence of operations and dates that all major stages of the work will begin and the estimated time of completion. Such schedule will be subject to approval by the Engineer, and no

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changes or deviations may be made from the schedule without first advising the Engineer in writing that such deviations are necessary and giving the reason for the change.

21. REFERENCE SPECIFICATIONS:

All references to ASTM Specifications are to those of the American Society for Testing and Materials. This and all other specifications of Trade Association, Technical Societies, or of Manufacturers, refer to the latest edition of each which is effective on the date of "Invitation to Bidders". Manufacturer's specifications and recommendations shall be construed to mean those printed on container labels or in published manuals, catalogs, or instruction sheets.

22. ENUMERATION OF DRAWINGS:

Drawings entitled "RUBB/Big Top Building Foundation - Port of Galveston Sheets S0.01 to S1.03" form an integral part of these contract documents.

23. SHOP DRAWINGS:

The Contractor shall submit for the Engineer's approval shop drawings, brochures, or schedules, as may be required, for the work of the various trades. Submittal shall be well in advance of the time information will be required in order that work will not be delayed. The shop drawings shall be prepared by skilled draftsmen and presented in a clear and thorough manner. The Engineer's approval will not relieve the Contractor from responsibility for deviations from drawings or specifications, unless such deviations have been approved specifically in writing, nor shall it relieve him from responsibility for errors of any sort in the shop drawings. Also such approval shall not constitute acceptance of departures from local, state, or federal laws, nor regulations of boards, commissions, or departures from local, state, or federal laws, or regulations of boards, commissions, or departments having jurisdiction. No work shall be fabricated until the Engineer approval has been obtained. Shop or setting drawings shall be submitted in quintuplicate. Two copies will be returned "approved", "approved as noted", or "resubmit". Contractor shall furnish additional approved shop drawings to other trades as required.

Brochures shall be presented as follows: Furnish to the Engineer for approval, six (6) copies of brochures for all equipment and materials to be furnished. These brochures shall be published by the manufacturer of the equipment or materials, and shall contain complete and detailed engineering and dimensional information which is relative to the particular equipment or materials to be furnished. Do not submit catalogs that describe several items other than those to be used unless all irrelevant information is completely marked out leaving only the information that pertains to the items submitted for approval.

24. WEATHER PROTECTION:

The Contractor shall take special precaution to protect his work during exceedingly hot, freezing or inclement weather. No concrete, mortar, paint, etc. shall be used during freezing or hot weather unless special and proper precaution is taken to prevent damage to the finished work.

The Contractor shall provide and furnish all heat that may be required for the protection of his own work during cold or inclement weather. If salamanders or heaters are required, they must be so located and positioned as to not cause damage to any part of the work. Approval from Junior Engineer shall be obtained prior to making such arrangements to protect work against freezing or inclement weather.

25. "AS BUILT" DRAWINGS:

A complete set of contract drawings shall be maintained at the site for the purpose of showing "As Built" conditions. The drawings shall be kept up-to-date and marked each day to show all changes and variations, and each entry shall be dated, verified, and approved by the Engineer as made.

General requirements for the submission and approval of shop drawings are specified under Paragraph 23 of the Special Conditions. Specific requirements for shop drawings are such that detailed shop drawings for all fabricated or special work items shall be submitted and approved prior to start of fabrication or as specifically called for under various sections of the Technical Specifications. At the completion of the work, a complete set of "As Built" Shop Drawings shall be submitted to the Engineer.

26. COOPERATION WITH OTHERS:

Attention is invited to the fact that other contracts have been or will be awarded for other work on, and adjacent to, or adjoining, the construction site, and that such work will be carried on concurrently with this contract. This Contractor shall cooperate with other Contractors to the end that each may complete his work with a minimum of interference; and that wherever the work of one is dependent upon completion of work by another, each will so arrange his schedule that the entire work may be completed most expeditiously. This Contractor shall be responsible for compliance of all his subcontractors in this regard.

27. FAILURE TO COMPLETE WORK ON TIME:

Time is of the essence in the contract. If the contractor fails to complete the contract in the number of working days specified, including authorized extensions, a time charge will be made for each workday thereafter, that the work is not complete. For each working day, under the conditions described by Section IV, that any work remains uncompleted after the expiration of the working days specified in the contract, together with additional authorized working days, Contractor will have the amount of **FIVE HUNDRED DOLLARS (\$500.00)** per day deducted from the money due or to become due, not as a penalty, but as liquidated damages and for added expenses incurred due to the delay.

28. PRICE OF MATERIALS AND STATE SALES TAX:

The prices quoted should exclude all State Sales Taxes on all materials and other tangible property as are to be actually incorporated into the final result of the work covered in the contract. "Tangible Personal Property" means personal property which may be seen, weighed, measured, felt or touched, or which is in any other manner perceptible to the senses.

After award of the contract, the Galveston Wharves will, on written request from the Contractor, furnish the Contractor with a Certificate of Exemption from the Texas Limited Sales, Excise and Use Tax in an amount not exceeding the value of materials and other tangible property described above. Such written request must contain a statement to the effect that such materials or property have been or will be utilized in the amount for which a certificate or exemption is requested.

29. PORT SECURITY REQUIREMENTS:

The Contractor acknowledges that the Port of Galveston is a facility subject to regulation under the Maritime Transportation Security Act of 2002, as codified in 46 U.S.C. Chapter 701. As a result, certain areas immediately adjacent to the job site may be "secure/restricted areas" as that term is defined in the Act's implementing regulations (33 CFR Subchapter H – Maritime Security). Personnel entering a secure/restricted area must possess a Transportation Worker Identification Credential (TWIC) or be escorted by someone who possesses a Port of Galveston approved TWIC Escort Badge. The contractor will be responsible for complying

with the terms of the Port of Galveston's TWIC Escort Policies and Procedures. Contractor understands that, whenever it is necessary for it (or any of its representatives or subcontractors) to enter a secure or restricted area, it shall at all times maintain with the Port of Galveston's Emergency Operations Center (EOC) a list of names including: date of birth, driver's license number and/or a government identification number of all requesting access. To the extent access to a secure/restricted area is necessary, the Contractor is strictly and solely responsible for ensuring that its employees, and the employees of any subcontractors assigned to the job in support of the Contractor's work, comply with the port access and TWIC carriage requirements set forth in 33 CFR 101.514. Further, Contractor understands and warrants that, in the event it (or any of its representatives or subcontractors) receives, or causes the Port of Galveston to receive, a civil or criminal penalty for failure to comply with any of the provisions of 33 C.F.R. Chapter 1, Subchapter H (Maritime Security) it will be liable for the penalty.

30. PREVAILING WAGE RATES IN GALVESTON AREA:

Article 5159-a of the Revised Civil Statutes of Texas, passed by the 43rd Legislature Acts of 1933, Page 91, Chapter 45, provides that any government subdivision shall ascertain the general prevailing rate of per diem wages in the locality in which the work is to be performed for each craft or type of workman or mechanic and shall specify in the call for bids and in the contract the prevailing rate of per diem wages which shall be paid for each craft type of workman. This Article further provides that the Contractor shall forfeit, as a penalty to the Galveston Wharves, City, County, or State or other political subdivision, TEN DOLLARS (\$10.00) per day for each laborer, workman, or mechanic who is not paid the stipulated wage for the type of work performed by him as set up in the wage scale. The Galveston Wharves is authorized to withhold from the Contractor the amount of this penalty in any payment that might be claimed by the Contractor or Subcontractor. The Act makes the Contractor responsible for the acts of the Subcontractor in this respect.

The Article likewise requires that the Contractor and Subcontractor keep an accurate record of the names and occupations of all persons employed by him and to show the actual per diem wages paid to each worker and these records are open to the inspection of the Galveston Wharves.

In addition to the penalty provided by Article 5159-a, Article 1581-a of the penal Code of -Texas provides that any Contractor or Subcontractor or his representative who fails to keep such record or who refuses to allow the inspection of the records or who fails to comply with Article 5159-a insofar as payment of the prevailing wage scale is concerned is guilty of a misdemeanor, and upon conviction shall be punished by a fine of riot exceeding FIVE HUNDRED DOLLARS (\$500.00), or by imprisonment in the County Jail for not exceeding six months, or by both fine and imprisonment.

The minimum prevailing rate which must be paid and on which the statutory records must be kept by Contractors will be as follows:

U. S. DEPARTMENT OF LABOR WAGE RATES

General Decision Number: TX140094 01/03/2015 TX94

Superseded General Decision Number: TX20130094

State: Texas

Construction Type: Heavy

County: Galveston County in Texas.

HEAVY CONSTRUCTION PROJECTS Including Water and Sewer Lines

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(Does Not Include Flood Control)

Modification	Number	Publication	Date
0		01/03/2015	

* SFTX0669-001 07/01/2013

	Rates	Fringes
SPRINKLER FITTER (Fire Sprinklers)		16.62
SUTX2005-021 08/05/2005		
HEAVY Including Water and Sewer	Lines (Excluding	Flood Control)
	Rates	Fringes
Carpenter	.\$ 14.38	
Cement mason/concrete finisher	.\$ 11.37	1.13
Electrician	.\$ 18.40	1.34
FORM BUILDER/FORM SETTER	.\$ 13.35	1.17
IRONWORKER, REINFORCING	.\$ 11.29	
Laborers: Common	.\$ 7.35 .\$ 9.96	
PIPEFITTER	.\$ 17.00	0.04
Power equipment operators: Excavator	.\$ 13.25 .\$ 14.00 .\$ 14.91 .\$ 11.75 .\$ 12.20	0.58 0.92 1.48 1.51
TRUCK DRIVER	.\$ 12.28	0.98

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is union or non-union.

Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters , PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union number or district council number where applicable , i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rates.

0000/9999: weighted union wage rates will be published annually each January.

Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union majority rates, LA indicates the State of Louisiana; 2004 is the year of the

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survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material,

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- etc.) that the requestor considers relevant to the issue.
- 3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

SECTION VII TECHNICAL SPECIFICATIONS RUBB/BIG TOP BUILDING FOUNDATION

1. <u>TECHNICAL SPECIFICATIONS:</u>

The following is a list of the Technical Specifications applicable to this contract and which form an integral part of these contract documents, all entitled RUBB/Big Top Building Foundation, Port of Galveston - Galveston, Texas.

A. The specifications listed below and shown in Section VII and included as a part of this project.

01300	 Submittals
03001	 Concrete
03002	 Steel Reinforcing

DOCUMENT 01300 SUBMITTALS

I. GENERAL

A. RELATED DOCUMENTS

1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01-Specification sections, apply to work of this section.

B. SUMMARY

- 1. Section Includes: Administrative and procedural requirements for submittal and review of product data, shop drawings, samples and similar items required by the specifications.
- 2. Related Sections: Refer to appropriate sections of Divisions 02 16 for additional submittal requirements (if any).

C. ADMINISTRATIVE SUBMITTALS

- 1. Refer to other Division-01 Sections and other Contract Documents for requirements for administrative submittals. Such submittals include, but are not limited to:
 - a. Schedules
 - b. Permits
 - c. Applications for payment
 - d. Performance and payment bonds
 - e. Insurance certificates
 - f. List of Subcontractors
 - q. Schedule of Values
 - h. Inspection and test results
 - i. Closeout documents
- Such submittals are for information and record and do not require action on the part of the Engineer except where not in conformity with the Contract Documents. If such non-conformity is observed the Engineer will notify the Contractor within two weeks of receipt of document. Failure to observe or notify by the Engineer does not relieve Contractor of compliance with Contract Documents.

D. SUBMITTAL PROCEDURES

- 1. General: Make submittals from Contractor to the Engineer after Contractor has reviewed each submittal and indicated their action thereon except for samples and selection submittals.
- 2. Scheduling: Prepare a separate listing and schedule organized by related specification section number sequence, showing the principal work-related submittals and their initial submittal dates as required for coordination of the work. Submit listing within 30 days after notice to proceed with construction or commencement of work.
- 3. Submit with Contractor's construction schedule, a complete schedule of submittals.
- 4. Coordinate submittal schedule with the list of subcontracts, schedule of values and the list of products as well as the Contractor's construction schedule.
- 5. Prepare the schedule in chronological order; include submittals required during the first 90 days of construction. Provide the following information:
 - a. Scheduled date for the first submittal
 - b. Related section number:
 - c. Name of Subcontractor;
 - d. Description of the part of the Work covered;
 - e. Scheduled date for resubmittal;

f.

- 6. Schedule Updating: Revise the schedule after each meeting or activity, where revisions have been recognized or made. Issue the updated schedule concurrently with report of each meeting.
- 7. Coordination: Coordinate the preparation and processing of submittals with the performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.
- 8. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals and related activities that require sequential activity.
- 9. Coordinate transmittal of different types of submittals for related elements of the Work so processing will not be delayed by the need to review submittals concurrently for coordination.
- 10. The Engineer reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- 11. Processing: Allow sufficient review time so that installation will not be delayed as a result of the time required to process submittals, including time for resubmittals.
- 12. Allow 2 weeks for initial review. Allow additional time if processing must be delayed to permit coordination with subsequent submittals. The Engineer will promptly advise the Contractor when a submittal being processed must be delayed for coordination.
- 13. If an intermediate submittal is necessary, process the same as the initial submittal.
- 14. Allow 2 weeks for reprocessing each submittal.
- 15. No extension of Contract Time will be authorized because of failure to transmit submittals to the Engineer sufficiently in advance of the Work to permit processing.
- 16. Submittal Preparation: Place a permanent label or title block on each submittal for identification. Indicate the name of the entity that prepared each submittal on the label or title block.
- 17. Provide a space approximately 4" x 5" on the label or beside the title block on Shop Drawings to record the Contractor's review and approval markings and the action taken.
- 18. Include the following information on the label for processing and recording action taken.
 - a. Project name
 - b. Date
 - c. Name and address of Engineer

 - d. Name and address of Contractore. Name and address of Subcontractor
 - Name and address of supplier f.
 - Name of manufacturer g.
 - Number and title of appropriate Specification Section
 - Drawing number and detail references, as appropriate.
- 19. Submittal Transmittal: Package each submittal appropriately for transmittal and handling. Transmit each submittal from Contractor to Engineer using a transmittal form. Submittals received from sources other than the Contractor will be returned without action.
- 20. On the transmittal Record relevant information and requests for data. On the form, or separate sheet, record deviations from Contract Document requirements, including minor variations and limitations. Include Contractor's certification that information complies with Contract Document requirements.

E. SHOP DRAWINGS

- 1. Submit newly prepared information, drawn to accurate scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the Project is not considered Shop Drawings.
- 2. Shop Drawings include fabrication and installation drawings, setting diagrams, schedules, patterns,

01300 - Page 2 of 4 Submittals templates and similar drawings. Include the following information:

- a. Dimensions:
- Identification of products and materials included;
- Compliance with specified standards;
- Notation of coordination requirements;
- Notation of dimensions established by field measurement.
- 3. Submit initially, one correctable, translucent, reproducible print and one blue- or black-line print each, to the Consulting Engineer. Concurrently, submit one print to the Owner.
- 4. Contractor will provide prints of marked up sepia as may be required for their use and that of their Subcontractors and suppliers.
- 5. Final submittal shall be delivered to the Engineer with sufficient copies so that desired distribution can be made by Contractor, one copy each to the consulting engineer where applicable, the Contractor's field office, their home office, the Record Documents, the fabricator, and any others involved in the submittal.
- 6. If initial submittal becomes final submittal, provide sufficient additional copies that may be needed to meet these requirements.
- 7. Where shop drawings are indicated to be submitted for "information only", submit three sets of prints to Engineer and retain one set for Project Record Documents.

F. PRODUCT DATA

- 1. Collect Product Data into a single submittal for each element of construction or system. Product Data includes printed information such as manufacturer's installation instructions, catalog cuts, standard color charts, rough-in diagrams and templates, standard wiring diagrams and performance curves. Where Product Data must be specially prepared because standard printed data is not suitable for use, submit as "Shop Drawings".
- 2. Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products, some of which are not required, mark copies to indicate the applicable information. Include the following information.

 - a. Manufacturer's printed recommendations;b. Compliance with recognized trade association standards;
 - Compliance with recognized testing agency standards;
 - d. Application of testing agency labels and seals;
 - Notation of dimensions verified by field measurement; e.
 - Notation of coordination requirements.
- 3. Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed.
- 4. Submittal is for information and record, unless otherwise indicated; and therefore, initial submittal is final submittal unless returned promptly by the Engineer marked with an "action" which indicates an observed non-compliance.
- Submit copies as above specified for final shop drawings. Where applicable, include additional copies for maintenance manuals. Submit a covering letter to show Contractor's review and action.

G. SELECTIONS SUBMITTAL

- 1. Where selections of colors, patterns, textures are specified to be made by the Engineer, assemble complete samples of all specified or approved products for all specification sections and submit to Engineer. Review specifications and assemble all such samples for a combined single submittal. Indicate on the transmittal the latest date for selections to be made for each item to permit delivery of material in accordance with Progress Schedule. Engineer's action is limited solely to the specified selections or rejection of submittal items not in accordance with Specifications.
- 2. Inspection and Test Reports: Where standard tests are specified for products, including equipment, which tests are not performed at the job site, follow procedures for Product Data. For field inspection and tests specified to be performed by independent agencies, such agencies shall transmit directly one copy each to the Engineer, their consulting engineer where applicable, and the Contractor with an extra copy for Record Documents.

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- II. PRODUCTS
 - A. (Not applicable)
- III. EXECUTION
 - A. (Not applicable)

END OF DOCUMENT

01300 - Page 4 of 4 Submittals

DOCUMENT 03001 STRUCTURAL CONCRETE

1 Description.

These specifications shall govern for the materials used; for the storing, measuring and handling of materials and for the proportioning and mixing of concrete. Concrete shall meet the requirements of:

ACI 318, "Building Code Requirements for Reinforced Concrete".

- A. The ASTM Standards.
- B. ACI "Manual of Concrete Practice".

2 Materials.

Concrete shall be composed of Portland cement, coarse and fine aggregate, water and chemical admixtures as outlined below:

A.

A. Portland cement shall meet the requirements of ASTM C150, "Specification for Portland Cement". Unless otherwise permitted or required, cement shall be Type I or Type III.

Mixing water for concrete shall conform to the requirements for water specified in ASTM C94, "Specification for Ready-Mixed Concrete".

- B. Chemical admixtures shall conform to the following specifications:
 - 1. Air-entraining admixtures shall conform to the requirements of ASTM C231, "Standard test method for air content of fresh mixed concrete by the pressure method".
 - 2 Chemical admixtures shall conform to the requirements of ASTM C494, "Specification for Chemical Admixtures for Concrete".
 - 3. High early strength concrete may be produced from either Type I or Type III Portland cement. If Type I cement is used in lieu of Type III, the Contractor shall use an accelerating agent (Type C), conforming to ASTM Designation C494. The accelerator shall be used in accordance with that manufacturer's recommendations.
 - Corrosion inhibiting admixtures shall conform to the requirements of ASTM C1582, "Specification for Admixtures to Inhibit Chloride-Induced Corrosion of Reinforcing Steel in Concrete".
- D. Aggregates for normal weight concrete shall conform to the requirements of ASTM C33, "Specification for Concrete Aggregates".

Coarse aggregates shall consist of durable particles of gravel, crushed stone, or combinations thereof; free from frozen material or injurious amounts of salt, alkali, vegetable matter, or other objectionable material. It shall not contain more than 0.25 percent, by weight, of clay lumps, not more than 1.0 percent, by weight, of shale not more than 5 percent, by weight, of laminated and/or friable particles. It shall have a wear of not more than 35 percent when tested in accordance with ASTM C131.

Coarse aggregate shall be subjected to five cycles of both the sodium sulfate and the magnesium sulfate soundness tests. Coarse aggregate which has a loss greater than 12 percent with sodium sulfate and/or 18 percent with magnesium sulfate shall not be accepted.

Gradation of coarse aggregate shall conform to the grading requirements shown in Table 1.

TA	ABLE 1 - C	coarse Ag	gregate	Gradation	n		
Nominal Size							
	2"	1-1/2"	1"	3/4"	3/8"	No. 4	No. 8
1-1/2"	0	0-5		30-65	70-90	95-100	
3/4"	0	0	0	0-10	45-80	90-100	95-100

The loss by decantation of coarse aggregate shall be from 0 to 1%.

Fine aggregate shall consist of clean, hard, durable and uncoated particles of natural or manufactured sand or a combination thereof, with or without a mineral filler. It shall be free from frozen material or injurious amounts of salt, alkali, vegetable matter or other objectionable material and it shall not contain more than 0.5 percent by weight of clay lumps. When subjected to the color test for organic impurities, it shall not show a color darker than standard. The fine aggregate shall produce a mortar having a tensile strength equal to or greater than that of Ottawa sand mortar. Mineral filler shall consist of stone dust, clean crushed sand or other approved inert material.

Gradation of fine aggregate shall conform to the grading requirements shown in Table No. 2.

TABLE 2 - Fine Aggregate Gradation
Percent, By Weight Retained on Square Sieve

Fine aggregate shall be subjected to the Sand Equivalent Test. The sand equivalent shall be not less than 80.

The fineness modulus for fine aggregate shall be between 2.30 and 3.10. The fineness modulus will be determined by adding the percentages, by weight, retained on the following sieves, and dividing by 100; Numbers 4, 8, 16, 30, 50 and 100. The fine aggregate shall have not more than 45% passing any sieve and retained on the next consecutive sieve of those shown in Table 2.

3 Storage of Materials.

Cement shall be stored in well ventilated weathertight buildings, bins, or silos which shall exclude moisture and contaminants.

Aggregate stockpiles shall be arranged and used in such a manner as to avoid contamination, with other materials or with other sizes of like aggregates. To ensure that this condition is met, any test for determining conformance to requirements for cleanliness and grading shall be performed on samples secured in accordance with ASTM D75. Frozen or partially frozen aggregates shall not be used. Unless otherwise authorized by the Engineer, all aggregate shall be stockpiled at least 24hours prior to use, to reduce free moisture content.

Chemical admixtures shall be stored in such a manner as to avoid contamination, evaporation, or damage. For those used in the form of suspensions or non-stable solutions, agitating equipment shall be provided to assure thorough distribution of the ingredients. Liquid admixtures shall be protected from freezing and from temperature changes which would adversely affect their characteristics.

4 Proportioning of Concrete.

Concrete for all parts of the work shall be of the specified quality, capable of being placed without excessive segregation and, when hardened, of developing all characteristics required by this item and the contract documents.

The specified compressive or flexural strength of the concrete, for each portion of the structure, shall be as designated in the contract documents.

Strength requirements shall be based on the 28-day and 7-day compressive strength, respectively.

5 Concrete Classification.

Concrete shall be classified as severe exposure (s2) shown by Table No. 3.

TABLE 3 - Concrete Classification

Class	Nominal Coarse Aggrega	ite	Cement Sacks Per C.Y.	Minimum 28-day strength f'c	Minimum 7-day strength f'c	%	H2O/Cement Ratio
S1 S2	1-1/2" 1"	5.5 6.0	3000 p 5000 p			0.45 0.40	

6. Selection of Proportions.

Proportions of materials for concrete shall be established to provide:

- A. Workability and consistency to permit concrete to be worked readily into forms and around reinforcement under conditions of placement to be employed without segregation or excessive bleeding.
- B. Strength requirements in accordance with Table No. Three.
- C. Resistance to special exposure as required by the Engineer and as specified in the contract documents in any Special Provisions.

All classes of concrete will have a slump as determined in accordance with ASTM C143 of 3-inches with an allowable tolerance of plus or minus 1-inch. The average slump for all classes of concrete may range to the wet side of the tolerance.

The allowable air-content for severe exposures is:

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1-1/2" aggregate (No. 2) - 2.5 - 5.0 percent 3/4" aggregate (No. 5) - 3.0 - 5.0 percent
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7 Evaluation and Acceptance of Concrete.

Samples for strength tests shall be taken in accordance with ASTM C172, "Method of Sampling Freshly Mixed Concrete".

Cylinders for strength tests shall be molded and laboratory cured in accordance with ASTM C31, "Method of Making and Curing Concrete Test Specimens in the Field", for 7 and 28 day testing. Specimens shall be tested in accordance with ASTM C39, "Test Method for Compressive Strength of Cylindrical Concrete Specimens". Two cylinders shall be molded for the 28-day test and two cylinders for the 7-day test. For structural concrete, one set of cylinders shall be cast for each 75 cubic yards of concrete.

The strength level of an individual class of concrete shall be considered satisfactory, if both of the following requirements are met:

- A. Average of all sets of three consecutive strength tests equal to or exceed specified f'c.
- B. For concrete structures, no individual strength test (average of two cylinders falls below f'c by more than 500 psi.)

8 Production of Concrete.

Ready mixed concrete shall be batched, mixed and transported in accordance with ASTM C94, "Specification for Ready-Mixed Concrete".

The concrete shall be mixed in the quantities required for immediate use, and any concrete which has developed initial set or which is not in place within 1 1/2-hours after the initial water has been added, shall not be used.

No concrete shall be mixed while the air temperature is at or below 35° F. The temperature of the concrete shall at no time fall below 60° F. or exceed 90° F. When the concrete reaches a temperature of 85° F., retarders shall be introduced into the mixture.

Chemical admixtures shall be charged into the mixer as solutions and shall be measured by means of an approved mechanical dispensing device. The liquid shall be considered as part of the mixing water. Admixtures that cannot be added in solution may be weighed or may be measured by volume if so recommended by the manufacturer.

If two or more admixtures are used in the concrete, they shall be added separately to avoid possible interaction that may interfere with the efficiency of either admixture or adversely affect the concrete.

When concrete arrives at the project with a slump below that suitable for placing, as indicated by the specifications, water may be added only if the maximum permissible water-cement ratio and maximum slump is not exceeded. The water shall be incorporated by additional mixing equal to at least half of the total mixing required.

9 Placing of Concrete.

Concrete shall not be placed into any formwork, until that formwork has been inspected by the Engineer. It is the Contractor's responsibility to determine if the formwork will support the load and that all of the reinforcement is in place.

Concrete shall be conveyed from mixer to place of final deposit by methods that will prevent separation or loss of materials and without interruptions sufficient to permit loss of plasticity between successive increments.

Concrete shall be deposited as near as practicable in its final position to avoid segregation due to rehandling or flowing. Depositing large quantities at one point in the forms and running and/or working it along the forms will not be permitted. Pumped concrete shall not be dropped

more than 3-feet from the bottom of the "elephant trunk/boot".

Concrete that has partially hardened or been contaminated by foreign materials shall not be deposited in the structure.

In depositing the concrete, care shall be taken to entirely fill the form, and to consolidate the concrete by continuous vibratory means. The concrete shall be placed in forms designed to support the load and not bulge, distort the forms, or disturb their alignment.

Any porous section may be removed at the expense of the contractor.

Sufficient placing capacity, as well as mixing and transporting capacity, should be provided so that the concrete can be kept plastic and free of cold joints while it is being placed. It should be placed in horizontal layers not exceeding 2 feet (60 centimeters) in depth, avoiding inclined layers and cold joints. For monolithic construction each concrete layer shall be placed before an initial set has taken place in the previous layers, and layers shall be sufficiently shallow to permit knitting the two together by proper means. Special care shall be taken in filling the forms, to thoroughly work the concrete under and around the reinforcement, embedded fixtures and into corners of forms.

After concreting is started, it shall be carried on as a continuous operation until complete as defined by its boundaries or predetermined joints. When construction joints are required, joints shall be made as specified in the contract documents.

After the concrete has taken its initial set, care shall be exercised to prevent walking on the concrete, to avoid jarring the forms or knocking or straining projecting reinforcement.

10 Concreting in Cold Weather.

No concrete shall be placed when the atmosphere temperature is below 35 degrees Fahrenheit unless permission to do so is granted in writing by the Engineer. When such permission is given, the requirements of ACI 306R, "Cold Weather Concreting", shall govern. The contractor shall assume all risk connected with placing concrete during freezing weather. The County Engineer's permission in no way relieves the contractor of proper and satisfactory quality concrete placement.

11 Concreting in Hot Weather.

Hot weather is defined as any combination of high air temperature, low relative humidity, and wind velocity tending to impair the quality of fresh or hardened concrete or otherwise resulting in abnormal properties.

Concrete placement in hot weather should be performed in a period of time so as to reduce water demand and slump loss. This period of time should not exceed one and one-half (1 1/2) hours after cement has been mixed in the batch.

Small increments of retempering water may be added, with Engineer's approval, to mixed batches to obtain the mix design slump. However, the production of concrete of excessive slump or adding water in excess of the mix design to compensate for slump loss resulting from delays in delivery or placing shall be prohibited.

The contractor shall follow all requirements of ACI 305R, "Hot Weather Concreting" for placing concrete in hot weather and assume all risk involved in its placing.

12 Curing Concrete.

Concrete (other than high-early-strength) shall be maintained above 50° F., protected from the sun, and kept in a moist condition for at least the first 7 days after placement. High-

earlystrength shall be maintained above 50° F., protected from the sun, and in a moist condition for at least the first 3 days.

Accelerated curing methods are not allowed.

Concrete shall be cured from loss of moisture for not less than 72 hours for pavement and not less than 7 days for structures from initiation of the curing process. Curing methods acceptable to Harris County are:

- A. Sealing Materials: White, clear, or for cold weather, black plastic shall be used to completely cover and seal structure and/or pavement from moisture loss. The plastic material shall be no less than 0.004 inches (0.10 millimeters) in thickness. Two (2) thicknesses shall be required on all finished concrete during cold weather (50 degrees and below). Precautions shall be taken to prevent traffic on and tears in plastic cover. All tears shall be remedied immediately to prevent moisture loss and deleterious material introduction. Plastic shall conform to ASTM C171, "Sheet Materials for Curing Concrete".
- B. Liquid Membrane: Placed concrete not cured by plastic sealing method may be cured using liquid membrane curing. See the Item, "Membrane Curing". Abutment caps, bridge slabs, bridge sidewalks, bridge rails, retaining walls, culvert, and culvert headwalls shall not be cured using curing compounds.
- C. Additional Curing Methods: Methods not listed will be noted in a Special Provision in this item, by the Engineer and referenced to ACI 308 "Curing Concrete".

13 Inspection and Testing.

Concrete materials and operations will be tested and inspected as the work progresses. Failure to detect any defective work or material shall not in any way prevent later rejection when such defect is discovered nor shall it obligate the Engineer for final acceptance.

14 Responsibilities and Duties of Contractor.

The Contractor shall provide the necessary testing services for the following:

- A Qualification of proposed materials and the establishment of mix designs.
- B Other testing services needed or required by the Contractor.
- C The use of testing services shall in no way relieve the contractor of the responsibility to furnish materials and construction in full compliance with the contract documents.
- D To facilitate testing and inspection, the Contractor shall: Furnish any necessary labor to assist the designated testing agency in obtaining and handling samples at the project or other sources of materials.
- E Advise the designated testing agency sufficiently in advance of operations to allow for completion of quality tests and for the assignment of personnel.
- F Submit copies of mill test reports for shipments of cement, reinforcing steel and prestressing tendons to the Engineer when required.

15 **Fly Ash.**

The addition of fly ash, in any form to structural concrete is strictly prohibited.

16 Quality Assurance.

The Materials Engineer will sample and test the concrete mixtures being used for the specific designations in accordance with the requirements given for that designation.

For structural concrete used in all except prestressed structures, the Materials Engineer will mold four cylinders for each set of test specimens, from each batch sampled. The cylinders will be tested in accordance with ASTM C39 at 28 days.

The average strength for the set will be determined by use of the average of the two cylinders tested.

For structural concrete used in prestressed concrete structures, the manufacturer shall supply cylinder molds to the Materials Engineer to cast early release test cylinders. These cylinders shall be cast and cured along side the precast/prestressed unit and tested by the manufacturer. The compressive strength test shall be performed in accordance with ASTM C39 and witnessed by the Materials Engineer to insure that the concrete meets the minimum requirements of 4000 psi compressive strength prior to stress transfer. Four additional test cylinders shall also be cast and cured in accordance with ASTM C31 for each lot of precast concrete. Two cylinders shall be tested 7 days. The remaining two cylinders shall be tested at 28 days to insure that the minimum 28 day compressive strength is obtained.

17 Measurement.

The method of measurement for structural concrete shall be as shown in the table below:

Structural Component Method of Measurement

Beams Cubic Yards

Panels Cubic Yards

18 Payment.

Structural concrete shall be paid for at the contract unit price bid based on the method of measurement shown above.

END OF DOCUMENT

DOCUMENT 03002 REINFORCING STEEL

1 Description.

This item shall govern for the furnishing and placing of reinforcing steel of the type, size and quantity designated for use in structures, as shown on the plans and in accordance with these specifications.

2 Materials.

Unless otherwise designated on the plans, or herein, all bar reinforcement shall be deformed and shall conform to the following:

A. ASTM Designation A615, Grade 40 or 60, open hearth, basic oxygen or electric furnace new billet steel.

Unless noted by these specifications, rail steel or axle steel shall not be permitted.

When no specific grade is specified on the plans, the reinforcing steel shall be a minimum Grade 60.

Where bending of bar sizes #14 or #18 of Grade 60 is required, bend testing shall be performed on representative specimens as described for smaller bars in the applicable ASTM Specification. The required bend shall be 90 degrees around a pin having a diameter of 10 times the nominal diameter of the bar.

B. Spiral reinforcement shall be either smooth or deformed bars, or wire, of the minimum size or gage shown on the plans or as specified herein. Bars for spiral reinforcement shall comply with ASTM Designation A675, A615 or A617. Wire shall conform to ASTM Designation A82.

Unless otherwise shown on the plans, the minimum yield strength for spiral reinforcement shall be 40,000 psi.

Report of chemical analysis, showing the percentages of carbon, manganese, phosphorus and sulphur will be required of all reinforcing steel bars when it is to be welded.

The nominal size and area and the theoretical weight of reinforcing steel bars covered by this specifications are as follows:

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Bar	Nominal	Nominal Area	Weight per
Size #	Diameter In.	Square Inch	Linear Foot
2	0.250	0.05	0.167
3	0.375	0.11	0.376
4	0.500	0.20	0.668
5	0.625	0.31	1.043
6	0.750	0.44	1.502
7	0.875	0.60	2.044
8	1.000	0.79	2.670
9	1.128	1.00	3.400
10	1.270	1.27	4.303
11	1.410	1.56	5.313
14	1.693	2.25	7.65
18	2.257	4.00	13.60
5 6 7 8 9 10 11	0.625 0.750 0.875 1.000 1.128 1.270 1.410 1.693	0.31 0.44 0.60 0.79 1.00 1.27 1.56 2.25	1.043 1.502 2.044 2.670 3.400 4.303 5.313 7.65

C. When wire is ordered by size numbers, the following relation between size number, diameter

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in inches and area shall apply unless otherwise specified.

Size #	Table No. 2 Nominal <u>Diameter Inch</u>	Nominal Area <u>Square Inch</u>
31	0.628	0.310
30	0.618	0.300
28	0.597	0.280
26	0.575	0.260
24	0.553	0.240
22	0.529	0.220
20	0.505	0.200
18	0.479	0.180
16	0.451	0.160
14	0.422	0.140
12	0.391	0.120
10	0.357	0.100
8	0.319	0.080
7	0.299	0.070
6	0.276	0.060
5.5 5	0.265	0.055
5 4.5	0.252 0.239	0.050 0.045
4.5 4	0.226	0.045
4	0.220	0.040
	Nominal	Nominal Area
Size #	Diameter Inch	Square Inch
3.5	0.211	0.035
3	0.195	0.030
2.5	0.178	0.025
2	0.160	0.020
1.5	0.138	0.015
1.2	0.124	0.012
1	0.113	0.010
0.5	0.080	0.005

Where deformed wire is required the size number shall be preceded by D, and for smooth wire, the prefix W will be shown.

D. Where plain steel wire is used for concrete reinforcement, it shall meet the requirements of ASTM A82.

Fabricated deformed steel bar mats shall meet the requirements of ASTM A184, while plain steel welded wire fabric shall meet the requirements of ASTM A185.

Deformed steel wire for concrete reinforcement shall meet the requirements of ASTM 496, while deformed steel welded wire fabric shall meet the requirements of ASTM 497.

3. Bending.

The reinforcement shall be bent cold, true to the shapes indicated on the plans. Bending shall preferably be done in the shop. Irregularities in bending shall be cause for rejection. Unless otherwise

shown on the plans, bends shall be made in accordance with ACI 315. Bends of 90° and greater in stirrups, ties and other secondary bars that enclose another bar in the bend, in terms of the nominal bar diameter (d), shall be as follows:

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	Grade 40	Grade 60
#3, #4, #5	4d	4d
#6, #7, #8	6d	6d

All bends in main bars and in secondary bars not covered above shall be as follows:

Table No. 4

	Grade 40	Grade 60
#3 through #8	6d	6d
#9, #10, #11	8d	8d
#14, #18	10d	10d

4. Fabricating Tolerances.

Fabricating tolerances for bars shall be as indicated in ACI 315.

5. Storing.

Steel reinforcement shall be stored above the surface of the ground upon platforms, skids or other supports and shall be protected from mechanical injury and surface deterioration caused by exposure to conditions producing rust. When placed in the work, reinforcement shall be free from dirt, paint, grease, oil or other foreign materials. Reinforcement shall be free from injurious defects such as cracks and laminations. Rust, surface seams, surface irregularities or mill scale will not be cause for rejection, provided the minimum dimensions, crosssectional area and tensile proportions of a hand wire brushed specimen meets the physical requirements for the size and grade of steel specified.

6 Lap Splices.

Splicing of bars, except where shown on the plans, will not be permitted without prior approval of the Engineer. Splices, not provided for on the plans, will be permitted in slabs not more than 15 inches in thickness, columns, walls and parapets subject to the following:

Splices will be permitted in bars 30 feet or less in plan length. For bars exceeding 30 feet in plan length, the distance center to center of splices shall not be less than 30 feet minus one splice length, with no more than one individual bar length less than 10 feet. Splices not shown on the plans, but permitted hereby, shall be made in accordance with Table No. 5. The specified concrete cover shall

be maintained at such splices and bars placed in contact and securely tied together. Lap bars so that both bars will be in the same plane parallel to the nearest concrete surface.

Table No. 5
Minimum Lap Requirements

Size #	Grade 40	Grade 60
3	1' - 0"	1' - 0"
4	1' - 2"	1' - 9"
5	1' - 5"	2' - 2"
6	1' - 9"	2' - 7"
7	2' - 4"	3' - 5"
8	3' - 0"	4' - 6"
9	3' - 10"	5' - 8"
10	4' - 10"	7' - 3"
11	5' - 11"	8' - 11"

Spiral steel will be lapped a minimum of one turn.

Sizes #14 and #18 may not be lapped.

7 Welded Splices.

Where shown on the plans or required by the provisions of this item or other pertinent specifications, welded bar splices shall be used. All welding operations, processes, equipment, materials, workmanship and inspection shall conform to the American Welding Society Specification D1.4. For bars #6 and smaller, use lap weld splices with fillet welds equal to one half bar diameter on each side, for 4 inches in length. For bars #7 and larger, use butt weld splices in accordance with AWS D1.4.

All splices whether lap, weld, mechanical or coupler, shall develop the full strength of the bar. Information on mechanical splicing devices and couplers shall be submitted for approval prior to use.

8 Placing.

Steel reinforcement shall be placed in the exact position as shown on the plans and held securely in place during the placing of the concrete. The dimensions shown are to centers of bars, unless otherwise noted. Hold bars securely in place with wire and other approved means during placement of concrete.

- A. In plane of steel parallel to nearest surface of concrete, bars should not vary from plan spacing by more than one twelfth of spacing between bars.
- B. In plane of steel perpendicular to nearest surface of concrete, bars shall not vary from plan placement by more than 1/4 inch.

Space steel the required distance from forms or earth by approved galvanized metal spacers, metal spacers with plastic coated tips, stainless steel spacers, plastic spacers, or approved precast mortar or concrete blocks. For approval of plastic spacers, provide samples of plastic which show no indications of deterioration after immersion in a 5 percent solution of sodium hydroxide after 120 hours.

Use galvanized metal chairs to support all reinforcing steel, except that pavement steel chairs need not be galvanized. Use a heavy bolster to support bottom layer of reinforcing in abutment caps, bent caps and other beams.

In bridge deck slabs, use two rows of supports for bottom layer of reinforcing parallel to beams for each bay. Use high chairs to support top layer.

Reinforcing steel for bridge slabs, top slabs or direct traffic culverts and the top slabs of prestressed box beams shall be tied at all intersections, except that where the spacing is less than one foot in each direction, alternate intersections only need be tied. For reinforcing steel cages or other structural members, the steel shall be tied at enough intersections to provide a rigid cage of steel. Mats or wire fabric shall overlap each other one full space as a minimum to maintain a uniform strength and shall be fastened securely at the ends and edges. Before any concrete is placed, all mortar, mud, dirt, etc., shall be cleaned from reinforcement. No concrete shall be deposited, until the Engineer has inspected the placement of the reinforcing steel and given permission to proceed.

9 Submittals.

The following information shall be submitted for reinforcing steel. Six sets of each item shall be submitted.

- A. Product data for all materials used.
- B. Shop drawings indicating locations, placement, sizes and bending.
 Shop drawings shall be in accordance with the ACI Manual of Practice for Detailing Reinforced Concrete Structures.
- C. When welding is required, furnish report of chemical analysis, showing percentages of carbon, manganese, phosphorus and sulphur.
- D. Submit certified copies of mill certificates of compliance with requirements herein specified.
- E. Submit information on mechanical splicing devices, couplers, and all other reinforcing accessories.

10 Measurement & Payment.

Reinforcing steel quantities will not be measured or paid for directly. All costs of furnishing, fabrication, placement, ties, chairs, bending, labor and equipment shall be considered subsidiary to bids for concrete structures, requiring reinforcement.

END OF DOCUMENT

03002 - Page 5 of 5 REINFORCING STEEL

Schedule 1. Wharves' Insurance and Indemnity Requirements of RUBB/Big Top Building Foundation

1. Specific Insurance Requirements

The following insurance shall be maintained in effect with limits not less than those set forth below at all times during the term of this Agreement and thereafter as required:

Insurance	Coverage/Limits	Other Requirements
Commercial General Liability (Occurrence Basis)	 \$1,000,000 Per Occurrence \$2,000,000 General Aggregate \$2,000,000 Products/Completed Operations Aggregate \$1,000,000 Personal And Advertising Injury Designated Construction Project(s) General Aggregate Limit \$1,000,000 Electronic Data Liability 	 Current ISO edition of CG 00 01 The personal injury contractual liability exclusion shall be deleted. Additional insured shall be provided in favor of Wharves Parties on ISO forms CG 20 10 10 01 and CG 20 37 10 01, or substitute endorsement(s) providing "equivalent" coverage. For purposes of this additional insured requirement, "equivalent" coverages means coverage for liability arising out of Contractor's work performed for Wharves, including coverage for the negligence or fault of Wharves Parties as to bodily injury or death of an employee or agent of Contractor or Contractor's subcontractor, including products-completed operations. This coverage shall be endorsed to provide primary and non-contributing liability coverage. The following exclusions/limitations (or their equivalent(s), are prohibited: Contractual Liability Limitation CG 21 39 Amendment of Insured Contract Definition CG 24 26 Limitation of Coverage to Designated Premises or Project, CG 21 44 Any endorsement modifying or deleting the exception to the Employer's Liability exclusion Any "Insured vs. Insured" exclusion Any Punitive, Exemplary or Multiplied Damages exclusion
Business Auto Liability	\$1,000,000 Per Accident	 Current ISO edition of CA 00 01 Arising out of any auto (Symbol 1), including owned, hired and nonowned
Workers' Compensation and Employer's Liability	 Statutory Limits \$1,000,000 Each Accident and Disease Alternate Employer endorsement USL&H 	 The State in which work is to be performed must listed under Item 3.A. on the Information Page Such insurance shall cover liability arising out of the Contractor's employment of workers and anyone for whom the Contractor may be liable for workers' compensation claims. Workers' compensation insurance is required, and no "alternative" forms of insurance shall be permitted. Where a Professional Employer Organization (PEO) or "leased employees" are utilized, Contractor shall require its leasing company to provide Workers'

Attachment A

		Compensation insurance for said workers and such policy shall be endorsed to provide an Alternate Employer endorsement in favor of Contractor and Wharves. Where Contractor uses leased employees with Workers' Compensation insurance provided by a PEO or employee leasing company, Contractor is strictly prohibited from subletting any of its work without the express written agreement of Wharves.
Excess/Umbrella Liability (Occurrence Basis)	\$5,000,000 Each Occurrence	 Such insurance shall be excess over and be no less broad than all coverages described above. Such insurance shall be endorsed to be primary and non-contributing to any liability insurance, whether primary, umbrella or excess, held by the Wharves Parties. Drop-down coverage shall be provided for reduction and/or exhaustion of underlying aggregate limits and shall include a duty to defend any insured.
Pollution Liability	 \$1,000,000 Each Occurrence Such insurance must provide third party liability coverage for bodily injury, property damage, clean up expenses, and defense arising from the operations. All coverage provided in the policy shall apply to operations and completed operations of the firm without separate restrictions for either of these time frames. Mold and/or microbial matter and/or fungus and/or biological substance shall be specifically included within the definition of Pollutants in the policy. 	 This insurance is not permitted to include any type of exclusion or limitation of coverage applicable to claims arising from: contractual assumption of liability materials supplied or handled by the named insured. However, exclusions for the sale and manufacture of products are allowed. Exclusionary language pertaining to materials supplied by the insured shall be reviewed by the certificate holder for approval. punitive, exemplary or multiplied damages
Crime	 \$500,000 Each Occurrence Such insurance must provide coverage for Employee Theft of Client Property, to include money, securities and other property of Wharves Parties 	

2. General Insurance Requirements

A. <u>Definitions.</u> For purposes of this Agreement:

- i. "ISO" means Insurance Services Office.
- ii. "Contractor" shall include subcontractors of any tier.
- iii. "Wharves Parties" means (a) Board of Trustees of the Galveston Wharves ("Wharves"), (b) the Galveston Port Facilities Corporation, (c) their respective trustees, officers, employees, and agents, and (d) their affiliates, subsidiaries, successors and assigns.

B. Policies.

i. Contractor shall maintain such General Liability, Excess/Umbrella Liability, and Pollution insurance in identical coverage, form and amount, including required endorsements, for at least ten (10) years following Date of Substantial Completion of the Work to be performed under this Agreement. Contractor shall provide written representation to Wharves stating Work completion date.

ii. It is the intent of the parties to this Agreement that all General Liability and Excess/Umbrella insurance coverage required herein shall be primary and non-contributory to any liability insurance, whether primary, excess or umbrella, held by the Wharves Parties. It is the specific intent that all insurance held by the Wharves Parties shall be excess, secondary and non-contributory.

iii. All policies must:

- a. Be written through insurance companies authorized to do business in the State in which the work is to be performed and rated no less than A-: VII in the most current edition of A. M. Best's Key Rating Guide.
- b. Provide a waiver of subrogation in favor of Wharves Parties on all insurance coverage carried by Contractor, whether required herein or not
- c. Contain an endorsement providing for thirty (30) days prior written notice to Wharves of cancellation or material change of coverage.
- d. Be provided to the Wharves Parties in compliance with the requirements herein and shall contain no endorsements that restrict, limit, or exclude coverage required herein in any manner without the prior express written approval of the Wharves.
- iv. Failure of any Wharves Party to demand such certificate or other evidence of full compliance with these insurance requirements or failure of any Wharves Party to identify a deficiency from evidence that is provided shall not be construed as a waiver of the Contractor's obligation to maintain such insurance.
- v. Contractor shall provide to the Wharves a certified copy of all insurance policies required herein within ten (10) days of any such request. Renewal policies, if necessary, shall be delivered to the Wharves prior to the expiration of the previous policy.
- vi. Commencement of Work without provision of the required certificate of insurance, evidence of insurance and/or required endorsements, or without compliance with any other provision of this Agreement, shall not constitute a waiver by any Wharves Party of any rights. The Wharves shall have the right, but not the obligation, of prohibiting the Contractor or any subcontractor from performing any Work until such certificate of insurance, evidence of insurance and/or required endorsements are received and approved by the Wharves.

C. <u>Limits, Deductibles and Retentions</u>

- i. The limits of liability may be provided by a single policy of insurance or by a combination of primary and excess/umbrella policies, but in no event shall the total limits of liability available for any one occurrence or accident be less than the amount required herein.
- ii. No deductible or self-insured retention shall exceed \$25,000 without prior written approval of the Wharves, except as otherwise specified herein. All deductibles and/or retentions shall be paid by, assumed by, for the account of, and at the Contractor's sole risk. The Contractor shall not be reimbursed for same

D. Forms

- i. If the forms of policies, endorsements, certificates or evidence of insurance required by this Exhibit are superseded or discontinued, Wharves will have the right to require other equivalent forms.
- ii. Any policy or endorsement form other than a form specified in this Exhibit must be approved in advance by Wharves.
- iii. If the Additional Insured requirements are deemed to violate any law, statute or ordinance, the additional insured requirements, including any additional insured policy provision or endorsements procured pursuant to his Agreement, shall be reformed to provide the maximum amount of protection to the Contractor Parties as allowed under the law.

E. **Evidence of Insurance**. Insurance must be evidenced as follows:

- i. ACORD Form 25 Certificate of Liability Insurance, or any other form approved by the Texas Department of Insurance for liability coverages.
- ii. Evidence shall be provided to Wharves prior to commencing Work and prior to the expiration of any required coverage.
- iii. Approved certificate form(s) shall specify:
 - a. Wharves as certificate holder at Wharves' mailing address;
 - b. Insured's name, which must match that on this Agreement;
 - c. Insurance companies producing each coverage and the policy number and policy date of each coverage;
 - d. Producer of the certificate with correct address and phone number and have the signature of the authorized representative of the producer;

- e. Additional Insured status in favor of Wharves Parties;
- f. Amount of any deductible or self-insured retention in excess of \$25,000;
- g. Designated Construction Project(s) General Aggregate Limit;
- h. Personal Injury Contractual Liability;
- i. Primary and non-contributory status;
- j. Waivers of subrogation; and
- k. All exclusions and limitations added by endorsement to the General Liability coverage. This can be achieved by attachment of the Schedule of Forms and Endorsements page.
- iv. Copies of the following policy provisions and/or endorsements shall also be provided:
 - Additional Insured status;
 - 30 Day Notice of Cancellation; and
 - Schedule of Forms and Endorsements pages applicable to the General Liability and Excess/Umbrella policies.

F. Contractor Insurance Representations to Wharves Parties

- i. It is expressly understood and agreed that the insurance coverages required herein (a) represent Wharves Parties' minimum requirements and are not to be construed to void or limit the Contractor's indemnity obligations as contained in this Agreement nor represent in any manner a determination of the insurance coverages the Contractor should or should not maintain for its own protection; and (b) are being, or have been, obtained by the Contractor in support of the Contractor's liability and indemnity obligations under this Agreement. Irrespective of the requirements as to insurance to be carried as provided for herein, the insolvency, bankruptcy or failure of any insurance company carrying insurance of the Contractor, or the failure of any insurance company to pay claims accruing, shall not be held to affect, negate or waive any of the provisions of this Agreement.
- ii. Failure to obtain and maintain the required insurance shall constitute a material breach of, and default under, this Agreement. If the Contractor shall fail to remedy such breach within five (5) business days after notice by the Wharves, the Contractor will be liable for any and all costs, liabilities, damages and penalties resulting to the Wharves Parties from such breach, unless a written waiver of the specific insurance requirement(s) is provided to the Contractor by the Wharves. In the event of any failure by the Contractor to comply with the provisions of this Agreement, the Wharves may, without in any way compromising or waiving any right or remedy at law or in equity, on notice to the Contractor, purchase such insurance, at the Contractor's expense, provided that the Wharves shall have no obligation to do so and if the Wharves shall do so, the Contractor shall not be relieved of or excused from the obligation to obtain and maintain such insurance amounts and coverages.
- iii. This Exhibit is an independent contract provision and shall survive the termination or expiration of the Construction Agreement.

G. Insurance Requirements of Contractor's Subcontractors

- i. Insurance similar to that required of the Contractor shall be provided by all subcontractors (or provided by the Contractor on behalf of subcontractors) to cover operations performed under any subcontract agreement. The Contractor shall be held responsible for any modification in these insurance requirements as they apply to subcontractors. The Contractor shall maintain certificates of insurance from all subcontractors containing provisions similar to those listed herein (modified to recognize that the certificate is from subcontractor) enumerating, among other things, the waivers of subrogation, additional insured status, and primary liability as required herein, and make them available to the Wharves upon request.
- ii. The Contractor is fully responsible for loss and damage to its property on the site, including tools and equipment, and shall take necessary precautions to prevent damage to or vandalism, theft, burglary, pilferage and unexplained disappearance of property. Any insurance covering the Contractor's or its subcontractor's property shall be the Contractor's and its subcontractor's sole and complete means or recovery for any such loss. To the extent any loss is not covered by said insurance or subject to any deductible or co-insurance, the Contractor shall not be reimbursed for same. Should the Contractor or its subcontractors choose to self insure this risk, it is expressly agreed that the Contractor hereby waives, and shall cause its subcontractors to waive, any claim for damage or loss to said property in favor of the Wharves Parties.

H. Use of the Wharves Equipment

The Contractor, its agents, employees, subcontractors or suppliers shall use the Wharves equipment only with express written permission of the Wharves' designated representative and in accordance with the Wharves terms and condition for such use. If the Contractor or any of its agents, employees, subcontractors or suppliers utilize any of the Wharves equipment for any purpose, including machinery, tools, scaffolding, hoists, lifts or similar items owned, leased or under the control of the Wharves, the Contractor shall defend, indemnify and be liable to the Wharves Parties for any and all loss or damage which may arise from such use.

I. Release and Waiver

The Contractor hereby releases, and shall cause its subcontractors to release, the Wharves Parties from any and all claims or causes of action whatsoever which the Contractor and/or its subcontractors might otherwise now or hereafter possess resulting in or from or in any way connected with any loss covered by insurance, whether required herein or not, or which should have been covered by insurance required herein, including the deductible and/or uninsured portion thereof, maintained and/or required to be maintained by the Contractor and/or its subcontractors pursuant to this Agreement.

3. INDEMNITY.

TO THE FULLEST EXTENT PERMITTED BY LAW, BUT IN NO WAY IN CONTRAVENTION OF THE LAW, CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD HARMLESS WHARVES, ARCHITECT, ANY OTHER PERSON OR ENTITY THAT CONTRACTOR IS REQUIRED TO DEFEND OR INDEMNIFY UNDER THE CONTRACT DOCUMENTS, AND THEIR RESPECTIVE AGENTS AND EMPLOYEES (COLLECTIVELY, THE "INDEMNITEES"), FROM AND AGAINST ANY CLAIMS, SUITS, FINES, PENALTIES, LOSSES, COSTS, EXPENSES AND/OR DAMAGES (INCLUDING ATTORNEYS' FEES) (COLLECTIVELY, "LIABILITIES") ARISING OUT OF OR RELATED TO OR ALLEGED TO ARISE OUT OF OR RELATE TO THE CONTRACT OR THE PERFORMANCE THEREOF INCLUDING, WITHOUT LIMITATION, LIABILITIES ATTRIBUTABLE TO (1) PERSONAL/BODILY INJURY, SICKNESS, DISEASE OR DEATH, OR (2) INJURY OR DAMAGE TO PROPERTY (INCLUDING ANY RESULTING LOSS OF USE OR ECONOMIC LOSS).

CONTRACTOR UNDERSTANDS THAT ITS DEFENSE AND INDEMNITY OBLIGATIONS IN THIS ADDENDUM EXTEND TO AND INCLUDE LIABILITIES CAUSED OR ALLEGED TO BE CAUSED BY THE SOLE OR PARTIAL NEGLIGENCE OR FAULT OF ANY OF THE INDEMNITEES.

3.1 DEFENSE OBLIGATIONS

CONTRACTOR'S OBLIGATION TO DEFEND UNDER PARAGRAPH 3 ABOVE IS SEPARATE AND DISTINCT FROM ITS OBLIGATION TO INDEMNIFY. CONTRACTOR SHALL DEFEND THE INDEMNITEES EVEN IF LIABILITIES ARE CAUSED OR ALLEGED TO BE CAUSED IN WHOLE OR IN PART BY THE NEGLIGENCE OR FAULT OF ANY INDEMNITEES, AND CONTRACTOR SHALL COMPLY WITH AND CONTINUE ITS DEFENSE OBLIGATIONS UNTIL THE UNDERLYING LIABILITY IS FINALLY ADJUDICATED OR SETTLED.

3.2 WORKER INJURIES

CONTRACTOR AGREES WITH RESPECT TO ANY PERSONS PERFORMING ANY PART OF THE CONTRACT THAT CONTRACTOR IS SOLELY RESPONSIBLE FOR: (1) PROVIDING ALL NECESSARY SUPERVISION, MONITORING, DIRECTION AND CONTROL, (2) COMPLYING WITH AND ENFORCING ALL SAFETY REQUIREMENTS REQUIRED BY THE CONTRACT AND APPLICABLE LAW, AND (3) PROVIDING ALL NECESSARY SAFETY EQUIPMENT, TRAINING AND SAFE WORKING CONDITIONS. ACCORDINGLY, AND NOTWITHSTANDING ANYTHING IN THIS ADDENDUM TO THE CONTRARY, IF ANY LIABILITIES ARE ATTRIBUTABLE TO ANY PERSONAL/BODILY INJURY, SICKNESS, DISEASE OR DEATH TO ANY AGENT, **SERVANT** REPRESENTATIVE BORROWED OR OF CONTRACTOR SUBCONTRACTORS, SUPPLIERS OR VENDORS OF ANY TIER, THEN THE DEFENSE AND INDEMNITY OBLIGATIONS OF CONTRACTOR HEREIN SHALL EXTEND AND APPLY TO ALL LIABILITIES EVEN IF CAUSED OR ALLEGED TO BE CAUSED IN WHOLE OR IN PART BY THE NEGLIGENCE OR FAULT OF ANY INDEMNITEES, AND CONTRACTOR AGREES TO DEFEND AND INDEMNIFY THE INDEMNITEES FROM THE CONSEQUENCES OF THEIR OWN PARTIAL OR SOLE NEGLIGENCE OR FAULT. HOWEVER, IN NO EVENT SHALL CONTRACTOR BE REQUIRED TO INDEMNIFY THE INDEMNITEES TO THE EXTENT THAT ANY LIABILITIES ARE CAUSED BY THEIR OWN GROSS NEGLIGENCE OR WILLFUL MISCONDUCT.

3.3 Architect/Engineer Exclusion

Notwithstanding anything in this Addendum to the contrary, in no event shall Contractor be obligated to defend or indemnify Architect or any other registered architect or licensed engineer from Liabilities resulting from design defects or professional negligence to the extent prohibited by Section 130.001 et seq. of the Texas Civil Practice & Remedies Code, as the same may be amended or re-codified.

3.4 Compliance

Contractor shall comply with its obligations under this Addendum upon notice of any Liability from any Indemnitee, with legal counsel reasonably acceptable to Wharves and any applicable Indemnitee. Contractor shall not settle or compromise any Liability without the prior written consent of Wharves and any applicable Indemnitee. Contractor shall comply with its obligations under this Addendum at its sole cost and expense. If Contractor fails to fully comply, Wharves may, in addition to any other rights and remedies in the Contract, take all such action as it deems necessary in its sole discretion to protect itself and/or any other Indemnitee and defend, pay, discharge or otherwise settle any Liabilities, and Contractor shall be liable for all resulting cost, damage, loss or expense (including attorneys' fees) incurred by Wharves. Contractor agrees to pay all attorneys' fees, costs and expenses incurred by Wharves in enforcing this Addendum.

3.5 No Limitation

The rights and remedies of the Indemnitees in this Addendum are cumulative and in addition to other rights and remedies related to defense and indemnity elsewhere in the Contract or otherwise available at law or in equity. Contractor's obligations under this Addendum shall not be limited by any limitation on the amount or type of damages, compensation or benefits payable under workers' compensation, disability or other employee benefit acts, or by the scope or limits of insurance required of or otherwise maintained by Contractor. The requirements of this Addendum shall survive completion of the obligations Contractor under the Contract or any earlier termination and shall continue until barred by applicable law.

3.6 Definitions

Terms in this Addendum shall have the meaning assigned in the Contract unless otherwise defined in this Addendum.

Client References

Customer Name:	
Business Address:	
Business Type:	
Contact Name:	
Telephone No.:	
Email Address:	
Contract Period:	Contract Value: \$
Services Provided:	
Customer Name: _	
Business Address:	
Business Type:	
Contact Name:	
Telephone No.:	
Email Address:	
Contract Period:	Contract Value: \$
Services Provided:	
Customer Name:	
Business Address:	
Business Type:	
Contact Name:	
Telephone No.:	
Email Address:	
Contract Period:	Contract Value: \$
Services Provided:	
	Business Address: Business Type: Contact Name: Telephone No.: Email Address: Contract Period: Services Provided: Customer Name: Business Address: Business Type: Contact Name: Telephone No.: Email Address: Contract Period: Services Provided: Customer Name: Telephone No.: Email Address: Contract Period: Services Provided: Customer Name: Business Address: Business Type: Contact Name: Telephone No.: Email Address: Contract Period:

DESIGN DATA GOVERNING BUILDING CODE: IBC 2009

REFER TO BTK ENGINEERING SERVICES, INC. REACTION DATA

1.	WIND LOAD: A. BASIC WIND SPEED (V 3s) B. BUILDING CATEGORY C. IMPORTANCE FACTOR D. EXPOSURE CATEGORY E. ENCLOSURE CLASSIFICATION	I 0.77 C	7
2.	LIVE LOADS: A. ROOF	. 5 F	PSF

PROJECT NOTES

GENERAL

- 1. NOTES ON THIS PAGE SUPPLEMENT THE SPECIFICATIONS, REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- 2. ARCHITECT'S APPROVAL MUST BE SECURED FOR ALL SUBSTITUTIONS.
- 3. CHECK ALL DIMENSIONS ON STRUCTURAL DRAWINGS AGAINST ARCHITECTURAL DRAWINGS. 4. VERIFY OPENINGS THROUGH FLOORS, ROOFS, AND WALLS WITH ARCHITECTURAL,
- MECHANICAL, CIVIL AND ELECTRICAL REQUIREMENTS. 5. ANY DISCREPANCY OF INFORMATION DESCRIBED ON THE STRUCTURAL DRAWINGS, SPECIFICATIONS, OR ANY INFORMATION SHOWN ON OTHER DRAWINGS MUST BE BROUGHT
- TO THE ATTENTION OF THE STRUCTURAL ENGINEER FOR CLARIFICATION. 6. PRE-ENGINEERED SYSTEMS AND COMPONENTS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS. SHOP DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION.
- 7. THE OWNER SHALL INDEMNIFY SHELMARK ENGINEERING, LLC. AGAINST ANY LIABILITY ASSOCIATED WITH THE UNAUTHORIZED REUSE OR MODIFICATION OF THE CONSTRUCTION DOCUMENTS. CALCULATIONS OR OTHER INSTRUMENTS USED IN THE PRODUCTION OF THESE DRAWINGS WILL NOT BE PROVIDED FOR ANY USE WHATSOEVER, EXCEPT AS REQUIRED BY BUILDING OFFICIALS IN THEIR PROCESS OF ISSUING A BUILDING PERMIT.

- 1. FURNISH THREE SETS OF SHOP AND ERECTION DRAWINGS TO STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION. UNLESS THE STRUCTURAL ENGINEER PROVIDES WRITTEN EXCEPTION, THE TRANSFER OF REVIEWED SHOP DRAWINGS TO THE ARCHITECT WITHIN 10 WORKING DAYS OF RECEIPT BY THE STRUCTURAL ENGINEER'S OFFICE, SHALL BE CONSIDERED AS "REVIEWED IN A TIMELY MANNER". ONE SET OF REVIEWED SHOP DRAWINGS WILL BE RETAINED BY THE STRUCTURAL ENGINEER.
- 2. FURNISH TWO SETS OF CONCRETE MIX DESIGNS INCLUDING STRENGTH TEST DATA AND MANUFACTURER'S LITERATURE ON ADMIXTURES FOR REVIEW BY STRUCTURAL ENGINEER
- NO LATER THAN 2 WEEKS PRIOR TO ON-SITE USE OF THESE MATERIALS. 3. CONTRACT DOCUMENTS ARE NOT TO BE USED BY ANY CONTRACTOR, SUB-CONTRACTOR OR SUPPLIER AS PART OF THEIR SHOP DRAWING SUBMITTAL. ANY SHOP DRAWINGS SUBMITTED IN SUCH A MANNER WILL BE REJECTED AND RETURNED WITHOUT REVIEW.
- 4. ELECTRONIC COPIES OF CONTRACT DOCUMENTS WILL NOT BE PROVIDED TO ANY CONTRACTOR, SUB-CONTRACTOR OR SUPPLIER EXCEPT THAT PORTIONS OF THE DOCUMENTS MAY BE PROVIDED UNDER THE FOLLOWING CONDITIONS
- A. THE STRUCTURAL ENGINEER SHALL DECIDE WHICH DOCUMENTS MAY BE RELEASED ON ELECTRONIC MEDIA,
- B. THE CONTRACTOR, SUB-CONTRACTOR, OR SUPPLIER SIGNS AND RETURNS A RELEASE OF LIABILITY PROVIDED BY THE STRUCTURAL ENGINEER, AND PAYS THE STRUCTURAL ENGINEER A \$100.00 HANDLING FEE.

QUALITY ASSURANCE PLAN

1. THE OWNER SHALL EMPLOY SPECIAL INSPECTORS FOR THE FOLLOWING WORK, COPIES OF WRITTEN REPORTS BY THE INSPECTORS SHALL BE PROVIDED TO THE STRUCTURAL ENGINEER.

A. FABRICATORS	IBC 1704.2
B. STEEL CONSTRUCTION	
C. CONCRETE CONSTRUCTION	IBC 1704.4
D. WIND FORCE RESISTING SYSTEM	IBC 1706

- 2. THE STRUCTURAL ENGINEER OR THEIR ASSIGNED REPRESENTATIVE SHALL MAKE VISUAL OBSERVATIONS OF THE FOLLOWING ITEMS FOR GENERAL CONFORMANCE TO THE STRUCTURAL DESIGN. THE CONTRACTOR SHALL PROVIDE ADEQUATE NOTICE WHEN SUCH ITEMS HAVE BEEN INSTALLED TO THE EXTENT WHICH WILL ALLOW THE
- A. SUBGRADE PREPARATION INCLUDING PROOF ROLLING B. DRILLING AND REBAR OF FIRST CONCRETE PIERS
- C. GRADE BEAM REBAR PRIOR TO FIRST POUR D. SLAB REBAR PRIOR TO FIRST POUR

CONSTRUCTION NOTES

STRUCTURAL STABILITY DURING CONSTRUCTION

- 1. THE STRUCTURAL DRAWINGS REPRESENT THE COMPLETED STRUCTURE WITH ALL
- ELEMENTS PROPERLY INSTALLED IN THEIR FINAL POSITIONS. 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MEANS AND METHODS OF CONSTRUCTION, INCLUDING THE DESIGN, CONSTRUCTION, SEQUENCING AND MAINTENANCE OF ANY SHORING, BRACING, OR OTHER TEMPORARY SUPPORTS OR ERECTION DEVICES AS MAY BE REQUIRED TO PROPERLY BRACE, SUPPORT AND ERECT ANY ELEMENT
- REQUIRED TO CONSTRUCT THE STRUCTURE SHOWN HEREIN DURING CONSTRUCTION. 3. DO NOT PLACE BACKFILL AGAINST FOUNDATION WALLS OR GRADE BEAMS UNTIL BRACING FLOORS ARE IN PLACE, OR OTHER TEMPORARY BRACING IS INSTALLED.
- 4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PAINT ALL SURFACES WHICH REQUIRE PROTECTION FROM THE ELEMENTS WITH THE APPROPRIATE PAINT INCLUDING NECESSARY PRIMER COATS AND BACK PRIMING WHERE NECESSARY.

SITE SAFETY

- 1. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS TO HIS SATISFACTION BEFORE PROCEEDING WITH CONSTRUCTION. CONFIRM LOCATION OF ALL UNDERGROUND UTILITIES, CONDUIT, CABLE, PIPE LINES, GAS LINES, TELEPHONE AND POWERLINES. REVIEW SOIL TESTING REPORTS AND ENVIRONMENTAL REPORTS. IF A CONFLICT WITHIN THE PLANS IS DISCOVERED. THE CONTRACTOR IS TO NOTIFY THE ENGINEER BEFORE PROCEEDING WITH THE CONSTRUCTION. THE CONTRACTOR ACCEPTS RESPONSIBILITY FOR ANY CONSTRUCTION PROBLEM OR DEFECT CAUSED BY PROCEEDING WITH CONSTRUCTION WITHOUT NOTIFYING THE ENGINEER OF CONFLICTS WITHIN THE
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SITE SAFETY AND CONFORMANCE TO ALL SAFETY REGULATIONS PRESCRIBED BY FEDERAL, STATE AND LOCAL AUTHORITIES, INCLUDING ADHERENCE TO ALL OSHA REQUIREMENTS IN EFFECT AT THE TIME OF
- 3. THE DESIGN, CONSTRUCTION AND MAINTENANCE OF ALL ERECTION OR TEMPORARY
- SAFETY DEVICES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. 4. THE CONTRACTOR, SHALL IDENTIFY, AND BRING TO THE ATTENTION OF THE STRUCTURAL ENGINEER, ANY DETAIL OR CONDITION SHOWN ON THE DRAWING WHICH IS NOT IN COMPLIANCE WITH ANY FEDERAL, STATE, OR LOCAL REGULATIONS, SO THAT THE STRUCTURAL ENGINEER MAY PROVIDE CONFORMING MODIFICATIONS.

NON-STRUCTURAL BUILDING ELEMENTS

1. NON-STRUCTURAL BUILDING ELEMENTS SUCH AS WINDOWS, DOORS, STOREFRONT, CURTAIN WALLS AND OTHER COMPONENTS AND CLADDING ARE TO BE DESIGNED BY THE SUPPLIER TO RESIST LATERAL LOADS AS SHOWN IN THE DESIGN DATA SECTION OF THESE NOTES. ALL CONNECTIONS AND ATTACHMENTS OF SUCH ELEMENTS TOT HE BUILDING STRUCTURE ARE THE RESPONSIBILITY OF THE SUPPLIER AND SHALL BE DESIGNED IN SUCH A MANNER THAT THE LOADS ARE TRANSFERRED TO THE STRUCTURAL FRAMING SYSTEM.

SUBGRADE PREPARATION (COMPACT SELECT FILL BY OWNER)

- 1. REFER TO GEOTECHNICAL REPORT NO. 14G24558 BY GEOSCIENCE ENGINEERING & TESTING, INC. FOR ALL SOIL RECOMMENDATIONS AND PREPARATION METHODS.
- 2. UNDER SLAB FILL SHALL CONSIST OF 40" OF STRUCTURAL SELECT FILL MATERIALS WITH LIQUID LIMIT LESS THAN 35 AND A PLASTICITY INDEX (PI) BETWEEN 10 AND 20 PLACED IN LIFTS NOT EXCEEDING 8-INCHES. THE TOP 1 TO 2-INCHES UNDER THE SLAB CAN BE BANK SAND FOR LEVELING PURPOSES. FILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY PER ASTM D-698 AT A MOISTURE CONTENT WITHIN -1 TO +3% OF OPTIMUM.
- 3. SITE SHALL BE GRADED AND MAINTAINED TO PERMIT POSITIVE DRAINAGE AWAY FROM THE FOUNDATION.

SLAB-ON-GRADE

- 1. THE SLAB-ON-GRADE AT THE GROUND FLOOR LEVEL OF THIS BUILDING HAS SOME RISK OF MOVEMENT OVER TIME. THE PREPARATION OF THE SUBGRADE FOR THE SLAB-ON-GRADE SHALL BE IN STRICT ACCORDANCE WITH THE PROJECT GEOTECHNICAL REPORT REFERENCED ABOVE. THE CONTRACTOR SHALL DIRECT QUESTIONS REGARDING THE SUBGRADE PREPARATION REQUIREMENTS TO THE GEOTECHNICAL ENGINEER.
- 2. SUPPORT SLAB REINFORCEMENT WITH PLASTIC CHAIRS @ 3'-0" O.C.E.W. MAXIMUM. ADDITIONAL SUPPORTS MAY BE REQUIRED AT DISCRETION OF ENGINEER.

CONCRETE

- 1. SLABS AND WALLS SHALL NOT HAVE JOINTS IN A HORIZONTAL PLANE, ANY STOP IN CONCRETE WORK MUST BE MADE AT CENTER OF SUPPORT WITH VERTICAL BULKHEADS AND HORIZONTAL KEYS, UNLESS OTHERWISE SHOWN. ALL CONSTRUCTION JOINTS SHALL BE AS DETAILED OR AS APPROVED BY ARCHITECT AND STRUCTURAL ENGINEER.
- 2. ALL CONSTRUCTION JOINTS SHOWN ON THE DRAWINGS SHALL BE PREPARED BY ROUGHENING THE SURFACE OF THE CONCRETE SO THAT THE AGGREGATE SHALL BE EXPOSED UNIFORMLY, LEAVING NO LAITANCE, LOOSENED PARTICLES, OR DAMAGED CONCRETE. AS AN ALTERNATIVE, 2 X 4 CONTINUOUS KEY WAYS MAY BE USED FOR CONSTRUCTION JOINTS.
- 3. PROVIDE SLEEVES FOR ALL PIPES PLACED THROUGH CONCRETE FOUNDATIONS. NO OPENINGS OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE PERMITTED UNLESS THE ARCHITECT'S AND STRUCTURAL ENGINEER'S APPROVAL IS SECURED PRIOR TO THE PLACEMENT OF REINFORCING STEEL.
- 4. ALL MIXING, TRANSPORTATION, PLACING, AND CURING OF CONCRETE SHALL COMPLY WITH ACI 318-05.

- 1. ALL CONCRETE SHALL BE NORMAL WEIGHT (NW) AGGREGATE UNLESS NOTED ON THE PLANS OR SCHEDULES.
- 2. CEMENT FOR ALL CONCRETE IN CONTACT WITH SOILS USE TYPE: 1/II
- 3. CONCRETE SHALL CONFORM TO THE FOLLOWING TABLE:

USE	28 DAY STRENGTH	WEIGHT CLASS	SLUMP ±1"	MAX. AGGR.SIZE	AIR
	PSI		INCHES	INCHES	%
PIERS	4000	NW	4	1	0-2
GRADE BEAMS	4000	NW	4	1	0-2
SLAB	4000	NW	4	3/4	0-2

CONCRETE REINFORCEMENT:

- 1. DETAIL BARS IN ACCORDANCE WITH "ACI DETAILING MANUAL", PUBLICATION SP-66, AND "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, "ACI 318, LATEST EDITIONS, PROVIDE DETAILS INDICATING REINFORCING CONTINUITY AT CONSTRUCTION
- JOINTS. 2. REINFORCEMENT PROTECTION CONCRETE PLACED AGAINST EARTH... CONCRETE PLACED IN FORMS BUT EXPOSED TO WEATHER OR EARTH: BARS #5 AND SMALLER... BARS #6 AND LARGER.. COLUMNS, GIRDERS, BEAMS....
- SLABS OR WALLS NOT EXPOSED TO WEATHER OR EARTH ... 3. SPLICES IN REINFORCEMENT ARE NOT PERMITTED EXCEPT AS DETAILED OR AUTHORIZED
- BY STRUCTURAL ENGINEER. 4. SPLICE CONTINUOUS TOP BARS AT MIDSPAN, SPLICE CONTINUOUS BOTTOM BARS OVER
- THE SUPPORT. 5. PROVIDE ACCESSORIES NECESSARY TO PROPERLY SUPPORT REINFORCING AT POSITIONS SHOWN ON PLANS AND DETAILS.
- 6. ENSURE HORIZONTAL CONTINUITY IN WALLS, FOOTINGS AND GRADE BEAMS, BY PROVIDING CORNER BARS AT ALL CORNERS AND INTERSECTIONS, CORNER BARS SHALL MATCH SIZE AND SPACING OF HORIZONTAL REINFORCING AND EXTEND A MINIMUM OF
- 36 BAR DIAMETERS BEYOND THE CORNER. 7. PLACE 2-#5 (1 EACH FACE) WITH 2'-0" PROJECTION AROUND OPENINGS THROUGH FLOOR TOPPING SLABS, UNLESS NOTED.
- 8. WIRE FABRIC REINFORCEMENT SHALL LAP ONE FULL MESH AT SPLICES AND BE WIRED
- TOGETHER. 9. WELDING OF REINFORCING SHALL NOT BE PERMITTED UNLESS SPECIFICALLY CALLED FOR
- OR APPROVED BY THE STRUCTURAL ENGINEER. 10. DO NOT RE-BEND ANY BARS WITH A YIELD STRESS GREATER THAN 40 KSI.
- 11. CONCRETE REINFORCING SHALL CONFORM TO THE FOLLOWING TABLE:

USE	ASTM	YIELD, KSI	NOTES			
MILD REINFORCING	A615	60				
COLUMN TIES	A615	60	#3 BARS 40 KSI			
BEAM STIRRUPS	A615	60	#3 BARS 40 KSI			
WELDABLE	A706	60				

13. RUSTED REINFORCEMENT WILL NOT BE PERMITTED, ALL RUSTED REINFORCEMENT IDENTIFIED BY THE ENGINEER OR HIS REPRESENTATIVE WILL REQUIRE WIRE BRUSHING TO CLEAN STEEL AND COATING WITH SIKA ARMATEC 110 EPOCEM RUST INHIBITING BONDING

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ISSUED FOR

ISSUE FOR BIDS

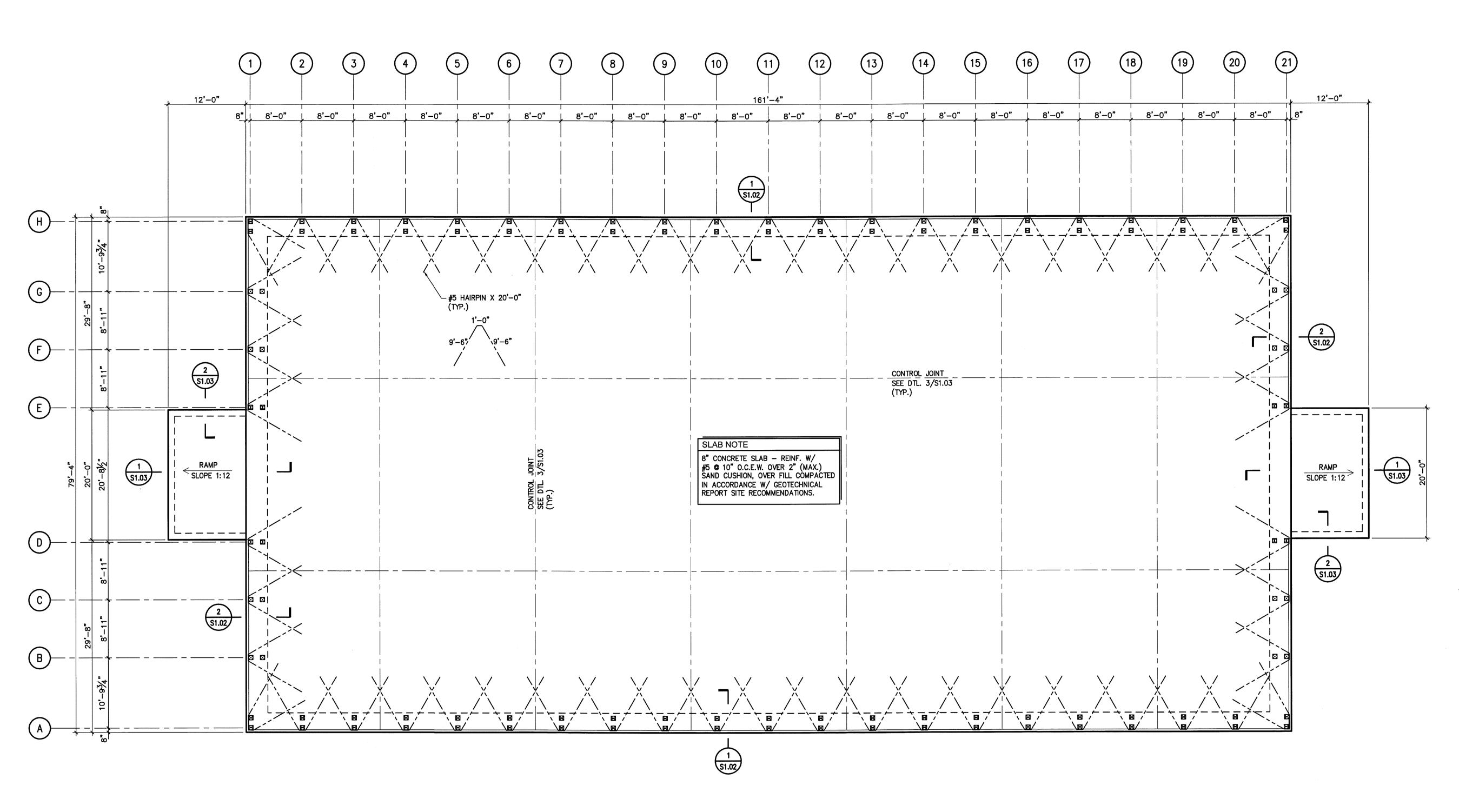
RICHARD B. EWER

DWG NAME:

STRUCTURAL NOTES

JOB NO: 14-451

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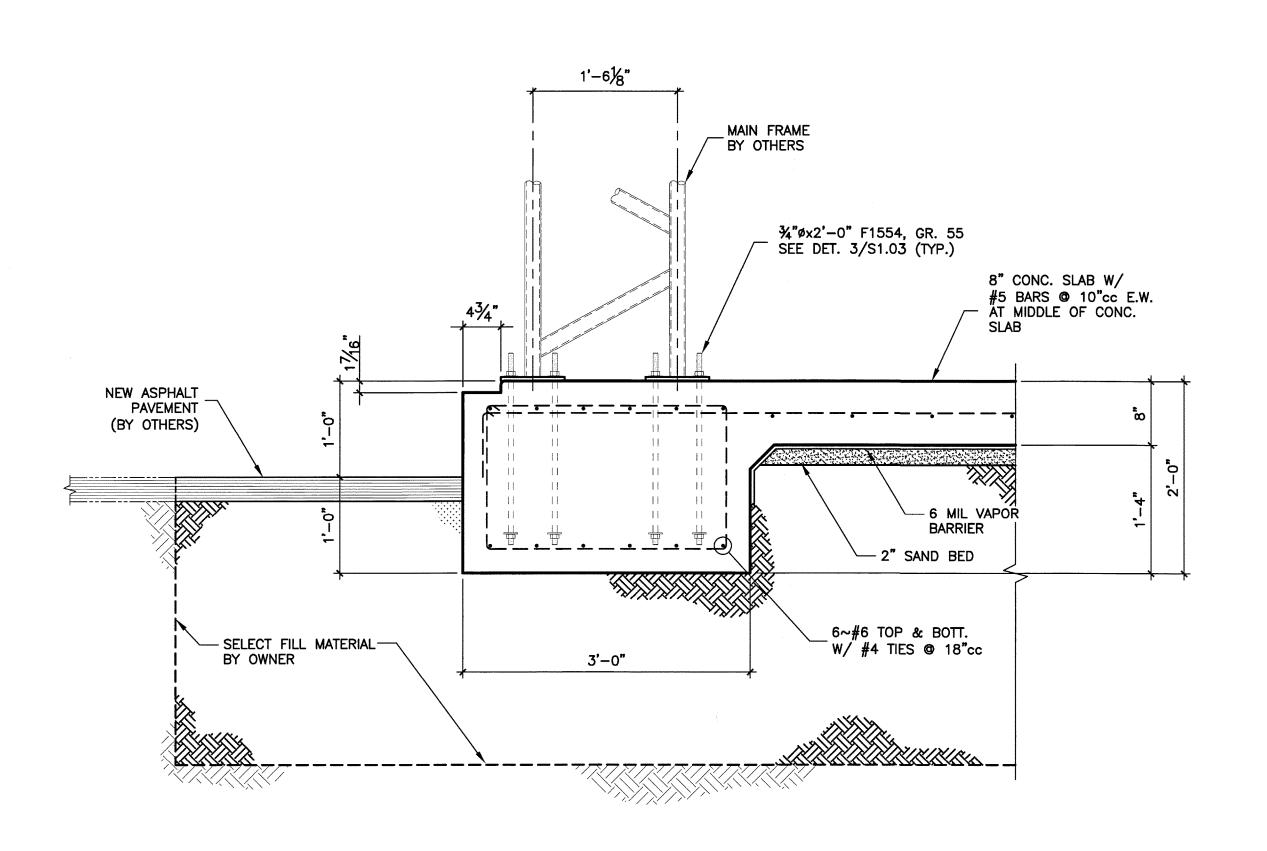
Rubb Building Foundation Plan

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

ISSUED FOR ISSUE FOR BIDS

JOB NO: 14-451 REV:

DWG NAME:
RUBB BUILDING FOUNDATION
PLAN



NEW ASPHALT
PAREMENT
(BY OTHERS)

SELECT FILL MATERIAL
BY OWNER

11-9%

END WALL FRAME
BY OTHERS

8" CONC. SLAB W/
#5 BARS @ 10°cc E.W.
AT MIDDLE OF CONC.
SLAB

6 MIL VAPOR
BARRIER
1

2" SAND BED

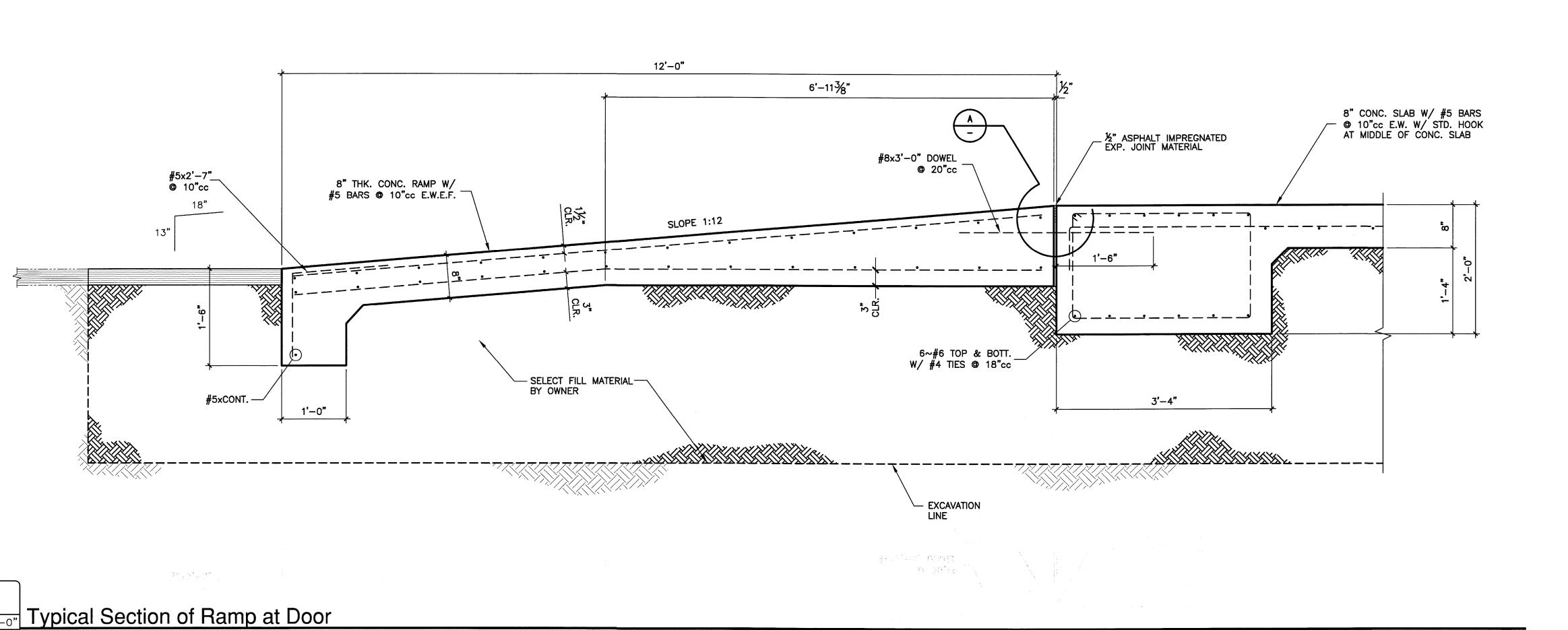
SELECT FILL MATERIAL
3'-4"

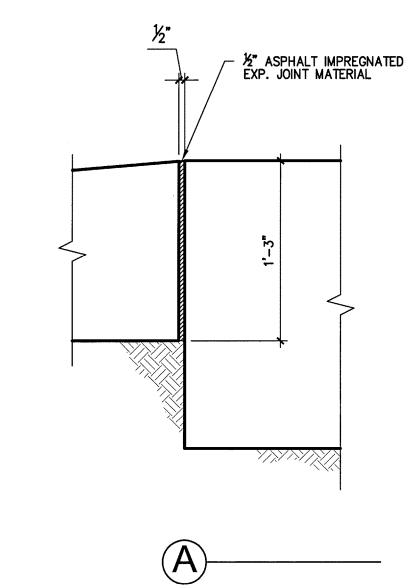
W/ #4 TIES @ 18°cc

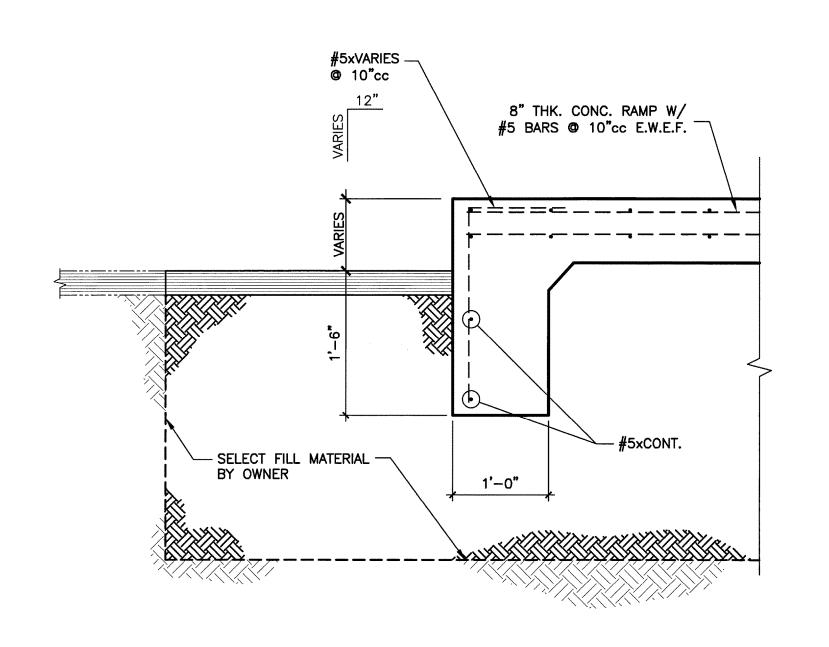
Typical Section of Foundation at Main Frame

Typical Section of Foundation at End Frame

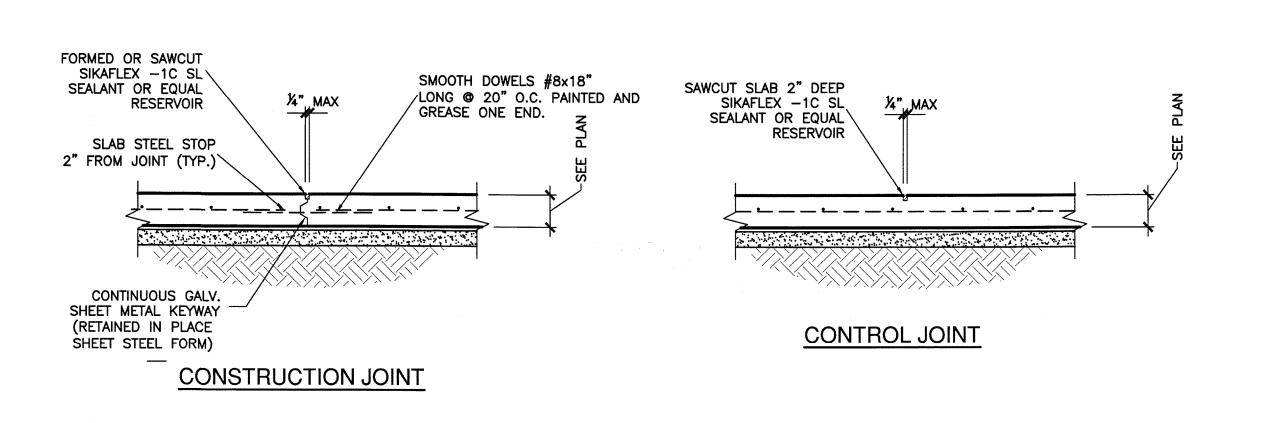
BUILDING N PLAN BIG RUBB FO RUBB BUILDING FOUNDATION DETAILS





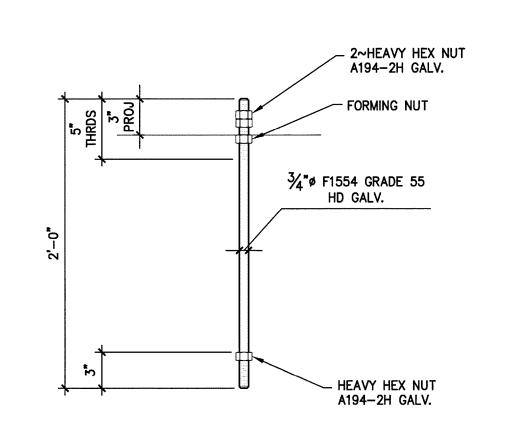


Typical Section of Ramp at Door



PROVIDE CONTROL JOINTS (C.J.) IN SLAB
SO THAT NO DISTANCE IS GREATER THAN
25 FEET AND THE SQUARE FOOTAGE IS LESS
THAN 625 SQ. FT. CONSTRUCTION JOINTS
MAY BE PLACED AT CONTRACTORS DISCRETION.

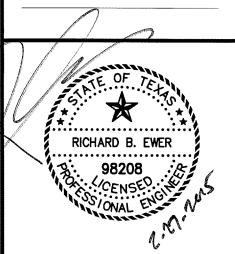
Typical Slab Joint Details



N.T.S. Typical Anchor Bolt Detail

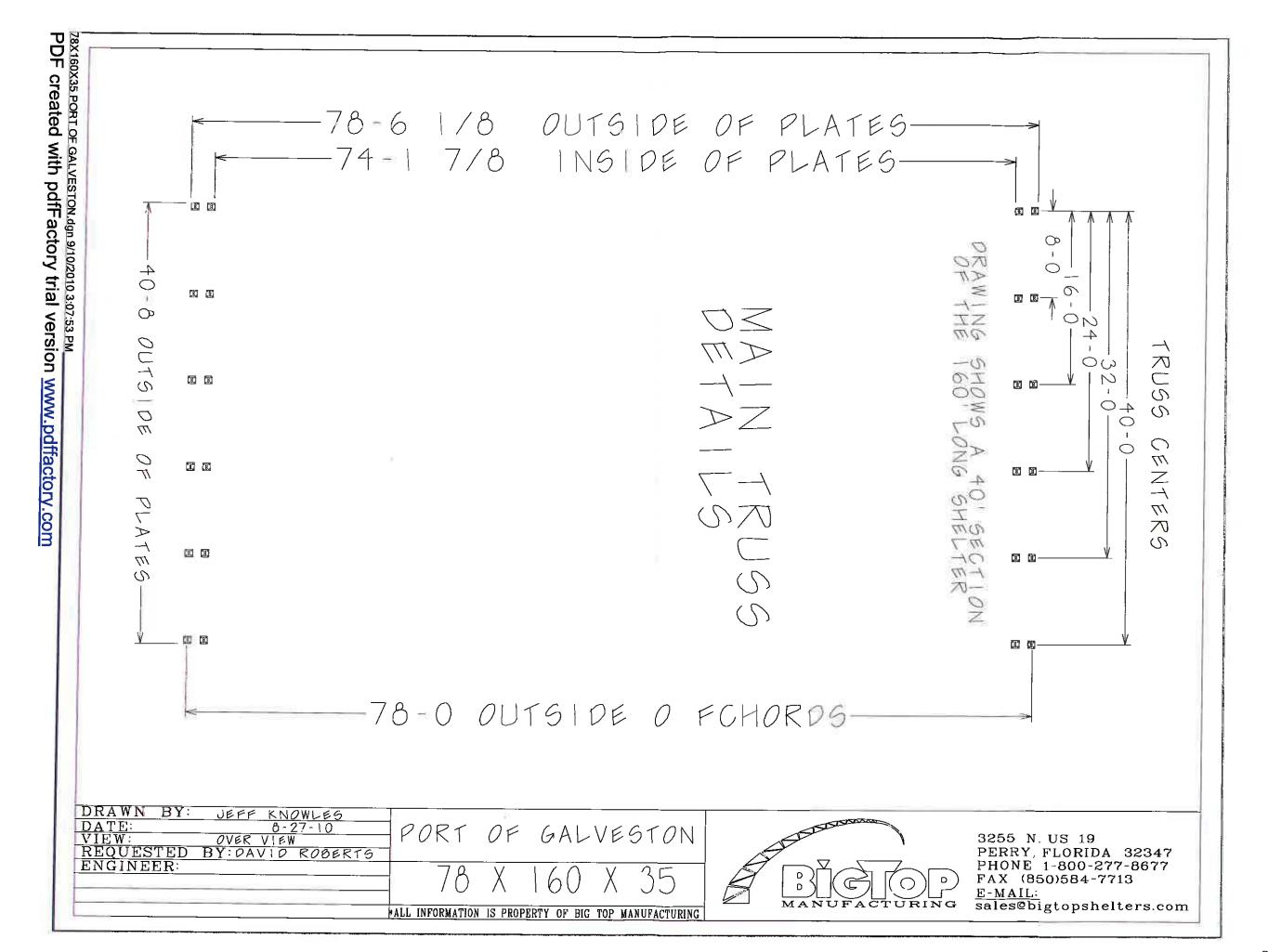
BIC RUBB

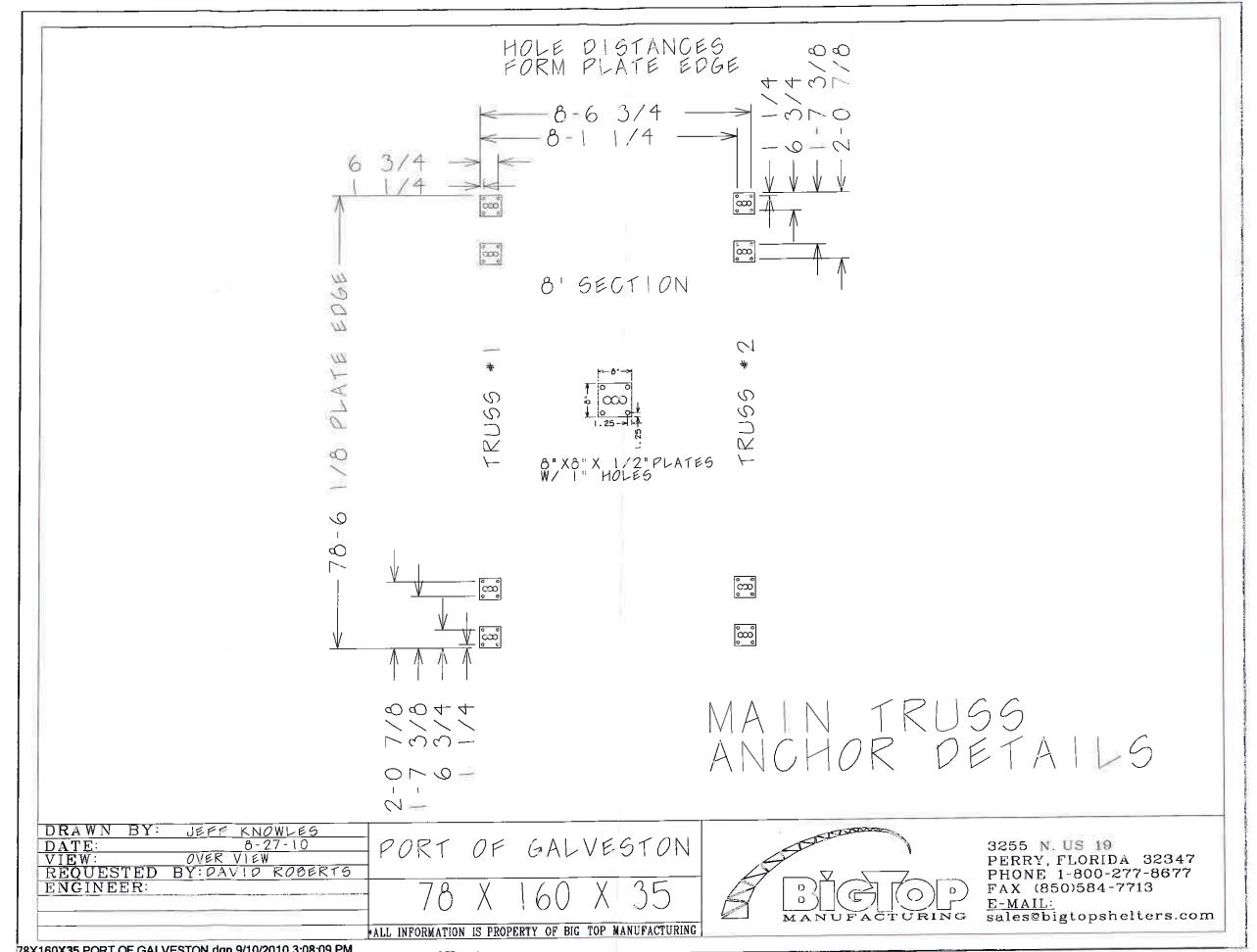
ISSUED FOR ISSUE FOR BIDS



RUBB BUILDING FOUNDATION DETAILS

JOB NO: 14-451





END PANEL DETAILS



MEASUREMENTS ARE FROM THE EDGE OF THE MAIN TRUSS PLATES TO THE CENTER OF THE END PANEL TRUSS PLATES

DRAWN BY: JEFF KNOWLES

DATE: 8-27-10

VIEW: 0YER VIEW

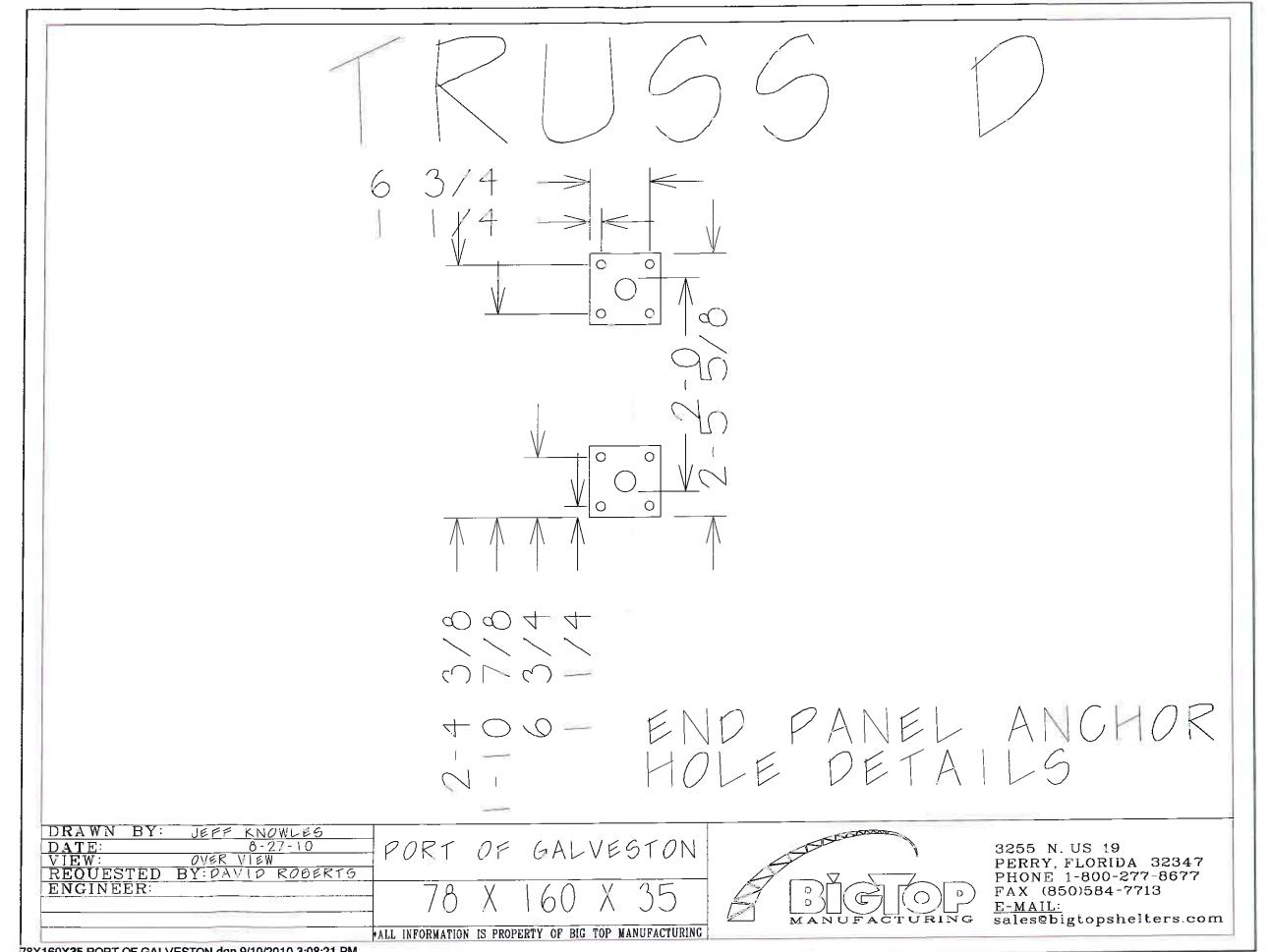
REQUESTED BY: DAVID ROBERTS

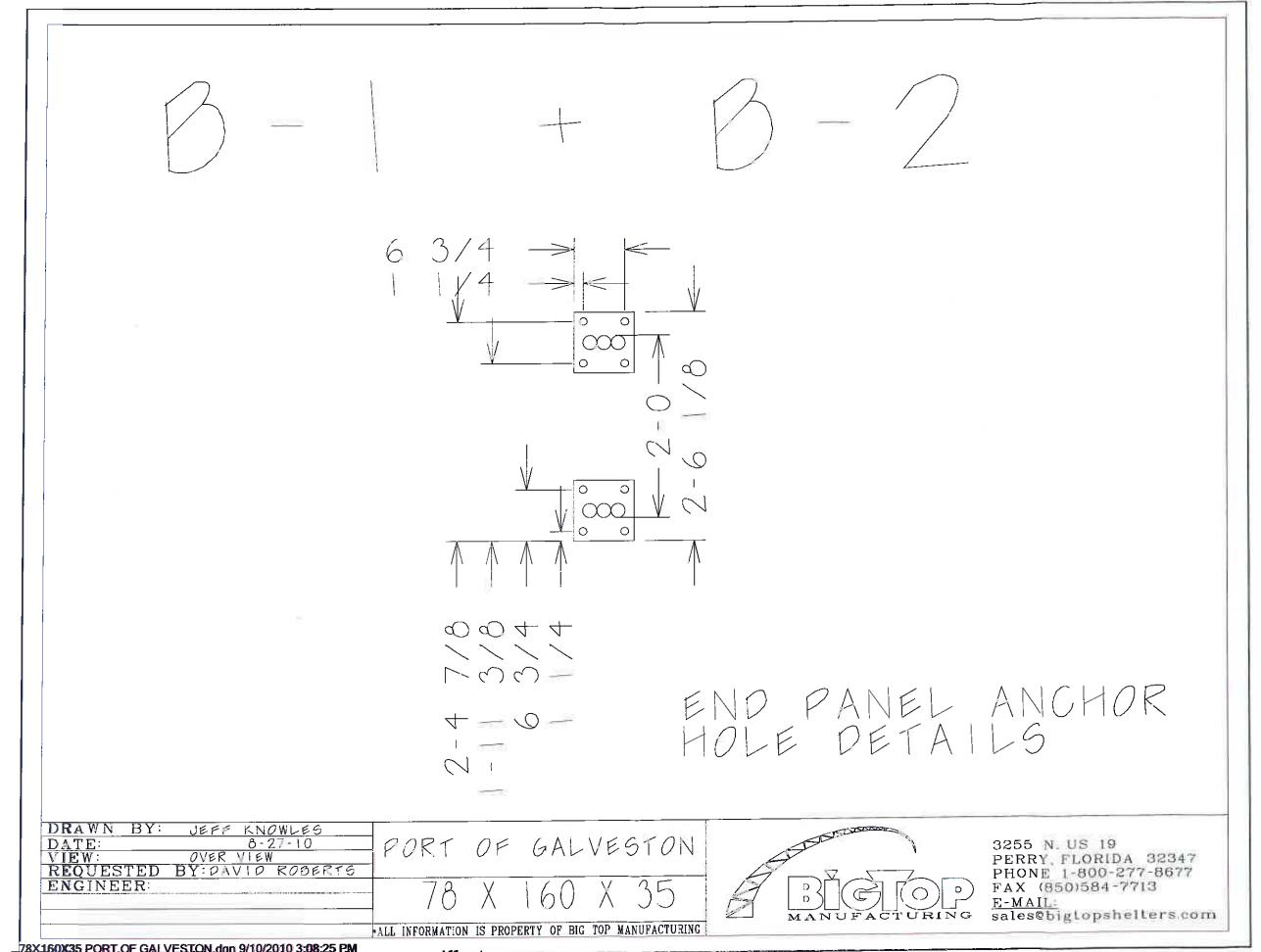
ENGINEER: 78 X 160 X 35

*ALL INFORMATION IS PROPERTY OF BIG TOP MANUFACTURING



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PERRY, FLORIDA 32347
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FAX (850)584-7713
E-MAIL:
sales@bigtopshelters.com





ISOMETRIC VIEW 10-1 ELEVATION VIEW TB=1 96-0-ALL- THREAD GOVER TENSIONING ALONG SIDE ---- 160-0-CW-2 1/4" CABLE TWO CABLE CLAMPS PER CABLE WRAP 10-2 TWO CABLE CLAMPS PER CABLE WRAP DRAWN BY: JEFF KNOWLES
DATE: 6-5-10
VIEW: OVER VIEW
REQUESTED BY: DAVID ROBERTS
ENGINEER: PORT OF GALVESTON 3255 N. US 19 PERRY, FLORIDA 32347 PHONE 1-800-277-8677 FAX (850)584-7713 E-MAIL: sales@bigtopshelters.com FALL INFORMATION IS PROPERTY OF BIG TOP MANUFACTURING PDF created with pdfFactory trial version www.pdffactory.com

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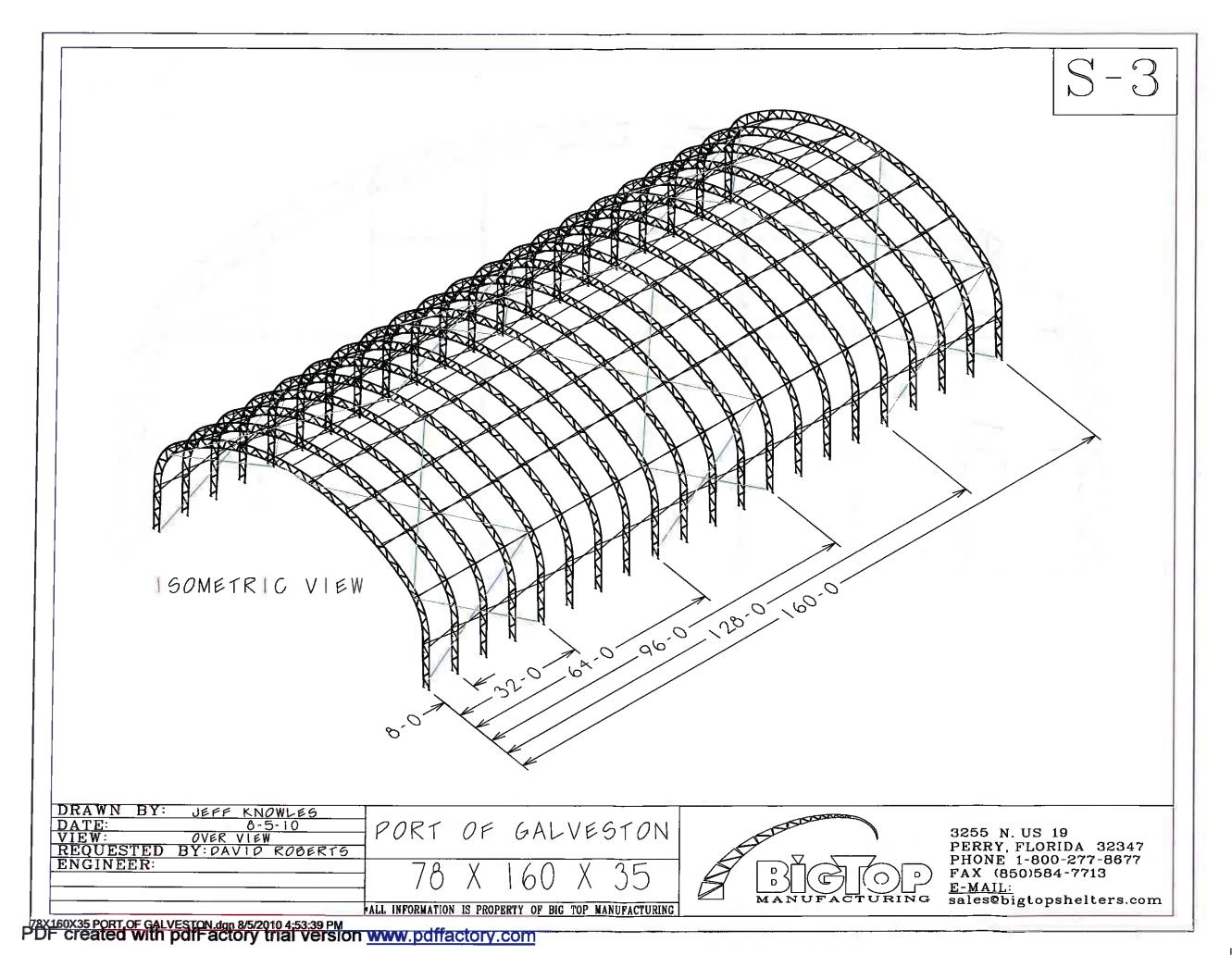
10-1 ELEVATION VIEW SHELTER TRUSS THREE 1/4 CABLE CLAMPS
PER CABLE WRAP TB=1 CW-1·32-0 🚄 -64-0--96-0--160-0 PLAN VIEW 1/4" CABLE TWO CABLE CLAMPS PER CABLE WRAP TB-2 Ø. TURNBUCKLE TB-2 CABLE WRAP TWO CABLE CLAMPS PER CABLE WRAP DRAWN BY: JEFF KNOWLES

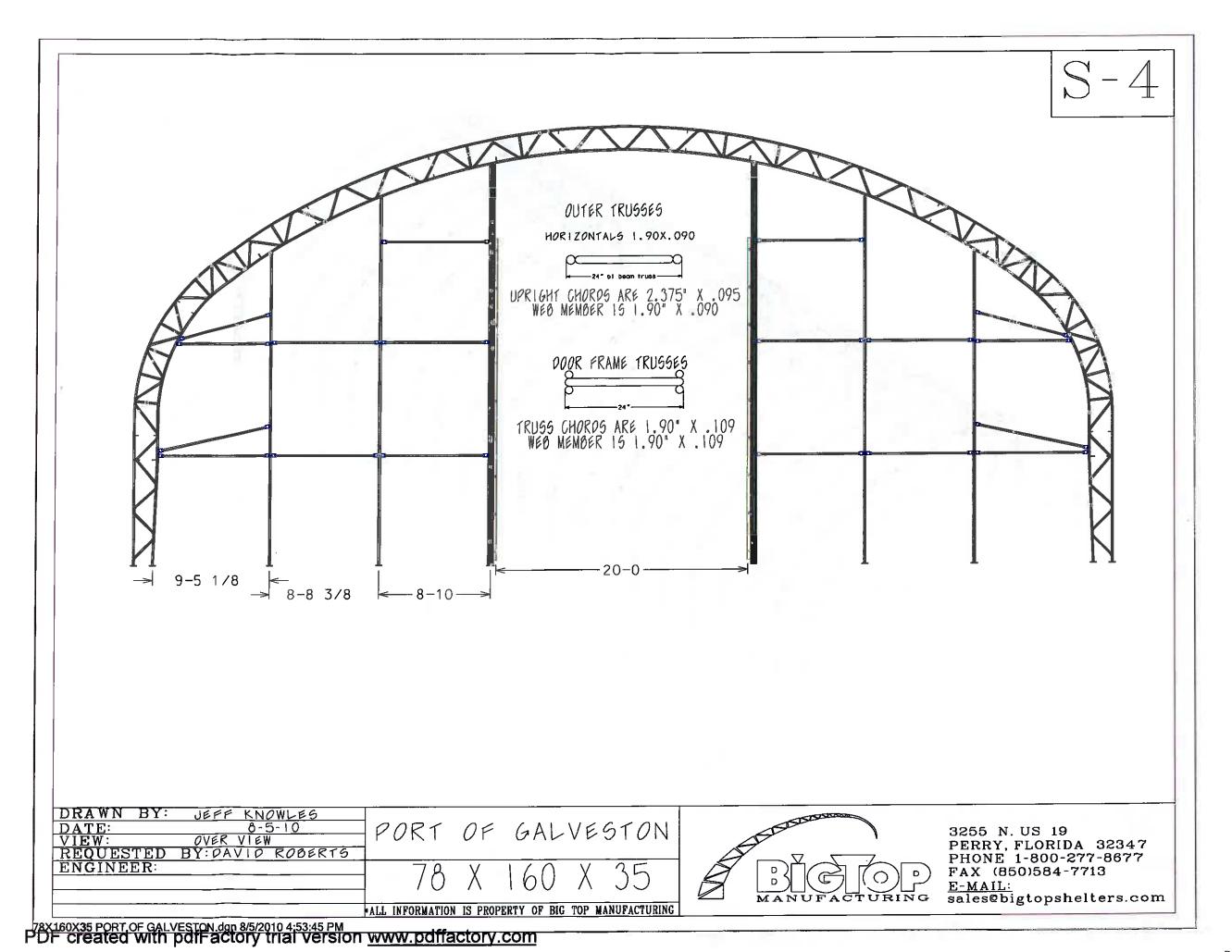
DATE: 6-5-10

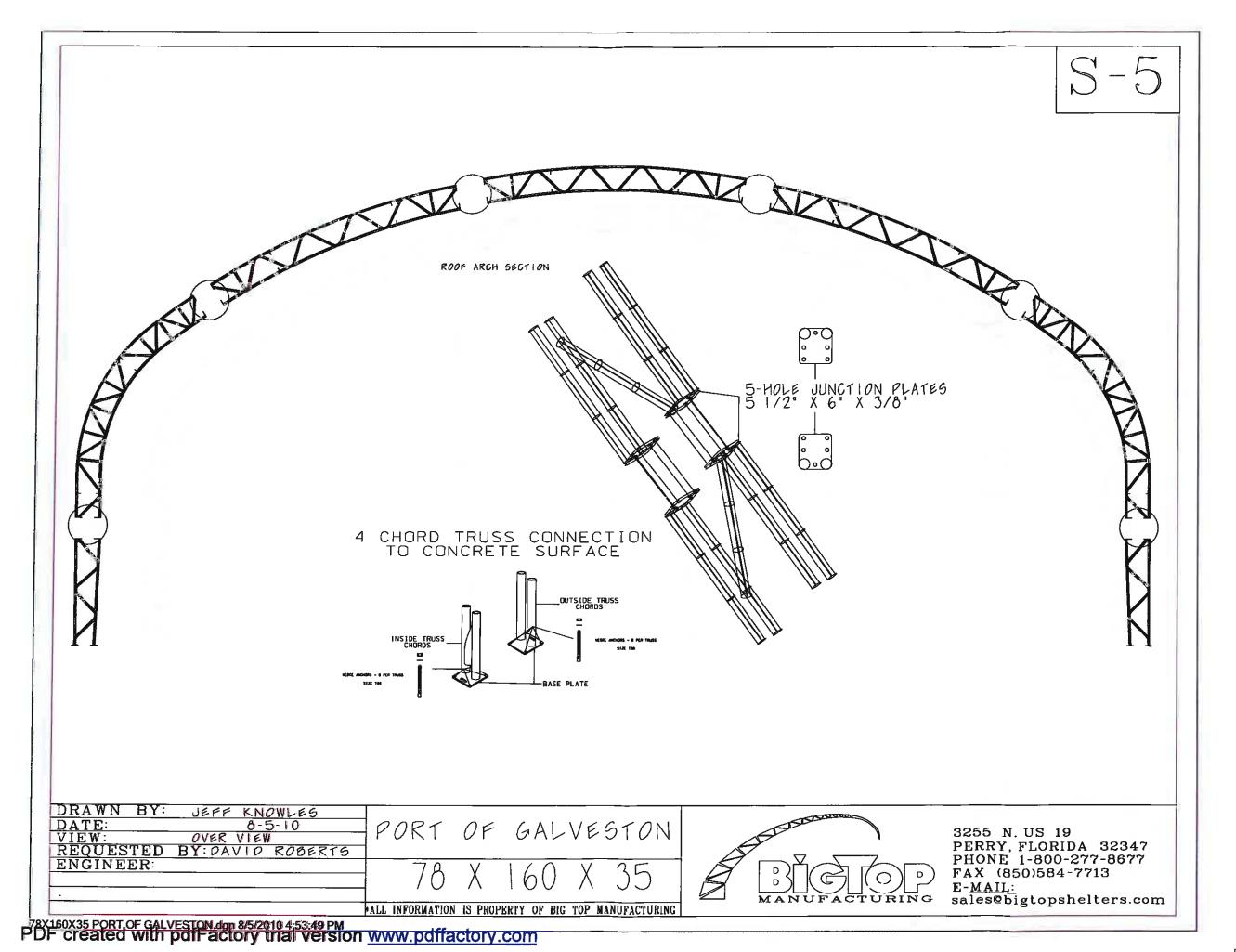
VIEW: OVER VIEW

REQUESTED BY: PAVID ROBERTS

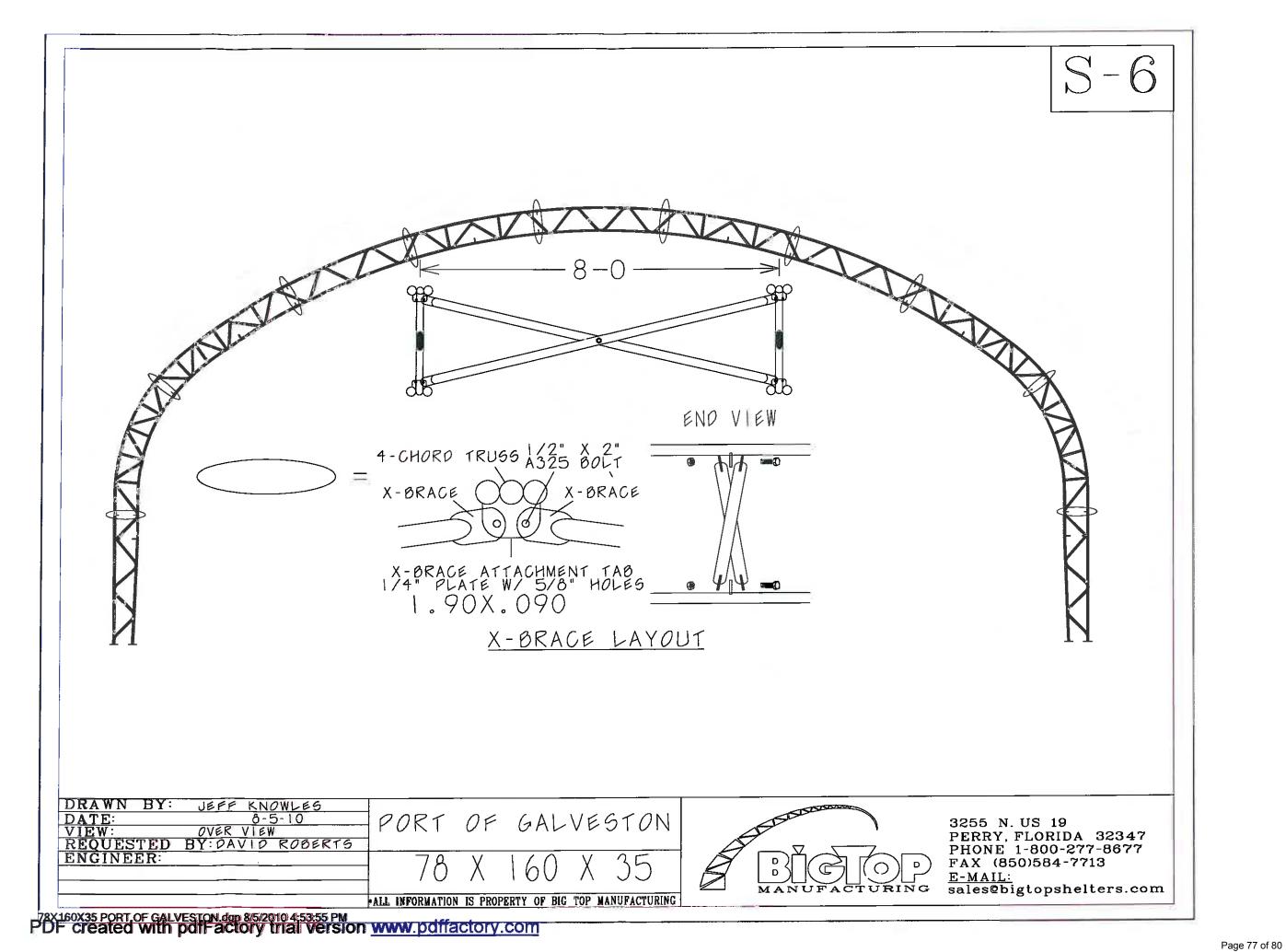
ENGINEER: PORT OF GALVESTON 3255 N. US 19 PERRY, FLORIDA 32347 PHONE 1-800-277-8677 FAX (850)584-7713 E-MAIL: sales@bigtopshelters.com *ALL INFORMATION IS PROPERTY OF BIG TOP MANUFACTURING 78X160X35 PORT, OF GALVESTON.dgn 8/5/2010 4:53:35 PM
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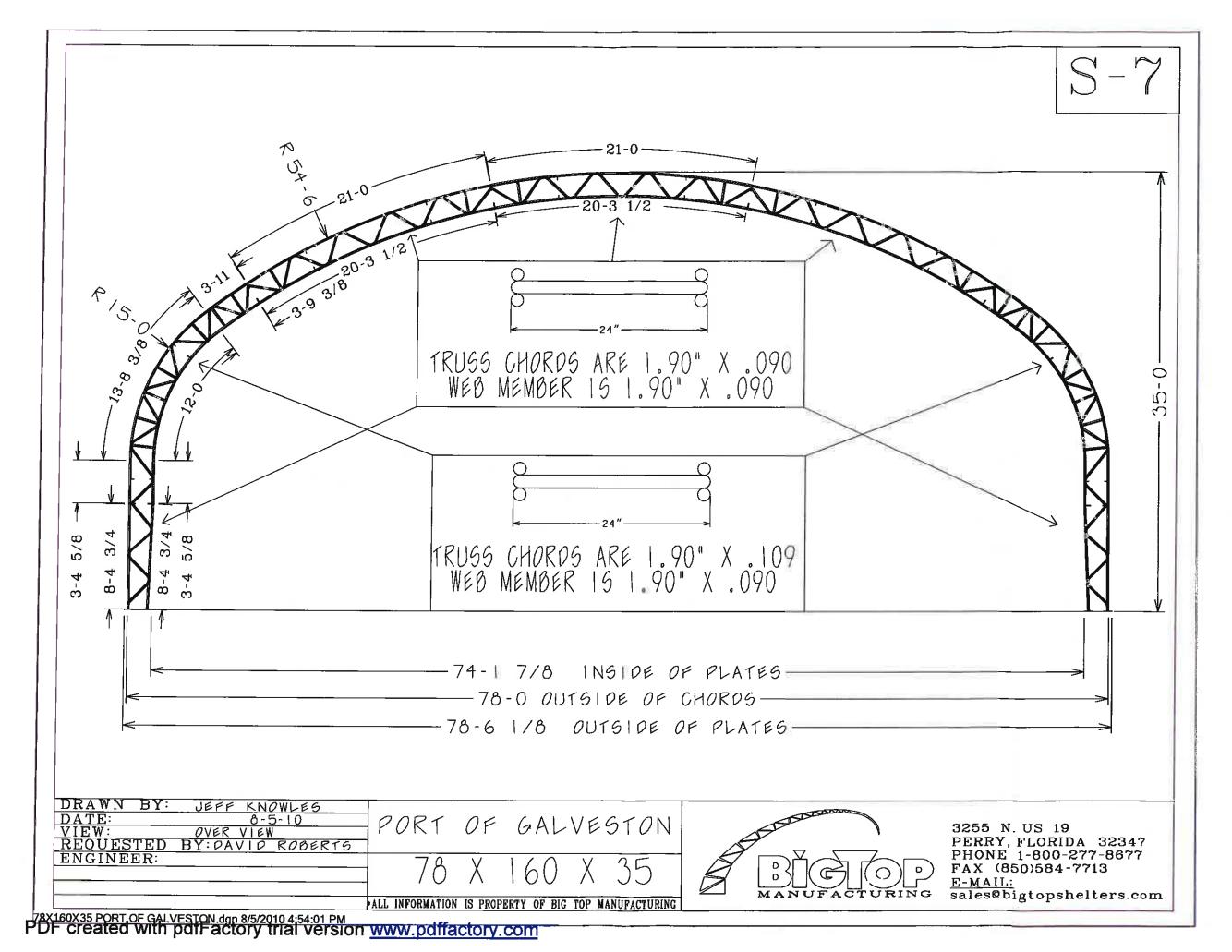




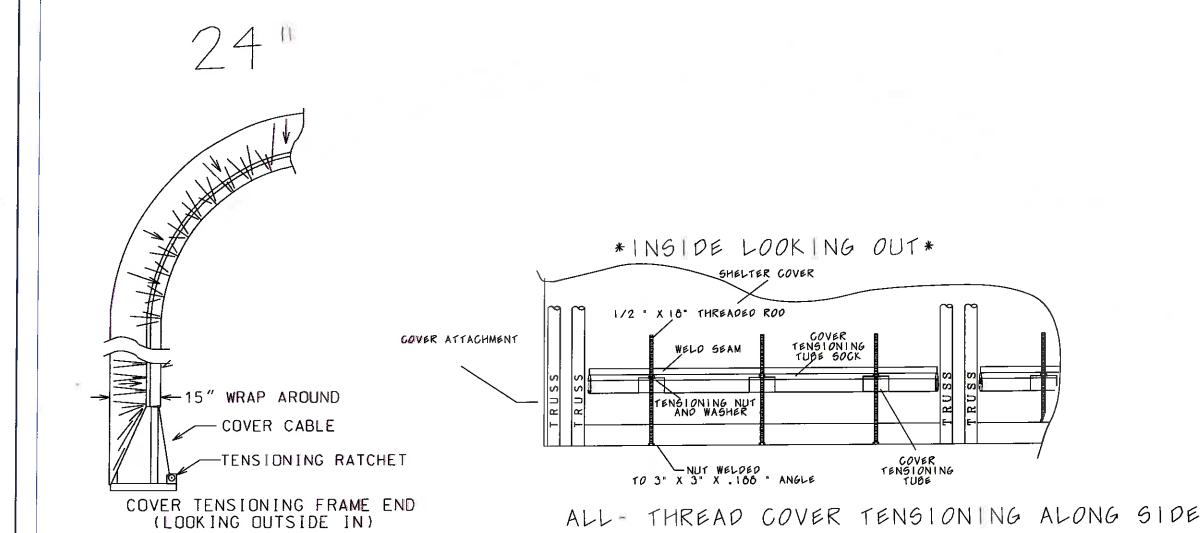


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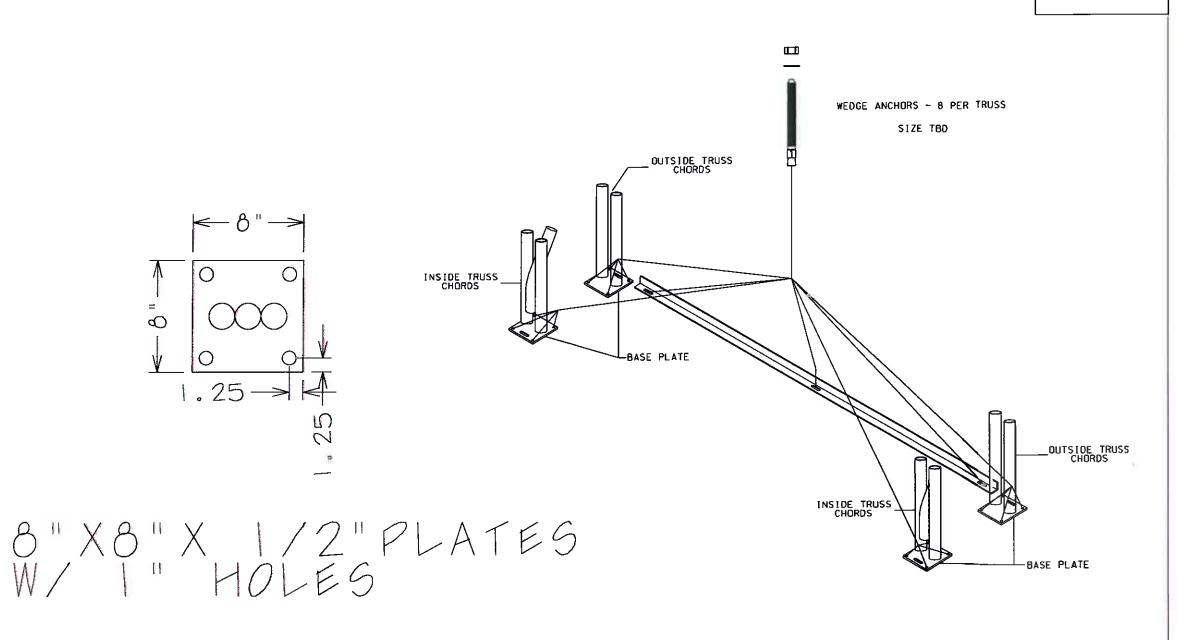


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VIEW: OVER VIEW REQUESTED BY: DAVID ROBERTS					- 1/ 0 -
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REQUESTED BY: DAVID ROBERTS						
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