

January 26, 2024



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MAST Naval Science Building 23
Monmouth County Vocational School District
Fort Hancock, Sandy Hook NJ

ADDENDUM NUMBER THREE (KJW #4200.8)

TO ALL PRIME CONTRACT BIDDERS OF RECORD

This Addendum forms a part of the Contract Documents and modifies the original specifications and drawings as hereinafter described. Where any article of the specifications or portion of any drawing is hereby modified, the provisions of such article and/or drawing not so specifically modified shall remain in effect.

The Bid Due Date and time remain as extended by Addendum Number Two: Wednesday, February 7. All Sealed bids will be received at the Business Office of the Monmouth County Vocational School District, Board of Education Office, 4000 Kozloski Road (in the Agriculture Building), Freehold, NJ 07728 up to 1:00 PM (prevailing time), on Wednesday February 7, 2024, then opened and read aloud. Such proposals to receive consideration by the Monmouth County Vocational School District, are to be submitted in strict compliance with the Public School Contract Law, NJSA 18A:18A-1, et. seq.

Acknowledge receipt of this Addendum in the space provided on Bid Form.

Item # 3.1 Addition: Spec Section - Table of Contents

The attached Table of Contents dated 1.26.24, replaces the corresponding spec section from the bid set dated 11.20.2023.

Item #3.2 Revision: Spec Section LN – Legal Notice

The attached Legal Notice, replaces the corresponding spec section from the bid set dated 11.20.2023.

Item #3.3 Revision: Spec Section IB – Instructions to Bidders

The attached Instructions to bidders dated 1.26.24, replaces the corresponding spec section from the bid set dated 11.20.2023.

Item #3.4 Revision: Spec Section G/SC – General / Supplementary Conditions

Paragraph 57 is added to this section:

57. Project Labor Agreement

Project Labor Agreement: The Contractor awarded for the contract is required to execute a Project Labor Agreement (“PLA”) for the Project in the form attached as Exhibit A as part of the contract signing process. The successful Bidder must abide by the PLA for the entirety of the project. The successful Bidder must return an executed Project Labor Agreement Letter of Assent with the bid package or prior to award of contract.

The former paragraph 57 is now paragraph 58 and is revised as follows:

58. Bid Attachments: The sealed bid shall include a copy of the following attachments and documents:

- a. Bid Bond / Bid Security
- b. Non-Collusive Bidding Certificate

Eric L Wagner AIA
Richard R Kane AIA

- c. Certified Corporate Resolution (indicating the Contractor's intention to submit a bid for the project)
- d. Ownership Disclosure Statement
- e. Affidavit of no material adverse change in qualification pursuant to N.J.S.A. 18A:18A-32 (for Bidder and all listed subcontractors)
- f. Affirmative Action Questionnaire and Certification
- g. Sworn Contractor Certification of Qualifications and Credentials (pursuant to N.J.S.A. 18A:7G-37) (for Bidder and each Major Trade Subcontractor)
- h. Sworn Contractor Certification Regarding Debarment, Suspension, Disqualification
- i. Contractor's Qualifications Questionnaire
- j. Equipment Certification / Certificate of Bidder Showing Ability to Perform Contract N.J.S.A. 18A:18A-23
- k. Prevailing Wage Affidavit
- l. Certificate of Equal Opportunity
- m. Certificate of Insurance Statement
- n. Equivalent Listing
- o. Subcontractor Disclosure Statement
- p. NJDPMC Notice of Classification Form for Contractor and Major Trade Subcontractors
- q. NJDPMC Total Amount of Uncompleted Contracts Form (Bidder and all Major Trade Subcontractors)
- r. Disclosure of Investment Activities in Iran form
- s. Consent of Surety
- t. Political Contribution Disclosure Form
- u. Business Registration Certificate (or if a foreign corporation a Certificate of Authority to perform work in New Jersey) (to be provided by Bidder and all listed Subcontractors)
- v. Public Works Contractor Registration Act Certificate (Bidder and all listed subcontractors)
- w. Asbestos Acknowledgement Form
- x. Equal Employment Opportunity Mandatory Bid Statement
- y. Attach any valid trade licenses required under applicable New Jersey law
- z. Project Labor Agreement—Letter of Assent

Item # 3.5 Addition: Spec Section EL - Equivalent Listing Request Form

The attached Equivalent Listing Request Form is added to the spec.

Item # 3.6 Addition: Spec Section SDS - Subcontractor Disclosure Statement

The attached Subcontractor Disclosure Statement is added to the spec.

Item # 3.7 Addition: Spec Section LA – Letter of Assent

The attached Letter of Assent Form is added to the spec.

Item #3.8 Revision: Spec Section CA – Checklist of Attachments

The attached Checklist of Attachments dated 1.26.24, replaces the corresponding spec section from the bid set dated 11.20.2023.

Item # 3.9 Addition: Spec Section PLA – Exhibit A - Project Labor Agreement

The attached Project Labor Agreement is added to the specifications. Please note there

is an additional document to be returned with the bids: Letter of Assent.

Item #3.10 Clarification: Spec Section 06 61 00 – Architectural Fiberglass

Paragraph 2.1, A is revised to include:

5. Architectural Mall, Inc., 323 St Paul Blvd., Carol Stream, IL, 877-279-9993
6. Architect approved equal.

Item #3.11 Revision: Spec Section 07 56 00 – Cold Fluid Applied Roofing and Waterproofing

The attached Spec Section 07 56 00 – Cold Fluid Applied Roofing and Waterproofing dated 1.26.24, replaces the corresponding spec section from the bid set dated 11.20.2023.

Item #3.12 Revision: Spec Section 14 20 00 – Electric Traction Elevators

Paragraph 1.2, O is revised from 480V, three-phase to 208V, three-phase.

Item #3.13 Clarification: Drawings A-9.3, A-9.4 and A-9.5

The terra cotta rainscreen details on drawings A-9.4 and A-9.5 include call outs to install water resistive, vapor permeable, fully self-adhered air barrier membrane. Provide and install VaproShield's RevealShield self-adhered water resistant, vapor permeable barrier or Architect approved equal.

The terra cotta rainscreen details on drawings A-9.3 and A-9.5 include call outs to install 3" thick mineral wool semi-rigid insulation board. Provide and install Cavityrock Black, semi-rigid, stone wool insulation board in layers to equal 3" thickness, as manufactured by Roxul, Inc. 800-265-6878 or Architect approved equal. Provide a complete and water-tight system including manufacturer's black mat facer finish option and manufacturer's suite of tape, liquid flashing, etc.

Item # 3.14 Addition: Structural Drawings S5.10 and S5.11

The attached drawings S5.10 and S5.11, dated 3.31.21, are added to the bid set.

Clarification: these drawings will be updated after Award of Contract as stated in spec section 01 11 00, 1.3, C, 1.

Item #3.15 Question / Response

Question: Reference is made to the CHECKLIST OF ATTACHMENTS in the bid documents.

Please provide blanks of the following documents:

- Corporate Resolution (Including the Contractor's Intention to Submit a Bid for the project)
- Equivalent Listing
- Equipment Certification/Certificate of Bidder Showing Ability to Perform Contract
- Subcontractor List

Answer:

- Corporate Resolution must be drafted by the Contractor's Corporation. There will be no blanks provided by the architect
- Equivalent Listing Request Form is now available from the Architect and is included in Addendum Number 3.

- Equipment Certification/Certificate of Bidder Showing Ability to Perform Contract was included in the original bid package. It is shown as CBA-1 in the front end documents.
- The Subcontractor List referenced on the original Checklist of Attachments has now been replaced with a Subcontractor Disclosure Statement. This new form is included in Addendum Number 3.

Item #3.16 Question / Response

Question: Please confirm the Building Power supply for the elevator. The specification calls for 480v but the plans only show 208v.

Answer: The electrical power supply for the elevator is revised from 480V, three-phase to 208V, three-phase. Refer to Addendum Item #3.12.

Item #3.17 Question / Response

Question: Regarding the exterior doors (#107-1, 113-8, 116-1, 201-1, 201-2, 201-3 and 207-1), please clarify what, if any, new material is required at these openings. Notes in the remarks column of the door schedule implies they are existing. Details on A23.8.3 and General Door Note #7 imply new doors. Note #7 calls for solid wood stile and rail doors with mortise and tenon joints, please note these doors are not available from the production manufacturers.

Answer: Drawing A2.5, General Door Note 7, indicates these are new exterior, custom fabricated, historic wood door(s) and frame(s) transoms sidelights and trim in existing masonry openings. Note 7 also states that the GC shall have the option of rehabilitating existing door units currently in storage. Note 7 addresses the Remarks column of the Door Schedule.

Item #3.18 Question / Response

Question: Drawings S.5.10 & S5.11 are included in the Structural Drawing List but missing from the documents. Please provide.

Answer: Drawings S5.10 and S5.11, dated 3.31.21, are added to the bid set. Refer to Addendum Item #3.14.

Item #3.19 Question / Response

Question: Please confirm that the Contract Delivery Method for this project is a Lump Sum Firm Fixed Price Contract with Named Subcontractors.

Answer: Confirmed.

END OF ADDENDUM NUMBER THREE

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SCC	Sworn Contractor Certification of Qualifications	1
CBD	Sworn Statement Regarding Debarment	1
CBA	Certificate of Bidder Showing Ability to Perform	1
NMC	Affidavit of No Material Change of Classification	1
NC	Non Collusion Affidavit	1
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LEGAL NOTICE

MONMOUTH COUNTY VOCATIONAL SCHOOL DISTRICT

The School Business Administrator/Board Secretary of the Monmouth County Vocational School District Board of Education, in the State of New Jersey, by authority of said Board, solicits sealed bid proposals for:

Building 23 Addition and Alterations at Marine Academy of Science & Technology, Fort Hancock, Sandy Hook, NJ. (305 MAST Way, Highlands, NJ 07732)

Sealed Proposals in duplicate for the Monmouth County Vocational School District's:
Building 23 Addition and Alterations at Marine Academy of Science & Technology, Fort Hancock, Sandy Hook, NJ. (305 MAST Way, Highlands, NJ 07732).

The bid due date remains unchanged from the previous Addendum #2. Sealed bids will be received at the Business Office of the Monmouth County Vocational School District, Board of Education Office, 4000 Kozloski Road (in the Agriculture Building), Freehold, NJ 07728 up to 1:00 PM (prevailing time), on Wednesday February 7, 2024, then opened and read aloud. Such proposals to receive consideration by the Monmouth County Vocational School District, are to be submitted in strict compliance with the Public School Contract Law, NJSA 18A:18A-1, et. seq.

Addendum #3 has been issued for this previously advertised project on January 26, 2024. In addition to other items included in this addendum, this addendum adds provisions for the execution of a Project Labor Agreement (PLA): The Contractor awarded this contract is required to execute a Project Labor Agreement ("PLA") for the Project in the form attached as Exhibit A as part of the contract signing process. The successful Bidder must abide by the PLA for the entirety of the project. The successful Bidder must return an executed Project Labor Agreement Letter of Assent with the bid package or prior to award of contract.

Bids, utilizing the bid forms as prepared by the Architect, may be submitted in person, by mail or delivery service prior to that time. Any bid submitted by mail or delivery service is done so at the sole risk of the bidder. No Bids will be received by facsimile or electronic transmission. It is expressly understood that the bidder is responsible for getting the bid proposals to the Business Administrator prior to the time and date set for the bid opening. Any bid received after the closing time will be returned unopened.

Arrangements to obtain bid documents and addenda may be made by emailing Kellenyi Johnson Wagner Architects, Attn: Andrea Kunyz at akunyz@kjlw.com (732-741-5270). Bidders will receive a Onehub link to view and download the online bid documents.

Bid proposals for the above Contract will be received from Bidders registered with the Division of Revenue and Department of Labor. All Bidders proposing to Bid shall be classified in accordance with N.J.S.A. 18A:18A-25 et seq. as to the character and amount of public work on which they shall be qualified to submit a Bid by the Department of Treasury, Division of Property Management and Construction (DPMC).

Bidder must hold #C006-Construction Manager as Constructor and #C024 Historic Restoration Trade Classification from NJ Treasury Dept, Division of Property Management and Construction to be eligible to submit a bid for this project. Bidder must list all named Subcontractors', Name and Address for the following scopes of work on the bid form: Plumbing & Gas Fitting and Kindred Work, Electrical Work, Heating & Ventilating Systems & Equipment, and Structural Steel & Ornamental Iron Work. Bidders must also complete the Subcontractor's Disclosure Statements and submit with bid documents.

Site Visits are available but must be scheduled in advance with the Architect by calling Andrea Kunyz (732-741-5270).

The Monmouth County Vocational School District reserves the right to reject any or all bids and to waive immaterial formalities in any bid if deemed to be in the interest of the District. The District takes no responsibility for the punctual receipt of mailed bids. All bids mailed are done so at the risk of the bidder and must be clearly marked with the bid title.

Bids must be made on the proposal form provided, as designated, and submitted with a "Bid Bond" or "Certified Check" in the sum of not less than ten (10) percent of the amount of the proposal, not to exceed \$20,000.00. Bids may not be withdrawn for a period of sixty (60) days after the day of the bid opening.

Bidders are required to submit with their proposal, written consent of a Surety Bond, and agree to execute the required performance bond in accordance with the specification requirements. Each Bidder shall also be registered pursuant to the Public Works Contractor Registration Act, N.J.S.A. 34:11-56, 48 et. Seq. and shall provide a valid and current registration certificate with its Bid as to the bidder and all subcontractors.

Bidders are required to comply with the requirements of N.J.S.A. 10:5-31 et. seq.

Bidding shall be in conformance with the applicable requirements of N.J.S.A. 18A:18A-1 et seq., pertaining to the "Public School Contracts Law". Bids will be considered in accordance with N.J.S. A. 18A: 18A-1 et seq. and N.J.S.A. 18A:7G-1 et seq. The board of Education reserves the right to reject all bids, to waive any immaterial defects in any bid, or to award a contract in whole or in part, in accordance with the requirements of the Public-School Contracts Law at N.J. S.A. 18A:18A-1 et seq.

The Bidder's attention is directed to the fact that all applicable federal, state, and municipal laws, and ordinances, rules and regulations, including P.L. 1975, c.127 (N.J.A.C. 17:27) of all authorities having jurisdiction over construction work in the locality of the project shall apply to the contract throughout, and they will be deemed to be included in the contract the same as though herein written out in full, including, but not limited to, those laws identified in the INSTRUCTIONS TO BIDDERS including the requirements of the Laws Against Discrimination, N.J.S.A. 10:2-1 et seq., the Affirmative Action Regulations, N.J.S.A. 10:5-31 et seq., N.J.A.C. 17:27 et seq., and compliance with the mandatory affirmative action regulations. Bidders and all major subcontractors are required to comply with the Public Works Contractor Registration Act, Chapter 238, Public Laws of 1999 (N.J.S.A. 34:11-56.48 et seq.) and to possess current certification for the Division of Wage and Hour Compliance in the Department of Labor and Workforce Development at the time the bid is submitted. Bidders are also required to submit a Business Registration Certificate issued by the Division of Revenue in the New Jersey Department of Treasury. All Bidders are required to submit an affidavit by the Bidder that the Bidder is not, at the time of the bid, included on the New Jersey State Treasurer's List or the Federal Government List of Debarred, Suspended, or Disqualified Firms or individuals pursuant to N.J.A.C. 17:19-4 and N.J.A.C. 19:38A-4. All Bidders are required to complete and submit a Disclosure of Investment Activities in Iran Form in accordance with N.J.S.A. 52:32-58 and N.J.S.A. 18A:18A-49.4. All Bidders must submit a Political Contribution Disclosure Form with their Bid Package. All Bidders must comply with N.J.S.A. 18A:18A-20 "American Goods and Products to be used where possible."

Authorized by Monmouth County Vocational School District
Kelly A. Brazelton, Business Administrator/Board Secretary

INSTRUCTIONS TO BIDDERS

1. Form of Contract

- a. The contract to be awarded for this project shall be: Construction Manager as Constructor where the basis of Payment is the Cost of the Work Plus a fee with a guaranteed Maximum Price. Bidder must hold both #C006 – Construction Manager as Constructor and #C024 Historic Restoration Trade Classification from the State of New Jersey, Department of Treasury, Division of Property Management and Construction to be eligible to bid this project.
- b. In this form of contract, a Construction Manager, in addition to acting as an advisor to the Owner during the preconstruction phase, also provides construction of the project with a guaranteed maximum price. The Construction Manager provides the Owner with a Guaranteed Maximum Price proposal which the Owner may accept or reject. Upon the Owner’s acceptance of the proposal, the Construction Manager becomes contractually bound to provide labor and materials for the Project and to complete construction at or below the guaranteed maximum price. The Construction Manager’s services under this document are divided into two phases: the Preconstruction Phase and the Construction Phase, portions of which may proceed concurrently. A 133-2019 also includes an Insurance Bonds Exhibit (Exhibit B), which is a critical part of the agreement, and should be discussed with legal and insurance counsel. Further details and requirements for this form of Contract are enumerated in the AIA Document A133 (2019) Standard Form of Agreement Between Owner and Construction Manager as Constructor, as revised and included in this Project Manual.

2. Proposal Form

- a. Sealed Proposals in duplicate for the Monmouth County Vocational School District’s: **Building 23 Addition and Alterations** at Marine Academy of Science & Technology, Fort Hancock, Sandy Hook, NJ. (305 MAST Way, Highlands, NJ 07732)
All Sealed bids will be received at the Business Office of the Monmouth County Vocational School District, Board of Education Office, 4000 Kozloski Road (in the Agriculture Building), Freehold, NJ 07728 up **to 1:00 PM (prevailing time), on Wednesday, January 17, 2024**, then opened and read aloud. Such proposals to receive consideration by the Monmouth County Vocational School District, are to be submitted in strict compliance with the Public School Contract Law, NJSA 18A:18A-1, et.seq. in accordance with Bid Advertisement at the Time and Date Stated.
- b. Proposals to receive consideration shall be prepared on provided Bid Forms copies of which are included in Specifications.
- c. Two (2) copies of Proposal must be filled out, executed and submitted, and one (1) copy retained by Bidder.
- d. Proposals must be enclosed in a sealed envelope, plainly marked on outside with name and number of Project, name of Bidder, and noted "Proposal."
- e. All prices quoted are subject to same conditions and requirements as other items provided even though briefly stated.
- f. Proposal shall be made on form provided, and all blank spaces shall be fully and appropriately filled in and executed by a principal authorized to make contracts. Bidder's legal name shall be fully stated. Completed form shall be without interlineation, alteration, or erasure.
- g. Proposals which are incomplete, conditional or obscure may be rejected. No oral or telephone modifications will be considered.
- h. Proposals received after the designated time and date may not be considered.
- i. Receipt of bulletin and/or addenda, if any, issued before submission of bid date shall be verified in the appropriate space(s) in the Proposal.

3. Site Examination, Etc.

- a. A pre-bid site visit has been scheduled for **1:00 PM on Wednesday, December 20, 2023** starting in MAST Building 77, Magruder Road, Fort Hancock, Sandy Hook, NJ. Attendance is strongly recommended.

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MAST – BLDG 23 ADDITION AND ALTERATIONS		INSTRUCTIONS TO BIDDERS

INSTRUCTIONS TO BIDDERS

- b. Bidders shall thoroughly familiarize themselves with Contract requirements, conditions under which work will be performed, location of utilities, transportation, limitation for storing materials, and the like. Note all incidental work required which is not particularly specified, but which is necessary to carry out the work.
- c. Bidders will be presumed to have done this review prior to submission of Proposal covering cost of entire and complete work. Offer of Proposal by Bidders will be deemed to have considered difficulties and all costs of successfully performing completed work, including materials as may be required.

4. Discrepancies

- a. Should the Bidders find discrepancies or be in doubt as to the meaning of Contract Documents, Drawings, and Specifications, they should communicate with the Architect for interpretation. Bidders should act promptly in this respect to allow sufficient time for a reply before submission of bids. Any interpretation and reply made will be in the form of an Addendum to specifications, copies of which will be forwarded to all Bidders and its receipt by Bidders must be acknowledged on the Proposal Form.
- b. The Board of Education (Owner) will not be responsible for any oral interpretation unless same are followed by an Addenda.
- c. After Contract has been entered into, no consideration will be given for any misunderstanding as to work and materials set forth herein, it being understood that tender of a Proposal carried with it an agreement to this and other obligations set forth in Contract and further implied a full understanding of Contract Documents.
- d. Proposal shall be based only upon materials and methods specified, awarding of Contract will be held to be upon such basis only, unless modified and so incorporated in Contract before signing of Agreement.

5. Deadline for Questions

- a. To receive a formal response and provide sufficient time to issue an addendum, if necessary, all questions shall be formally submitted in writing to the Architect by no later than 10 business days prior to bid due date. These questions may be submitted by email to: ewagner@kjl.com.

6. Owner/Client's Right

- a. Owner reserves right to reject any and all bids and waive any informalities, and award contracts as may be deemed for their best interest.
- b. No Proposal shall be withdrawn pending the decision of the Owner, provided that such decision shall be made within sixty (60) days after date of receipt of bids, it being understood that award of Construction Agreement will be made as soon after opening of Proposals as practicable.

7. Bid Documents

- a. Upon receipt of the non-refundable deposit, the architect will issue to each bidder one printed and bound set of the Contract documents; Drawings and Specifications (project manual). In addition, at the same time a CD will be issued with pdf files of all drawings and specifications. Please be advised that in the event of a discrepancy between the printed plans and specifications and those provided on the CD, the printed set will govern as the official documents.

8. Qualifications of Bidders

- a. Competency, fitness, and financial responsibility of Bidders will be considered in making award and, if required, they shall support their claims of competency, fitness, and financial responsibility with evidence satisfactory to Owner.

9. Project Labor Agreement

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MAST – BLDG 23 ADDITION AND ALTERATIONS		INSTRUCTIONS TO BIDDERS

INSTRUCTIONS TO BIDDERS

- a. **Project Labor Agreement: The Contractor awarded for the contract is required to execute a Project Labor Agreement (“PLA”) for the Project in the form attached as Exhibit A as part of the contract signing process. The successful Bidder must abide by the PLA for the entirety of the project. The successful Bidder must return an executed Project Labor Agreement Letter of Assent with the bid package or prior to award of contract.**

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MAST – BLDG 23 ADDITION AND ALTERATIONS		INSTRUCTIONS TO BIDDERS

EQUIVALENT LISTING REQUEST FORM

(After the Bidding/Negotiating Phase)

Project: _____ Substitution Request Number: _____

From: _____
To: _____ Date: _____

A/E Project Number: _____
Re: _____ Contract For: _____

Specification Title: _____ Description: _____
Section: _____ Page: _____ Article/Paragraph: _____

Proposed Substitution: _____

Manufacturer: _____ Address: _____

Phone: _____ Trade _____ Name: _____

Model _____ No.: _____

Installer: _____ Address: _____

Phone: _____

History: New product 1-4 years old 5-10 years old More than 10 years old

Differences between proposed substitution and specified product:

Point-by-point comparative data attached — REQUIRED BY A/E

Reason for not providing specified item:

Similar Installation:

Project: _____ Architect: _____

Address: _____ Owner: _____

Date Installed: _____

Proposed substitution affects other parts of Work: No Yes; explain

Savings to Owner for accepting substitution: _____ (\$
_____).

Proposed substitution changes Contract Time: No Yes [Add] [Deduct] _____
_____ days.

Supporting Data Attached: Drawings Product Data Samples Tests Reports

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MAST - BLDG 23 ADDITION AND ALTERATIONS		EQUIVALENT LISTING

SUBCONTRACTOR'S DISCLOSURE STATEMENT

The _____
 (Name of Bidding Company)

Please Check One:

_____ will sub-contract a portion of this project.
 _____ will not sub-contract any portion of this project.

Authorized Agent _____ **Title** _____

Signature of Bidder _____ **Date** _____

If the bidder is not going to subcontract any portion of this project, the bidder need not complete any further part of this document.

If the bidder will subcontract any of the following:

- Plumbing & Gas Fitting & All Kindred Work
- Electrical work, tele-data, fire alarm or security systems.
- Heating/ventilating systems & equipment.
- Structural steel & ornamental ironwork.

the bidder must do the following:

- Identify the contract number and type of work he intends to subcontract;
- Provide the name, address and other pertinent information about the subcontractor;
- Attach any valid trade licenses required under applicable New Jersey Law.*
- If the cost of the work by the subcontractor shall exceed the amounts listed below, the bidder shall provide in the bid package submission the following documents:

<u>SUBCONTRACTOR DOCUMENT SUBMISSIONS</u>		
<u>Estimated Value of Contract – Subcontractor</u>	For Subcontractors in any of the four major branches listed above	For all other Subcontractors
	<u>Submit With Bid</u>	<u>Submit Within ten 10 Days of Receipt of Notice of Award</u>
\$2,000 through \$5,999	Contractor's Registration Certificate	
\$6,000 through \$17,499	Contractor's Registration Certificate New Jersey Business Registration Certificate	
\$17,500 through \$19,999	Contractor's Registration Certificate New Jersey Business Registration Certificate Chapter 271 Political Contribution Disclosure Form	
\$20,000 or more	Contractor's Registration Certificate New Jersey Business Registration Certificate Chapter 271 Political Contribution Disclosure Form Notice of Classification Total Amount of Uncompleted Contracts -- Certified	

Please list subcontractor(s) on the following pages. Bidders may make extra copies of the following pages. * *Failure to identify the names and addresses of any subcontractors required to be named in the bid, or to submit the appropriate documents for each such subcontractor, may be cause for the bid to be rejected as being non-responsive.*

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MAST - BLDG 23 ADDITION AND ALTERATIONS		SUBCONTRACTOR DISCLOSURE STATEMENT

1. Sub-Contractor for Plumbing & Gas Fitting & All Kindred Work

Name of Subcontracting Company _____
 Address _____
 City, State, Zip _____
 Telephone _____ Fax _____ E-Mail _____
 FEIN No: _____
 Authorized Agent _____ Title _____

Will the cost of sub-contract exceed \$20,000.00?

_____ Yes Estimated Value of Contract \$

_____ No Estimated Value of Contract \$

If checked **yes**, the sub-contractor must be pre-qualified to perform the work. The bidder must provide in the bid package the following:

- The subcontractor's Notice of Classification;
- The subcontractor's Total Amount of Uncompleted Contracts; and
- Other documents that are required:

<u>SUBCONTRACTOR DOCUMENT SUBMISSIONS</u>		
<u>Estimated Value of Contract – Subcontractor</u>	For Subcontractors in any of the four major branches listed above	For all other Subcontractors
	<u>Submit With Bid</u>	<u>Submit Within ten 10 Days of Receipt of Notice of Award</u>
\$2,000 through \$5,999	Contractor's Registration Certificate	
\$6,000 through \$17,499	Contractor's Registration Certificate New Jersey Business Registration Certificate	
\$17,500 through \$19,999	Contractor's Registration Certificate New Jersey Business Registration Certificate Chapter 271 Political Contribution Disclosure Form	
\$20,000 or more	Contractor's Registration Certificate New Jersey Business Registration Certificate Chapter 271 Political Contribution Disclosure Form Notice of Classification Total Amount of Uncompleted Contracts -- Certified	

Certification of Equipment

The _____ hereby certifies the above named Name of Bidding Company subcontractor has the personnel, equipment, experience, financial and sufficient means to complete their portion of the contract in full accordance with the bid specifications.

 Authorized Agent (Print) -- Bidder Signature of Authorized Agent—Bidder

2. Sub-Contractor for HEATING & VENTILATING SYSTEMS AND EQUIPMENT

Name of Subcontracting Company _____

Address _____

City, State, Zip _____

Telephone _____ Fax _____

E-Mail _____

FEIN No: _____

Authorized Agent _____ Title _____

Will the cost of sub-contract exceed \$20,000.00?

_____ Yes Estimated Value of Contract \$

_____ No Estimated Value of Contract \$

If checked **yes**, the sub-contractor must be pre-qualified to perform the work. The bidder must provide in the bid package the following:

- The subcontractor's Notice of Classification;
- The subcontractor's Total Amount of Uncompleted Contracts; and
- Other documents that are required:

<u>SUBCONTRACTOR DOCUMENT SUBMISSIONS</u>		
<u>Estimated Value of Contract</u> = <u>Subcontractor</u>	For Subcontractors in any of the four major branches listed above	For all other Subcontractors
	<u>Submit With Bid</u>	<u>Submit Within ten 10 Days of Receipt of Notice of Award</u>
\$2,000 through \$5,999	Contractor's Registration Certificate	
\$6,000 through \$17,499	Contractor's Registration Certificate New Jersey Business Registration Certificate	
\$17,500 through \$19,999	Contractor's Registration Certificate New Jersey Business Registration Certificate Chapter 271 Political Contribution Disclosure Form	
\$20,000 or more	Contractor's Registration Certificate New Jersey Business Registration Certificate Chapter 271 Political Contribution Disclosure Form Notice of Classification Total Amount of Uncompleted Contracts -- Certified	

Certification of Equipment

The _____ hereby certifies the above named Name of Bidding Company subcontractor has the personnel, equipment, experience, financial and sufficient means to complete their portion of the contract in full accordance with the bid specifications.

Authorized Agent (Print) -- Bidder Signature of Authorized Agent—Bidder _____

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MAST - BLDG 23 ADDITION AND ALTERATIONS		SUBCONTRACTOR DISCLOSURE STATEMENT

3. Sub-Contractor for ELECTRICAL WORK, TELE-DATA, FIRE ALARM and SECURITY SYSTEM

Name of Subcontracting Company _____

Address _____

City, State, Zip _____

Telephone _____ Fax _____

E-Mail _____

FEIN No: _____

Authorized Agent _____ Title _____

Will the cost of sub-contract exceed \$20,000.00?

_____ Yes Estimated Value of Contract \$

_____ No Estimated Value of Contract \$

If checked **yes**, the sub-contractor must be pre-qualified to perform the work. The bidder must provide in the bid package the following:

- The subcontractor's Notice of Classification;
- The subcontractor's Total Amount of Uncompleted Contracts; and
- Other documents that are required:

<u>SUBCONTRACTOR DOCUMENT SUBMISSIONS</u>		
<u>Estimated Value of Contract</u> = <u>Subcontractor</u>	For Subcontractors in any of the four major branches listed above	For all other Subcontractors
	<u>Submit With Bid</u>	<u>Submit Within ten 10 Days of Receipt of Notice of Award</u>
\$2,000 through \$5,999	Contractor's Registration Certificate	
\$6,000 through \$17,499	Contractor's Registration Certificate New Jersey Business Registration Certificate	
\$17,500 through \$19,999	Contractor's Registration Certificate New Jersey Business Registration Certificate Chapter 271 Political Contribution Disclosure Form	
\$20,000 or more	Contractor's Registration Certificate New Jersey Business Registration Certificate Chapter 271 Political Contribution Disclosure Form Notice of Classification Total Amount of Uncompleted Contracts -- Certified	

Certification of Equipment

The _____ hereby certifies the above named Name of Bidding Company subcontractor has the personnel, equipment, experience, financial and sufficient means to complete their portion of the contract in full accordance with the bid specifications.

Authorized Agent (Print) -- Bidder Signature of Authorized Agent—Bidder

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MAST - BLDG 23 ADDITION AND ALTERATIONS		SUBCONTRACTOR DISCLOSURE STATEMENT

4. Sub-Contractor for Structural Steel and Ornamental Work

Name of Subcontracting Company _____
 Address _____
 City, State, Zip _____
 Telephone _____ Fax _____ E-Mail _____
 FEIN No: _____
 Authorized Agent _____ Title _____

Will the cost of sub-contract exceed \$20,000.00?

_____ Yes Estimated Value of Contract \$

_____ No Estimated Value of Contract \$

If checked **yes**, the sub-contractor must be pre-qualified to perform the work. The bidder must provide in the bid package the following:

- The subcontractor's Notice of Classification;
- The subcontractor's Total Amount of Uncompleted Contracts; and
- Other documents that are required:

<u>SUBCONTRACTOR DOCUMENT SUBMISSIONS</u>		
<u>Estimated Value of Contract</u> = <u>Subcontractor</u>	For Subcontractors in any of the four major branches listed above	For all other Subcontractors
	<u>Submit With Bid</u>	<u>Submit Within ten 10 Days of Receipt of Notice of Award</u>
\$2,000 through \$5,999	Contractor's Registration Certificate	
\$6,000 through \$17,499	Contractor's Registration Certificate New Jersey Business Registration Certificate	
\$17,500 through \$19,999	Contractor's Registration Certificate New Jersey Business Registration Certificate Chapter 271 Political Contribution Disclosure Form	
\$20,000 or more	Contractor's Registration Certificate New Jersey Business Registration Certificate Chapter 271 Political Contribution Disclosure Form Notice of Classification Total Amount of Uncompleted Contracts -- Certified	

Certification of Equipment

The _____ hereby certifies the above named Name of Bidding Company subcontractor has the personnel, equipment, experience, financial and sufficient means to complete their portion of the contract in full accordance with the bid specifications.

 Authorized Agent (Print) -- Bidder Signature of Authorized Agent—Bidder

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MAST - BLDG 23 ADDITION AND ALTERATIONS		SUBCONTRACTOR DISCLOSURE STATEMENT

PROJECT LABOR AGREEMENT

**COVERING CONSTRUCTION OF BUILDING 23 ADDITION & ALTERATIONS AT THE
MARINE ACADEMY OF SCIENCE & TECHNOLOGY (MAST) IN
SANDY HOOK, NEW JERSEY
LETTER OF ASSENT**

Re: Project Labor Agreement
Monmouth & Ocean Counties Building & Construction Trades Council, AFL-CIO and
The Monmouth County Vocational School District.

The undersigned, as a General Contractor, Contractor(s) or Subcontractor(s) on a Contract which is part of large project construction for the Monmouth County Vocational School District, for and in consideration of the award of a Contract to perform work on said Project, and in further consideration of the mutual promises made in the Project Labor Agreement, a copy of which was received and is acknowledged, hereby:

- (1) On behalf of itself and all its employees, accepts and agrees to be bound by the terms and conditions of the Project Labor Agreement, together with any and all amendments and supplements now existing or which are later made thereto, and understands that any act of non-compliance with all such terms and conditions will subject the non-complying Contractor or employee(s) to being prohibited from the Project Site until full compliance is obtained.
- (2) Certifies that it has no commitments or agreements that would preclude its full compliance with the terms and conditions of said Projects Labor Agreement.
- (3) Agrees to secure from any Contractor(s) (as defined in said Project Labor Agreement) which is or becomes a Subcontractor(s) (of any tier), a duly executed Letter of Assent in form identical to this document prior to commencement of any work.

Company Name

By: _____

Contract Number _____

Title: _____

General Contractor _____

Date: _____

cc: (Unions employed by Contractor)

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MAST – BLDG 23 ADDITION AND ALTERATIONS		LETTER OF ASSENT

CHECKLIST OF ATTACHMENTS

The following documents shall be included in this bid proposal package:

----- **Bid Proposal Form**

----- **Bid Bond Bid Security**

_____ **Non-collusion Affidavit (Non-Collusive Bidding Certificate)**

_____ **Certified Corporate Resolution (Including the Contractor’s Intention to Submit a Bid for the Project.) ****

_____ **Ownership Disclosure Statement**

_____ **Affidavit of No Material Adverse Change in Qualifications**

_____ **Affirmative Action Questionnaire and Certification**

----- **Sworn Contractor Certification of Qualifications and Credentials (pursuant to N.J.S.A. 18A:7G-37) (for Bidder and each Major Trade Subcontractor)**

_____ **Contractor Certification Regarding Debarment, Suspension, Disqualification**

_____ **Contractor’s Qualifications Questionnaire**

_____ **Equipment Certification/Certificate of Bidder Showing Ability to Perform Contract N.J.S.A. 18A-23**

_____ **Prevailing Wage Affidavit**

_____ **Certificate of Equal Opportunity**

_____ **Certificate of Insurance Statement***

_____ **Equivalent Listing Request Form**

_____ **Subcontractor Disclosure Statement**

_____ **NJDPMC Notice of Classification Form for Contractor and Major Trade Subcontractors***

_____ **Disclosure of Investment Activities in Iran**

_____ **Consent of Surety (Use bidder’s form or enclosed document)**

_____ **Political Contribution Disclosure Form**

_____ **Business Registration Certificate (or if a foreign corporation a Certificate of Authority to perform work in New Jersey) (to be provided by Bidder and all listed Subcontractors)***

_____ **Public Works Contractor Registration Act Certificate (Bidder and all listed subcontractors)***

_____ **Asbestos Acknowledgement Form**

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MAST – BLDG 23 ADDITION AND ALTERATIONS		CHECKLIST OF ATTACHMENTS

_____ **Equal Employment Opportunity Mandatory Bid Statement**

_____ **Attach any Valid Trade Licenses Required Under Applicable New Jersey Law***

_____ **Letter of Assent for Project Labor Agreement**

*Forms provided by Bidder

** Not included in package—Contracting Corporation must create.

Bid shall be placed in sealed envelope clearly marked:

“MAST-Building 23 Addition and Alterations”, bearing name and address of bidder. (Bids submitted by FEDEX should have a separate sealed envelope inside, as the FEDEX package will likely be opened by a mail clerk prior to the bid opening.)

GATE 250651	KJW #4200.8	CA - 2
MAST – BLDG 23 ADDITION AND ALTERATIONS		CHECKLIST OF ATTACHMENTS

MONMOUTH COUNTY
PROJECT LABOR AGREEMENT
COVERING CONSTRUCTION OF BUILDING 23 ADDITION & ALTERATIONS AT
THE MARINE ACADEMY OF SCIENCE & TECHNOLOGY (MAST)
PROJECT IN SANDY HOOK, NEW JERSEY

ARTICLE 1 - PREAMBLE

WHEREAS, _____, the General Contractor, on behalf of itself, and reflecting the objectives of the Monmouth County Vocational School District, as Owner, desires to provide for the efficient, safe, quality, and timely completion of certain large public works projects, in a manner designed to afford lower reasonable costs to the Monmouth County Vocational School District, the Owner, and the Public it represents, and the advancement of public policy objectives;

WHEREAS, this Project Labor Agreement will foster the achievement of these goals, inter alia by:

- (1) ensuring a reliable source of skilled and experienced labor;
- (2) standardizing the terms and conditions governing the employment of labor on the Project;
- (3) permitting wide flexibility in work scheduling and shift hours and times; from those which otherwise might obtain;
- (4) receiving negotiated adjustments as to work rules and staffing requirements from those which otherwise might obtain;
- (5) providing comprehensive and standardized mechanisms for the settlement of work disputes, including those relating to jurisdiction;
- (6) avoiding the costly delays of potential strikes, slowdowns,

walkouts, picketing and other disruptions arising from work disputes, and promote labor harmony and peace for the duration of the Project.

(7) furthering public policy objectives as to improved employment opportunities for minorities, women and the economically disadvantaged in the construction industry;

(8) expediting the construction process;

and, **WHEREAS**, the signatory Unions desire the stability, security and work opportunities afforded by a Project Labor Agreement;

and **WHEREAS**, the Parties desire to maximize Project safety conditions for both workers and the public,

NOW, THEREFORE, the Parties enter into this Agreement:

SECTION 1. PARTIES TO THE AGREEMENT

This is a Project Labor Agreement ("Agreement") entered into by and between the General Contractor, and their successors and assigns, for the construction work of the construction of Building 23 Addition & Alterations at the Marine Academy of Science & Technology (MAST) project to be performed on the property of the Monmouth County Vocational School District in the State of New Jersey and by the Monmouth & Ocean Counties Building and Construction Trades Council, AFL-CIO, on behalf of itself and its affiliates and members.

ARTICLE 2 - GENERAL CONDITIONS

SECTION 1. DEFINITIONS

Throughout this Agreement, the Union party and the Building Trades Council are referred to singularly and collectively as "the Union(s)" where specific reference is made to "Local Unions"

that phrase is sometimes used; the term "Contractor(s)" shall include the General Contractor (GC), and all signatory contractors, and their subcontractors of whatever tier, engaged in on-site Project construction work within the scope of this Agreement as defined in Article III; the Monmouth County Vocational School District

is referenced as (Owner); the Monmouth & Ocean Counties Building and Construction Trades Council, AFL-CIO is referenced as the BTC, and the work covered by this Agreement (as defined in Article III) is referred to as the "Project".

SECTION 2. CONDITIONS FOR AGREEMENT TO BECOME EFFECTIVE

The Agreement shall not become effective unless executed by the BTC and the GC and will remain in effect until the completion of the Project.

SECTION 3. ENTITIES BOUND & ADMINISTRATION OF AGREEMENT

This Agreement shall be binding on all signatory Unions and the General Contractor and all signatory Contractors performing on-site Project work, including site preparation and staging areas, as defined in Article 3. The Contractors shall include in any subcontract that they let, for performance during the term of this Agreement, a requirement that their subcontractors, of whatever tier, become signatory and bound by this Agreement with respect to subcontracted work performed within the scope of Article 3. This Agreement shall be administered by the GC on behalf of all Contractors.

SECTION 4. SUPREMACY CLAUSE

This Agreement, together with the local Collective Bargaining Agreements appended hereto as Schedule A represents the complete understanding of all signatories and supersedes any national agreement, local agreement or other collective bargaining agreement of any type which would otherwise apply to this Project, in whole or in part, except for all work performed under the NTD Articles of Agreement, the National Stack/Chimney Agreement, the National Cooling Tower Agreement, all instrument calibration work and loop checking shall be performed under the terms of the UA/IBEW Joint National Agreement for Instrument and Control Systems Technicians, and the National Agreement of the International Union of Elevator Constructors, with the exception of

Article VII, IX and X of this Project Agreement, which shall apply to such work.. Where a subject covered by the provisions, explicit or implicit, of this Agreement is also covered by a Schedule A, the provisions of this Agreement shall prevail. It is further understood that neither the GC nor any Contractor shall be required to sign any other agreement as a condition of performing work on this Project. No practice, understanding or agreement between a Contractor and Local Union, which is not explicitly set forth in this Agreement shall be binding on this Project unless endorsed in writing by the GC.

SECTION 5. LIABILITY

The liability of any Contractor and the liability of any Union under this Agreement shall be several and not joint. The GC and any Contractor shall not be liable for any violations of this Agreement by any other Contractor and the BTC and Local Unions shall not be liable for any violations of this Agreement by any other Union.

SECTION 6. THE GENERAL CONTRACTOR

The GC shall require in its bid specifications for all work within the scope of Article 3 that all successful bidders, and their subcontractors of whatever tier, become bound by, and signatory to, this Agreement. The Monmouth County Vocational School District is not a party to and shall not be liable in any manner under this Agreement. It is understood that nothing in this Agreement shall be construed as limiting the sole discretion of the Monmouth County Vocational School District in determining which Contractors shall be awarded contracts for Project work. It is further understood that the Monmouth County Vocational School District has sole discretion at any time to terminate, delay or suspend the work, in whole or part, on this Project.

SECTION 7. AVAILABILITY AND APPLICABILITY TO ALL SUCCESSFUL BIDDERS

The Unions agree that this Agreement will be made available to and will fully apply to any successful bidder for Project work who becomes signatory thereto, without regard to whether that successful bidder performs work at other sites on either a union or non-union basis and without regard to whether employees of such successful bidder are, or are not, members of any unions. This Agreement shall not apply to the work of any Contractor or GC , which is performed at any location other than a Project site, as defined in Article 3, Section 1.

ARTICLE 3 - SCOPE OF THE AGREEMENT

The Project work covered by this Agreement shall be as defined and limited by the following sections of this Article.

SECTION 1: THE WORK

This Agreement shall apply to all on-site public construction work for the Monmouth County Vocational School District performed on the construction of Building 23 Addition & Alterations at the Marine Academy of Science & Technology (MAST) in Sandy Hook, Monmouth County, New Jersey.

The scope of work is confined to the on-site Project work contained in the scope of the final construction contract of the General Contractor.

SECTION 2. EXCLUDED EMPLOYEES

The following persons are not subject to the provisions of this Agreement, even though performing work on the Project:

- a. Superintendents, supervisors (excluding superintendents and general supervisors and forepersons specifically covered by a craft's Schedule A), engineers, inspectors and testers (excluding divers specifically covered by a craft's Schedule A), quality control/assurance personnel, timekeepers, mail carriers, clerks, office workers, messengers, guards, non-manual employees, and all professional, engineering, administrative and management persons;
- b. Employees of Owner or any State agency, authority or entity or employees of any municipality or other public employer.
- c. Employees and entities engaged in off-site manufacture, modifications, repair, maintenance, assembly, painting, handling or fabrication of project components, materials, equipment or machinery, unless such offsite operations are covered by the New

Jersey Prevailing Wage Act (for example, by being dedicated exclusively to the performance of the public works contract or building project and are adjacent to the site of work), or involved in deliveries to and from the Project site excepting local

Deliveries of all major construction materials including fill, ready mix, concrete and cement, asphalt and other items which are covered by this Agreement.

- d. Employees of the GC, excepting those performing manual, on-site construction labor who will be covered by this Agreement;
- e. Employees engaged in on-site equipment warranty.
- f. Employees engaged in geophysical testing (whether land or water) other than boring for core samples;
- g. Employees engaged in laboratory or specialty testing or inspections;
- h. Employees engaged in ancillary Project work performed by third parties such as electric utilities, gas utilities, telephone utility companies, and railroads.

SECTION 3. NON-APPLICATION TO CERTAIN ENTITIES

This Agreement shall not apply to the parents, affiliates, subsidiaries, or other joint or sole ventures of any Contractor or of GC, which do not perform work at this Project. It is agreed, for the purposes of this Agreement only, that this Agreement does not have the effect of creating any joint employment, single employer or alter ego status among the Owner, the GC and/or any Contractor. The Agreement shall further not apply to the Owner or any other state or county agency, authority, or other municipal or public entity and nothing contained herein shall be construed to prohibit or restrict the Owner or its employees of any other state authority, agency or entity and its employees from performing on or off-site work related to the Project. As the contracts which comprise the Project work are completed and accepted, the Agreement shall not have further force or effect on such items or areas except where inspections, additions, repairs, modifications, check-out and/or warranty work are assigned in writing (copy to Local Union involved) by the General Contractor for performance under the terms of this Agreement.

ARTICLE 4 - UNION RECOGNITION AND EMPLOYMENT

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MAST – BLDG 23 ADDITION AND ALTERATIONS		EXHIBIT A – PROJECT LABOR AGREEMENT

SECTION 1. PRE-HIRE RECOGNITION

The Contractors recognize the signatory Unions as the sole and exclusive bargaining representatives of all craft employees who are performing on-site Project work within the scope of this Agreement as defined in Article 3.

SECTION 2. UNION REFERRAL

- A. The Contractors agree to hire Project, craft employees covered by this Agreement through the job referral systems and hiring halls (where the referrals meet the qualifications set forth in items 1, 2, and 4 subparagraph B) established in the Local Unions' area collective bargaining agreements (attached as Schedule A to this Agreement). Notwithstanding this, the Contractors shall have sole rights to determine the competency of all referrals; the number of employees required (except with regard to piledriving); the selection of employees to be laid-off (subject to the applicable procedures in Schedule A for permanent and/or temporary layoffs and except as provided in Article 5, Section 3); and the sole right to reject any applicant referred by a Local Union, subject to the show-up payments required in the applicable Schedule A. In the event that a Local Union is unable to fill any request for qualified employees within a 48-hour period after such requisition is made by the Contractor (Saturdays, Sundays, and holidays excepted), the Contractor may employ qualified applicants from another competent source. In the event that the Local Union does not have a job referral system, the Contractor shall give the Local Union first preference to refer applicants, subject to the other provisions of this Article. The Contractor shall notify the Local Union of the Project, craft employees hired within its jurisdiction from any source other than referral by the Union.
- B. Following the employment of the first employee in each craft under Schedule A or the procedure set forth above in paragraph A, a Contractor may request by name, and the Local will honor, referral of persons who have applied to the Local for Project work and who meet the following qualifications as determined by a Committee of 3 designated, respectively, by the applicable Local Union, the GC and a mutually selected third party or, in the absence of agreement, the permanent arbitrator (or designee) designated in Article 7:

- (1) possess any license required by NJ law for the Project work to be performed;
- (2) have worked a total of at least 1000 hours in the Construction craft during the prior 3 years;
- (3) were on the Contractor's active payroll for at least 60 out of the 180 calendar days prior to the contract award;
- (4) have demonstrated ability to safely perform the basic function of the applicable trade.

No more than 12 per centum of the employees covered by this Agreement, per Contractor by craft, shall be hired through the special provisions above (any fraction shall be rounded to the next highest whole number).

C. A certified MBE/WBE contractor may request from the Workforce Coordinator, through the GC, an exception to, and waiver of, the above per centum limitation upon the number of it's employees to be hired through the special provision of Section 2.B above. This exception is based upon hardship and demonstration by the contractor that the Project work would be the contractor's only job and that it would be obliged to lay off qualified minority and female employees in its current workforce moving from the last job. The exception and waiver are also conditioned upon the employees meeting the qualifications as set forth in Section 2.B above.

SECTION 3. NON-DISCRIMINATION IN REFERRALS

The Unions represent that their hiring halls and referral systems will be operated in a non-discriminatory manner and in full compliance with all applicable federal, state and local laws and regulations, which require equal employment opportunities. Referrals shall not be affected in any way by the rules, regulations, bylaws, constitutional provisions or any other aspects or obligations of union membership, policies or requirements and shall be subject to such other conditions as are established in this Article. No employment applicant shall be discriminated against by any referral system or hiring hall because of the applicant's union membership, or lack thereof.

SECTION 4. WORKFORCE DIVERSITY

To the extent applicable, the parties hereby agree that each will implement and abide by the requirements of the Owner with regard to workforce diversity. Furthermore, General Contractor, Contractors and the Unions will comply with such affirmative action plan, including but not limited to: (1) the parties will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, sex or any other protected category used by government regulation; (2) the parties will endeavor to include in any solicitations or advertisements for employees or subcontractors, a notice that all qualified applicants will receive consideration for employment, and contractors and subcontractors for work, without regard to age, race, creed, color, national origin, ancestry, marital status, sex or any other protected category used by government regulation; and (3) the parties agree to utilize the best efforts to ensure that minority business enterprises and women-owned business enterprises shall have the maximum practicable opportunity to provide Construction Work under this Agreement.

The Local Unions agree and support the importance of the Owner places on having and maintaining a diverse workforce. The Unions agree to refer any and all _____ resident journeymen and apprentices who are registered on the Out-of-Work list of the local union referral systems at the time of a contractor's request. The Local Unions will cooperate with Contractor requests for residents of _____, residents of disadvantaged communities, minority, or women referrals to meet the requirements of the Owner.

In the event a Union either fails, or is unable, to refer qualified minority or female applicants in percentages equaling Project affirmative action goals as set forth in the Owners bid specifications, the Contractor may employ qualified minority or female applicants from any other available source as Apprentice Equivalents. Apprentice Equivalents will have completed a DOL approved training program, applied to take a construction Apprenticeship test, and will be paid at not less then the applicable equivalent Apprentice rate. With the approval of the Local Administrative Committee (LAC), experience in construction related areas may be accepted as meeting the above requirements.

SECTION 5. CROSS AND QUALIFIED REFERRALS

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The Unions shall not knowingly refer to a Contractor an employee then employed by another Contractor working under this Agreement. The Local Unions will exert their utmost efforts to recruit sufficient numbers of skilled and qualified craft employees to fulfill the requirements of the Contractor.

SECTION 6. UNION DUES / WORKING ASSESMENTS

The Union security provisions contained in the applicable Schedule A local agreements, shall not apply to the employees covered by this Agreement for the period of time during which they are performing on-site Project work. No employee shall be discriminated against at the Project site because of the employee's union membership or lack thereof. In the case of unaffiliated employees who have voluntarily executed dues checkoff authorization cards provided in a Schedule A local agreement, the dues payment can be received by the Unions as a working assessment fee.

SECTION 7. CRAFT FOREPERSONS AND GENERAL FOREPERSONS

The selection of craft forepersons and/or general forepersons and the number of forepersons required shall be solely the responsibility of the Contractor except where otherwise provided by specific provisions of an applicable Schedule A. All forepersons shall take orders exclusively from the designated Contractor representatives. Craft foreperson shall be designated as working forepersons at the request of the Contractor, except when an existing local Collective Bargaining Agreement prohibits a foreperson from working when the craftsperson he is leading exceed a specified number.

ARTICLE 5 - UNION REPRESENTATION

SECTION 1. LOCAL UNION REPRESENTATIVE

Each Local Union representing on-site Project employees shall be entitled to designate in writing (copy to General Contractor involved) representatives, including the Business Manager, who shall be afforded access to the Project.

SECTION 2. STEWARDS

- (a) Each Local Union shall have the right to designate a working journey person as a Steward and an alternate, and shall notify the Contractor and GC of the identity of the designated Steward (and alternate) prior to the assumption of such duties. Stewards shall not exercise supervisory functions and will receive the regular rate of pay for their craft classifications. There will be no non-working Stewards on the Project.
- (b) In addition to their work as an employee, the Steward shall have the right to receive complaints or grievances and to discuss and assist in their adjustment with the Contractor's appropriate supervisor. Each Steward shall be concerned with the employees of the Steward's Contractor and, if applicable, subcontractors of that Contractor, but not with the employees of any other Contractor. The Contractor will not discriminate against the Steward in the proper performance of Union duties.
- (c) The Stewards shall not have the right to determine when overtime shall be worked, or who shall work overtime, except pursuant to a Schedule A provision providing procedures for the equitable distribution of overtime.

SECTION 3. LAYOFF OF A STEWARD

Contractors agree to notify the appropriate Union 24 hours prior to the layoff of a Steward, except in cases of discipline or discharge for just cause. If a Steward is protected against layoff by a Schedule A, such provisions shall be recognized to the extent the Steward possesses the necessary qualifications to perform the work required. In any case in which a Steward is discharged or disciplined for just cause, the Local Union involved shall be notified immediately by the Contractor.

ARTICLE 6 - MANAGEMENT'S RIGHTS

SECTION 1. RESERVATION OF RIGHTS

Except as expressly limited by a specific provision of this Agreement, Contractors retain full and exclusive authority for the management of their Project operations including, but not limited to: the right to direct the work force, including determination as to the number to be hired and the

qualifications therefore; the promotion, transfer, layoff of its employees; or the discipline or discharge for just cause of its employees; the assignment and schedule of work; the promulgation of reasonable Project work rules; and, the requirement, timing and number of employees to be utilized for overtime work. No rules, customs, or practices, which limit or restrict productivity or efficiency of the individual, as determined by the Contractor, GC, and/or joint working efforts with other employees shall be permitted or observed.

SECTION 2. MATERIALS, METHODS & EQUIPMENT

There shall be no limitations or restriction upon the contractors' choice of materials, techniques, methods, technology or design, or, regardless of source or location, upon the use and installation of equipment, machinery, package units, pre-cast, pre-fabricated, pre-finished, or pre-assembled materials, tool, or other labor-saving devices. Contractors may, without restriction, install or use materials, supplies or equipment regardless of their source. The on-site installation or application of such items shall be performed by the craft having jurisdiction over such work; provided, however, it is recognized that other personnel having special qualifications may participate, in a supervisory capacity, in the installation, check-out or testing of specialized or unusual equipment or facilities as designated by the Contractor. Notwithstanding the foregoing statement of contractor rights, prefabrication issues relating to work traditionally performed at the job site shall be governed pursuant to the terms of the applicable Schedule A. There shall be no restrictions as to work, which is performed off-site for the Project, except for 1) offsite operations work covered under the New Jersey Prevailing Wage Act or 2) done in a fabrication center, tool yard, or batch plant dedicated exclusively to the performance of work on the Project, and located adjacent to the "site of work".

ARTICLE 7 - WORK STOPPAGES AND LOCKOUTS

SECTION 1. NO STRIKES-NO LOCKOUT

There shall not be strikes, sympathy strikes, picketing, work stoppages, slowdowns, hand billing, demonstrations or other disruptive activity at the Project for any reason by any Union or employee against any Contractor or employer while performing work at the Project. There shall be no other Union, or concerted or employee activity which disrupts or

interferes with the operation of the existing free flow of traffic in the project area. Failure of any Union or employee to cross any picket line established by any union, signatory or non-signatory to this Agreement, or the picket or demonstration line of any other organization, at or in proximity to the Project site is a violation of this Article. There shall be no lockout at the Project by any signatory Contractor. Contractors and Unions shall take all steps necessary to ensure compliance with this Section 1 and to ensure uninterrupted construction and the free flow of traffic in the project area for the duration of this Agreement.

SECTION 2. DISCHARGE FOR VIOLATION

A Contractor may discharge any employee violating Section 1, above, and any such employee will not be eligible thereafter for referral under this Agreement for a period of 100 days.

SECTION 3. NOTIFICATION

If a Contractor contends that any Union has violated this Article, it will notify the appropriate district or area council of the Local Union involved advising of such fact, with copies of the notification to the Local Union and the BTC. The district or area council, and the BTC shall each instruct, order and otherwise use their best efforts to cause the employees, and/or the Local Unions to immediately cease and desist from any violation of this Article. A district or area council, or the BTC complying with these obligations shall not be liable for the unauthorized acts of a Local Union or its members.

SECTION 4. EXPEDITED ARBITRATION

Any Contractor or Union alleging a violation of Section 1 of this Article may utilize the expedited procedure set forth below (in lieu of, or in addition to, any actions at law or equity) that may be brought.

- a. A party invoking this procedure shall notify J.J. Pierson Jr, Esq., at 51 JFK Parkway, First Floor West, Short Hills , New Jersey 07078, telephone number (973) 359-8100, fax number (973) 359-8161 ,who shall serve as Arbitrator under this expedited arbitration procedure. In the event that J.J. Pierson is unable to serve, a party invoking this procedure shall notify Gary Kendellen, who shall serve as arbitrator under this expedited

procedure. Copies of such notification will be simultaneously sent to the alleged violator and, if a Local Union is alleged to be in violation, it's International, the GC , and the BTC.

- b. The Arbitrator shall thereupon, after notice as to time and place to the Contractor, the GC, the Local Union involved, and the BTC, hold a hearing within 48 hours of receipt of the notice invoking the procedure it is contended that the violation still exists. The hearing will not, however, be scheduled for less than 24 hours after the notice to the district or area council required by Section 3 above. Hearings shall be held at the jobsite or at the Newark office of the New Jersey State Board of Mediation, as directed by the Arbitrator.
- c. All notices pursuant to this Article may be by telephone, telegraph, hand delivery, or fax, confirmed by overnight delivery, to the arbitrator, Contractor or Union involved. The hearing may be held on any day including Saturdays or Sundays. The hearing shall be completed in one session, which shall not exceed 8 hours duration (no more than 4 hours being allowed to either side to present their case, and conduct their cross examination) unless otherwise agreed. A failure of any Union or

Contractor to attend the hearing shall not delay the hearing of evidence by those present or the issuance of an award by the Arbitrator.

- d. The sole issue at the hearing shall be whether a violation of Section 1, above, occurred. If a violation is found to have occurred, the Arbitrator shall issue a Cease and Desist Award restraining such violation and serve copies on the Contractor and Union involved. The Arbitrator shall have no authority to consider any matter in justification, explanation or mitigation of such violation or to award damages, which issue is reserved solely for court proceedings, if any. The Award shall be issued in writing within 3 hours after the close of the hearing, and may be issued without

an Opinion. If any involved party desires an Opinion, one shall be issued within 15 calendar days, but its issuance shall not delay compliance with, or enforcement of, the Award.

- e. An Award issued under this procedure may be enforced by any court of competent jurisdiction upon the filing of the Agreement together with the Award. Notice of the filing of such enforcement proceedings shall be given to the Union or Contractor involved. In any court proceeding to obtain a temporary or preliminary order enforcing the arbitrator's Award as issued under this expedited procedure, the involved Union and Contractor waive their right to a hearing and agree that such proceedings may be ex parte, provided notice is given to opposing counsel. Such agreement does not waive any party's right to participate in a hearing for a final court order of enforcement or in any contempt proceeding.
- f. Any rights created by statute or law governing arbitration proceedings which are inconsistent with the procedure set forth in this Article, or which interfere with compliance thereto, are hereby waived by the Contractors and Unions to whom they accrue.
- g. The fees and expenses of the Arbitrator shall be equally divided between the involved Contractor and Union.

SECTION 5. ARBITRATION OF DISCHARGES FOR VIOLATION

Procedures contained in Article 9 shall not be applicable to any alleged violation of this Article, with the single exception that an employee discharged for violation of Section 1, above, may have recourse to the procedures of Article 9 to determine only if the employee did, in fact, violate the provisions of Section 1 of this Article; but not for the purpose of modifying the discipline imposed where a violation is found to have occurred.

ARTICLE 8. - LOCAL ADMINISTRATIVE COMMITTEE (LAC)

SECTION 1. MEETINGS

The Local Administrative Committee (LAC) will meet on a regular basis to 1) Implement and oversee the Agreement procedures and initiatives; 2) monitor the effectiveness of the Agreement; and 3) identify opportunities to improve efficiency and work execution.

SECTION 2. COMPOSITION

The LAC will be co-chaired by the President of the Monmouth & Ocean Counties Building and Construction Trades Council or his designee, and designated official of the GC. It will be comprised of representatives of the local unions signatory to the project labor agreement (PLA) and representatives of the GC and other contractors on the project.

ARTICLE 9 - GRIEVANCE & ARBITRATION PROCEDURE

SECTION 1. PROCEDURE FOR RESOLUTION OF GRIEVANCES

Any question, dispute or claim arising out of, or involving the interpretation or application of this Agreement (other than jurisdictional disputes or alleged violations of Article 7, Section 1) shall be considered a grievance and shall be resolved pursuant to the exclusive procedure of the steps described below; provided, in all cases, that the question, dispute or claim arose during the term of this Agreement.

Step 1:

(a) When any employee covered by this Agreement feels aggrieved by a claimed violation of this Agreement, the employee shall, through the Local Union business representative or job steward give notice of the claimed violation to the work site representative of the involved Contractor. To be timely, such notice of the grievance must be given within 7 calendar days after the act, occurrence, or event giving rise to the grievance, or after the act, occurrence or event became known or should have become known to the Union. The business representative of the Local Union or the job steward and the work site representative of the involved Contractor shall meet and endeavor to adjust the matter within 7 calendar days after

timely notice has been given. If they fail to resolve the matter within the prescribed period, the grieving party, may, within 7 calendar days thereafter, pursue Step 2 of the grievance procedure by serving the involved Contractor and the General Contractor with written copies of the grievance setting forth a description of the claimed violation, the date on which the grievance occurred, the provisions of the Agreement alleged to have been violated. Grievances and disputes settled at Step 1 are non-precedential except as to the specific Local Union, employee and Contractor directly involved, unless the settlement is accepted in writing, by the General Contractor, as creating a precedent.

(b) Should any signatory to this Agreement have a dispute (excepting jurisdictional disputes or alleged violations of Article 7, Section 1) with any other signatory to this Agreement and, if after conferring, a settlement is not reached within 7 calendar days, the dispute shall be reduced to writing and proceed to Step 2 in the same manner as outlined in subparagraph (a) for the adjustment of employee grievances.

Step 2:

The Business Manager or designee of the involved Local Union, together with representatives of the BTC, the involved Contractor, and the General Contractor shall meet in Step 2 within 5 calendar days of the written grievance to arrive at a satisfactory settlement.

Step 3:

(a) If the grievance shall have been submitted but not resolved in Step 2, any of the participating Step 2 entities may, within 14 calendar days after the initial Step 2 meeting, submit the grievance in writing (copies to other participants) to the next available arbitrator of the panel of arbitrators consisting of J.J. Pierson Jr., Esq., Gary Kendellen and Wellington Davis, who shall serve as arbitrator under this expedited procedure. The Labor Arbitration Rules of the American Arbitration Association shall govern the conduct of the arbitration hearing, at which all Step 2 participants shall be parties. Hearings shall be held at the jobsite or at the Newark office of the New Jersey State Board of Mediation, as directed by the Arbitrator.

The decision of the Arbitrator shall be final and binding on the involved Contractor, Local Union and employees and the fees and expenses of such arbitration's shall be borne equally by the involved Contractor and Local Union.

(b) Failure of the grieving party to adhere to the time limits set forth in this Article shall render the grievance null and void. These time limits may be extended only by written consent of the GC, involved Contractor and involved Local Union at the particular step where the extension is agreed upon. The Arbitrator shall have authority to make decisions only on the issues presented to him and shall not have the authority to change, add to, delete or modify any provision of this Agreement.

SECTION 2. LIMITATION AS TO RETROACTIVITY

No arbitration decision or award may provide retroactivity of any kind exceeding 30 calendar days prior to the date of service of the written grievance on the construction Project Manager and the involved Contractor or Local Union.

SECTION 3. PARTICIPATION BY GENERAL CONTRACTOR

The General Contractor shall be notified by the involved Contractor of all actions at Steps 2 and 3 and, at its election, may participate in full in all proceedings at these Steps, including Step 3 arbitration.

ARTICLE 10 - JURISDICTIONAL DISPUTES

SECTION 1. NO DISRUPTIONS

There will be no strikes, sympathy strikes, work stoppages, slowdowns, picketing or other disruptive activity of any kind arising out of any jurisdictional dispute. Pending the resolution of the dispute, the work shall continue uninterrupted and as assigned by the Contractor. No jurisdictional dispute shall excuse a violation of Article 7.

SECTION 2. ASSIGNMENT

A. There shall be a mandatory pre-job markup / assignment meeting prior to the commencement of any work. Attending such meeting shall be designated representatives of the Union signatories to this Agreement, the CM, and the involved Contractors. Best efforts will be made to schedule the pre-job meeting in a timely manner after Notice to Proceed is issued but not later than 30 days prior to the start of the Project.

B. All Project construction work assignments shall be made by the Contractor according to the criteria set forth in Section 3, Subsection D 1-3.

C. When a Contractor has made an assignment of work, he shall continue the assignment without alteration unless otherwise directed by an arbitrator or there is agreement between the National or International Unions involved. Claims of a change of original assignment shall be processed in accordance with Article I of the Procedural Rules of the Plan for the Settlement of Jurisdictional Disputes in the Construction Industry ("the Plan").

D. In the event that a Union involved in the change of original assignment dispute is an affiliate of a National or International Union that is not affiliated with the Building and Construction Trades Department and does not wish to process a case through the Plan, the parties shall mutually select one of the following Arbitrators: Arbitrator J.J. Pierson, Arbitrator Andy Douglas or Arbitrator Richard K. Hanft and submit the dispute directly to the Arbitrator. The selected Arbitrator shall determine whether the case requires a hearing or may be decided upon written submissions. In rendering his determination on whether there has been a change of original assignment, the Arbitrator shall be governed by the following:

1. The contractor who has the responsibility for the performance and installation shall make a specific assignment of the work which is included in his contract to a particular union(s). For instance, if contractor A subcontracts certain work to contractor B, then contractor B shall have the responsibility for making the specific assignments for the work included in his contract. If contractor B, in turn, shall subcontract certain work to contractor C, then contractor C shall have the responsibility for making the specific assignment for the work included in his contract. After work has been so assigned, such assignment will be maintained even though the assigning contractor is replaced and such work is subcontracted to another contractor.

It is a violation of the Agreement for the contractor to hold up disputed work or shut down a project because of a jurisdictional dispute.

2. When a contractor has made an assignment of work, he shall continue the assignment without alteration unless otherwise directed by an arbitrator or there is agreement between the National or International Unions involved.

a. Unloading and/or handling of materials to stockpile or storage by a trade for the convenience of the responsible contractor when his employees are not on the job site, or in an emergency situation, shall not be considered to be an original assignment to that trade.

b. Starting of work by a trade without a specific assignment by an authorized representative of the responsible contractor shall not be considered an original assignment to that trade, provided that the responsible contractor, or his authorized representative, promptly, and, in any event, within eight working hours following the start of work, takes positive steps to stop further unauthorized performance of the work by that trade.

SECTION 3. PROCEDURE FOR SETTLEMENT OF DISPUTES

A. Any Union having a jurisdictional dispute with respect to Project work assigned to another Union will submit through its International the dispute in writing to the Administrator of the Plan within 72 hours and send a copy of the letter to the other Union involved, the Contractor involved, the General Contractor, the BTC, and the district or area councils of the unions involved. Upon receipt of a dispute letter from any Union, the Administrator will invoke the procedures set forth in the Plan to resolve the jurisdictional dispute. The jurisdictional dispute letter shall contain the information described in Article IV of the Procedural Rules of the Plan.

B. Within 5 calendar days of receipt of the dispute letter, there shall be a meeting of the General Contractor, the Contractor involved, the Local Unions involved and designees of the BTC and the district or area councils of the Local Unions involved for the purpose of resolving the jurisdictional dispute.

C. In order to expedite the resolution of jurisdictional disputes, the parties have agreed in advance to mutually select one of the following designated Arbitrators: Arbitrator J.J. Pierson, Arbitrator Andy Douglas or Arbitrator Richard K. Hanft to hear all unresolved jurisdictional disputes arising under this Agreement. All other rules and procedures of the Plan shall be followed. If none of the three Arbitrators is available to hear the dispute within the time

limits of the Plan, the Plan's arbitrator selection process shall be utilized to select another arbitrator.

D. In the event that a Union involved in the dispute is an affiliate of a National or International Union that is not affiliated with the Building and Construction Trades Department and does not wish to process a case through the Plan as described in paragraphs A-C above, the parties to the dispute shall mutually select one of the following Arbitrators: Arbitrator J. J. Pierson, Arbitrator Andy Douglas or Arbitrator Richard K. Hanft to hear the dispute and shall submit the dispute directly to the selected arbitrator. The time limits for submission and processing disputes shall be the same as provided elsewhere in this Section. The selected Arbitrator shall schedule the hearing within seven business days from the date of submission. If he cannot hear the case within the required timeframe, one of the other Arbitrators will be selected to hear the case unless all parties to the dispute agree to waive the seven day time limit. In rendering his decision, the Arbitrator shall determine:

1. First whether a previous agreement of record or applicable agreement, including a disclaimer agreement, between the National and International Unions to the dispute governs;
2. Only if the Arbitrator finds that the dispute is not covered by an appropriate or applicable agreement of record or agreement between the crafts to the dispute, he shall then consider the established trade practice in the industry and prevailing practice in the locality. Where there is a previous decision of record governing the case, the Arbitrator shall give equal weight to such decision of record, unless the prevailing practice in the locality in the past ten years favors one craft. In that case, the Arbitrator shall base his decision on the prevailing practice in the locality. Except, that if the Arbitrator finds that a craft has improperly obtained the prevailing practice in the locality through raiding, the undercutting of wages or by the use of vertical agreements, the Arbitrator shall rely on the decision of record and established trade practice in the industry rather than the prevailing practice in the locality.
3. Only if none of the above criteria is found to exist, the Arbitrator shall then consider that because efficiency, cost or continuity and good management are essential to the well being of the industry, the interests of the consumer or the past practices of the employer shall not be ignored. The Arbitrator shall set forth the basis for his decision and shall explain his findings regarding the applicability of the above criteria. If lower-ranked criteria are relied upon,

the Arbitrator shall explain why the higher-ranked criteria were not deemed applicable. The Arbitrator's decision shall only apply to the job in dispute.

Each party to the arbitration shall bear its own expense for the arbitration and agrees that the fees and expenses of the Arbitrator shall be borne by the losing party or parties as determined by the Arbitrator.

E. The Arbitrator shall render a short-form decision within 5 days of the hearing based upon the evidence submitted at the hearing, with a written decision to follow within 30 days of the close of hearing.

F. This Jurisdictional Dispute Resolution Procedure will only apply to work performed by Local Unions that represent workers employed on the Project.

G. Any Local Union involved in a jurisdictional dispute on this Project shall continue working in accordance with Section 2 above and without disruption of any kind.

SECTION 4. AWARD

Any award rendered pursuant to this Article and the Plan shall be final and binding on the disputing Local Unions and the involved Constructor on this Project only and may be enforced in accordance with the provisions of Article VII of the Plan. Any award rendered pursuant to the alternate procedures of this Article shall be final and binding on the disputing Local Unions and the involved Contractor on this Project only, and may be enforced in any court of competent jurisdiction. Such award or resolution shall not establish a precedent on any other construction work not covered by this Agreement. In all disputes under this Article, the General Contractor and the involved Contractors shall be considered parties in interest.

SECTION 5. LIMITATIONS

The Arbitrator shall have no authority to assign work to a double crew, that is, to more employees than the minimum required by the Contractor to perform the work involved; nor to assign work to employees who are not qualified to perform the work involved; nor to assign work being performed by non-union employees to union employees. This does not prohibit the establishment, with the agreement of the involved Contractor, of composite crews where more than

1 employee is needed for the job. The aforesaid determinations shall decide only to whom the disputed work belongs.

SECTION 6. NO INTERFERENCE WITH WORK

A. There shall be no interference or interruption of any kind with the work of the Project while any jurisdictional dispute is being resolved. The work shall proceed as assigned by the Contractor until finally resolved under the applicable procedure of this Article. The award shall be confirmed in writing to the involved parties. There shall be no strike, work stoppage or interruption in protest of any such award. Any claims of a violation of this section shall be submitted and processed in accordance with the impediment to job progress provisions of the Plan.

B. In the event a Union alleged to have engaged in an impediment to job progress is an affiliate of a National or International Union that is not affiliated with the Building and Construction Trades Department and does not wish to have the impediment to job progress charge processed through the Plan, the parties to the dispute shall mutually select one of the three Arbitrators designated in this Article to hear the dispute. The selected Arbitrator shall schedule the hearing within two business days from the date of submission. If he cannot hear the case within the required timeframe, one of the other Arbitrators shall be selected by the parties to hear the case unless all parties to the dispute agree to waive the two day time limit. The sole issue at the hearing shall be whether or not a violation of this Section has in fact occurred, and the Arbitrator shall have no authority to consider any matter in justification, explanation or mitigation of such violation or to award damages. The Arbitrator's decision shall be issued in writing within 3 hours after the close of the hearing, and may be issued without an opinion. If any party desires an opinion, one shall be issued within 15 days, but its issuance shall not delay compliance with, or enforcement of, the decision. The Arbitrator may order cessation of the violation of this Section and other appropriate relief, and such decision shall be served on all parties by facsimile upon issuance. Each party to the arbitration shall bear its own expense for the arbitration and agrees that the fees and expenses of the Arbitrator shall be borne by the losing party or parties as determined by the Arbitrator.

ARTICLE 11 - WAGES AND BENEFITS

SECTION 1. CLASSIFICATION AND BASE HOURLY RATE

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All employees covered by this Agreement shall be classified in accordance with the work performed and paid the base hourly wage rates for those classifications as specified in the attached Schedules A, as amended during this Agreement. Recognizing, however, that special conditions may exist or occur on the Project, the parties, by mutual agreement may establish rates and/or hours for one or more classifications, which may differ from Schedules A. Parties to such agreements shall be the General Contractor, the Contractor involved, the involved Local Unions and the BTC.

SECTION 2. EMPLOYEE BENEFIT FUNDS

A. The Contractors agree to pay contributions on behalf of all employees covered by this Agreement to the established employee benefit funds in the amounts designated in the appropriate Schedule A. Bona fide jointly trusted fringe benefit plans established or negotiated through collective bargaining during the life of this Agreement may be added.

B. The Contractor agrees to be bound by the written terms of the legally established Trust Agreements specifying the detailed basis on which payments are to be paid into, and benefits paid out of, such Trust Funds but only with regard to work done on this Project and only for those employees to whom this Agreement requires such benefit Payments.

C. Should any contractor or sub-contractor become delinquent in the payment of contributions to the fringe benefit funds, then the subcontractor at the next higher tier, or upon notice of the delinquency claim from the Union or the Funds, agrees to withhold from the subcontractor such disputed amount from the next advance, or installment payment for work performed and the amount claimed and owed will be paid within thirty (30) days after receipt of the notification by the General Contractor, if not paid prior to said date by the delinquent contractor/subcontractor.

ARTICLE 12 - HOURS OF WORK, PREMIUM PAYMENTS, SHIFTS AND HOLIDAYS**SECTION 1. WORK WEEK AND WORK DAY**

- A. The standard work week shall consist of 40 hours of work at straight time rates per one of the following schedule:
- 1) Five-Day Work Week: Monday-Friday, 5 days, 8 hours plus 1/2 hour unpaid lunch period each day.
- B. The Day Shift shall commence between the hours of 6:00 a.m. and 9:00 a.m. and shall end between the hours of 2:30 p.m. and 5:30 p.m. Starting and quitting times shall occur at the employees' place of work as may be designated by the Contractor in accordance with area practice.
- C. Notice - Contractors shall provide not less than 5 days prior notice to the Local Union involved as to the work week and work hours schedules to be worked or such lesser notice as may be mutually agreed upon.

SECTION 2. OVERTIME

Overtime pay for hours outside of the standard work week and work day, described in paragraph A above, shall be paid in accordance with the applicable Schedule A. There will be no restriction upon the Contractor's scheduling of overtime or the nondiscriminatory designation of employees who shall be worked, except as noted in Article 5, Section 2. There shall be no pyramiding of overtime pay under any circumstances. The Contractor shall have the right to schedule work so as to minimize overtime.

SECTION 3. SHIFTS

- A. Flexible Schedules - Scheduling of shift work shall remain flexible in order to meet Project schedules and existing Project conditions including the minimization of interference with traffic. It is not necessary to work a day shift in order to schedule a second shift. Shifts must be worked a minimum of five consecutive work days, must have prior approval of the GC and must be scheduled with not less than five work days notice to the Local Union.

B. Second/Shift - The second shift (starting between 2 p.m. and 8p.m.) shall consist of 8 hours work for an equal number of hours pay at the straight time rate plus 15% in lieu of overtime and exclusive of a 1/2 hour unpaid lunch period.

C. Flexible Starting Times – Shift starting times will be adjusted by the Contractor as necessary to fulfill Project requirements subject to the notice requirements of Paragraph A.

D. It is agreed that when project circumstances require a deviation from the above shifts, the involved unions, contractors and the General Contractor shall adjust the starting times of the above shifts or establish shifts which meet the project requirements. It is agreed that neither party will unreasonably withhold their agreement.

SECTION 4. HOLIDAYS

A. Schedule - There shall be 8 recognized holidays on the Project:

New Years Day	Labor Day
Presidents Day	Veterans Day
Memorial Day	Thanksgiving Day
Fourth of July	Christmas Day

* Presidential Election Day shall be observed as a holiday in a general election year. Work shall be scheduled on Good Friday, Columbus Day and the Friday after Thanksgiving pursuant to the craft's Schedule A.

All said holidays shall be observed on the dates designated by New Jersey State Law. In the absence of such designations, they shall be observed on the calendar date except those holidays which occur on Sunday shall be observed on the following Monday. Holidays falling on Saturday are to be observed on the preceding Friday.

B. Payment - Regular holiday pay, if any, and/or premium pay for work performed on such a recognized holiday shall be in accordance with the applicable Schedule A.

C. Exclusivity - No holidays other than those listed in Section 4-A above shall be recognized nor observed.

SECTION 5. REPORTING PAY

A. Employees who report to the work location pursuant to regular schedule and who are not provided with work or whose work is terminated early by a Contractor, for whatever reason, shall receive minimum reporting pay in accordance with the applicable Schedule

B. When an employee, who has completed their scheduled shift and left The Project site, is "called back" to perform special work of a casual, incidental or irregular nature, the employee shall receive pay for actual hours worked with a minimum guarantee, as may be required by the applicable Schedule A.

C. When an employee leaves the job or work location of their own volition or is discharged for cause or is not working as a result of the Contractor's invocation of Section 7 below, they shall be paid only for the actual time worked.

D. Except as specifically set forth in this Article there shall be no premiums, bonuses, hazardous duty, high time or other special payments of any kind.

E. There shall be no pay for time not actually worked except as specifically set forth in this Agreement or except where specifically provided in an applicable Schedule A.

SECTION 6. PAYMENT OF WAGES

A. Payday - Payment shall be made by check, drawn on a New Jersey bank with branches located within commuting distance of the job site. Paychecks shall be issued by the Contractor at the job site by 10 a.m. on Thursdays. In the event that the following Friday is a bank holiday, paychecks shall be issued on Wednesday of that week. Not more than 3 days wages shall be held back in any pay period. Paycheck stubs shall contain the name and business address of the Contractor, together with an itemization of deductions from gross wages.

B. Termination-Employees who are laid-off or discharged for cause shall be paid in full for that which is due them at the time of termination. The Contractors shall also provide the employee with a written statement setting forth the date of lay off or discharge.

SECTION 7. EMERGENCY WORK SUSPENSION

A Contractor or GC may, if considered necessary for the protection of life and /or safety of employees or others, suspend all or a portion of Project Work. In such instances, employees will be paid for actual time worked; provided, however, that when a Contractor request that employees remain at the job site available for work, employees will be paid for "stand-by" time at their hourly rate of pay.

SECTION 8. INJURY/DISABILITY

An employee who, after commencing work, suffers a work-related injury or disability while performing work duties, shall received no less than 8 hours wages for that day. Further, the employee shall be rehired at such time as able to return to duties provided there is still work available on the Project for which the employee is qualified and able to perform.

SECTION 9. TIME KEEPING

A Contractor may utilize brassing or other systems to check employees in and out. Each employee must check in and out. The Contractor will provide adequate facilities for checking in and out in an expeditious manner.

SECTION 10. MEAL PERIOD

A Contractor shall schedule an unpaid period of not more than 1/2 hour duration at the work location between the 3rd and 5th hour of the scheduled shift. A Contractor may, for efficiency of operation, establish a schedule which coordinates the meal periods of two or more crafts. If an employee is required to work through the meal period, the employee shall be compensated in a manner established in the applicable Schedule A.

SECTION 11. BREAK PERIODS

There will be no rest periods, organized coffee breaks or other non-working time established during working hours. Individual coffee containers will be permitted at the employee's work location. Local area practice will prevail for coffee breaks that are not organized.

ARTICLE 13 - APPRENTICES

SECTION 1. RATIOS

Recognizing the need to maintain continuing supportive programs designed to develop adequate numbers of competent workers in the construction industry and to provide craft entry opportunities for minorities, women and economically disadvantaged non-minority males, Contractors will employ apprentices in their respective crafts to perform such work as is within their capabilities and which is customarily performed by the craft in which they are indentured. Contractors may utilize apprentices and such other appropriate classifications as are contained in the applicable Appendix A in a ratio not to exceed the ratio provided in the applicable Appendix A providing prevailing wage and fringe benefits as defined in N.J.S.A. 34:11-56.26(9) for the classification in Monmouth County, New Jersey. Apprentices and such other classifications as are appropriate shall be employed in a manner consistent with the provisions of the appropriate collective bargaining agreement listed in Schedule A.

SECTION 2. DEPARTMENT OF LABOR

To assist the Contractors in attaining a maximum effort on this Project, the Unions agree to work in close cooperation with, and accept monitoring by, the New Jersey State and Federal Departments of Labor to ensure that minorities, women, or economically disadvantaged are afforded opportunities to participate in apprenticeship programs which result in the placement of apprentices on this Project. To further ensure that this Contractor effort is attained, up to 50% of the apprentices placed on this Project should be first year, minority, women or economically disadvantaged apprentices. The Local Unions will cooperate with Contractor request for minority, women or economically disadvantaged referrals to meet this Contractor effort.

SECTION 3. HELMETS TO HARDHATS

The Employers and the Unions recognize a desire to facilitate the entry into the building and construction trades of veterans who are interested in careers in the building and construction industry. The Employers and Unions agree to utilize the services of the Center for Military recruitment, Assessment and Veterans Employment (hereinafter “Center”) and the Center’s “Helmets to Hardhats” program to serve as a resource for preliminary orientation, assessment of construction aptitude, referral to apprenticeship programs or hiring halls, counseling and mentoring, support network, employment opportunities and other needs as identified by the parties.

The Unions and Employers agree to coordinate with the Center to create and maintain an integrated database of veterans interested in working on the Project and of apprenticeship and employment opportunities for the Project. To the extent permitted by law, the Unions will give credit to such veterans for bona fide, provable past experience.

ARTICLE 14 - SAFETY PROTECTION OF PERSON AND PROPERTY

SECTION 1. SAFETY REQUIREMENTS

Each Contractor will ensure that applicable OSHA requirements and other requirements set forth in the contract documents are at all times maintained on the Project and the employees and Unions agree to cooperate fully with these efforts. Employees must perform their work at all times in a safe manner and protect themselves and the property of the Contractor and the Owner from injury or harm. Failure to do so will be grounds for discipline, including discharge.

SECTION 2. CONTRACTOR RULES

Employees covered by this Agreement shall at all times be bound by the reasonable safety, security, and visitor rules as established by the Contractors and the GC for this Project. Such rules will be published and posted in conspicuous places throughout the Project.

SECTION 3. INSPECTIONS

The Contractors and GC retain the right to inspect incoming shipments of equipment, apparatus, machinery and construction materials of every kind.

ARTICLE 15 - NO DISCRIMINATION

SECTION 1. COOPERATIVE EFFORTS

The Contractors and Unions agree that they will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin or age in any manner prohibited by law or regulation. It is recognized that special procedures maybe established by Contractors and Local Unions and the New Jersey State Department of Labor for the training and employment of persons who have not previously qualified to be employed on construction projects of the type covered by this Agreement. The parties to this Agreement will assist in such programs and agree to use their best efforts to ensure that the goals for female and minority employment are met on this Project.

SECTION 2. LANGUAGE OF AGREEMENT

The use of the masculine or feminine gender in this Agreement shall be construed as including both genders.

ARTICLE 16 - GENERAL TERMS

SECTION 1. PROJECT RULES

The GC and the Contractors shall establish such reasonable Project rules as are appropriate for the good order of the Project, provided they do not violate the terms of this agreement. These rules will be explained at the pre-job conference and posted at the Project site and may be amended thereafter as necessary. Failure of an employee to observe these rules and regulations shall be grounds for discipline, including discharge. The fact that no order was posted prohibiting a certain type of misconduct shall not be a defense to an employee disciplined or discharged for such misconduct when the action taken is for cause.

SECTION 2. TOOLS OF THE TRADES

The welding/cutting torch and chain fall, are tools of the trade having jurisdiction over the work performed. Employees using these tools shall perform any of the work of the trade. There shall

be no restrictions on the emergency use of any tools or equipment by any qualified employee or on the use of any tools or equipment for the performance of work within the employee's jurisdiction.

SECTION 3. SUPERVISION

Employees shall work under the supervision of the craft foreperson or general foreperson.

SECTION 4. TRAVEL ALLOWANCES

There shall be no payments for travel expenses, travel time, subsistence allowance or other such reimbursements or special pay except as expressly set forth in this Agreement and in Schedule A.

SECTION 5. FULL WORK DAY

Employees shall be at their staging area at the starting time established by the Contractor and shall be returned to their staging area by quitting time after performing their assigned functions under the supervision of the Contractor. The signatories reaffirm their policy of a fair day's work for a fair day's wage.

SECTION 6. COOPERATION

The General Contractor and the Unions will cooperate in seeking any NJ State Department of Labor approvals that may be required for implementation of any terms of this Agreement.

ARTICLE 17 - SAVINGS AND SEPARABILITY

SECTION 1. THIS AGREEMENT

In the event that the application of any provision of this Agreement is enjoined, on either an interlocutory or permanent basis, or otherwise found in violation of law, the provision involved shall be rendered, temporarily or permanently, null and void but the remainder of the Agreement shall remain in full force and effect. In such event, the Agreement shall remain in effect for contracts already bid and awarded or in construction where the Contractor voluntarily accepts the

Agreement. The parties to this Agreement will enter into negotiations for a substitute provision in conformity with the law and the intent of the parties for contracts to be let in the future.

SECTION 2. THE BID SPECIFICATIONS

In the event that the General Contractor's bid specifications, or other action, requiring that a successful bidder become signatory to this Agreement is enjoined, on either an interlocutory or permanent basis, or otherwise found in violation of law such requirement shall be rendered, temporarily or permanently, null and void but the Agreement shall remain in full force and effect to the extent allowed by law. In such event, the Agreement shall remain in effect for contracts already bid and awarded or in constructions where the Contractor voluntarily accepts the Agreement. The parties will enter in to negotiations as to modifications to the Agreement to reflect the court action taken and the intent of the parties for contracts to be let in the future.

SECTION 3. NON-LIABILITY

In the event of an occurrence referenced in Section 1 or Section 2 of this Article, neither the Owner, the GC, or any Contractor, or any signatory Union shall be liable, directly or indirectly, for any action taken, or not taken, to comply with any court order, injunction or determination. Project bid specifications will be issued in conformance with court orders in effect and no retroactive payments or other action will be required if the original court determination is ultimately reversed.

SECTION 4. NON-WAIVER

Nothing in this Article shall be construed as waiving the prohibitions of Article 7 as to signatory Contractors and signatory Unions.

ARTICLE 18 - FUTURE CHANGES IN SCHEDULE A AREA CONTRACTS

SECTION 1. CHANGES TO AREA CONTRACTS

A. Schedules A to this Agreement shall continue to full force and effect until

the Contractor and/or Union parties to the Area Collective Bargaining Agreements which are the basis for Schedules A notify the General Contractor in writing of the mutually agreed upon changes in provisions of such agreements which are applicable to the Project, and their effective dates.

- B. It is agreed that any provisions negotiated into Schedules A collective bargaining agreements will not apply to work on this Project if such provisions are less favorable to this Project than those uniformly required of contractors for construction work normally covered by those agreements; nor shall any provisions be recognized or applied on this Project if it may be construed to apply exclusively, or predominantly, to work covered by this Project Agreement.
- C. Any disagreement between signatories to this Agreement over the incorporation into Schedules "A" of provisions agreed upon in the renegotiations of Area Collective Bargaining Agreements shall be resolved in accordance with the procedure set forth in Article 9 of this Agreement.

SECTION 2. LABOR DISPUTES DURING AREA CONTRACT NEGOTIATIONS

The Unions agree that there will be no strikes, work stoppages, sympathy actions, picketing, slowdowns or other disruptive activity or other violations of Article 7 affecting the Project by any Local Union involved in the renegotiations of Area Local Collective Bargaining Agreements nor shall there be any lock-out on the Project affective a Local Union during the course of such renegotiations.

IN WITNESS WHEREOF the parties have caused this Agreement to be executed and effective as of the _____ day _____, 20__.

General Contractor

**Monmouth & Ocean Counties
 Building and Construction Trades
 Council, AFL-CIO**

Signature

Presidents' Signature

Print Name

Print Name

Union Affiliates:

Asbestos, Lead & Hazardous Waste Laborers, Local 78

Boilermakers, Local 28

Bricklayers and Allied Crafts Workers, Local 4 &5 ADC/NJ

Carpenters, Local 255

Cement Masons, Local 592

Dockbuilders, Local 441

Dockbuilders, Local 1556

Electrical Workers, Local 400

Elevator Constructors, Local 5

Heat & Frost Insulators and Allied Workers, Local 32

Heat & Frost Insulators and Allied Workers, Local 89

Heavy Construction Laborers, Local 172

Heavy Construction Laborers, Local 472

Ironworkers, Local 11

Ironworkers, Local 399

Laborers, Local 77

Millwrights, Local 715

Operating Engineers, Local 825

**Painters and Allied Trades, District
Council Local 21**

Plumbers and Pipefitters, Local 9

Roofers, Local, 4

Roofers, Local 30

Sheet Metal Workers, Local 27

Sheet Metal Workers (Sign Hangers) Local 137

Sprinkler Fitters, Local 669

Sprinkler Fitters, Local 696

Teamsters, Local 469

Tile/Marble/Terrazo Workers, Local 7

SCHEDULE A

A COPY OF EACH UNION'S CURRENT COLLECTIVE BARGAINING AGREEMENT IS INCLUDED AS PART OF SCHEDULE A BY REFERENCE, UPON EXECUTION BY THE SIGNATORY LOCAL.

Asbestos, Lead & Hazardous Waste Laborers, Local 78

Boilermaker, Local 28

Bricklayers and Allied Crafts Workers, Local 4 & 5 ADC/NJ

Carpenters, Locals 255

Cement Masons, Local 592

Dockbuilders, Local 441

Dockbuilders, Local 1556

Electrical Workers, Local 400

Elevator Constructors, Local 5

Heavy Construction Laborers, Local 172

Heavy Construction Laborers, Local 472

Ironworkers, Local 11

Ironworkers, Local 399

Laborers, Local 77

Insulators and Allied Workers, Local 32

Insulators and Allied Workers, Local 89

Millwrights, Local 715

Operating Engineers, Local 825

Painters and Allied Trades, District Council 21

Plumbers and Pipefitters, Local 9

Roofers, Local 4

Roofers, Local 30

Sheet Metal Workers, Local 27

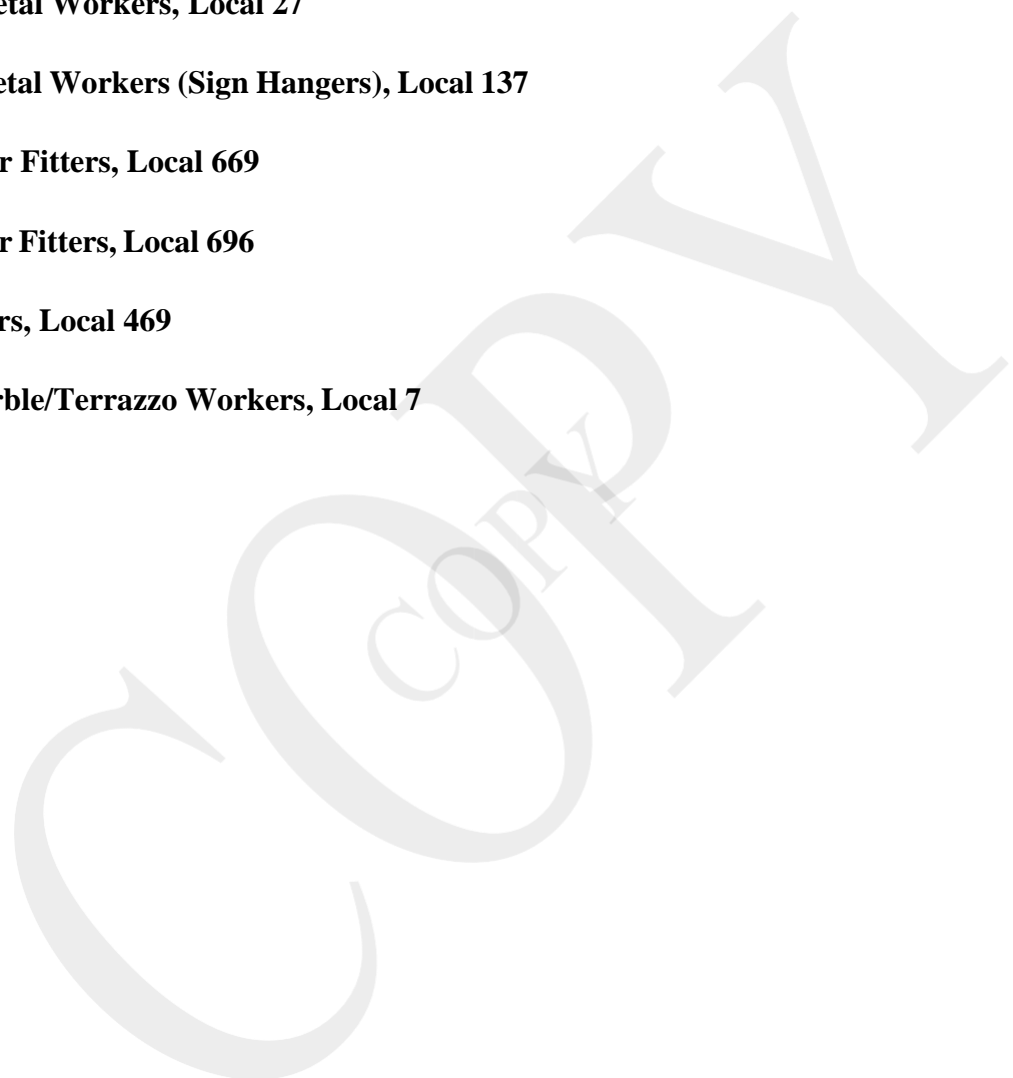
Sheet Metal Workers (Sign Hangers), Local 137

Sprinkler Fitters, Local 669

Sprinkler Fitters, Local 696

Teamsters, Local 469

Tile/Marble/Terrazzo Workers, Local 7



PROJECT LABOR AGREEMENT

COVERING CONSTRUCTION OF BUILDING 23 ADDITION & ALTERATIONS AT THE MARINE ACADEMY OF SCIENCE & TECHNOLOGY (MAST) IN SANDY HOOK, NEW JERSEY.

The parties hereby agree that all Tele-data work and associated electrical work performed on any of the sites during construction shall be done by employees represented by the signatory unions. For the purpose of this Agreement, Tele-data work shall include, but not limited to, the following: All receiving, placement, installation, operation, testing, inspection, maintenance, repair and service of radio, television, video, data, voice, sound, emergency call, microwave and visual production and reproduction apparatus, equipment and appliances used for domestic, commercial, education and entertainment purposes; all installation and erection of equipment, apparatus or appliance, cables and/or wire, emergency power (batteries) and all directly related work which becomes an integral part of the telecommunication and/or telecommunications related systems repair and service maintenance work of telecommunications systems and devices including, but not limited to, Private Branch Exchanges (PBX-PABX), Key equipment-owned, CCTV, CATV, card access, Systems RS 232 ethernet and/or any local area network system associated with computer installation.

General Contractor

IBEW Local 400

Signature

Signature

Print Name

Print Name

PROJECT LABOR AGREEMENT

COVERING CONSTRUCTION OF BUILDING 23 ADDITION & ALTERATIONS AT THE MARINE ACADEMY OF SCIENCE & TECHNOLOGY (MAST) IN SANDY HOOK, NEW JERSEY.

General Contractor agrees that when subcontracting for prefabrication of H.V.A.C. duct and other related sheet metal, such prefabrication shall be subcontracted to fabricators who pay their employees engaged in such fabrication not less than the prevailing wage for comparable sheet metal fabrication as established under agreements between local affiliates of (SMART) International Association of Sheet Metal, Air, Rail and Transportation Workers and local sheet metal fabricators.

General Contractor and the (SMART) International Association of Sheet Metal, Air, Rail and Transportation Workers agree to work with fabrication shops referenced in the Addendum. This joint effort will be directed at improving fabricators' competitiveness through the application of continuous improvement principles.

Sheet Metal Workers' Local #27

General Contractor

Signature

Print Name

Signature

Print Name

PROJECT LABOR AGREEMENT

**COVERING CONSTRUCTION OF BUILDING 23 ADDITION & ALTERATIONS AT
THE MARINE ACADEMY OF SCIENCE & TECHNOLOGY (MAST) IN
SANDY HOOK, NEW JERSEY**

LETTER OF ASSENT

Re: Project Labor Agreement
Monmouth & Ocean Counties Building & Construction Trades Council, AFL-CIO and The
Monmouth County Vocational School District.

The undersigned, as a General Contractor, Contractor(s) or Subcontractor(s) on a Contract which is part of large project construction for the Monmouth County Vocational School District, for and in consideration of the award of a Contract to perform work on said Project, and in further consideration of the mutual promises made in the Project Labor Agreement, a copy of which was received and is acknowledged, hereby:

- (1) On behalf of itself and all its employees, accepts and agrees to be bound by the terms and conditions of the Project Labor Agreement, together with any and all amendments and supplements now existing or which are later made thereto, and understands that any act of non-compliance with all such terms and conditions will subject the non-complying Contractor or employee(s) to being prohibited from the Project Site until full compliance is obtained.
- (2) Certifies that it has no commitments or agreements that would preclude its full compliance with the terms and conditions of said Projects Labor Agreement.
- (3) Agrees to secure from any Contractor(s) (as defined in said Project Labor Agreement) which is or becomes a Subcontractor(s) (of any tier), a duly executed Letter of Assent in form identical to this document prior to commencement of any work.

Company Name

By: _____

Contract Number _____

Title: _____

General Contractor _____

Date: _____

cc: (Unions employed by Contractor)

SECTION 07 56 00 - COLD FLUID APPLIED MEMBRANE ROOFING AND WATERPROOFING

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Cold Fluid Applied Roofing and Waterproofing.

1.2 RELATED SECTIONS

- A. Division 6 Section - Rough Carpentry: Wood Blocking and Nailers
- B. Division 7 Section - Sheet Metal Flashing and Trim.
- C. Division 15 Section - Plumbing Fixtures: Roof drain and plumbing vent flashing flanges

1.3 REFERENCES

- A. ASTM C 96 - Test Method for Specific Gravity and Absorption of Fine Aggregate
- B. ASTM C 473 - Standard Test Methods for Physical Testing of Gypsum Panel Products
- C. ASTM C 518 - Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus
- D. ASTM C 1289 - Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board
- E. ASTM D 570 - Standard Test Method for Water Absorption of Plastics
- F. ASTM D 1037 - Standard Test Methods for Evaluating Properties of Wood-Base Fiber and Particle Panel Materials
- G. ASTM D 2240 - Standard Test Method for Rubber Property-Durometer Hardness
- H. ASTM E 96 - Tests for Water Vapor Transmission of Materials in Sheet Form
- I. ASTM E 831 - Standard Test Method for Linear Thermal Expansion of Solid Materials by Thermomechanical Analysis
- J. SSPC - Steel Structures Painting Council painting standards.
- K. CRRC (Cool Roof Rating Council) - Standard 1
- L. FM - Approvals Guide
- M. FM Loss Prevention Bulletin 1-49
- N. SMACNA - Architectural Sheet Metal Manual

1.4 PERFORMANCE

- A. System assembly shall comply with FM / UL testing data showing that the system meets the local wind uplift requirements and provides a Class A fire-rated roof assembly.

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- B. System assembly shall be listed on the CRRC website coolroofs.org showing that the initial solar reflectance, thermal emittance, and SRI values comply with LEED requirements, local building code requirements, and/or any specific project requirements.

1.5 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Product Literature.
 - 2. Preparation instructions and recommendations.
 - 3. Storage and handling requirements and recommendations.
 - 4. Installation methods.
 - 5. Safety Data Sheets (SDS) for all components.
- C. Shop Drawings: Show including plans and details of cold fluid-applied polymethyl methacrylate liquid resin membrane system including membrane, penetration flashings, base flashings, and expansion joints size, flashing details, and attachment.
- D. Verification Samples: For each product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, thickness, color, texture and surfacing.
- E. Manufacturer's Certificates: Certify products meet or exceed specified requirements.
- F. Field Quality Control: Submit the following.
 - 1. Daily inspection and testing reports
 - 2. Substrate and Bond Testing Reports
 - 3. Completed Membrane Inspection Reports
- G. Closeout Submittals: Submit roofing/waterproofing manufacturer and applicator's warranty and ensure forms have been completed in Owner's name and registered with manufacturer.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing reinforced liquid resin roofing/waterproofing membranes with a minimum of 20 years of documented experience with applications in the United States.
- B. Installer Qualifications: Company specializing in performing the work of this section with a minimum of 3 years documented experience and approved by system manufacturer for warranted membrane installation.
- C. Installer's Field Supervision: Maintain a full-time Supervisor/Foreman on job site during all phases of roofing work while roofing work is in progress
- D. Manufacturer's Field Service: Membrane manufacturer shall provide the services of a competent field representative on-site to provide the following inspections:
 - 1. Job start inspection at the beginning of each phase of the project, to review special detailing conditions and substrate preparation.
 - 2. Periodic in-progress inspections throughout duration of the project to evaluate membrane and flashing application.
 - 3. Observe field quality control testing.
 - 4. Final punch-list inspection at the completion of each phase of the project prior to

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installation of any surfacing or overburden materials.

5. Warranty inspection to confirm completion of all punch list items, surfacing, and overburden application.

- E. Source Limitations: Obtain all principal components of roofing/waterproofing system from a single manufacturer. Secondary products that are required shall be as recommended and approved in writing by the roofing/waterproofing system manufacturer. Upon request of the Architect or Owner, submit Manufacturer's written approval of secondary components in list form, signed by an authorized agent of the manufacturer.

- F. Electronic Field Vector Mapping (EFVM) testing is required on the completed membrane prior to the installation of overburden or aggregate coating/finish as part of the final field quality control. EFVM testing shall be arranged through the membrane manufacturer and performed by International Leak Detection (ILD) or an approved testing company. Check project compatibility with the membrane manufacture and ensure that all necessary components for the EFVM testing are included in the design. Testing shall be observed by the manufacturer's field service representative.

1.7 PRE-INSTALLATION CONFERENCE

- A. Convene a pre-roofing conference approximately two weeks before scheduled commencement of roofing/waterproofing system installation and associated work.

- B. Require attendance of installers of substrate construction to receive roofing/waterproofing, installers of work in and around roofing/waterproofing which must precede or follow roofing/waterproofing work including mechanical and electrical penetration, equipment openings, subsequent finish work, and the Architect, Owner, and roofing/waterproofing system manufacturer's representative.

- C. Objectives include:
 1. Review foreseeable methods and procedures related to roofing/waterproofing work, including set up and mobilization areas for stored material and work area.
 2. Tour representative areas of roofing/waterproofing substrates, inspect and discuss condition of substrate, penetrations and other preparatory work.
 3. Review structural loading limitations of deck and inspect deck for loss of flatness and for required attachment.
 4. Review roofing/waterproofing system requirements, Drawings, Specifications and other Contract Documents.
 5. Review and finalize schedule related to roofing/waterproofing work and verify availability of materials, installer's personnel, equipment and facilities needed to make progress and avoid delays.
 6. Review required inspection, testing, certifying procedures.
 7. Review weather and forecasted weather conditions and procedures for coping with unfavorable conditions, including possibility of temporary roofing.
 8. Record conference including decisions and agreements reached. Furnish a copy of records to each party attending.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging with labels intact until ready for installation.

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- B. Store materials off the ground or on pallets, under cover and in a cool, dry location, out of direct sunlight, in accordance with manufacturer's recommendations. Store roll goods horizontally on platforms sufficiently elevated to prevent contact with water and other contaminants. Do not use rolls that are wet, dirty or have damaged ends. Materials must be kept dry at all times. Plastic wrapping installed at the factory should not be used as outside storage covers.
- C. Do not store materials in quantities that exceed design loads, damage substrate materials, hinder installation or drainage.
- D. Follow manufacturer's directions for protection of materials prior to and during installation. Do not use materials that have been damaged to the point that they will not perform as specified. Fleece reinforcing materials must be clean, dry and free of all contaminants.
- E. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of the local authorities having jurisdiction.
- F. Maintain copies of all current SDS for all components on site. Provide personnel with appropriate safety data information and training as it relates to the specific chemical compounds to be utilized.

1.9 SEQUENCING

- A. Apply roofing/waterproofing in a timely manner in conjunction with work of other trades. Coordinate with other trades to avoid traffic over or against completed membrane surfaces.
- B. Coordinate with installation of drains as shown on Drawings, including flashing, and associated roofing/waterproofing work.
- C. Field Quality Control:
 - 1. On-Site Substrate Testing of substrates shall be successfully completed prior to installation of roofing/waterproofing membrane.
 - 2. Field Quality Control Tests of completed sections of waterproofing membrane shall be successfully completed before proceeding with protection layers and overburden. Schedule tests promptly to allow timely installation of protection layers.

1.10 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.
- B. Do not apply roofing/roofing/waterproofing membrane during or with the threat of inclement weather.
- C. Application of roofing/waterproofing membrane may proceed while air temperature is between 23 degrees F (minus 5 degrees C) and 95 degrees F (40 degrees C) and providing the substrate is a minimum of 5 degrees F above the dew point.
- D. When ambient temperatures are at or expected to fall below 70 degrees F (21 degrees C), or reach 85 degrees F (30 degrees C) or higher, follow Membrane System Manufacturer's recommendations for weather related application procedures.

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- E. Ensure that substrate materials are dry and free of contaminants. Do not commence with the application unless substrate conditions are suitable. Contractor shall demonstrate that substrate conditions are suitable for the application of the materials.
- F. Where required by the Architect, implement odor control and elimination measures prior to and during the application of the roofing/roofing/waterproofing materials. Control/elimination measures shall be field tested at off-hours and typically consists of 1 or a multiple of the following measures
 - 1. Sealing of air intakes with activated carbon filters. Install filters in accordance with requirements and recommendations of the filter manufacturer. Seal filters at joints and against building exterior walls to prevent leakage of unfiltered air.
 - 2. Sealing of doorways, windows, and skylights with duct tape and polyethylene sheeting to prevent leakage of air into the building.
 - 3. Erection and use of moveable enclosure(s) sized to accommodate work area(s) and stationary enclosure for resin mixing station. Enclosure shall be field constructed or pre-manufactured of fire retardant materials in compliance with local requirements in accordance with requirements of the Owner or his designated Representative. Provide enclosure(s) with mechanical air intake/ exhaust openings and Odor Control Air Cleaners, as required to clean enclosed air volume and to prevent odor migration outside the enclosure. Exhaust opening shall be sealed with activated carbon filter
 - 4. Protection of Contractor personnel and occupants of the structure and surrounding buildings as necessary to comply with requirements of OSHA, NIOSH and/or governing local authority.

1.11 WARRANTY

- A. Manufacturer's Premier Warranty: Provide 25 year manufacturer's premier warranty that provides for cost of labor and materials for loss of watertightness, limited to amounts necessary to effect repairs necessitated by either defective material or defects in related installation workmanship, with no dollar limitation ("NDL").
- B. Roofing/waterproofing applicator's Warranty: Provide 5 year "Applicator Maintenance Warranty" covering workmanship for all work of this section including installation of membrane, flashings, metal work, and roofing/waterproofing accessories.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Base of Design: Kemper System America, Inc., which is located at: 1200 North America Drive; West Seneca, NY 14224; Toll Free Tel: 800-541-5455; Fax: 716-558-2978; Email:[request info \(inquiry@kempersystem.com\)](mailto:request info (inquiry@kempersystem.com)); Web:<http://www.kemper-system.com/us/eng>
 - 1. Local Contacts:
 - a. Architecture/Engineering/General Contractor
Jae Horbacz – Mobile (347) 949-0373
Email - jhorbacz@kempersystem.com
- B. Requests for substitutions will be considered in accordance with provisions of Division 1 Section , Product Requirements.

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2.2 PRODUCTS, GENERAL

- A. Materials shall be products of a single manufacturer or items standard with manufacturer of membrane roofing/waterproofing system. Provide secondary materials that are produced or are specifically recommended by manufacturer of membrane roofing/waterproofing system to ensure compatibility.

- B. Monolithic Membrane: Kemper System America's monolithic membrane is created in the field by combining the KEMPEROL 2K FR two-part, cold fluid-applied reactive cure polyurethane resin with Kemperol polyester reinforcing fleece. Kemperol polyester reinforcing fleece is a 360 degree needle punched non-woven 165 g/m2 polyester reinforcing fleece, for a finished dry film membrane thickness of .080 inch nominal per ply. Moisture-cured Polymethyl-methacrylate (PMMA), MMA and Aromatic Polyurethanes are not permitted. Membrane shall have the following properties:
 - 1. Physical Properties: All times are approximate and depend upon air flow, humidity and temperature.
 - a. Color: As Selected by Architect from Manufactures Standard Resin Colors
 - b. Physical State: Cures to Solid
 - c. Bright White Solar Reflectance (initial) CRRC Rated 0.87, ASTM C 1549
 - d. Bright White Thermal Emittance (initial) CRRC Rated 0.90, ASTM C 1371
 - e. Bright White SRI (initial) 110, ASTM E 1980
 - f. Thickness (165 Fleece): 80 mils
 - g. VOC Content: 2.0 g/l
 - h. Peak load @ break 70 lbf CMD - 100 lbf MD, ASTM D 4073
 - i. Elongation: Min 30 percent, ASTM D 5147
 - j. Tearing Strength 60.0 lbs/in, ASTM D 4073
 - k. Dimensional stability D 1204: 0.15 percent
 - l. Puncture resistance FTMS 101-2031: 140 lbs.
 - m. Water absorption D 570: Less than 3 percent
 - n. Impact resistance D 2240: Shore A 75 plus or minus 15 percent
 - o. Crack spanning: 0.08 inch (2 mm)
 - p. Usage time: 30 minutes
 - q. Rainproof after: 2 hours
 - r. Solid to walk on after: 24 hours
 - s. Completely hardened: 3 days
 - t. Short-term temperature resistance: 482 degrees F (250 degrees C)

- C. Membrane Flashings: Composite of the same resin material as field membrane with 165 g/m2 fleece reinforcement.

- D. Substrate Primer and Resin Additives:
 - 1. Polyurethane Primer: Kempertec D/R primer ,two-component, solvent-free polyurethane resin for use in improving adhesion of membrane to wood, metal and bituminous substrate surfaces.
 - 2. Epoxy Primer: Kempertec EP5 primer, two-component, solvent-free epoxy resin for use in improving adhesion of membrane to cementitious/masonry substrate surfaces.
 - 3. Cold Weather Additive: Kemperol A 2K-PUR Accelerator, additive specifically designed to accelerate the resin reaction time at ambient temperatures below 50 degrees F (10 degrees C). Accelerator to be used with resin Component A prior to mixing of multi-component resin.

- E. Insulation:

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1. Flat Foam Polyisocyanurate Insulation with Coated Glass Fiber Facers: Hunter Panels -H-Shield CG, 1.0 inch minimum thickness, with the following characteristics:
 - a. ASTM C 1289, Type II, Class 2:
 - 1) Grade 2 (20 psi)
 - 2) Grade 3 (25 psi)
 - b. Board Size:
 - 1) 48 by 48 inches
 - 2) 48 by 96 inches
 - c. Board Thickness:
 - d. R Value: Provide Insulation with LTTR (Long Term Thermal Resistance) in accordance with ASTM C 1289.
 - e. Board Edges: Square
2. Tapered Polyisocyanurate Insulation with Coated Glass Fiber Facers: Hunter Panels- Tapered H-Shield, 1.0 inch minimum thickness, with the following characteristics:
 - a. ASTM C 1289, Type II, Class 2:
 - 1) Grade 2 (20 psi)
 - 2) Grade 3 (25 psi)

F. Insulation Cover Board:

1. Cement Roof Board: USG - SECUROCK Cement Board, high compressive strength, non-combustible, roof underlayment board consisting of aggregated Portland cement slurry with polymer-coated glass-fiber mesh, with the following characteristics:
 - a. Board Weight: 2.4 lbs/sq.ft.
 - b. Board Size: 48 by 48 inches and 48 by 96 inches
 - c. Board Thickness: 1/2 inch
 - d. Flexural Strength: > 750 psi, parallel, per ASTM C 947
 - e. Compressive Strength: > 1000 psi nominal
 - f. Flute Spannability: 12 inches, per ASTM E 661
 - g. Permeance: 5.84 perms, per ASTM E 96
 - h. Thermal Conductivity: R-value of 0.39 as determined by ASTM C 518
 - i. Coefficient of thermal expansion: 4.5 by 106 per ASTM E 831
 - j. Linear variation w change in moisture: < 0.07 percent maximum per ASTM D 1037
 - k. Water absorption: < 15 percent maximum per ASTM C 473
 - l. Mold resistance: 10 per ASTM D 3273
 - m. Board Edges: Square

G. Insulation and Cover Board Securement:

1. Cover Board Fastening to Metal Deck only-
 - a. Mechanical Fasteners: Trufast FM-approved corrosion resistant insulation fasteners of appropriate length with plates. Securement pattern shall be in accordance with specified wind uplift rating for system application. Roofing fasteners shall be a type approved by membrane and insulation manufacturer.
2. Insulation & Cover Board Securement above 1st Layer Cover Board
 - a. InsulationFoamable Adhesive: Millennium One Step Foamable Adhesive is a highly elastomeric, one-step, all-purpose, foamable adhesive that contains no solvents. It is designed for use as an adhesive for bonding approved roof insulation and cover board to a building's structural roof deck, base sheets, and smooth or properly prepared graveled built-up roof surfaces. Roofing adhesive shall be a type approved by membrane and insulation manufacturer.

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2.3 ACCESSORIES

- A. Citrus-Based Cleaner for Membrane: Kempertec Klean.
- B. Aggregate Specification and Size: All surfacing aggregates shall be washed, kiln-dried, dust-free, suitable for broadcast, round grain or angular, and sized as follows:
 - 1. Kemperol Surfacing Sand (1) #14 (0.8 to 1.5 mm) for coarse surfacing.
 - 2. Mixing Proportions shall be a ratio of resin to sand at 1:2 by volume for leveling, 1:4 by volume for patching, or as approved by membrane manufacturer.
- C. Backer Rod: Expanded, closed-cell polyethylene foam designed for use with cold-applied joint sealant.
- D. Joint Sealant:
 - 1. Cover Board/Insulation: Kempertec Joint Sealant, single component, non-sag elastomeric polyurethane sealant for use in sealing joints, cracks, gaps, and transitions in cover boards, insulation, plywood and miscellaneous other sealant applications.
- E. Wood Nailers and Cant Strips: New wood nailers and cant strips shall be pressure treated for rot resistance using Wolmanized or Osiose K-33, #2 or better lumber. Asphaltic or creosote treated lumber is not acceptable.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared and conditions are suitable to proceed with the Work of this specification.
 - 1. Substrates shall be inspected and repaired as needed to provide a proper surface to receive roofing/waterproofing system.
 - 2. Identify incompatible or unsatisfactory substrates, if any.
- B. Verify substrate openings, curbs, and protrusions through deck/substrate, wood blocking and reglets are in place and solidly set.
- C. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. General: Surfaces to be prepared as a substrate for the new roofing/waterproofing system as follows:
 - 1. Determine the condition of the existing structural deck/substrate. All defects in the deck or substrate shall be corrected before new roofing/waterproofing work commences. Areas of deteriorated deck/substrate, porous or other affected materials must be removed and replaced with new to match existing.
 - 2. Prepare flashing substrates as required for application of new roofing/waterproofing membrane flashings.
 - 3. Inspect substrates, and correct defects before application of new roofing/waterproofing. Fill all surface voids greater than 1/8 inch wide with an acceptable fill material.
 - 4. Remove all ponded water, snow, frost and/or ice from the work substrate prior to installing new roofing/waterproofing materials.

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5. Substrate for roofing/waterproofing shall be clean, dry, free of loose, spalled or weak material including coatings, mineral aggregate, and flood coat/gravel surfacing, oil, grease, contaminants, abrupt changes in level, roofing/waterproofing agents, curing compounds, and free of projections which could damage membrane materials.
- B. On-Site Substrate Testing: Perform tests at the beginning of the Work, and at intervals as required to assure specified substrate conditions with a minimum of 3 tests per 5000 SF area to be waterproofed. Smaller areas shall receive a minimum of 3 tests. Submit test results to the Architect promptly as they are completed. Notify the Architect immediately in the event the test results are below specified values. Do not begin application of waterproofing until acceptable conditions are achieved.
1. Cementitious Substrates:
 - a. Evaluate Surface moisture content by means of a Tramex Concrete Moisture Encounter Meter CME4 in accordance with ASTM F 2659. A surface moisture content of under 5 percent is required to allow for proper primer penetration into the substrate.
 - b. Frothing, bubbling, or pinholes within the primer indicates excessive moisture content within the substrate, beneath the surface. Blistering of membrane may result from excessive substrate moisture. Primer application during late afternoon/early evening will reduce vapor pressure within the substrate and may alleviate these conditions.
 - c. Continued frothing, bubbling, or pinholes indicates excessive moisture content that requires more substantial measures. Evaluate substrate moisture content by:
 - 1) Relative Humidity (RH) test in accordance with ASTM F 2170: Relative moisture content of 75 percent or greater indicates the need for more extensive substrate priming and sealing.
 - 2) Anhydrous Calcium Chloride Test in accordance with ASTM F 1869: Maximum result 3 lb / 1,000 ft² of area per 24-hour period, greater values indicates the need for more extensive substrate priming and sealing
 - 3) Where results exceed the maximum acceptable reading contact Membrane Manufacturer for recommendations.
 2. Substrate Bond Strength:
 - a. Evaluate bond strength by means of Elcometer Adhesion Tester Model 106 or similar device, or by the performance of a manual pull test.
 - b. Tensile bond strength of membrane to substrate must be greater than or equal to 150 psi (1.0 N/mm²).
 - c. Adequate surface preparation will be indicated by 135 degree peel bond strength of membrane to substrate such that cohesive failure of substrate or membrane occurs before adhesive failure of membrane/ substrate interface.
 - d. In the event the bond strengths are less than the minimum specified, additional substrate preparation and testing is required. Repeat testing to verify suitability of substrate preparation.
 - e. Where results exceed the maximum acceptable reading contact Membrane Manufacturer for recommendations.
- C. Steel/Metal:
1. Clean and prepare metal surfaces to near white metal in accordance with SSPC - SP3, Power Tool Cleaning, or as required by Roofing/waterproofing Manufacturer. Extend preparation a minimum of 1 inch beyond the termination of the membrane flashing materials.

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- 2. In addition to cleaning, all metal surfaces shall be abraded to provide a rough open surface. A wire brush finish is not acceptable.
- D. Wood/Plywood: Plywood shall be identified with American Plywood Association (APA) grade trademarks and meet the requirements of Product Standard PS1.
 - 1. Fit plywood to all penetrations, projections, and nailers. Plywood shall be secured, with joints not greater than 1/4 inch. Fill all joints and gaps up to 1/2 inch with polyurethane joint sealant.
 - 2. Strip all plywood joints with fleece reinforcement imbedded into the wet primer or resin. Under no circumstances shall the membrane be left unsupported over a space greater than 1/4 inch.
- E. Other Flashing Surfaces:
 - 1. Remove all contaminants as required by membrane manufacturer. Surface preparation shall be performed by means approved by Architect and Roofing/waterproofing Manufacturer.

3.3 WOOD NAILER INSTALLATION

- A. Install pressure-treated wood nailers as indicated, and as required by the Membrane manufacturer. Wood nailers are required to match the thickness of insulation and cover board, and are to be secured directly to the structural deck. Wood nailers shall be installed at all roof edges and on either side of expansion joints, as well as beneath any equipment flanges.
- B. Wood nailers shall be firmly fastened to the deck. Mechanically fasten wood nailers as required to resist a force of 200 lbs per lineal foot, but with no less than 5 fasteners per 8 foot or 6 fasteners per 10 foot length of nailer. Refer to current FM Loss Prevention Bulletin 1-49 for additional attachment recommendations.

3.4 INSULATION AND COVER BOARD INSTALLATION

- A. General: Install insulation and cover board accordance with the manufacturer's current published specifications and recommendations for use with adhered roofing.
 - 1. Install only as much insulation and cover board as can be primed, sealed, and protected before the end of the day's work or before the onset of inclement weather.
 - 2. Fit insulation and cover board at all penetrations, projections, and nailers. Insulation shall be loosely butted, with joints not greater than 1/4 inch. All joints greater than 1/2 inch shall be filled with acceptable insulation. Cover board shall be loosely butted, with joints not greater than 1/4 inch. All joints of 1/2 inch or greater shall be filled with polyurethane sealant.
 - 3. Strip all insulation and cover board joints with polyester fleece reinforcement imbedded into the wet primer or resin. Under no circumstances shall the membrane be left unsupported over a space greater than 1/4 inch.
 - 4. Stagger multiple layers of insulation and cover board a minimum of 6 inches in each direction.
 - 5. Steel Deck Substrates: Place boards perpendicular to steel deck flutes with edges over flute surface for bearing support. Edges shall be checked so that no edges are left substantially unsupported along the flutes.
 - 6. Drain Sumps: Insulation shall be feathered or tapered to provide a sump area a minimum of 36 inches by 36 inches where possible at all drains. Taper insulation around roof drains so as to provide proper slope for drainage. In areas where feathered

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or tapered insulation leaves insulation core exposed, cover with an appropriate cover board or base sheet/cap sheet assembly to provide a sound and smooth substrate surface.

7. Tapered Insulation: Place tapered thickness insulation to the required slope pattern in accordance with insulation manufacturer's instructions. Provide and install drainage crickets as required for positive drainage pattern round all rooftop obstructions.

B. Cover Board Attachment to Metal Deck

1. Mechanical Attachment: Mechanically attach insulation and cover board using fastener manufacturers' recommendations for the appropriate fastener and plate type, size and length. Reference FM approvals for fastening patterns to satisfy FM wind uplift requirements with additional fasteners as required in the corner and perimeter regions of the roof. Fasten boards to steel deck at dovetail flutes only. Fasteners that penetrate the inner deck, exposed to view will not be accepted.

C. Cover Board and Insulation Attachment above 1st Layer of Cover Board over Metal Deck

1. Foamable Adhesive Attachment: Follow insulation, cover board and adhesive manufacturers' recommendations for the appropriate adhesive application rate and application procedure. Place the boards onto the roofing adhesive beads. Walk on the boards to spread the roofing adhesive for maximum contact. Periodically walk on the boards until firmly attached. Reference FM approvals for adhesive application patterns that satisfy FM wind uplift requirements. Additional adhesive is required in the corner and perimeter regions of the roof. Secure insulation/cover board in accordance with approval requirements.

3.5 PRIMER APPLICATION

A. General:

1. Mix and apply two-component primer in strict accordance with written instructions of Membrane Manufacturer.
2. Substrate surface must be dry, with any remaining dust or loose particles removed using clean, dry, oil-free compressed air, industrial vacuum, cloth wipe or a combination of methods.
3. Do not apply primer on any substrate containing asphalt, coal-tar pitch, creosote or penta-based materials unless approved in writing by Membrane Manufacturer. Some substrates may require additional preparation before applying primer.

B. Mixing of Kempertec D Primer:

4. Premix primer Component A thoroughly with a spiral agitator. Pour entire unit of primer Component B into entire unit of primer Component A and mix the components for approximately 2 minutes with a clean spiral agitator on slow speed without creating any bubbles or streaks. DO NOT AERATE. Primer solution should be a uniform color, with no light or dark streaks present.
5. Do not thin primer. Determine required primer coverage for each substrate material/condition and apply in strict accordance with written instructions of Membrane Manufacturer.

C. Mixing of Kempertec EP5 Primer: Also to be used when ambient temperature is 50 degrees F (10 degrees C) and below.

1. Premix primer Component A thoroughly with a spiral agitator or stir stick. Pour entire unit of primer Component B into entire unit of primer Component A and mix the

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components for approximately 2 minutes with a clean spiral agitator on slow speed without creating any bubbles or streaks. DO NOT AERATE. Primer solution should be a uniform color, with no light or dark streaks present.

2. Do not thin primer. Determine required primer coverage for each substrate material/condition and apply in strict accordance with written instructions of Membrane Manufacturer.
3. Mix only full units of primer. Primer pot life is approximately 20 minutes.

D. Mixing of Kempertec R Primer:

1. Premix primer Component A within clear pouch to obtain consistent appearance. Remove separation cord. Knead primer Component B into Component A and mix the components for approximately 1 minute. The Primer solution should be a uniform color, with no light or dark streaks present.
2. Do not thin primer. Determine required primer coverage for each substrate material/condition and apply in strict accordance with written instructions of Membrane Manufacturer.
3. Mix only full units of primer. Primer pot life is approximately 5-10 minutes.

E. Application:

1. After mixing, apply the primer with a roller or brush evenly onto the surface in a cross directional method, or utilizing the pour and spread method to fully cover the substrate.
2. Porous and higher moisture content concrete substrates may require an adjustment to the primer application rate or multiple coats to achieve proper pore saturation.
3. For EP and EP5 Primer applications, broadcast Kemperol Surfacing sand (0, #18) at the rate of 50 lbs. / 100 ft² into the wet primer to increase surface area and enhance adhesion. Remove excess sand after primer has fully cured prior to membrane application.
4. Curing time is approximately 12-16 hours for D primer and approximately 3-4 hours for R and EP5 primers. Kemperol membrane may be applied when the primer is completely dry and without tack. Do not apply Kemperol membrane to tacky or wet primer.
5. Exposure of primer in excess of 8 days or premature exposure to moisture may require abrasion of contaminated surface and application of new primer coat.

3.6 MEMBRANE APPLICATION

A. General:

1. Apply the roofing/waterproofing membrane immediately following full curing of the primer in order to obtain the best bond between primer and membrane.
2. Mix and apply cold fluid-applied reinforced polyurethane roofing/waterproofing membrane in strict accordance with written instructions of Membrane Manufacturer.
3. Primed substrate surface shall be dry, with any remaining dust or loose particles removed using clean, dry, oil-free compressed air, industrial vacuum, cloth-wipe or a combination.
4. Protect all areas where membrane has been installed. Do not work off installed membrane during application of remaining work before 48 hours of curing. Movement of materials and equipment across installed membrane is not acceptable. If movement is necessary, provide complete protection of affected areas.
5. Follow the Membrane Manufacturer's recommendation for hot and cold weather application. Monitor surface and ambient temperatures, including the effects of wind

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chill.

B. Mixing of Kemperol REFLECT 2K FR Resin:

1. Premix resin Component A with a spiral agitator until the liquid is a uniform color. If the ambient temperature is below 50 degrees F (10 degrees C), then a weather related additive should be combined and mixed into the Component A.
2. Accelerator should be added to resin Component A when ambient temperature is 50 degrees F (10 degrees C) and below. Accelerator should be mixed with the spiral agitator for 2 minutes or until both liquids are thoroughly blended.
3. Pour entire resin Component B into entire resin Component A and thoroughly mix the components with a clean spiral agitator. The Resin solution should be a uniform color, with no light or dark streaks present. Mix only full units, do not break down units.
4. Resin pot life is approximately 30 minutes.

C. Application of Resin/Fleece:

1. After the Resin is mixed, using a Kemperol roller nap or brush, apply 2/3 of the resin liberally and evenly onto the surface. Covering one working area at a time, between 10 - 15 sq.ft.
2. Roll the Kemperol Fleece directly into the resin, making sure the SMOOTH SIDE IS FACING UP (natural unrolling procedure), avoiding folds and wrinkles. The fleece will begin to rapidly saturate with the liquid resin mix. Use the roller or brush to work the resin into the fleece, saturating from the bottom up, and eliminating air bubbles, wrinkles, etc. It is important to correct these faults before the resin cures.
3. Apply the remaining 1/3 of the resin to the top of fleece to complete the saturation. Rolling the final coat of resin onto the fleece should result in a glossy appearance. The fleece can only hold so much resin and all excess should be rolled forward to the unsaturated portion of the fleece. The correct amount of resin will completely saturate the fleece. Work wet membrane to avoid any blisters, openings, or lifting at corners, junctions, and transitions. Always assure full resin saturation of fleece.
4. Prevent contact between mixed/unmixed resin and new/existing membrane. If any unmixed resin contacts membrane surface remove immediately and clean thoroughly with a cloth rag.
5. At all fleece seams, allow a 2 inch (5 cm) overlap for all side joints and a 4 inch (10 cm) overlap for all end joints.
6. At membrane tie-offs, clean in-place membrane with MEK when resin has cured. Allow solvents to fully evaporate before application of new resin. **DO NOT APPLY PRIMER TO EXISTING KEMPEROL MEMBRANE.**

3.7 FLASHING APPLICATION

A. Alkalinity Protection:

1. Where placement of concrete, mortar or adhesive setting beds are required over sections of the waterproofing membrane or flashing, apply manufacturer's epoxy primer/coating at the manufacturer's recommended coverage rate, with broadcast to excess of kiln-dried silica sand into wet primer/coating.
2. Protection shall extend a minimum of 1 foot (0.3m) past the concrete form on all sides.
3. Provide continuous cleaning with water and brush to eliminate settlement of concrete residues on in-place waterproofing membrane adjacent to area of concrete placement.

B. Pipes, Conduits, and Unusually Shaped Penetrations:

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1. Flashing is typically constructed as a two part assembly consisting of a vertical wrap and a horizontal target patch. Provide a minimum of a 2 inch (5 cm) overlap between vertical and horizontal flashing components.

C. Drains and Scuppers:

1. Acceptable drain and scupper materials are galvanized, galvalum, cast iron, cast aluminum, copper, hard PVC, and ABS.
2. Flashing material shall extend 4 inches minimum onto drain or scupper flange and into drain/ scupper body.
3. Install clamping ring if provided as part of the drain or scupper design. Install a strainer basket to prevent debris from clogging the drainage line.
4. Custom fabricate through-wall scuppers of 316L stainless steel in dimensions indicated on drawings.

D. Flexible Penetrations:

1. Provide a weathertight gooseneck of round cross-section for each penetration or group of penetrations. Set in water cut-off mastic and secure to the structural substrate.
2. Flashing is typically constructed as a two part assembly consisting of a vertical wrap and a horizontal target patch. There must be a minimum of a 2 inch (5 cm) overlap between vertical and horizontal flashing components.

E. Walls, Curbs and Base Flashings:

1. Wall, curb and base flashings shall be installed to solid substrate surfaces only. Adhering to gypsum-based panels, cementitious stucco, synthetic stucco, wood or metal siding, and other similar materials is not acceptable.
2. Reinforce all transition locations and other potential wear areas with a 4 inch wide membrane strip evenly positioned over the transition prior to installing the exposed flashing layer.
3. Reinforce all inside and outside corners with a 4 inch diameter conical piece of membrane prior to installing the exposed flashing layer.
4. All pins, dowels and other fixation elements shall be flashed separately with a vertical flashing component prior to installing the exposed flashing layer.
5. Extend flashing a minimum of 4 inches onto the field substrate surface.

F. Drip Edges and Gravel Stops:

1. Metal drip edges and gravel stops shall be installed to solid substrate surfaces or wood nailers only. Securement to gypsum-based panels, cementitious stucco, synthetic stucco, wood or metal siding or coping, and other similar materials is not acceptable.
2. Flash all drip edges and gravel stops by extending the field membrane all the way to the edge of the exposed face prior to installing the metal edging. Strip in the metal flange with a separate 8 inch wide strip of membrane adhered to both the securement flange and to the field membrane.
3. For conditions where water infiltration behind the exposed drip edge or gravel stop face is possible, install a separate membrane layer positioned behind the face area and extending a minimum of 4 inches past the securement flange onto the field substrate prior to installing the drip edge or gravel stop.

G. Field Fabricated Control or Expansion Joint Flashing:

1. Control or expansion joints in excess of 2 inches in width and all expansion joints subject to vehicular traffic require the use of a separate engineered joint system.
2. For non-vehicular expansion joints in excess of 2 inches apply a minimum 8 inch strip of Kemperol membrane onto the primed field substrate on both sides of the joint. Lay

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expansion joint into the liquid membrane while wet. Following the initial embedment, cover the top fleece surface of the expansion joint material with a second 13 inch strip of Kemperol membrane, overlapping the fleece portion of the expansion joint, the first layer of Kemperol membrane and terminating on the field substrate.

3. For expansion joints that are less than 2 inches grind or otherwise bevel the inside edges of the joint opening to provide a smooth transition edge for the fleece.
4. Flashing typically consists of a fully saturated membrane bottom layer looped into the joint as a cradle, a compressible foam or rubber insert at 25 percent compression fitted into the joint, and a membrane top layer applied over the joint. Extend both fleece layers 4 inches minimum onto the field substrate on both sides of the joint.
5. Apply the field membrane tying into the entire joint area.

H. Electrical Conduit, Gas Lines and Lightning Protection

1. Supports for electrical conduit and gas lines greater than 1 inch in diameter require the use of a separate engineered support system.
2. Supports for electrical conduit and gas lines 1 inch or less in diameter, and bases for lightning protection rods and cable, can be adhered directly to the membrane surface with a single-component, polyurethane construction adhesive.

3.8 MEMBRANE PREPARATION FOR SURFACINGS AND COATINGS

- A. Membrane must be clean and dry, and free of all contaminants that may interfere with the adhesion of the surfacing and coating to the membrane surface.
- B. Membrane exposed less than 48 hours prior to application of surfacing and coating materials does not require special surface preparation. It is highly recommended that all surfacing and coating materials be applied to the membrane surface within 48 hours.
- C. Membrane exposed longer than 48 hours will require sanding/scuffing of the surface to remove the hard gloss finish, followed by an MEK or acetone solvent wipe.

3.9 SURFACING AND FINISHES

A. Aggregate Finish Surfacing

1. Where specified, provide and install approved kiln-dried silica sand, or other approved mineral surfacing to achieve an aesthetic and/or non-skid surface.
2. Pre-mix single-component and two-component coatings prior to application to achieve an even consistency.
3. Broadcast specified and approved sand or aggregate in excess into a bonding coat application of Membrane Manufacturer's approved methyl methacrylate-based aggregate coating system applied over clean, cured membrane at the manufacturer's recommended application rate. Aggregate shall be applied to excess to obtain uniform and full coverage.
4. Following minimum 1 hour cure time remove loose/un-embedded mineral aggregate by blowing with oil-free compressed air or with a vacuum. Re-broadcast clean mineral aggregate as required to provide full embedment and coverage of membrane.
5. Seal aggregate surface with a sealing coat application of Membrane Manufacturer's approved aggregate coating, applied at the manufacturer's recommended application rate. After completion of surfacing, avoid any traffic for a minimum of 6 hours to allow for surfacing to cure.

B. Adhesion Key:

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1. Where placement of cementitious or non-cementitious materials is required over sections of the roofing/waterproofing membrane or flashing, apply manufacturer's methyl methacrylate primer/coating at the manufacturer's recommended coverage rate, with broadcast to excess of kiln-dried silica sand into wet primer/coating.

3.10 TEMPORARY CLOSURES AND WATERSTOPS

- A. Ensure that moisture does not damage any completed section of the new roofing/waterproofing system. Completion of flashings, terminations, and temporary closures shall be completed as required to provide a watertight condition. All temporary closures shall be made as recommended or required by the membrane manufacturer.

3.11 PROTECTION

- A. Upon completion of roofing/waterproofing and flashings and associated work, institute appropriate procedures for surveillance and protection of roofing during remainder of construction period. Protect all areas where membrane has been installed

3.12 FIELD QUALITY CONTROL

- A. Electronic Field Vector Mapping (EFVM) test shall be completed prior to the installation of the overburden, but after the membrane receives a final inspection. Test shall be scheduled through the membrane manufacturer a minimum two weeks prior to the test and completed by an approved testing company. All located deficiencies shall be repaired and followed by a re-inspection by the membrane manufacturer.
- B. Prepare a written report of results of successful and unsuccessful inspection testing and submit to Architect within 7 days following each test. Report shall include date of test, project name, list of products being applied and tested, name of applicator, name of Contractor, and conditions causing failure of roofing/waterproofing in event of an unsuccessful test.
- C. Complete all post installation procedures in accordance with the manufacturer's guidelines for warranty issuance of the specified warrantee.
- D. Notification of Completion: Notify the membrane manufacturer of job completion and schedule a final inspection date.
- E. Final Inspection: At the completion of the Work meet with the membrane manufacturer's technical field representative to evaluate the completed installation of the field and flashing membrane. Complete all previously noted punch list items prior to the scheduled meeting.
- F. Correction of Work: Work that does not conform to specified requirements including tolerances, slopes, and finishes shall be corrected and/or replaced. Any deficiencies of membrane application, termination and/or protection as noted during the Membrane Manufacturer's inspections shall be corrected and/or replaced.

3.13 CLEANING

- A. Clean-Up: Site cleanup, including both interior and exterior building areas that have been affected by construction, shall be restored to preconstruction condition.
- B. Roofing/waterproofing materials, components and accessories shall be removed from Site

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and taken to a legal dumping area authorized to receive such materials.

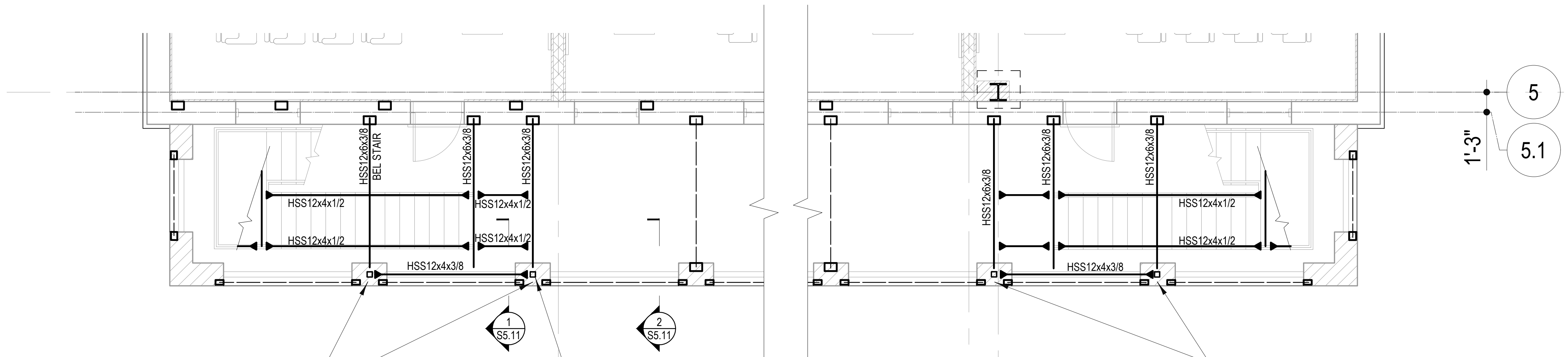
- C. Disposal of Primer and Resin: Cured resin may be disposed of in standard landfills. Uncured resin is considered a hazardous material and must be handled as such, in accordance with local, state and federal regulation

3.14 PROTECTION

- A. Protect building components with tarps or other suitable materials, from soil, stains, or spills at all hoisting points and areas of application.
- B. Any such damage shall be repaired at Contractor's expense to Owner's satisfaction or be restored to original condition.
- C. Provide barricades, retaining ropes, safety elements and any appropriate signage required.
- D. Protect finished roofing/waterproofing membrane from damage by other trades by the use of a cushioning layer such as 1 inch thick expanded polystyrene insulation and an impact layer such as 1/2 inch thick exterior-grade plywood.
- E. Do not allow waste products containing petroleum, grease, acid, solvents, vegetable or mineral oil, animal oil, animal fat, etc. or direct steam venting to come into direct contact with the membrane unless approved by manufacturer's chemical resistance chart.
- F. Eliminate construction traffic on newly tested membrane systems. Do not store construction materials on unprotected membrane surfaces.
- G. Membrane areas that are observed to be trafficked or used as a storage/working platform shall be retested and immediately repaired and covered with insulation and drainage composite.

END OF SECTION 07 56 00

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CAREFULLY DEMO BRICK PIERS AT FIRST FLOOR. STOCKPILE BRICK AND RECONSTRUCT PIER AROUND HSS POST AFTER STEEL HAS BEEN INSTALLED. GROUT ANY CAVITIES SOLID

1 PARTIAL PLAN - PORCH STAIR FIRST FLOOR
S5.10

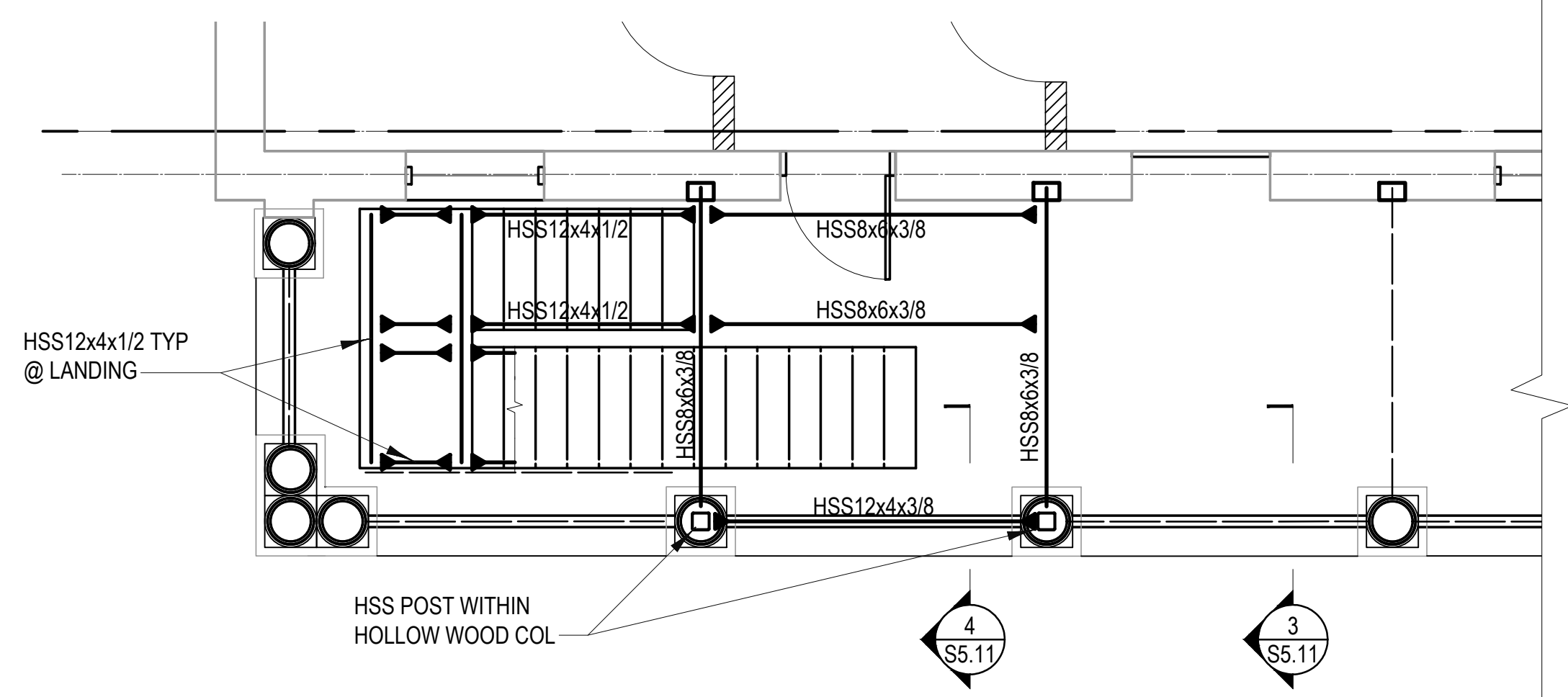
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HSS POST UP TO SECOND FLOOR FRAMING, TYP AT STEEL PORCH FRAMING

CAREFULLY DEMO BRICK PIERS AT FIRST FLOOR. STOCKPILE BRICK AND RECONSTRUCT PIER AROUND HSS POST AFTER STEEL HAS BEEN INSTALLED. GROUT ANY CAVITIES SOLID

5 5.1

1'-3"



2 PARTIAL PLAN - PORCH STAIR SECOND FLOOR
S5.10

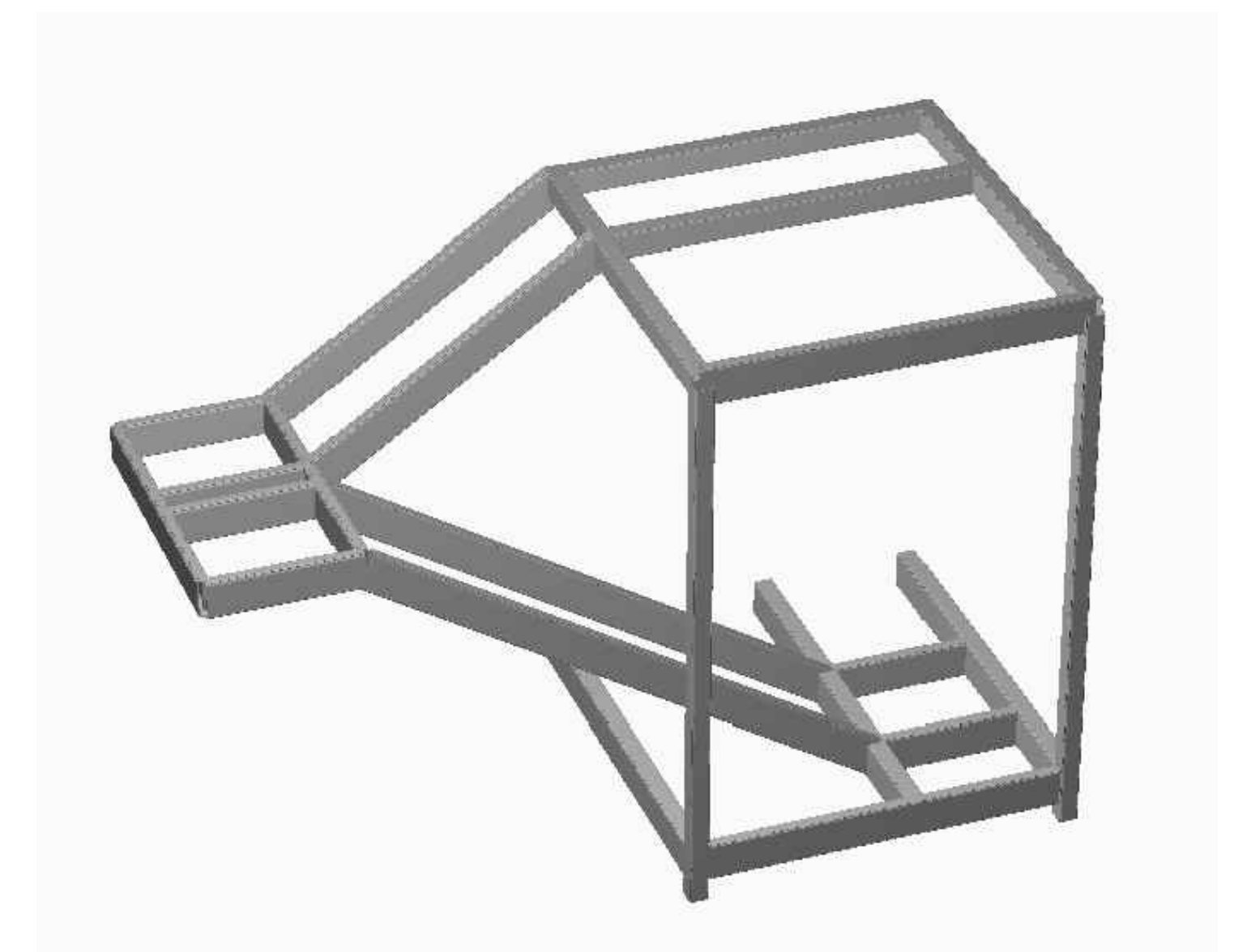
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HSS12x4x1/2 TYP @ LANDING

HSS POST WITHIN HOLLOW WOOD COL

PORCH STAIR NOTES:

1. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS AND ELEVATIONS.
2. STEEL FRAMING AT PORCH SHALL BE GALVANIZED.
3. THE PORCH STAIR IS A DELEGATED DESIGN ITEM. THE STAIR HAS BEEN DESIGNED TO A LEVEL NECESSARY TO ESTIMATE LOADS IMPARTED TO THE BUILDING STRUCTURE. STAIR CONNECTION DETAILS ARE CONCEPTUAL AND HAVE BEN DEVELOPED BASED ON A PRELIMINARY ANALYSIS OF THE STAIR'S LAYOUT AND LOADS. THE STRINGER SIZES SHOWN AND THE CONNECTION CONCEPTS MUST BE VERIFIED BY THE MONUMENTAL STAIR EOR. THE CONTRACTOR SHALL SUBMIT SIGNED AND SEALED STRUCTURAL ANALYSIS DATA FOR THE COMPLETE DESIGN OF THE STAIR, ITS COMPONENTS AND CONNECTIONS.



3 ISO - PORCH STAIR RENDERING
S5.10

SCALE AT FULL SIZE 1/4"=1'-0"

Denise Richards Professional Engineer
NJ PE No. 246E05649700

PORCH STAIR PLAN AND SECTIONS

M.A.S.T. NAVAL SCIENCE BUILDING No. 23
MONMOUTH COUNTY VOCATIONAL SCHOOL DISTRICT
FORT HANCOCK, SANDY HOOK
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EVAN A. WAGNER AIA 21838

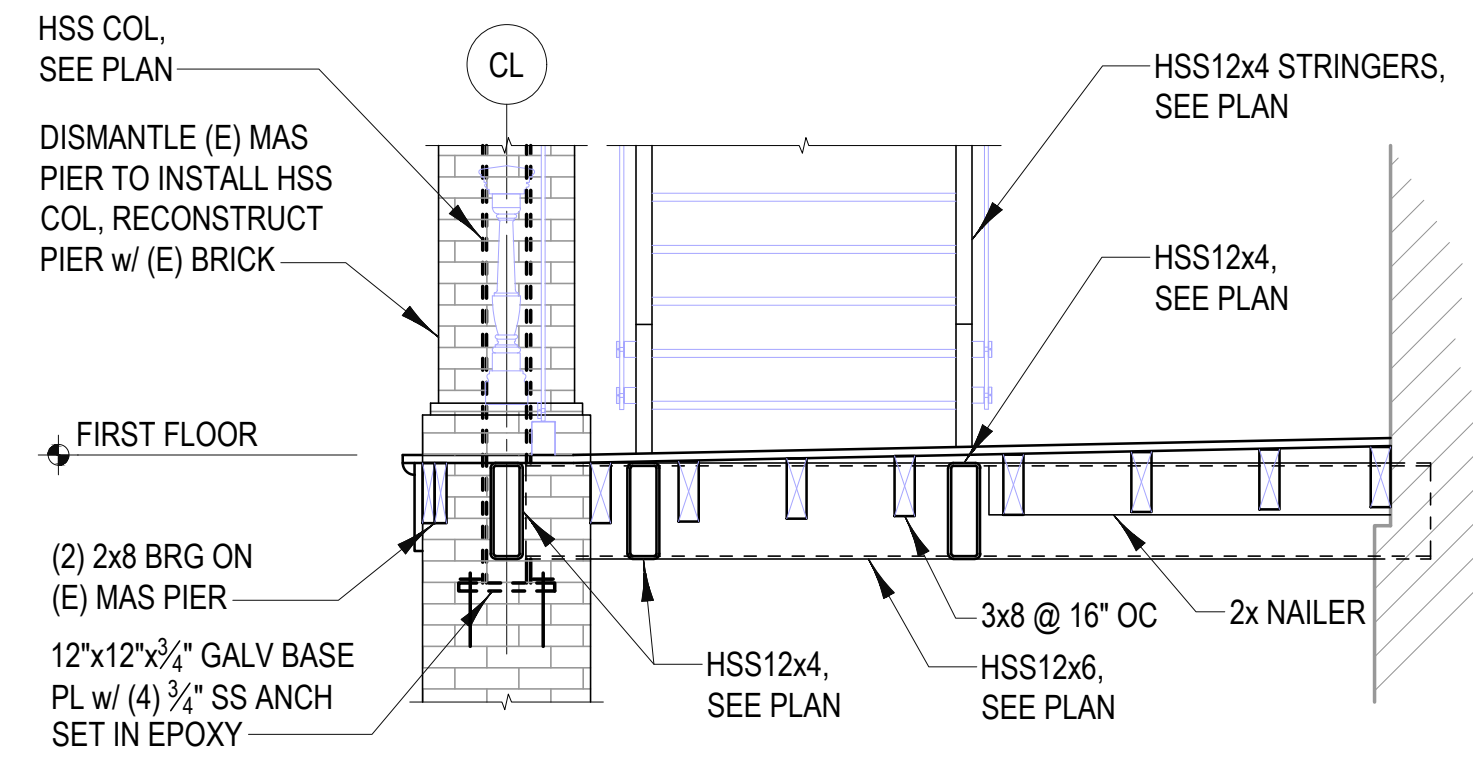
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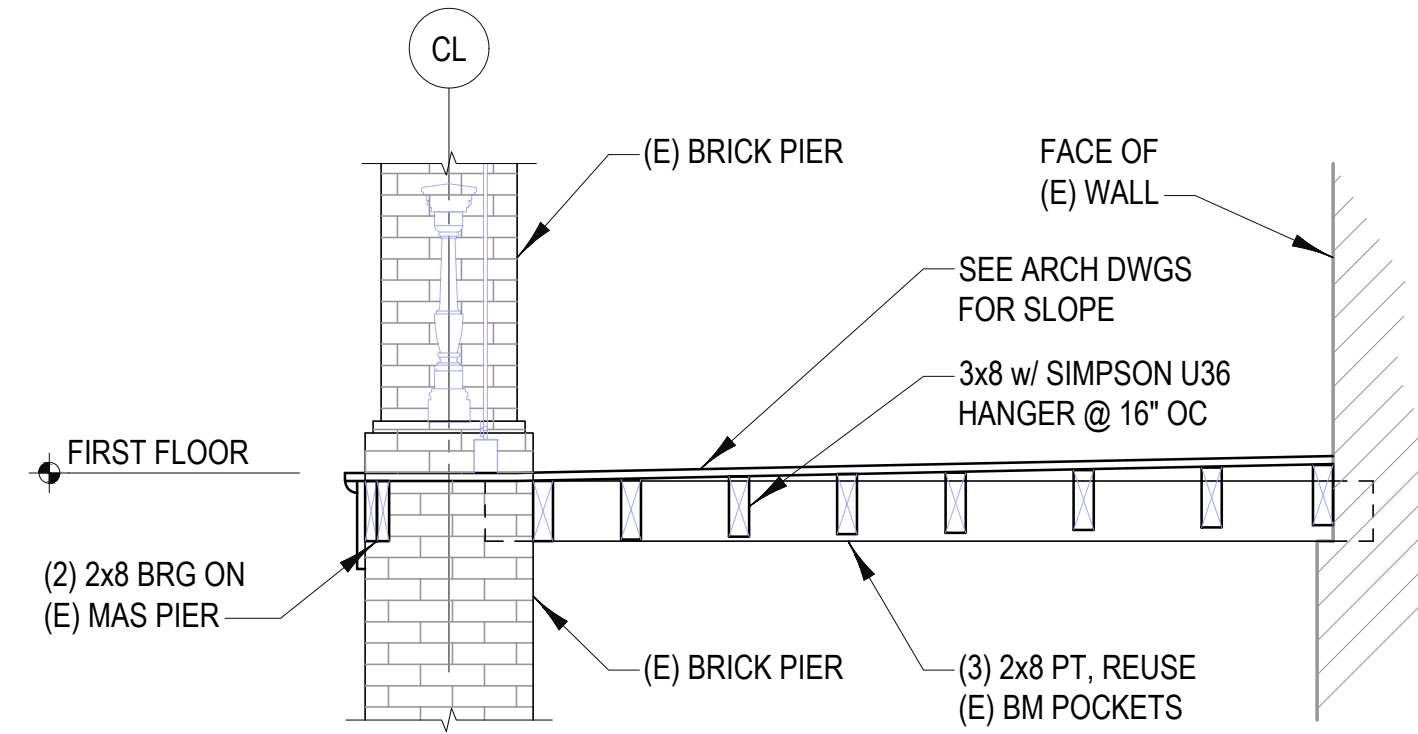
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NOT FOR CONSTRUCTION

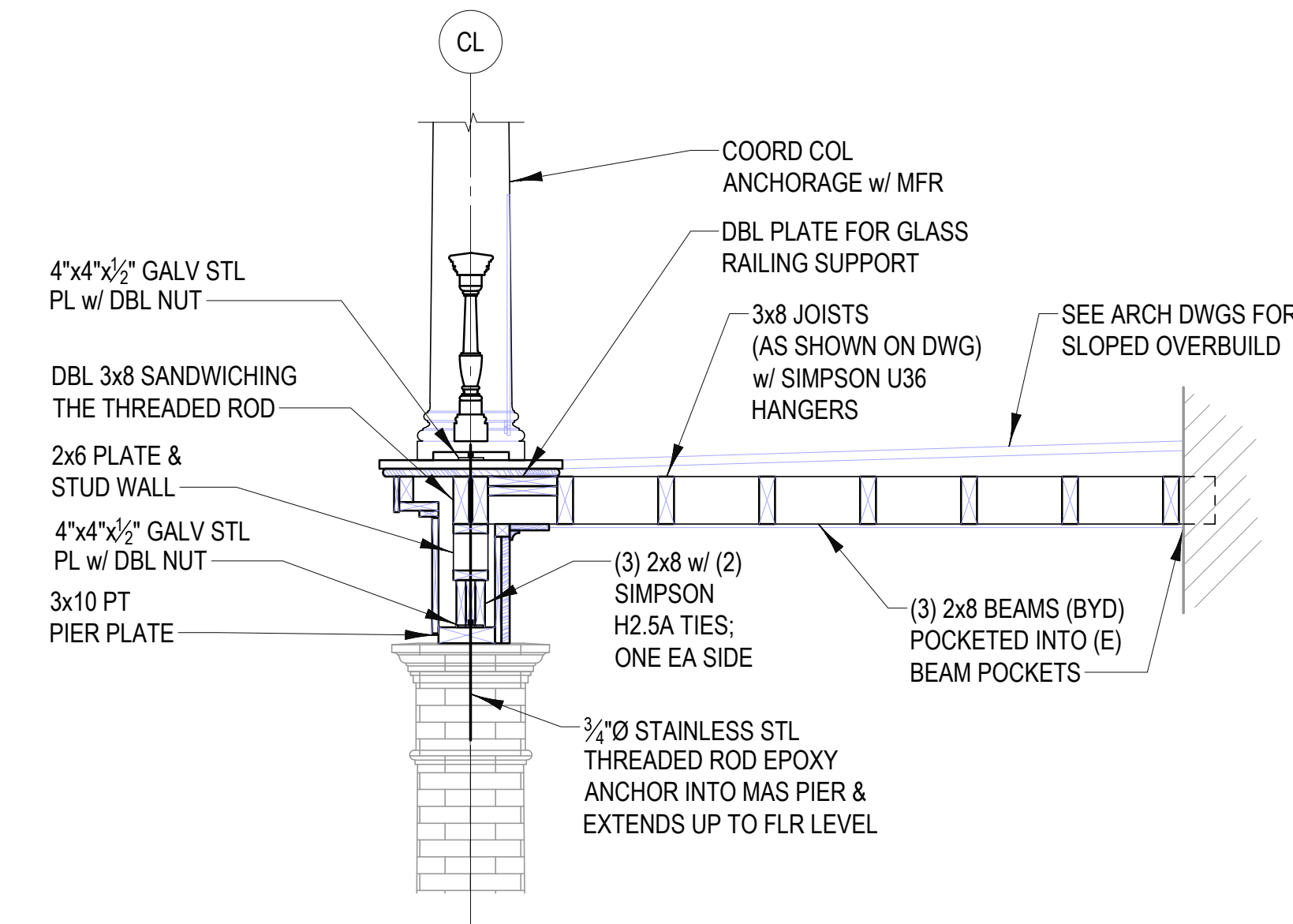
BLDG 23
S5.10



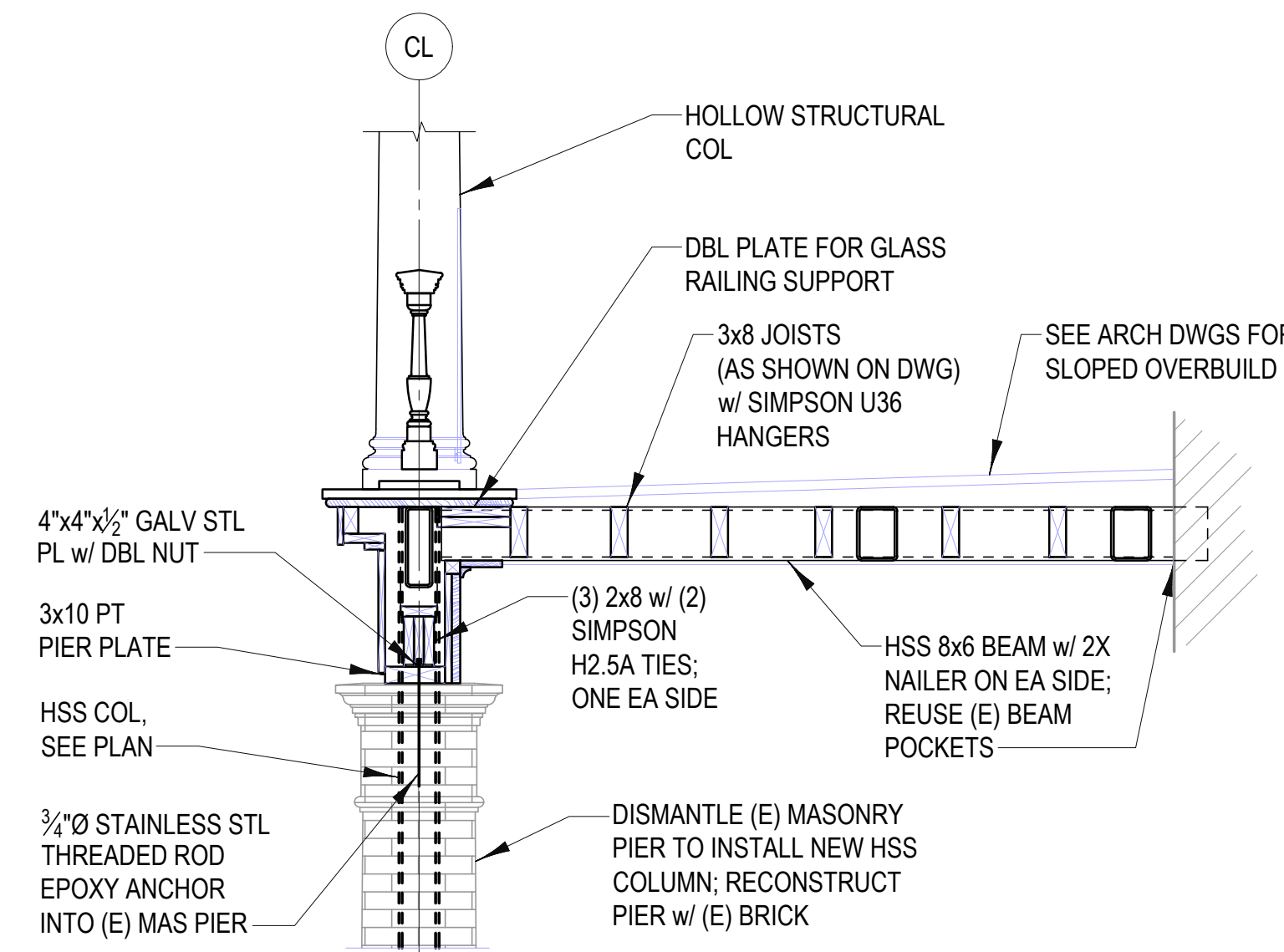
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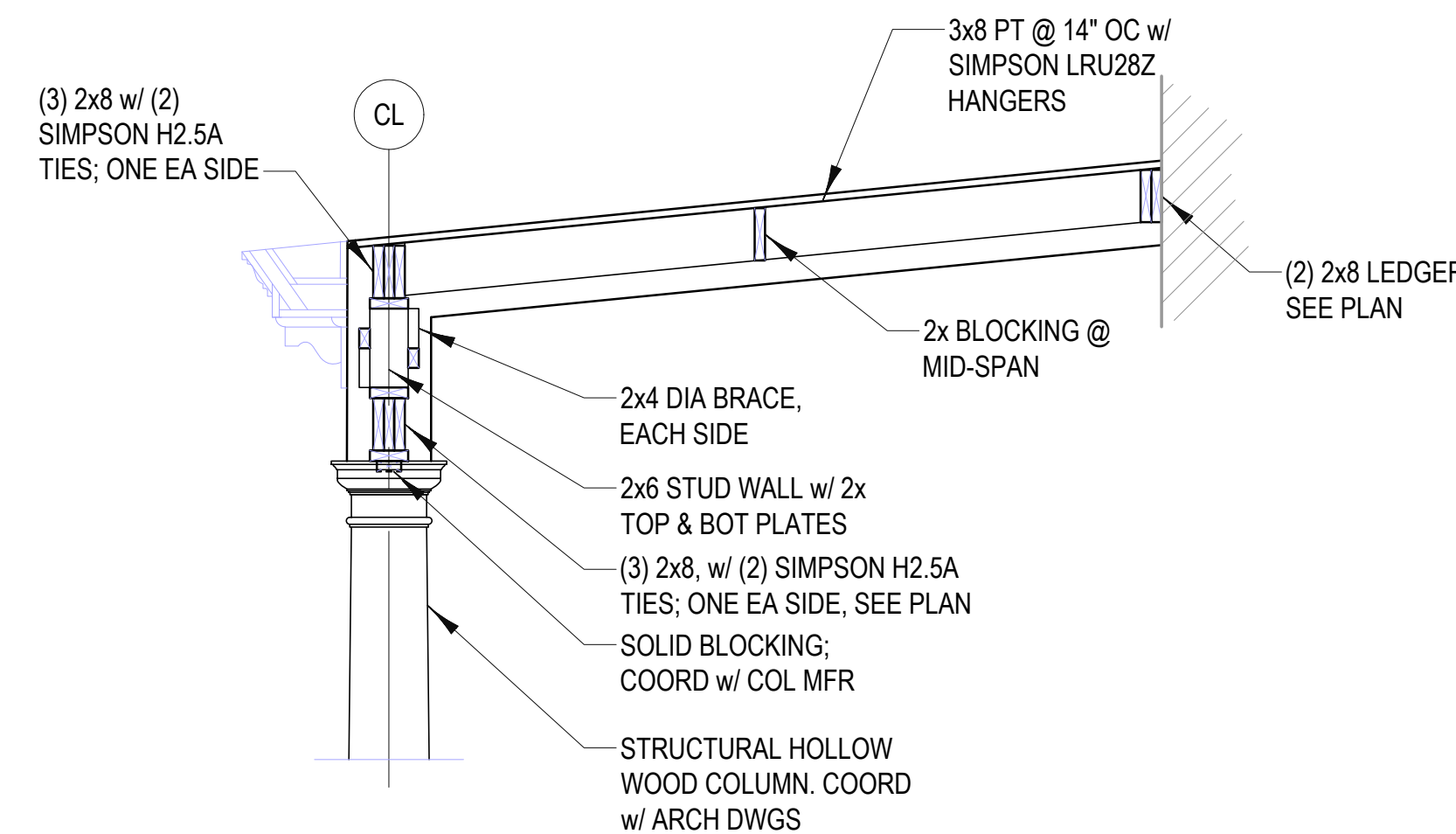
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3 SECTION
S5.11
SCALE AT FULL SIZE 1/2"=1'-0"



4 SECTION
S5.11
SCALE AT FULL SIZE 1/2"=1'-0"



5 SECTION
S5.11
SCALE AT FULL SIZE 1/2"=1'-0"

Denise Richards Professional Engineer
NJ PE No. 24605649700

PORCH STAIR PLAN AND SECTIONS
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architects

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S5.11

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