



Stirling & Wilbur Engineering Group

7085 South Tamiami Trail

Sarasota FL 34231

941.929.1552

CA6482

BID DOCUMENTS

May 12, 2023

Project: Harbor House West – West Face / Windows Repairs, hereinafter referred to as the PROJECT

Owner Name: Harbor House Owners Association, Inc., hereinafter referred to as the OWNER

Location: 226 Golden Gate Point, Sarasota, FL 34236

Engineer: Stirling & Wilbur Engineering Group, hereinafter referred to as the ENGINEER

Owner Representative: Kurt Kennedy, 503-799-4543, hereinafter referred to the OWNER REPRESENTATIVE

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Invitation to Bid

Sealed proposals will be accepted at the offices of the ENGINEER.

*Sealed proposals will be accepted until 4:00 PM on **TBD**.*

Bids must be addressed to the OWNER. Bids will not be opened publicly.

Deliver Proposals to the ENGINEER, do not deliver proposals to the OWNER.

Emailed bids will be accepted, send to bstirling@stirlingwilbur.com

Late bids will be returned unopened.

Bidders must visit the site prior to bid preparation to familiarize themselves with the site and conditions thereof. There will be a **mandatory pre-bid conference** held on site at 11:00 AM, **TBD**. Bidders may visit the site between 10:00 AM and 3:00 PM, Monday through Friday. Prior to site visits after the pre-bid conference, please notify the OWNER REPRESENTATIVE.

The OWNER reserves the right to reject any or all proposals, with or without cause, and accept the proposal, which in their judgment, best serves the interests of the OWNER.

Instructions to Bidders

1.01 Sealed Proposals:

- A. Sealed proposals will be received at the time and place designated in the "Invitation to Bid" for furnishing all labor, materials, tools, equipment supervision, and services necessary, and performing all operations required for the completion of the work described in the enclosed specifications and drawings.

1.02 Delivery of Proposals:

- A. Proposals may be emailed to the Engineer or delivered by the bid date and time to the Engineer in sealed envelopes bearing on the outside the words "BID ENCLOSED" and the name of the bidder and his address and clearly marked as well as the PROJECT name and OWNER name. Bids are due **TBD**.

And addressed to the OWNER.

And delivered to the ENGINEER.

1.03 Proposal Forms:

- A. The bidder shall submit his proposal on the form furnished herewith, together with an exact copy of the completed form. The blank spaces shall be filled in correctly for each item and for every item for which a bid is tendered. The bidder shall state the price, typewritten or written in ink, for which he proposes to do each item of the work.

1.04 Signature on Proposal:

- A. The bidder shall sign his proposal correctly. If an individual makes the proposal, his name and post office address shall be shown. If made by a firm or partnership, the name and post office address of the firm or partnership shall be shown. If made by a corporation, the person signing the proposal shall show his or her title and the corporation business address.

1.05 Familiarity with Laws:

- A. The bidder is assumed to be familiar with all federal, state, and local laws, ordinances, rules and regulations that may in any manner affect the work. The failure to familiarize himself with applicable laws will in no way relieve him of responsibility.

1.06 Examination of Site and Contract Documents:

- A. The bidder is required, before submitting his proposal, to visit the site of the proposed work and familiarize himself with the nature and extent of work and any local conditions that may in any manner affect the work to be done and the equipment, materials, and labor required. Bidder is also required to examine carefully the Contract Documents.

1.07 Contract Time:

- A. Time is of the essence. Contractor shall submit with their bid the time requirements for the project as described. Bidders will be prepared to submit a detailed schedule within 15 days of bid. It is anticipated the work will begin in the fall of 2023.

1.08 Qualifications of Bidders:

- A. The Contract will be awarded only to a responsible Contractor, qualified by experience to do the work specified herein. The bidder shall submit, prior to award of the Contract, satisfactory evidence of his experience in like work and that he is fully prepared with the necessary organization, capital, equipment, and machinery to complete the work to the satisfaction of the OWNER within the time limit stated in the proposal. Within five (5) days of opening the bids, the Bidder must be prepared to submit the following information, upon request by the Owner:
 - (i) Financial statement
 - (ii) Proposed project personnel, including resumes of project superintendent and project manager (both shall be fluent in English)
 - (iii) Listing of all sub-contractors and material suppliers intended for use on the project
 - (iv) Statement of current workload requirements
 - (v) Bond commitment letter
 - (vi) Site utilization plan for equipment, access, and storage areas

1.09 Right to Reject Proposals:

- A. The OWNER reserves the right to reject any and all proposals, with or without cause, and to waive technical errors and informalities, and to accept the proposal, which in his judgment, best serves the OWNER.

1.10 Award of Contract:

- A. The award of the Contract, if it is awarded, will be to the lowest responsible bidder whose qualifications indicate the award will be to the best interest of the OWNER and whose proposal shall comply with the requirements of the Contract Documents. Time is of the essence for this project. In no case will the award be made until all necessary investigations have been made into the responsibility of the low bidders and the OWNER is satisfied that the bidders are qualified to do the work and have the necessary organization, capital, and equipment to carry out the provisions of the contract to the satisfaction of the OWNER within the time specified.

1.11 Failure to Execute the Contract:

- A. The failure on the part of the successful bidder to execute the contract as required will be just cause for the annulment of the award.

1.12 Interpretations and Clarifications of the Contract Documents:

- A. All questions about the meaning or intent of the Contract Documents shall be submitted to the ENGINEER.
- B. Replies will be issued by Addenda to all parties recorded by the ENGINEER as having received the Bidding Documents. Questions received less than three days prior to the date for opening of Bids will not be answered. Only questions answered by the ENGINEER, by formal written Addenda, will be binding. Oral or other interpretations or clarifications will be without legal effect.

1.13 Time of Award:

- A. The OWNER reserves the right to hold all proposals for a period not to exceed 90 days after the bid date stated in the Invitation to Bid.

1.14 Alternates:

- A. Bidders are encouraged to submit equal or better alternates. Include a separate price for each alternative or option described in the Specifications and provided for in the Bid Form. **THE BID FORM MUST BE REFLECTIVE OF THE PROJECT AS SPECIFIED.** The Owners shall have total authority to act upon such and may reject any proposed alternate without cause of any type.

1.15 Working Hours and Conditions:

- A. The hours of work shall be restricted to 7:00 a.m. to 6:00 p.m., Monday to Friday, except Holidays. No noise will be allowed before 8:00 a.m. or after 5:00 p.m. A contractor's representative will be on site at all times work is being done. No radios are permitted on site. Shirts and proper safety equipment shall be worn at all times. Refer to Section 01100 for additional Requirements.
- B. OWNER is a non-smoking campus / property; no smoking is allowed on the property.

- End of Instructions to Bidders -

PROPOSAL FORM

Proposal of:

_____ (name)

_____ (street)

_____ (city) _____ (state) _____ (zip)

To furnish all materials, labor, equipment, and services to perform all work in accordance with the Contract Documents (Bid Documents) for the PROJECT.

TO: **The OWNER**

Ladies and Gentlemen:

1. The undersigned bidder has carefully examined the Bid Documents and the site of the proposed work and is familiar with the nature and extent of work and any local conditions that may in any manner affect the work to be done.

The undersigned agrees to do all work and furnish all materials and warranties called for in the Contract Documents, in the manner prescribed therein, without exception, and to the standards of the quality and performance established by the ENGINEER for the lump sum price stipulated.

A. The lump sum price for the BASE BID work as described shall be as follows:

General Conditions	\$ _____
Temporary Protection, Equipment & Scaffolding, Barriers & Protection and restoration of interior finishes	\$ _____
Concrete & Stucco Repairs	\$ _____
Unit Window & Door removal & replacements	\$ _____
Common Area Doors	\$ _____
Painting	\$ _____
Restoration of interior finishes and other misc. costs	\$ _____
Allowance for Builders Risk Insurance	\$ 30,000.00 _____
Permit Allowance	\$ 5,000.00 _____
BASE BID TOTAL	\$ _____

B. Alternates:

- 1. Window system voluntary alternate as written \$ _____
- 2. Windows system options – See S3.1
- a. Replace "G" Base bid window system with Alternate (ADD/DEDUCT) \$ _____
- b. Replace "H" Base bid window system with Alternate (ADD/DEDUCT) \$ _____
- c. Replace "I" Base bid window system with Alternate (ADD/DEDUCT) \$ _____
- d. For the base bid finish on frames provide 20 year warranty: \$ _____

C. Unit Pricing

Concrete Repairs - Should base bid quantity vary from the 400 cubic feet of repairs included in the base bid the following would apply.

	add	\$ _____	
	deduct	\$ _____	pcf

Stucco Repairs - Should base bid quantity vary from the 100 square feet of repairs included in the base bid the following would apply.

	add	\$ _____	
	deduct	\$ _____	psf

Woof Fascia Repairs Repairs - Should base bid quantity vary from the 150 lineal feet of repairs included in the base bid the following would apply.

	add	\$ _____	
	deduct	\$ _____	plf

D. Insulated Frames and Glazing System Alternate

Use insulated glass and substitute window products as follows:
 ES SW340 in lieu of ES EL200
 ES H340 in lieu of ES 100
 ES P252 in lieu of ES 5000

Add \$ _____

- 4. The undersigned agrees that within 10 days from the date of acceptance of this proposal, to execute and to furnish to the owner satisfactory payment and performance bonds, in the full amount of the contract price, guaranteeing the faithful performance of the work and payment of the bills.
- 5. The undersigned also agrees to place the order for windows and doors within 7 days of the notice to proceed, permit issuance, or date of this agreement, whichever comes first, and to substantially complete the work within 90 days of the date when windows and doors are delivered to the contractor.
- 6. The undersigned (is) (is not) qualifying the submitted bid package. (Attach qualifications to this Proposal)
 (circle one)

- 7. The undersigned represents that an individual or qualified representative of the firm identified below is duly licensed and qualified to submit plans and specifications on behalf of the Owner to the building authority, for the purpose of, obtaining all necessary documents related to and including a building permit.
- 8. The undersigned represents that the actual Project commencement date must follow the obtainment of a building permit as issued by the authority having jurisdiction. Mobilization and Construction scheduling are to be based on building tenancy and will be coordinated with the Owner to provide the least amount of tenant interference.
- 9. The undersigned confirms they are able to provide 100% Payment and Performance Bonds through the following company: _____. This proposal does not include the provision of 100% Performance and Payment Bonds, if the Owner decides to add Performance and Payment Bonds, the additional cost to add such coverage is to be a Contract Add value of:

100% Performance & Payment Bonds	Add:	\$ _____
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- 10. The undersigned acknowledges receipt of Addenda No's _____ to _____.

Date: _____

Submitted By: _____

(Signature, Please Use Blue Ink)

(License # and/or Qualifier's #)

(Name & Title)

(Company)

(Address)

**AGREEMENT BETWEEN OWNER AND CONTRACTOR
FOR CONSTRUCTION CONTRACT (STIPULATED PRICE)**

This Agreement is by and between **OWNER**. (“Owner”) and **CONTRACTOR** (“Contractor”).

Terms used in this Agreement have the meanings stated in the General Conditions and the Supplementary Conditions.

Owner and Contractor hereby agree as follows:

ARTICLE 1—WORK

1.01 *Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows: **as described in the Specifications Section 01100, General Requirements.***

ARTICLE 2—THE PROJECT

2.01 *The Project, of which the Work under the Contract Documents is a part, is generally described as follows: **as described in the Specifications Section 01100, General Requirements.***

ARTICLE 3—ENGINEER

3.01 *The Owner has retained **Stirling & Wilbur Engineering Group** (“Engineer”) to act as Owner’s representative, assume all duties and responsibilities of Engineer, and have the rights and authority assigned to Engineer in the Contract.*

3.02 *The part of the Project that pertains to the Work has been designed by **Engineer**”.*

ARTICLE 4—CONTRACT TIMES

4.01 *Time is of the Essence*

A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.02 *Contract Times: Days*

A. Windows and doors shall be ordered within 7 days of the contract award, notice to proceed, or issuance of the permit, whichever is sooner. The Work will be substantially complete within **90** days after the date when the Contract Times commence to run (**Base Bid Only**) as provided in Paragraph 4.01 of the General Conditions and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within **120** days after the date when the Contract Times commence to run (**Base Bid Only**). **The start date for this requirement will be the date when new window and door products have been delivered to the CONTRACTOR or the project site.**

4.03 *Liquidated Damages*

A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial and other losses if the Work is not completed and Milestones not achieved within the Contract Times, as duly modified. The parties also recognize the delays, expense, and difficulties involved in proving, in a legal or arbitration proceeding, the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):

1. *Substantial Completion:* Contractor shall pay Owner **\$500.00** for each day that expires after the time (as duly adjusted pursuant to the Contract) specified above for Substantial Completion, until the Work is substantially complete.
2. *Completion of Remaining Work:* After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Times (as duly adjusted pursuant to the

Contract) for completion and readiness for final payment, Contractor shall pay Owner **\$1,000.00** for each day that expires after such time until the Work is completed and ready for final payment.

- B. If Owner recovers liquidated damages for a delay in completion by Contractor, then such liquidated damages are Owner's sole and exclusive remedy for such delay, and Owner is precluded from recovering any other damages, whether actual, direct, excess, or consequential, for such delay, except for special damages (if any) specified in this Agreement.

ARTICLE 5—CONTRACT PRICE

5.01 *Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents, the amounts that follow, subject to adjustment under the Contract:*

- A. For all Work other than Unit Price Work, a lump sum of **\$TBD**.

All specific cash allowances are included in the above price in accordance with Paragraph 13.02 of the General Conditions.

- B. For all Unit Price Work, adjustments to the final amount shall be made in accordance with the Contractor's proposal.

The extended prices for Unit Price Work set forth as of the Effective Date of the Contract are based on estimated quantities. As provided in Paragraph 13.03 of the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer.

- C. For all Work, at the prices stated in Contractor's Bid, attached hereto as an exhibit.

ARTICLE 6—PAYMENT PROCEDURES

6.01 *Submittal and Processing of Payments*

- A. Contractor shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

6.02 *Progress Payments; Retainage*

- A. Owner shall make progress payments on the basis of Contractor's Applications for Payment on or about the **15th** day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided in the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of Values, as provided elsewhere in the Contract.

1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Owner may withhold, including but not limited to liquidated damages, in accordance with the Contract.

a. **90** percent of the value of the Work completed (with the balance being retainage).

b. If 70 percent or more of the Work has been completed, as determined by Engineer, and if the character and progress of the Work have been satisfactory to Owner and Engineer, then as long as the character and progress of the Work remain satisfactory to Owner and Engineer, there will be no additional retainage; and

b. **90** percent of cost of materials and equipment stored on site or in a secured site, not incorporated in the Work (with the balance being retainage).

- B. Upon Substantial Completion of the entire construction to be provided under the construction Contract Documents, Owner shall pay an amount sufficient to increase total payments to Contractor to **95** percent

of the Work completed, less such amounts set off by Owner pursuant to Paragraph 15.01.E of the General Conditions, and less one hundred percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the punch list of items to be completed or corrected prior to final payment.

6.03 Final Payment

- A. Upon final completion and acceptance of the Work, Owner shall pay the remainder of the Contract Price in accordance with Paragraph 15.06 of the General Conditions.

6.04 Interest

- A. All amounts not paid when due will bear interest at the rate of **eight** percent (8%) per annum.

ARTICLE 7—CONTRACT DOCUMENTS

7.01 Contents

- A. The Contract Documents consist of all of the following (information will be updated upon preparation of a final contract, this is for informational purposes only):
- 01. This Agreement (pages 1 to 6, inclusive);
 - 02. Standard General Conditions (pages 1 to 36, inclusive);
 - 03. Supplementary Conditions (pages 1 to 4, inclusive);
 - 04. Specifications as listed in the table of contents of the Project Manual.
 - 05. Drawings consisting of sheets numbered as indicated in the Table of Contents of the Project Manual.
 - 06. Addenda (numbers 1 to 2, inclusive);
 - 07. Exhibits to this Agreement (enumerated as follows):
 - a. Calculation of stipulated price
 - b. CONTRACTOR's Bid (pages 1 to 4, inclusive);
 - 08. The following which may be delivered or issued on or after the Effective Date of the Agreement and are attached hereto:
 - a. Written Amendments; N.A.
 - b. Work Change Directives; N. A.
 - c. Change Order(s); N.A.
- B. The Contract Documents listed in Paragraph 7.01.A are attached to this Agreement (except as expressly noted otherwise above).
- C. There are no Contract Documents other than those listed above in this Article 7.
- D. The Contract Documents may only be amended, modified, or supplemented as provided in the Contract.
- E. In the event of a conflict in the documents the governing documents shall be as follows:
- 1. The Agreement
 - 2. Supplementary Conditions
 - 3. General Conditions
 - 4. Addenda
 - 5. Change Orders and Construction Directives
 - 6. Specifications
 - 7. Drawings
 - 8. Price Calculations
 - 9. Contractor's Bid

ARTICLE 8—REPRESENTATIONS, CERTIFICATIONS, AND STIPULATIONS

8.01 *Contractor's Representations*

- A. In order to induce Owner to enter into this Contract, Contractor makes the following representations:
1. Contractor has examined and carefully studied the Contract Documents, including Addenda.
 2. Contractor has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 3. Contractor is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.
 4. Contractor has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.
 5. Contractor has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.
 6. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (c) Contractor's safety precautions and programs.
 7. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
 8. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
 9. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
 10. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
 11. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

8.02 *Contractor's Certifications*

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 8.02:
1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process or in the Contract execution;
 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or

Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;

3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

8.03 *Standard General Conditions*

- A. Owner stipulates that if the General Conditions that are made a part of this Contract are EJCDC® C-700, Standard General Conditions for the Construction Contract (2018), published by the Engineers Joint Contract Documents Committee, and if Owner is the party that has furnished said General Conditions, then Owner has plainly shown all modifications to the standard wording of such published document to the Contractor, through a process such as highlighting or "track changes" (redline/strikeout), or in the Supplementary Conditions.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement.

This Agreement will be effective on **the date the last party has signed this agreement** (which is the Effective Date of the Contract).

Owner:

Contractor:

(typed or printed name of organization)

(typed or printed name of organization)

By: _____
(individual's signature)

By: _____
(individual's signature)

Date: _____
(date signed)

Date: _____
(date signed)

Name: _____
(typed or printed)

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Title: _____
(typed or printed)

Address for giving notices:

Address for giving notices:

Phone: _____

Phone: _____

Email: _____

Email: _____

License No.: _____
(where applicable)

State: _____

Notice to Proceed

TO: _____

(CONTRACTOR)

ADDRESS: _____
Contract: _____

Project: OWNER- PROJECT

OWNER'S CONTRACT NO. _____

You are notified that the Contract Times under the above contract will commence to run on _____. By that date, you are to start performing your obligations under the Contract Documents. In accordance with Article 4 of the Agreement the date of Substantial Completion is _____ and the date of readiness for final payment is _____.

Before you may start any Work at the Site, paragraph 2.05.C of the General Conditions provides that you and Owner must each deliver to the other (with copies to ENGINEER and other identified additional insureds) certificates of insurance which each is required to purchase and maintain in accordance with the Contract Documents.

Also, before you may start any Work at the Site, you must
(Add other requirements if necessary)

OWNER
(OWNER)

By: _____
(AUTHORIZED SIGNATURE)

(TITLE)

Copy to: ENGINEER

Contractor’s Affidavit

BEFORE ME, the undersigned authority, this date personally appeared _____,
(Contractor’s Name)
of _____, who upon being duly sworn, says:
(Company Name)

1. Acting as the _____ of _____.
(Title) (Company Name)
2. _____ is the Contractor for _____ on the project known as
(Company Name) (Project Name)

(Project Description)
3. A Notice of Commencement in connection with the aforementioned contract was recorded in Instrument
_____ of the Public Records of _____.
(Notice of Commencement File #) (Name of County)
4. As of _____ the date of the request for payment, all lienors have been paid and all accounts are
(Date)
current unless otherwise noted below.

Name	Amount
1.	\$
2.	\$

The Contractor understands that the Owner is relying on this Affidavit in making the
_____ payment in the amount of _____.
(App. For Payment #)

General Manager / Company Name Date _____

STATE OF FLORIDA
COUNTY OF SARASOTA

Sworn to and subscribed before me this _____ day of _____, 2004, by _____
personally known to me or has produced _____ as identification.

AFFIX NOTARY SEAL

Notary Public Signature

Partial Release of Lien

The undersigned, (**CONTRACTOR's name**), for and in consideration of the sum of (**\$ Dollar amount**). The receipt of which constituting partial payment for work completed through (**DATE**), is hereby acknowledged, does hereby waive, release, remise and relinquish its right to claim, demand or impose a mechanic's lien or liens for work done, subcontract labor or material furnished of any other kind or class of lien whatsoever on the following described real property.

OWNER

Work Description:
PROJECT

This instrument constitutes a partial release of lien for the expressed purpose of inducing the Owner of the property to make disbursement and payment in the amount set forth above, by the undersigned and payment for the contract, job or account described above. This partial is conditional upon the receipt of a negotiable check and the check being paid. IN the event the check tendered to lienor as consideration for this partial release is dishonored for any reason, this partial is void and of no effect.

Signed this day _____

Signature _____
(Contractor)

The foregoing instrument was acknowledged before me on _____, by _____ of (Contractor), on behalf of the Corporation, who is personally known to me.

Affix Notary Seal

Notary Public

Final Release of Lien

The undersigned, **(CONTRACTOR's name)**, for and in consideration of the sum of **(\$ Dollar amount)**. The receipt of which constituting full payment for work completed on **(DATE)**, is hereby acknowledged, does hereby waive, release, remise and relinquish its right to claim, demand or impose a lien or liens for work completed, subcontract labor or material furnished of any other kind or class of lien whatsoever on the following described real property or entity named.

OWNER

Work Description:

PROJECT

This instrument constitutes a release of lien for the expressed purpose of inducing the Owner of the property to make disbursement and payment in the amount set forth above, by the undersigned and payment for the contract, job or account described above. This final release is conditional upon the receipt of a negotiable check and the check being paid. In the event the check tendered to lienor as consideration for this release is dishonored for any reason, this document is void and of no effect.

Signed this day _____

Signature _____
(Contractor)

The foregoing instrument was acknowledged before me on _____, by _____ of (Contractor), on behalf of the Corporation, who is personally known to me.

Affix Notary Seal

Notary Public

Certificate of Substantial Completion

Owner: OWNER
Contractor: Contractor's Name
Contract: Standard Form of Agreement Between Owner and Contactor on The Basis of a Stipulated Price
Project: PROJECT

This Certificate of Substantial Completion applies to all Work under the Contract Documents or to the following specified parts thereof:

Contract Documents

Dated:

To Owner:

And To Contractor:

The Work to which this Certificate applies has been reviewed by authorized representatives of OWNER, CONTRACTOR and ENGINEER, and that Work is hereby declared to be substantially complete in accordance with the Contract Documents on:

DATE OF SUBSTANTIAL COMPLETION

(Month, Day, Year)

A current list of items to be completed or corrected is attached hereto. This list may not be all-inclusive and the failure to include an item in it does not alter the responsibility of CONTRACTOR to complete all the Work in accordance with the Contract Documents. The items in the current list shall be completed or corrected by CONTRACTOR within 30 days of the above date of Substantial Completion.

The responsibilities between OWNER and CONTRACTOR for security, operation, safety, maintenance, heat, utilities, insurance and warranties and guarantees shall be as follows:

Owner: Allow Access to Contractor to complete the work associated with the enclosed Punch-out Roster. Provide necessary electrical power and potable water necessary for the Contractor to complete the Work.

Contractor: Maintain insurance and required bonds for the duration of the Punch-out activity. The Contractor shall be responsible for the safety of personnel during the above work. Compile and deliver a draft copy of all required warranty and guaranty documents as required by the Contract Agreement. Warranties for manufacturer product and labor shall be original documents and delivered to the Owner in exchange for final payment.

The following documents are attached to and made a part of this Certificate:

ENGINEER's Punch-out Roster dated:

First Review:

Second Review:

This certificate does not constitute an acceptance of Work not in accordance with the Contract Documents nor is it a release of Contractor's obligation to complete the Work in accordance with the Contract Documents. Executed by ENGINEER on:

ENGINEER

By: _____
(Authorized Signature)

Contractor Accepts This Certificate Of Substantial Completion On: _____ Date

Contractor's Name & Address

By: _____
(Authorized Signature)

Owner Accepts This Certificate Of Substantial Completion On: _____ Date

By: _____
(Authorized Signature)

**STANDARD GENERAL CONDITIONS
OF THE CONSTRUCTION CONTRACT**

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**STANDARD GENERAL CONDITIONS
OF THE CONSTRUCTION CONTRACT**

ARTICLE 1—DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

- A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
 2. *Agreement*—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
 3. *Application for Payment*—The document prepared by Contractor, in a form acceptable to Engineer, to request progress or final payments, and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 5. *Bidder*—An individual or entity that submits a Bid to Owner.
 6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
 7. *Bidding Requirements*—The Advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
 8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
 9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.
 10. *Claim*
 - a. A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment of Contract Price or Contract Times; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract.
 - b. A demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal, or seeking resolution of a contractual issue that Engineer has declined to address.
 - c. A demand or assertion by Owner or Contractor, duly submitted in compliance with the procedural requirements set forth herein, made pursuant to Paragraph 12.01.A.4, concerning disputes arising after Engineer has issued a recommendation of final payment.
 - d. A demand for money or services by a third party is not a Claim.
 11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), lead-based paint (as defined by the HUD/EPA standard), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to Laws and Regulations regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
 12. *Contract*—The entire and integrated written contract between Owner and Contractor concerning the Work.

13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents.
15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
17. *Cost of the Work*—See Paragraph 13.01 for definition.
18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.
20. *Electronic Document*—Any Project-related correspondence, attachments to correspondence, data, documents, drawings, information, or graphics, including but not limited to Shop Drawings and other Submittals, that are in an electronic or digital format.
21. *Electronic Means*—Electronic mail (email), upload/download from a secure Project website, or other communications methods that allow: (a) the transmission or communication of Electronic Documents; (b) the documentation of transmissions, including sending and receipt; (c) printing of the transmitted Electronic Document by the recipient; (d) the storage and archiving of the Electronic Document by sender and recipient; and (e) the use by recipient of the Electronic Document for purposes permitted by this Contract. Electronic Means does not include the use of text messaging, or of Facebook, Twitter, Instagram, or similar social media services for transmission of Electronic Documents.
22. *Engineer*—The individual or entity named as such in the Agreement.
23. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
24. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto.
 - a. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated into the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, is not a Hazardous Environmental Condition.
 - b. The presence of Constituents of Concern that are to be removed or remediated as part of the Work is not a Hazardous Environmental Condition.
 - c. The presence of Constituents of Concern as part of the routine, anticipated, and obvious working conditions at the Site, is not a Hazardous Environmental Condition.
25. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and binding decrees, resolutions, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
26. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
27. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date, or by a time prior to Substantial Completion of all the Work.
28. *Notice of Award*—The written notice by Owner to a Bidder of Owner's acceptance of the Bid.
29. *Notice to Proceed*—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.
30. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
31. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising Contractor's plan to accomplish the Work within the Contract Times.

32. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.
33. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative (RPR) includes any assistants or field staff of Resident Project Representative.
34. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
35. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer’s review of the submittals.
36. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor’s Applications for Payment.
37. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.
38. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands or areas furnished by Owner which are designated for the use of Contractor.
39. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
40. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
41. *Submittal*—A written or graphic document, prepared by or for Contractor, which the Contract Documents require Contractor to submit to Engineer, or that is indicated as a Submittal in the Schedule of Submittals accepted by Engineer. Submittals may include Shop Drawings and Samples; schedules; product data; Owner-delegated designs; sustainable design information; information on special procedures; testing plans; results of tests and evaluations, source quality-control testing and inspections, and field or Site quality-control testing and inspections; warranties and certifications; Suppliers’ instructions and reports; records of delivery of spare parts and tools; operations and maintenance data; Project photographic documentation; record documents; and other such documents required by the Contract Documents. Submittals, whether or not approved or accepted by Engineer, are not Contract Documents. Change Proposals, Change Orders, Claims, notices, Applications for Payment, and requests for interpretation or clarification are not Submittals.
42. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion of such Work.
43. *Successful Bidder*—The Bidder to which the Owner makes an award of contract.
44. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.
45. *Supplier*—A manufacturer, fabricator, supplier, distributor, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
46. *Technical Data*
 - a. Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (1) existing subsurface conditions at or adjacent to the Site, or existing physical conditions at or adjacent to the Site including existing surface or subsurface structures (except Underground Facilities) or (2) Hazardous Environmental Conditions at the Site.
 - b. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then Technical Data is defined, with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06, as the data contained in boring logs, recorded measurements of subsurface water levels, assessments of the condition of

- subsurface facilities, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical, environmental, or other Site or facilities conditions report prepared for the Project and made available to Contractor.
- c. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data, and instead Underground Facilities are shown or indicated on the Drawings.
47. *Underground Facilities*—All active or not-in-service underground lines, pipelines, conduits, ducts, encasements, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or systems at the Site, including but not limited to those facilities or systems that produce, transmit, distribute, or convey telephone or other communications, cable television, fiber optic transmissions, power, electricity, light, heat, gases, oil, crude oil products, liquid petroleum products, water, steam, waste, wastewater, storm water, other liquids or chemicals, or traffic or other control systems. An abandoned facility or system is not an Underground Facility.
48. *Unit Owner* – The owner of an individual unit within the condominium. This contract is between the condominium / owners association, and unit owners are not individually a party in this agreement.
49. *Unit Price Work*—Work to be paid for on the basis of unit prices.
50. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.
51. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

1.02 Terminology

- A. The words and terms discussed in Paragraphs 1.02.B, C, D, and E are not defined terms that require initial capital letters, but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
- B. *Intent of Certain Terms or Adjectives*: The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.
- C. *Day*: The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.
- D. *Defective*: The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
1. does not conform to the Contract Documents;
 2. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
 3. has been damaged prior to Engineer’s recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or Paragraph 15.04).
- E. *Furnish, Install, Perform, Provide*
1. The word “furnish,” when used in connection with services, materials, or equipment, means to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
 2. The word “install,” when used in connection with services, materials, or equipment, means to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, means to furnish and install said services, materials, or equipment complete and ready for intended use.
 4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words “furnish,” “install,” “perform,” or “provide,” then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.
- F. *Contract Price or Contract Times*: References to a change in “Contract Price or Contract Times” or “Contract Times or Contract Price” or similar, indicate that such change applies to (1) Contract Price, (2) Contract Times, or (3) both Contract Price and Contract Times, as warranted, even if the term “or both” is not expressed.
- G. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2—PRELIMINARY MATTERS

2.01 *Delivery of Performance and Payment Bonds; Evidence of Insurance*

- A. *Performance and Payment Bonds (Alternate)*: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner the performance bond and payment bond (if the Contract requires Contractor to furnish such bonds).
- B. *Evidence of Contractor’s Insurance*: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each additional insured (as identified in the Contract), the certificates, endorsements, and other evidence of insurance required to be provided by Contractor in accordance with Article 6, except to the extent the Supplementary Conditions expressly establish other dates for delivery of specific insurance policies.
- C. *Evidence of Owner’s Insurance*: After receipt of the signed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each additional insured (as identified in the Contract), the certificates and other evidence of insurance required to be provided by Owner under Article 6.

2.02 *Copies of Documents*

- A. Owner shall furnish to Contractor four printed copies of the Contract (including one fully signed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.
- B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.

2.03 *Before Starting Construction*

- A. *Preliminary Schedules*: Within 10 days after the Effective Date of the Contract (or as otherwise required by the Contract Documents), Contractor shall submit to Engineer for timely review:
1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
 2. a preliminary Schedule of Submittals; and
 3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.04 *Preconstruction Conference; Designation of Authorized Representatives*

- A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work, and to discuss the schedules referred to in Paragraph 2.03.A, procedures for handling Shop Drawings, Samples, and other Submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.
- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority

to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.05 *Acceptance of Schedules*

- A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review the schedules submitted in accordance with Paragraph 2.03.A. No progress payment will be made to Contractor until acceptable schedules are submitted to Engineer.
 - 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
 - 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
 - 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.
 - 4. If a schedule is not acceptable, Contractor will have an additional 10 days to revise and resubmit the schedule.

2.06 *Electronic Transmittals*

- A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may send, and shall accept, Electronic Documents transmitted by Electronic Means.
- B. If the Contract does not establish protocols for Electronic Means, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. Subject to any governing protocols for Electronic Means, when transmitting Electronic Documents by Electronic Means, the transmitting party makes no representations as to long-term compatibility, usability, or readability of the Electronic Documents resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the Electronic Documents.

ARTICLE 3—CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

- A. The Contract Documents are complementary; what is required by one Contract Document is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents.
- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic versions of the Contract Documents (including any printed copies derived from such electronic versions) and the printed record version, the printed record version will govern.
- D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.
- F. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation will be deemed stricken, and all remaining provisions will continue to be valid and binding upon Owner and Contractor, which agree that the Contract Documents will be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.
- G. Nothing in the Contract Documents creates:
 - 1. any contractual relationship between Owner or Engineer and any Subcontractor, Supplier, or other individual or entity performing or furnishing any of the Work, for the benefit of such Subcontractor, Supplier, or other individual or entity; or
 - 2. any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity, except as may otherwise be required by Laws and Regulations.

3.02 Reference Standards

A. Standards Specifications, Codes, Laws and Regulations

1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, means the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
2. No provision of any such standard specification, manual, reference standard, or code, and no instruction of a Supplier, will be effective to change the duties or responsibilities of Owner, Contractor, or Engineer from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner or Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

3.03 Reporting and Resolving Discrepancies

A. Reporting Discrepancies

1. *Contractor's Verification of Figures and Field Measurements:* Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict, error, ambiguity, or discrepancy is resolved by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.
2. *Contractor's Review of Contract Documents:* If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.
3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

B. Resolving Discrepancies

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:
 - a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or
 - b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 Requirements of the Contract Documents

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer in writing all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work.
- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.
- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings,

Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly notify Owner and Contractor in writing that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 *Reuse of Documents*

- A. Contractor and its Subcontractors and Suppliers shall not:
 - 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media versions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or
 - 2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein precludes Contractor from retaining copies of the Contract Documents for record purposes.

ARTICLE 4—COMMENCEMENT AND PROGRESS OF THE WORK

4.01 *Commencement of Contract Times; Notice to Proceed*

- A. The Contract Times will commence to run on the 30th day after the Effective Date of the Contract or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Contract. In no event will the Contract Times commence to run later than the 60th day after the day of Bid opening or the 30th day after the Effective Date of the Contract, whichever date is earlier.

4.02 *Starting the Work*

- A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work may be done at the Site prior to such date.

4.03 *Reference Points*

- A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.04 *Progress Schedule*

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.
 - 1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.
 - 2. Proposed adjustments in the Progress Schedule that will change the Contract Times must be submitted in accordance with the requirements of Article 11.
- B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work will be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

4.05 *Delays in Contractor's Progress*

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.

- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Such an adjustment will be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:
1. Severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
 2. Abnormal weather conditions;
 3. Acts or failures to act of third-party utility owners or other third-party entities (other than those third-party utility owners or other third-party entities performing other work at or adjacent to the Site as arranged by or under contract with Owner, as contemplated in Article 8); and
 4. Acts of war or terrorism.
- D. Contractor's entitlement to an adjustment of Contract Times or Contract Price is limited as follows:
1. Contractor's entitlement to an adjustment of the Contract Times is conditioned on the delay, disruption, or interference adversely affecting an activity on the critical path to completion of the Work, as of the time of the delay, disruption, or interference.
 2. Contractor shall not be entitled to an adjustment in Contract Price for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor. Such a concurrent delay by Contractor shall not preclude an adjustment of Contract Times to which Contractor is otherwise entitled.
 3. Adjustments of Contract Times or Contract Price are subject to the provisions of Article 11.
- E. Each Contractor request or Change Proposal seeking an increase in Contract Times or Contract Price must be supplemented by supporting data that sets forth in detail the following:
1. The circumstances that form the basis for the requested adjustment;
 2. The date upon which each cause of delay, disruption, or interference began to affect the progress of the Work;
 3. The date upon which each cause of delay, disruption, or interference ceased to affect the progress of the Work;
 4. The number of days' increase in Contract Times claimed as a consequence of each such cause of delay, disruption, or interference; and
 5. The impact on Contract Price, in accordance with the provisions of Paragraph 11.07.
- Contractor shall also furnish such additional supporting documentation as Owner or Engineer may require including, where appropriate, a revised progress schedule indicating all the activities affected by the delay, disruption, or interference, and an explanation of the effect of the delay, disruption, or interference on the critical path to completion of the Work.
- F. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5, together with the provisions of Paragraphs 4.05.D and 4.05.E.
- G. Paragraph 8.03 addresses delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.

ARTICLE 5—SITE; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 *Availability of Lands*

- A. Owner shall furnish the Site. Owner shall notify Contractor in writing of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.
- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

5.02 Use of Site and Other Areas

A. Limitation on Use of Site and Other Areas

1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas, or to improvements, structures, utilities, or similar facilities located at such adjacent lands or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.
 2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.13, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or in a court of competent jurisdiction; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.
- B. *Removal of Debris During Performance of the Work:* During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris will conform to applicable Laws and Regulations.
- C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.
- D. *Loading of Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

5.03 Subsurface and Physical Conditions

A. Reports and Drawings: The Supplementary Conditions identify:

1. Those reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data;
 2. Those drawings of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data; and
 3. Technical Data contained in such reports and drawings.
- B. *Underground Facilities:* Underground Facilities are shown or indicated on the Drawings, pursuant to Paragraph 5.05, and not in the drawings referred to in Paragraph 5.03.A. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data.
- C. *Reliance by Contractor on Technical Data:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b.

- D. *Limitations of Other Data and Documents:* Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:
1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto;
 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings;
 3. the contents of other Site-related documents made available to Contractor, such as record drawings from other projects at or adjacent to the Site, or Owner's archival documents concerning the Site; or
 4. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

5.04 *Differing Subsurface or Physical Conditions*

- A. *Notice by Contractor:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site:
1. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate;
 2. is of such a nature as to require a change in the Drawings or Specifications;
 3. differs materially from that shown or indicated in the Contract Documents; or
 4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

- B. *Engineer's Review:* After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine whether it is necessary for Owner to obtain additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- C. *Owner's Statement to Contractor Regarding Site Condition:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.
- D. *Early Resumption of Work:* If at any time Engineer determines that Work in connection with the subsurface or physical condition in question may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the condition in question has been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.
- E. *Possible Price and Times Adjustments*
1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. Such condition must fall within any one or more of the categories described in Paragraph 5.04.A;
 - b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,

- c. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E.
 2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
 - a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise;
 - b. The existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
 - c. Contractor failed to give the written notice required by Paragraph 5.04.A.
 3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.
 4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.
- F. *Underground Facilities; Hazardous Environmental Conditions:* Paragraph 5.05 governs rights and responsibilities regarding the presence or location of Underground Facilities. Paragraph 5.06 governs rights and responsibilities regarding Hazardous Environmental Conditions. The provisions of Paragraphs 5.03 and 5.04 are not applicable to the presence or location of Underground Facilities, or to Hazardous Environmental Conditions.

5.05 *Underground Facilities*

- A. *Contractor's Responsibilities:* Unless it is otherwise expressly provided in the Supplementary Conditions, the cost of all of the following are included in the Contract Price, and Contractor shall have full responsibility for:
1. reviewing and checking all information and data regarding existing Underground Facilities at the Site;
 2. complying with applicable state and local utility damage prevention Laws and Regulations;
 3. verifying the actual location of those Underground Facilities shown or indicated in the Contract Documents as being within the area affected by the Work, by exposing such Underground Facilities during the course of construction;
 4. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
 5. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.
- B. *Notice by Contractor:* If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated on the Drawings, or was not shown or indicated on the Drawings with reasonable accuracy, then Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing regarding such Underground Facility.
- C. *Engineer's Review:* Engineer will:
1. promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated on the Drawings, or was not shown or indicated with reasonable accuracy;
 2. identify and communicate with the owner of the Underground Facility; prepare recommendations to Owner (and if necessary issue any preliminary instructions to Contractor) regarding the Contractor's resumption of Work in connection with the Underground Facility in question;
 3. obtain any pertinent cost or schedule information from Contractor; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and
 4. advise Owner in writing of Engineer's findings, conclusions, and recommendations.

During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

- D. *Owner's Statement to Contractor Regarding Underground Facility:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.
- E. *Early Resumption of Work:* If at any time Engineer determines that Work in connection with the Underground Facility may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the Underground Facility in question and conditions affected by its presence have been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.
- F. *Possible Price and Times Adjustments*
1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, to the extent that any existing Underground Facility at the Site that was not shown or indicated on the Drawings, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;
 - b. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E; and
 - c. Contractor gave the notice required in Paragraph 5.05.B.
 2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.
 3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.
 4. The information and data shown or indicated on the Drawings with respect to existing Underground Facilities at the Site is based on information and data (a) furnished by the owners of such Underground Facilities, or by others, (b) obtained from available records, or (c) gathered in an investigation conducted in accordance with the current edition of ASCE 38, Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data, by the American Society of Civil Engineers. If such information or data is incorrect or incomplete, Contractor's remedies are limited to those set forth in this Paragraph 5.05.F.

5.06 *Hazardous Environmental Conditions at Site*

- A. *Reports and Drawings:* The Supplementary Conditions identify:
1. those reports known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site;
 2. drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and
 3. Technical Data contained in such reports and drawings.
- B. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:
1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto;
 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings;
or

3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.
- D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.
- E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.
- F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.
- G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, as a result of such Work stoppage, such special conditions under which Work is agreed to be resumed by Contractor, or any costs or expenses incurred in response to the Hazardous Environmental Condition, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off. Entitlement to any such adjustment is subject to the provisions of Paragraphs 4.05.D, 4.05.E, 11.07, and 11.08.
- H. If, after receipt of such written notice, Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.
- I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.I obligates Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.J obligates Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

- K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6—BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

- A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of Contractor's obligations under the Contract. These bonds must remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the terms of a prescribed bond form, the Supplementary Conditions, or other provisions of the Contract.
- B. Contractor shall also furnish such other bonds (if any) as are required by the Supplementary Conditions or other provisions of the Contract.
- C. All bonds must be in the form included in the Bidding Documents or otherwise specified by Owner prior to execution of the Contract, except as provided otherwise by Laws or Regulations, and must be issued and signed by a surety named in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Department Circular 570 (as amended and supplemented) by the Bureau of the Fiscal Service, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority must show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.
- D. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue bonds in the required amounts.
- E. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer in writing and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which must comply with the bond and surety requirements above.
- F. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner's termination rights under Article 16.
- G. Upon request to Owner from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Owner shall provide a copy of the payment bond to such person or entity.
- H. Upon request to Contractor from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Contractor shall provide a copy of the payment bond to such person or entity.

6.02 *Insurance—General Provisions*

- A. Owner and Contractor shall obtain and maintain insurance as required in this article and in the Supplementary Conditions.
- B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized in the state or jurisdiction in which the Project is located to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.
- C. Alternative forms of insurance coverage, including but not limited to self-insurance and "Occupational Accident and Excess Employer's Indemnity Policies," are not sufficient to meet the insurance requirements of this Contract, unless expressly allowed in the Supplementary Conditions.
- D. Contractor shall deliver to Owner, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Contractor has obtained and is maintaining the policies and coverages required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, full disclosure of all relevant exclusions, and evidence of insurance required to be purchased and maintained by Subcontractors or Suppliers. In any documentation furnished under this provision, Contractor, Subcontractors, and

Suppliers may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those applicable to this Contract.

- E. Owner shall deliver to Contractor, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Owner has obtained and is maintaining the policies and coverages required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, and full disclosure of all relevant exclusions. In any documentation furnished under this provision, Owner may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those relevant to this Contract.
- F. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, will not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.
- G. In addition to the liability insurance required to be provided by Contractor, the Owner, at Owner's option, may purchase and maintain Owner's own liability insurance. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.
- H. Contractor shall require:
 - 1. Subcontractors to purchase and maintain worker's compensation, commercial general liability, and other insurance that is appropriate for their participation in the Project, and to name as additional insureds Owner and Engineer (and any other individuals or entities identified in the Supplementary Conditions as additional insureds on Contractor's liability policies) on each Subcontractor's commercial general liability insurance policy; and
 - 2. Suppliers to purchase and maintain insurance that is appropriate for their participation in the Project.
- I. If either party does not purchase or maintain the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.
- J. If Contractor has failed to obtain and maintain required insurance, Contractor's entitlement to enter or remain at the Site will end immediately, and Owner may impose an appropriate set-off against payment for any associated costs (including but not limited to the cost of purchasing necessary insurance coverage), and exercise Owner's termination rights under Article 16.
- K. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect (but is in no way obligated) to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price will be adjusted accordingly.
- L. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests. Contractor is responsible for determining whether such coverage and limits are adequate to protect its interests, and for obtaining and maintaining any additional insurance that Contractor deems necessary.
- M. The insurance and insurance limits required herein will not be deemed as a limitation on Contractor's liability, or that of its Subcontractors or Suppliers, under the indemnities granted to Owner and other individuals and entities in the Contract or otherwise.
- N. All the policies of insurance required to be purchased and maintained under this Contract will contain a provision or endorsement that the coverage afforded will not be canceled, or renewal refused, until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured and Engineer.

6.03 Contractor's Insurance

- A. *Required Insurance:* Contractor shall purchase and maintain Worker's Compensation, Commercial General Liability, and other insurance pursuant to the specific requirements of the Supplementary Conditions.
- B. *General Provisions:* The policies of insurance required by this Paragraph 6.03 as supplemented must:
 - 1. include at least the specific coverages required;
 - 2. be written for not less than the limits provided, or those required by Laws or Regulations, whichever is greater;

3. remain in effect at least until the Work is complete (as set forth in Paragraph 15.06.D), and longer if expressly required elsewhere in this Contract, and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract;
 4. apply with respect to the performance of the Work, whether such performance is by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable; and
 5. include all necessary endorsements to support the stated requirements.
- C. *Additional Insureds*: The Contractor's commercial general liability, automobile liability, employer's liability, umbrella or excess, pollution liability, and unmanned aerial vehicle liability policies, if required by this Contract, must:
1. include and list as additional insureds Owner and Engineer, and any individuals or entities identified as additional insureds in the Supplementary Conditions;
 2. include coverage for the respective officers, directors, members, partners, employees, and consultants of all such additional insureds;
 3. afford primary coverage to these additional insureds for all claims covered thereby (including as applicable those arising from both ongoing and completed operations);
 4. not seek contribution from insurance maintained by the additional insured; and
 5. as to commercial general liability insurance, apply to additional insureds with respect to liability caused in whole or in part by Contractor's acts or omissions, or the acts and omissions of those working on Contractor's behalf, in the performance of Contractor's operations.

6.04 *Builder's Risk and Other Property Insurance*

- A. *Builder's Risk*: Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the Work's full insurable replacement cost (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). The specific requirements applicable to the builder's risk insurance are set forth in the Supplementary Conditions.
- B. *Property Insurance for Facilities of Owner Where Work Will Occur*: Owner is responsible for obtaining and maintaining property insurance covering each existing structure, building, or facility in which any part of the Work will occur, or to which any part of the Work will attach or be adjoined. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, providing coverage consistent with that required for the builder's risk insurance, and will be maintained until the Work is complete, as set forth in Paragraph 15.06.D.
- C. *Property Insurance for Substantially Complete Facilities*: Promptly after Substantial Completion, and before actual occupancy or use of the substantially completed Work, Owner will obtain property insurance for such substantially completed Work and maintain such property insurance at least until the Work is complete, as set forth in Paragraph 15.06.D. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, and provide coverage consistent with that required for the builder's risk insurance. The builder's risk insurance may terminate upon written confirmation of Owner's procurement of such property insurance.
- D. *Occupancy or Use by Owner*: Unit owners may occupy the residences throughout the duration of the Project.
- E. *Insurance of Other Property; Additional Insurance*: If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, then the entity or individual owning such property item will be responsible for insuring it. If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.04, it may do so at Contractor's expense.

6.05 *Property Losses; Subrogation*

- A. The builder's risk insurance policy purchased and maintained in accordance with Paragraph 6.04 (or an installation floater policy if authorized by the Supplementary Conditions), will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors.
1. Owner and Contractor waive all rights against each other and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by,

arising out of, or resulting from any of the perils, risks, or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all individuals or entities identified in the Supplementary Conditions as builder's risk or installation floater insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused.

2. None of the above waivers extends to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.
- B. Any property insurance policy maintained by Owner covering any loss, damage, or consequential loss to Owner's existing structures, buildings, or facilities in which any part of the Work will occur, or to which any part of the Work will attach or adjoin; to adjacent structures, buildings, or facilities of Owner; or to part or all of the completed or substantially completed Work, during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06, will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them, and that the insured is allowed to waive the insurer's rights of subrogation in a written contract executed prior to the loss, damage, or consequential loss.
1. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from fire or any of the perils, risks, or causes of loss covered by such policies.
- C. The waivers in this Paragraph 6.05 include the waiver of rights due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other insured peril, risk, or cause of loss.
- D. Contractor shall be responsible for assuring that each Subcontract contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from fire or other peril, risk, or cause of loss covered by builder's risk insurance, installation floater, and any other property insurance applicable to the Work.

6.06 *Receipt and Application of Property Insurance Proceeds*

- A. Any insured loss under the builder's risk and other policies of property insurance required by Paragraph 6.04 will be adjusted and settled with the named insured that purchased the policy. Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.
- B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.04 shall maintain such proceeds in a segregated account, and distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.
- C. If no other special agreement is reached, Contractor shall repair or replace the damaged Work, using allocated insurance proceeds.

ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

7.01 *Contractor's Means and Methods of Construction*

- A. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. If the Contract Documents note, or Contractor determines, that professional engineering or other design services are needed to carry out Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures, or for Site safety, then Contractor shall cause such services to be provided by a properly licensed design professional, at Contractor's expense. Such services are not Owner-delegated professional design services under this Contract, and neither Owner nor Engineer has any responsibility with respect to (1) Contractor's determination of the need for such services, (2)

the qualifications or licensing of the design professionals retained or employed by Contractor, (3) the performance of such services, or (4) any errors, omissions, or defects in such services.

7.02 *Supervision and Superintendence*

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who will not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

7.03 *Labor; Working Hours*

- A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall maintain good discipline and order at the Site.
- B. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of Contractor's employees; of Suppliers and Subcontractors, and their employees; and of any other individuals or entities performing or furnishing any of the Work, just as Contractor is responsible for Contractor's own acts and omissions.
- C. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site will be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.

7.04 *Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.
- B. All materials and equipment incorporated into the Work must be new and of good quality, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications will expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- C. All materials and equipment must be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

7.05 *"Or Equals"*

- A. *Contractor's Request; Governing Criteria:* Whenever an item of equipment or material is specified or described in the Contract Documents by using the names of one or more proprietary items or specific Suppliers, the Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or equal" item is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material, or items from other proposed Suppliers, under the circumstances described below.
 - 1. If Engineer in its sole discretion determines that an item of equipment or material proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer will deem it an "or equal" item. For the purposes of this paragraph, a proposed item of equipment or material will be considered functionally equal to an item so named if:
 - a. in the exercise of reasonable judgment Engineer determines that the proposed item:
 - 1) is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
 - 2) will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
 - 3) has a proven record of performance and availability of responsive service; and

- 4) is not objectionable to Owner.
- b. Contractor certifies that, if the proposed item is approved and incorporated into the Work:
 - 1) there will be no increase in cost to the Owner or increase in Contract Times; and
 - 2) the item will conform substantially to the detailed requirements of the item named in the Contract Documents.
- B. *Contractor's Expense*: Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.
- C. *Engineer's Evaluation and Determination*: Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Engineer will be the sole judge of acceptability. No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal," which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.
- D. *Effect of Engineer's Determination*: Neither approval nor denial of an "or-equal" request will result in any change in Contract Price. The Engineer's denial of an "or-equal" request will be final and binding, and may not be reversed through an appeal under any provision of the Contract.
- E. *Treatment as a Substitution Request*: If Engineer determines that an item of equipment or material proposed by Contractor does not qualify as an "or-equal" item, Contractor may request that Engineer consider the item a proposed substitute pursuant to Paragraph 7.06.

7.06 Substitutes

- A. *Contractor's Request; Governing Criteria*: Unless the specification or description of an item of equipment or material required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material under the circumstances described below. To the extent possible such requests must be made before commencement of related construction at the Site.
 1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of equipment or material from anyone other than Contractor.
 2. The requirements for review by Engineer will be as set forth in Paragraph 7.06.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.
 3. Contractor shall make written application to Engineer for review of a proposed substitute item of equipment or material that Contractor seeks to furnish or use. The application:
 - a. will certify that the proposed substitute item will:
 - 1) perform adequately the functions and achieve the results called for by the general design;
 - 2) be similar in substance to the item specified; and
 - 3) be suited to the same use as the item specified.
 - b. will state:
 - 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times;
 - 2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and
 - 3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.
 - c. will identify:
 - 1) all variations of the proposed substitute item from the item specified; and
 - 2) available engineering, sales, maintenance, repair, and replacement services.
 - d. will contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.

- B. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.
- C. *Special Guarantee:* Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- D. *Reimbursement of Engineer's Cost:* Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.
- E. *Contractor's Expense:* Contractor shall provide all data in support of any proposed substitute at Contractor's expense.
- F. *Effect of Engineer's Determination:* If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request will be final and binding, and may not be reversed through an appeal under any provision of the Contract. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.06.D, by timely submittal of a Change Proposal.

7.07 Concerning Subcontractors and Suppliers

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner. The Contractor's retention of a Subcontractor or Supplier for the performance of parts of the Work will not relieve Contractor's obligation to Owner to perform and complete the Work in accordance with the Contract Documents.
- B. Contractor shall retain specific Subcontractors and Suppliers for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor or Supplier to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within 5 days.
- E. Owner may require the replacement of any Subcontractor or Supplier. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors or Suppliers for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor or Supplier so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor or Supplier.
- F. If Owner requires the replacement of any Subcontractor or Supplier retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.
- G. No acceptance by Owner of any such Subcontractor or Supplier, whether initially or as a replacement, will constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.
- H. On a monthly basis, Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.
- I. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors and Suppliers.
- J. The divisions and sections of the Specifications and the identifications of any Drawings do not control Contractor in dividing the Work among Subcontractors or Suppliers, or in delineating the Work to be performed by any specific trade.

- K. All Work performed for Contractor by a Subcontractor or Supplier must be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract for the benefit of Owner and Engineer.
- L. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor for Work performed for Contractor by the Subcontractor or Supplier.
- M. Contractor shall restrict all Subcontractors and Suppliers from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed in this Contract.

7.08 *Patent Fees and Royalties*

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If an invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights will be disclosed in the Contract Documents.
- B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.
- C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

7.09 *Permits*

- A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits, licenses, and certificates of occupancy. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). The contract amount includes a \$5,000.00 allowance for the building permit. **Upon determination of the final permit cost a change order will be issued to reflect the final amount. There will be no mark up on the permit fees.**

7.10 *Taxes*

- A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

7.11 *Laws and Regulations*

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work or other action. It is not Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this does not relieve Contractor of its obligations under Paragraph 3.03.

- C. Owner or Contractor may give written notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such written notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

7.12 *Record Documents*

- A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

7.13 *Safety and Protection*

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations.
- B. Contractor shall designate a qualified and experienced safety representative whose duties and responsibilities are the prevention of Work-related accidents and the maintenance and supervision of safety precautions and programs.
- C. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
 - 1. all persons on the Site or who may be affected by the Work;
 - 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 - 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- D. All damage, injury, or loss to any property referred to in Paragraph 7.13.C.2 or 7.13.C.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
- E. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection.
- F. Contractor shall notify Owner; the owners of adjacent property; the owners of Underground Facilities and other utilities (if the identity of such owners is known to Contractor); and other contractors and utility owners performing work at or adjacent to the Site, in writing, when Contractor knows that prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.
- G. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. Any Owner's safety programs that are applicable to the Work are identified or included in the Supplementary Conditions or Specifications.
- H. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.
- I. Contractor's duties and responsibilities for safety and protection will continue until all the Work is completed, Engineer has issued a written notice to Owner and Contractor in accordance with Paragraph 15.06.C that the Work is acceptable, and Contractor has left the Site (except as otherwise expressly provided in connection with Substantial Completion).
- J. Contractor's duties and responsibilities for safety and protection will resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.14 Hazard Communication Programs

- A. Contractor shall be responsible for coordinating any exchange of safety data sheets (formerly known as material safety data sheets) or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

7.15 Emergencies

- A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused by an emergency, or are required as a result of Contractor's response to an emergency. If Engineer determines that a change in the Contract Documents is required because of an emergency or Contractor's response, a Work Change Directive or Change Order will be issued.

7.16 Submittals

A. Shop Drawing and Sample Requirements

1. Before submitting a Shop Drawing or Sample, Contractor shall:

- a. review and coordinate the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
- b. determine and verify:
 - 1) all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect to the Submittal;
 - 2) the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - 3) all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto;
- c. confirm that the Submittal is complete with respect to all related data included in the Submittal.

2. Each Shop Drawing or Sample must bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that Submittal, and that Contractor approves the Submittal.

3. With each Shop Drawing or Sample, Contractor shall give Engineer specific written notice of any variations that the Submittal may have from the requirements of the Contract Documents. This notice must be set forth in a written communication separate from the Submittal; and, in addition, in the case of a Shop Drawing by a specific notation made on the Shop Drawing itself.

B. Submittal Procedures for Shop Drawings and Samples: Contractor shall label and submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals.

1. Shop Drawings

- a. Contractor shall submit the number of copies required in the Specifications.
- b. Data shown on the Shop Drawings must be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide, and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.C.

2. Samples

- a. Contractor shall submit the number of Samples required in the Specifications.
- b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the Submittal for the limited purposes required by Paragraph 7.16.C.

3. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

C. *Engineer's Review of Shop Drawings and Samples*

1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the accepted Schedule of Submittals. Engineer's review and approval will be only to determine if the items covered by the Submittals will, after installation or incorporation in the Work, comply with the requirements of the Contract Documents, and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction, or to safety precautions or programs incident thereto.
3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
4. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will document any such approved variation from the requirements of the Contract Documents in a Field Order or other appropriate Contract modification.
5. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for complying with the requirements of Paragraphs 7.16.A and B.
6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, will not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
7. Neither Engineer's receipt, review, acceptance, or approval of a Shop Drawing or Sample will result in such item becoming a Contract Document.
8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.C.4.

D. *Resubmittal Procedures for Shop Drawings and Samples*

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous Submittals.
2. Contractor shall furnish required Shop Drawing and Sample submittals with sufficient information and accuracy to obtain required approval of an item with no more than two resubmittals. Engineer will record Engineer's time for reviewing a third or subsequent resubmittal of a Shop Drawing or Sample, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges.
3. If Contractor requests a change of a previously approved Shop Drawing or Sample, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

E. *Submittals Other than Shop Drawings, Samples, and Owner-Delegated Designs*

1. The following provisions apply to all Submittals other than Shop Drawings, Samples, and Owner-delegated designs:
 - a. Contractor shall submit all such Submittals to the Engineer in accordance with the Schedule of Submittals and pursuant to the applicable terms of the Contract Documents.
 - b. Engineer will provide timely review of all such Submittals in accordance with the Schedule of Submittals and return such Submittals with a notation of either Accepted or Not Accepted. Any such Submittal that is not returned within the time established in the Schedule of Submittals will be deemed accepted.
 - c. Engineer's review will be only to determine if the Submittal is acceptable under the requirements of the Contract Documents as to general form and content of the Submittal.
 - d. If any such Submittal is not accepted, Contractor shall confer with Engineer regarding the reason for the non-acceptance, and resubmit an acceptable document.
2. Procedures for the submittal and acceptance of the Progress Schedule, the Schedule of Submittals, and the Schedule of Values are set forth in Paragraphs 2.03, 2.04, and 2.05.

- F. Owner-delegated Designs: Submittals pursuant to Owner-delegated designs are governed by the provisions of Paragraph 7.19.

7.17 *Contractor's General Warranty and Guarantee*

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer is entitled to rely on Contractor's warranty and guarantee.
- B. Owner's rights under this warranty and guarantee are in addition to, and are not limited by, Owner's rights under the correction period provisions of Paragraph 15.08. The time in which Owner may enforce its warranty and guarantee rights under this Paragraph 7.17 is limited only by applicable Laws and Regulations restricting actions to enforce such rights; provided, however, that after the end of the correction period under Paragraph 15.08:
1. Owner shall give Contractor written notice of any defective Work within 60 days of the discovery that such Work is defective; and
 2. Such notice will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the notice.
- C. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
1. abuse, or improper modification, maintenance, or operation, by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 2. normal wear and tear under normal usage.
- D. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents is absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents, a release of Contractor's obligation to perform the Work in accordance with the Contract Documents, or a release of Owner's warranty and guarantee rights under this Paragraph 7.17:
1. Observations by Engineer;
 2. Recommendation by Engineer or payment by Owner of any progress or final payment;
 3. The issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
 4. Use or occupancy of the Work or any part thereof by Owner;
 5. Any review and approval of a Shop Drawing or Sample submittal;
 6. The issuance of a notice of acceptability by Engineer;
 7. The end of the correction period established in Paragraph 15.08;
 8. Any inspection, test, or approval by others; or
 9. Any correction of defective Work by Owner.
- E. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract will govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

7.18 *Indemnification*

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from losses, damages, costs, and judgments (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising from third-party claims or actions relating to or resulting from the performance or furnishing of the Work, provided that any such claim, action, loss, cost, judgment or damage is attributable to bodily injury, sickness, disease, or death, or to damage to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable.
- B. In any and all claims against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of

the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A will not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

7.19 *Delegation of Professional Design Services*

- A. Owner may require Contractor to provide professional design services for a portion of the Work by express delegation in the Contract Documents. Such delegation will specify the performance and design criteria that such services must satisfy, and the Submittals that Contractor must furnish to Engineer with respect to the Owner-delegated design.
- B. Contractor shall cause such Owner-delegated professional design services to be provided pursuant to the professional standard of care by a properly licensed design professional, whose signature and seal must appear on all drawings, calculations, specifications, certifications, and Submittals prepared by such design professional. Such design professional must issue all certifications of design required by Laws and Regulations.
- C. If a Shop Drawing or other Submittal related to the Owner-delegated design is prepared by Contractor, a Subcontractor, or others for submittal to Engineer, then such Shop Drawing or other Submittal must bear the written approval of Contractor's design professional when submitted by Contractor to Engineer.
- D. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, and approvals performed or provided by the design professionals retained or employed by Contractor under an Owner-delegated design, subject to the professional standard of care and the performance and design criteria stated in the Contract Documents.
- E. Pursuant to this Paragraph 7.19, Engineer's review, approval, and other determinations regarding design drawings, calculations, specifications, certifications, and other Submittals furnished by Contractor pursuant to an Owner-delegated design will be only for the following limited purposes:
 - 1. Checking for conformance with the requirements of this Paragraph 7.19;
 - 2. Confirming that Contractor (through its design professionals) has used the performance and design criteria specified in the Contract Documents; and
 - 3. Establishing that the design furnished by Contractor is consistent with the design concept expressed in the Contract Documents.
- F. Contractor shall not be responsible for the adequacy of performance or design criteria specified by Owner or Engineer.
- G. Contractor is not required to provide professional services in violation of applicable Laws and Regulations.

ARTICLE 8—OTHER WORK AT THE SITE

8.01 *Other Work*

- A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.
- B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any third-party utility work that Owner has arranged to take place at or adjacent to the Site, Owner shall provide such information to Contractor.
- C. Contractor shall afford proper and safe access to the Site to each contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work.
- D. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.
- E. If the proper execution or results of any part of Contractor's Work depends upon work performed by others, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work

that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

- F. The provisions of this article are not applicable to work that is performed by third-party utilities or other third-party entities without a contract with Owner, or that is performed without having been arranged by Owner. If such work occurs, then any related delay, disruption, or interference incurred by Contractor is governed by the provisions of Paragraph 4.05.C.3.

8.02 *Coordination*

- A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:
1. The identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;
 2. An itemization of the specific matters to be covered by such authority and responsibility; and
 3. The extent of such authority and responsibilities.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

8.03 *Legal Relationships*

- A. If, in the course of performing other work for Owner at or adjacent to the Site, the Owner's employees, any other contractor working for Owner, or any utility owner that Owner has arranged to perform work, causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment will take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract, and any remedies available to Contractor under Laws or Regulations concerning utility action or inaction. When applicable, any such equitable adjustment in Contract Price will be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times or Contract Price is subject to the provisions of Paragraphs 4.05.D and 4.05.E.
- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site.
1. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this Paragraph 8.03.B.
 2. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due Contractor.
- C. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all costs, losses, and damages

(including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such damage, delay, disruption, or interference.

ARTICLE 9—OWNER'S RESPONSIBILITIES

9.01 *Communications to Contractor*

- A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

9.02 *Replacement of Engineer*

- A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer's status under the Contract Documents will be that of the former Engineer.

9.03 *Furnish Data*

- A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

9.04 *Pay When Due*

- A. Owner shall make payments to Contractor when they are due as provided in the Agreement.

9.05 *Lands and Easements; Reports, Tests, and Drawings*

- A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.
- B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.
- C. Article 5 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

9.06 *Insurance*

- A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.

9.07 *Change Orders*

- A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.

9.08 *Inspections, Tests, and Approvals*

- A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.

9.09 *Limitations on Owner's Responsibilities*

- A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

9.10 *Undisclosed Hazardous Environmental Condition*

- A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.

9.11 *Evidence of Financial Arrangements*

- A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract (including obligations under proposed changes in the Work).

9.12 *Safety Programs*

- A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
- B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

ARTICLE 10—ENGINEER'S STATUS DURING CONSTRUCTION10.01 *Owner's Representative*

- A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract.

10.02 *Visits to Site*

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe, as an experienced and qualified design professional, the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
- B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.07. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 *Resident Project Representative*

- A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in the Supplementary Conditions and in Paragraph 10.07.
- B. If Owner designates an individual or entity who is not Engineer's consultant, agent, or employee to represent Owner at the Site, then the responsibilities and authority of such individual or entity will be as provided in the Supplementary Conditions.

10.04 *Engineer's Authority*

- A. Engineer has the authority to reject Work in accordance with Article 14.
- B. Engineer's authority as to Submittals is set forth in Paragraph 7.16.
- C. Engineer's authority as to design drawings, calculations, specifications, certifications and other Submittals from Contractor in response to Owner's delegation (if any) to Contractor of professional design services, is set forth in Paragraph 7.19.
- D. Engineer's authority as to changes in the Work is set forth in Article 11.
- E. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.05 *Determinations for Unit Price Work*

- A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

10.06 *Decisions on Requirements of Contract Documents and Acceptability of Work*

- A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.07 *Limitations on Engineer's Authority and Responsibilities*

- A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, will create, impose, or give rise to any duty in

contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation, and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Contractor under Paragraph 15.06.A, will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 10.07 also apply to the Resident Project Representative, if any.

10.08 *Compliance with Safety Program*

- A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs of which Engineer has been informed.

ARTICLE 11—CHANGES TO THE CONTRACT

11.01 *Amending and Supplementing the Contract*

- A. The Contract may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
- B. If an amendment or supplement to the Contract includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order.
- C. All changes to the Contract that involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, must be supported by Engineer's recommendation. Owner and Contractor may amend other terms and conditions of the Contract without the recommendation of the Engineer.

11.02 *Change Orders*

- A. Owner and Contractor shall execute appropriate Change Orders covering:
 - 1. Changes in Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
 - 2. Changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
 - 3. Changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.05, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters; and
 - 4. Changes that embody the substance of any final and binding results under: Paragraph 11.03.B, resolving the impact of a Work Change Directive; Paragraph 11.09, concerning Change Proposals; Article 12, Claims; Paragraph 13.02.D, final adjustments resulting from allowances; Paragraph 13.03.D, final adjustments relating to determination of quantities for Unit Price Work; and similar provisions.
- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of Paragraph 11.02.A, it will be deemed to be of full force and effect, as if fully executed.

11.03 *Work Change Directives*

- A. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price

and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.07 regarding change of Contract Price.

- B. If Owner has issued a Work Change Directive and:
 - 1. Contractor believes that an adjustment in Contract Times or Contract Price is necessary, then Contractor shall submit any Change Proposal seeking such an adjustment no later than 30 days after the completion of the Work set out in the Work Change Directive.
 - 2. Owner believes that an adjustment in Contract Times or Contract Price is necessary, then Owner shall submit any Claim seeking such an adjustment no later than 60 days after issuance of the Work Change Directive.

11.04 *Field Orders*

- A. Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly.
- B. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

11.05 *Owner-Authorized Changes in the Work*

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Changes involving the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters will be supported by Engineer's recommendation.
- B. Such changes in the Work may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work must be performed under the applicable conditions of the Contract Documents.
- C. Nothing in this Paragraph 11.05 obligates Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.06 *Unauthorized Changes in the Work*

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.C.2.

11.07 *Change of Contract Price*

- A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment of Contract Price must comply with the provisions of Article 12.
- B. An adjustment in the Contract Price will be determined as follows:
 - 1. Where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03);
 - 2. Where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.07.C.2); or
 - 3. Where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.07.C).
- C. *Contractor's Fee*: When applicable, the Contractor's fee for overhead and profit will be determined as follows:
 - 1. A mutually acceptable fixed fee; or

2. If a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. For costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee will be 15 percent;
 - b. For costs incurred under Paragraph 13.01.B.3, the Contractor's fee will be 5 percent;
 - c. Where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.07.C.2.a and 11.07.C.2.b is that the Contractor's fee will be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of 5 percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted Work the maximum total fee to be paid by Owner will be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the Work;
 - d. No fee will be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
 - e. The amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in Cost of the Work will be the amount of the actual net decrease in Cost of the Work and a deduction of an additional amount equal to 5 percent of such actual net decrease in Cost of the Work; and
 - f. When both additions and credits are involved in any one change or Change Proposal, the adjustment in Contractor's fee will be computed by determining the sum of the costs in each of the cost categories in Paragraph 13.01.B (specifically, payroll costs, Paragraph 13.01.B.1; incorporated materials and equipment costs, Paragraph 13.01.B.2; Subcontract costs, Paragraph 13.01.B.3; special consultants costs, Paragraph 13.01.B.4; and other costs, Paragraph 13.01.B.5) and applying to each such cost category sum the appropriate fee from Paragraphs 11.07.C.2.a through 11.07.C.2.e, inclusive.

11.08 *Change of Contract Times*

- A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment in the Contract Times must comply with the provisions of Article 12.
- B. Delay, disruption, and interference in the Work, and any related changes in Contract Times, are addressed in and governed by Paragraph 4.05.

11.09 *Change Proposals*

- A. *Purpose and Content.* Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; contest an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; challenge a set-off against payment due; or seek other relief under the Contract. The Change Proposal will specify any proposed change in Contract Times or Contract Price, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents. Each Change Proposal will address only one issue, or a set of closely related issues.

B. *Change Proposal Procedures*

1. *Submittal:* Contractor shall submit each Change Proposal to Engineer within 30 days after the start of the event giving rise thereto, or after such initial decision.
2. *Supporting Data:* The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal.
 - a. Change Proposals based on or related to delay, interruption, or interference must comply with the provisions of Paragraphs 4.05.D and 4.05.E.
 - b. Change proposals related to a change of Contract Price must include full and detailed accounts of materials incorporated into the Work and labor and equipment used for the subject Work.

The supporting data must be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event.

3. *Engineer's Initial Review:* Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal. If in its discretion Engineer concludes that additional supporting

data is needed before conducting a full review and making a decision regarding the Change Proposal, then Engineer may request that Contractor submit such additional supporting data by a date specified by Engineer, prior to Engineer beginning its full review of the Change Proposal.

4. *Engineer's Full Review and Action on the Change Proposal:* Upon receipt of Contractor's supporting data (including any additional data requested by Engineer), Engineer will conduct a full review of each Change Proposal and, within 30 days after such receipt of the Contractor's supporting data, either approve the Change Proposal in whole, deny it in whole, or approve it in part and deny it in part. Such actions must be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.
 5. *Binding Decision:* Engineer's decision is final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- C. *Resolution of Certain Change Proposals:* If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties in writing that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice will be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.
- D. *Post-Completion:* Contractor shall not submit any Change Proposals after Engineer issues a written recommendation of final payment pursuant to Paragraph 15.06.B.

11.10 Notification to Surety

- A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

ARTICLE 12—CLAIMS

12.01 Claims

- A. *Claims Process:* The following disputes between Owner and Contractor are subject to the Claims process set forth in this article:
1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents;
 3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters; and
 4. Subject to the waiver provisions of Paragraph 15.07, any dispute arising after Engineer has issued a written recommendation of final payment pursuant to Paragraph 15.06.B.
- B. *Submittal of Claim:* The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim rests with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.
- C. *Review and Resolution:* The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim will be stated in writing and submitted to the other party, with a copy to Engineer.
- D. *Mediation*
1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate will stay the Claim submittal and response process.

2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process will resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal and decision process will resume as of the date of the conclusion of the mediation, as determined by the mediator.
 3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.
- E. *Partial Approval:* If the party receiving a Claim approves the Claim in part and denies it in part, such action will be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.
- F. *Denial of Claim:* If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim will be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.
- G. *Final and Binding Results:* If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim will be incorporated in a Change Order or other written document to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13—COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.01 *Cost of the Work*

- A. *Purposes for Determination of Cost of the Work:* The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or
 2. When needed to determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
- B. *Costs Included:* Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work will be in amounts no higher than those commonly incurred in the locality of the Project, will not include any of the costs itemized in Paragraph 13.01.C, and will include only the following items:
1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor in advance of the subject Work. Such employees include, without limitation, superintendents, foremen, safety managers, safety representatives, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work will be apportioned on the basis of their time spent on the Work. Payroll costs include, but are not limited to, salaries and wages plus the cost of fringe benefits, which include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, will be included in the above to the extent authorized by Owner.
 2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts will accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment will accrue to Owner, and Contractor shall make provisions so that they may be obtained.
 3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, which will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any

subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee will be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.

4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed or retained for services specifically related to the Work.
5. Other costs consisting of the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
 - 1) In establishing included costs for materials such as scaffolding, plating, or sheeting, consideration will be given to the actual or the estimated life of the material for use on other projects; or rental rates may be established on the basis of purchase or salvage value of such items, whichever is less. Contractor will not be eligible for compensation for such items in an amount that exceeds the purchase cost of such item.
 - c. *Construction Equipment Rental*
 - 1) Rentals of all construction equipment and machinery, and the parts thereof, in accordance with rental agreements approved by Owner as to price (including any surcharge or special rates applicable to overtime use of the construction equipment or machinery), and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs will be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts must cease when the use thereof is no longer necessary for the Work.
 - 2) Costs for equipment and machinery owned by Contractor or a Contractor-related entity will be paid at a rate shown for such equipment in the equipment rental rate book specified in the Supplementary Conditions. An hourly rate will be computed by dividing the monthly rates by 176. These computed rates will include all operating costs.
 - 3) With respect to Work that is the result of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price ("changed Work"), included costs will be based on the time the equipment or machinery is in use on the changed Work and the costs of transportation, loading, unloading, assembly, dismantling, and removal when directly attributable to the changed Work. The cost of any such equipment or machinery, or parts thereof, must cease to accrue when the use thereof is no longer necessary for the changed Work.
 - d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
 - e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
 - f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of builder's risk or other property insurance established in accordance with Paragraph 6.04), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses will be included in the Cost of the Work for the purpose of determining Contractor's fee.
 - g. The cost of utilities, fuel, and sanitary facilities at the Site.
 - h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.
 - i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.

- C. *Costs Excluded:* The term Cost of the Work does not include any of the following items:
1. Payroll costs and other compensation of Contractor's officers, executives, principals, general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.
 2. The cost of purchasing, renting, or furnishing small tools and hand tools.
 3. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
 4. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
 5. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
 6. Expenses incurred in preparing and advancing Claims.
 7. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.
- D. *Contractor's Fee*
1. When the Work as a whole is performed on the basis of cost-plus-a-fee, then:
 - a. Contractor's fee for the Work set forth in the Contract Documents as of the Effective Date of the Contract will be determined as set forth in the Agreement.
 - b. for any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work, Contractor's fee will be determined as follows:
 - 1) When the fee for the Work as a whole is a percentage of the Cost of the Work, the fee will automatically adjust as the Cost of the Work changes.
 - 2) When the fee for the Work as a whole is a fixed fee, the fee for any additions or deletions will be determined in accordance with Paragraph 11.07.C.2.
 2. When the Work as a whole is performed on the basis of a stipulated sum, or any other basis other than cost-plus-a-fee, then Contractor's fee for any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work will be determined in accordance with Paragraph 11.07.C.2.
- E. *Documentation and Audit:* Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor and pertinent Subcontractors will establish and maintain records of the costs in accordance with generally accepted accounting practices. Subject to prior written notice, Owner will be afforded reasonable access, during normal business hours, to all Contractor's accounts, records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data relating to the Cost of the Work and Contractor's fee. Contractor shall preserve all such documents for a period of three years after the final payment by Owner. Pertinent Subcontractors will afford such access to Owner, and preserve such documents, to the same extent required of Contractor.

13.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.
- B. *Cash Allowances:* Contractor agrees that:
1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment for any of the foregoing will be valid.

- C. *Owner's Contingency Allowance:* Contractor agrees that an Owner's contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor for Work covered by allowances, and the Contract Price will be correspondingly adjusted.

13.03 *Unit Price Work*

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, and the final adjustment of Contract Price will be set forth in a Change Order, subject to the provisions of the following paragraph.
- E. *Adjustments in Unit Price*
 - 1. Contractor or Owner shall be entitled to an adjustment in the unit price with respect to an item of Unit Price Work if:
 - a. the quantity of the item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and
 - b. Contractor's unit costs to perform the item of Unit Price Work have changed materially and significantly as a result of the quantity change.
 - 2. The adjustment in unit price will account for and be coordinated with any related changes in quantities of other items of Work, and in Contractor's costs to perform such other Work, such that the resulting overall change in Contract Price is equitable to Owner and Contractor.
 - 3. Adjusted unit prices will apply to all units of that item.

ARTICLE 14—TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

14.01 *Access to Work*

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply with such procedures and programs as applicable.

14.02 *Tests, Inspections, and Approvals*

- A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work will be governed by the provisions of Paragraph 14.05.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.

- D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
 2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
 3. by manufacturers of equipment furnished under the Contract Documents;
 4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
 5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests will be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

- E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering will be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to cover the same and Engineer had not acted with reasonable promptness in response to such notice.

14.03 *Defective Work*

- A. *Contractor's Obligation:* It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority:* Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. *Notice of Defects:* Prompt written notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement:* Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.
- E. *Preservation of Warranties:* When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. *Costs and Damages:* In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs, losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 *Acceptance of Defective Work*

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work will be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

14.05 *Uncovering Work*

- A. Engineer has the authority to require additional inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.

- B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.
 - 1. If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
 - 2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.06 *Owner May Stop the Work*

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work will not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

14.07 *Owner May Correct Defective Work*

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace defective Work as required by Engineer, then Owner may, after 7 days' written notice to Contractor, correct or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.
- C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.
- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

ARTICLE 15—PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 *Progress Payments*

- A. *Basis for Progress Payments:* The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments for Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.
- B. *Applications for Payments*
 - 1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents.

2. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment must also be accompanied by:
(a) a bill of sale, invoice, copies of subcontract or purchase order payments, or other documentation establishing full payment by Contractor for the materials and equipment; (b) at Owner's request, documentation warranting that Owner has received the materials and equipment free and clear of all Liens; and (c) evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.
3. Beginning with the second Application for Payment, each Application must include an affidavit of Contractor stating that all previous progress payments received by Contractor have been applied to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
4. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

C. *Review of Applications*

1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
 - a. the Work has progressed to the point indicated;
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
 - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
 - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or
 - b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.
4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
 - a. to supervise, direct, or control the Work;
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto;
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work;
 - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid by Owner;
or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.
6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
 - a. the Work is defective, requiring correction or replacement;

- b. the Contract Price has been reduced by Change Orders;
 - c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or
 - e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.
- D. *Payment Becomes Due*
- 1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.
- E. *Reductions in Payment by Owner*
- 1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
 - a. Claims have been made against Owner based on Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages resulting from Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;
 - b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
 - c. Contractor has failed to provide and maintain required bonds or insurance;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
 - e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
 - f. The Work is defective, requiring correction or replacement;
 - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - h. The Contract Price has been reduced by Change Orders;
 - i. An event has occurred that would constitute a default by Contractor and therefore justify a termination for cause;
 - j. Liquidated or other damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
 - k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens; or
 - l. Other items entitle Owner to a set-off against the amount recommended.
 - 2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed will be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.
 - 3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld will be treated as an amount due as determined by Paragraph 15.01.D.1 and subject to interest as provided in the Agreement.

15.02 *Contractor's Warranty of Title*

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than 7 days after the time of payment by Owner.

15.03 *Substantial Completion*

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.
- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which will fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have 7 days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.
- E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

15.04 *Partial Use or Occupancy*

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:
 - 1. At any time, Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through 15.03.E for that part of the Work.
 - 2. At any time, Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
 - 3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.04 regarding builder's risk or other property insurance.

15.05 *Final Inspection*

- A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

15.06 *Final Payment*

A. *Application for Payment*

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents (as provided in Paragraph 7.12), and other documents, Contractor may make application for final payment.
2. The final Application for Payment must be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents;
 - b. consent of the surety, if any, to final payment;
 - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.
 - d. a list of all duly pending Change Proposals and Claims; and
 - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.

- B. *Engineer's Review of Final Application and Recommendation of Payment:* If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within 10 days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the final Application for Payment to Owner for payment. Such recommendation will account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

- C. *Notice of Acceptability:* In support of its recommendation of payment of the final Application for Payment, Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to stated limitations in the notice and to the provisions of Paragraph 15.07.

- D. *Completion of Work:* The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment and issuance of notice of the acceptability of the Work.

- E. *Final Payment Becomes Due:* Upon receipt from Engineer of the final Application for Payment and accompanying documentation, Owner shall set off against the amount recommended by Engineer for final payment any further sum to which Owner is entitled, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions of this Contract with respect to progress payments. Owner shall pay the resulting balance due to Contractor within 30 days of Owner's receipt of the final Application for Payment from Engineer.

15.07 *Waiver of Claims*

- A. By making final payment, Owner waives its claim or right to liquidated damages or other damages for late completion by Contractor, except as set forth in an outstanding Claim, appeal under the provisions of Article 17, set-off, or express reservation of rights by Owner. Owner reserves all other claims or rights after final payment.
- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted as a Claim, or appealed under the provisions of Article 17.

15.08 *Correction Period*

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the Supplementary Conditions or the terms of any applicable special guarantee required by the Contract Documents), Owner gives Contractor written notice that any Work has been found to be defective, or that Contractor's repair of any damages to the Site or adjacent areas has been found to be defective, then after receipt of such notice of defect Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 - 1. correct the defective repairs to the Site or such adjacent areas;
 - 2. correct such defective Work;
 - 3. remove the defective Work from the Project and replace it with Work that is not defective, if the defective Work has been rejected by Owner, and
 - 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting from the corrective measures.
- B. Owner shall give any such notice of defect within 60 days of the discovery that such Work or repairs is defective. If such notice is given within such 60 days but after the end of the correction period, the notice will be deemed a notice of defective Work under Paragraph 7.17.B.
- C. If, after receipt of a notice of defect within 60 days and within the correction period, Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others). Contractor's failure to pay such costs, losses, and damages within 10 days of invoice from Owner will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the failure to pay.
- D. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- E. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.
- F. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph are not to be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16—SUSPENSION OF WORK AND TERMINATION16.01 *Owner May Suspend Work*

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times directly attributable to any such suspension. Any Change Proposal seeking such adjustments must be submitted no later than 30 days after the date fixed for resumption of Work.

16.02 *Owner May Terminate for Cause*

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment, or failure to adhere to the Progress Schedule);
 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
 4. Contractor's repeated disregard of the authority of Owner or Engineer.
- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) 10 days' written notice that Owner is considering a declaration that Contractor is in default and termination of the Contract, Owner may proceed to:
1. declare Contractor to be in default, and give Contractor (and any surety) written notice that the Contract is terminated; and
 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within 7 days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.
- F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond will govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 *Owner May Terminate for Convenience*

- A. Upon 7 days' written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
 3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid for any loss of anticipated profits or revenue, post-termination overhead costs, or other economic loss arising out of or resulting from such termination.

16.04 Contractor May Stop Work or Terminate

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon 7 days' written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, 7 days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17—FINAL RESOLUTION OF DISPUTES**17.01 Methods and Procedures**

- A. *Disputes Subject to Final Resolution:* The following disputed matters are subject to final resolution under the provisions of this article:
1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full, pursuant to Article 12; and
 2. Disputes between Owner and Contractor concerning the Work, or obligations under the Contract Documents, that arise after final payment has been made.
- B. *Final Resolution of Disputes:* For any dispute subject to resolution under this article, Owner or Contractor may:
1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions;
 2. agree with the other party to submit the dispute to another dispute resolution process; or
 3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

ARTICLE 18—MISCELLANEOUS**18.01 Giving Notice**

- A. Whenever any provision of the Contract requires the giving of written notice to Owner, Engineer, or Contractor, it will be deemed to have been validly given only if delivered:
1. in person, by a commercial courier service or otherwise, to the recipient's place of business;
 2. by registered or certified mail, postage prepaid, to the recipient's place of business; or
 3. by e-mail to the recipient, with the words "Formal Notice" or similar in the e-mail's subject line.

18.02 Computation of Times

- A. When any period of time is referred to in the Contract by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

18.03 Cumulative Remedies

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.04 *Limitation of Damages*

- A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 *No Waiver*

- A. A party's non-enforcement of any provision will not constitute a waiver of that provision, nor will it affect the enforceability of that provision or of the remainder of this Contract.

18.06 *Survival of Obligations*

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination of the Contract or of the services of Contractor.

18.07 *Controlling Law*

- A. This Contract is to be governed by the law of the state in which the Project is located.

18.08 *Assignment of Contract*

- A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party to this Contract of any rights under or interests in the Contract will be binding on the other party without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract.

18.09 *Successors and Assigns*

- A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

18.10 *Headings*

- A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

Supplementary Conditions to the General Conditions of the Contract

ARTICLE 1 - Definitions and Terminology

1.01.A.28 - Notice of Award , and 1.01.A.29 - Notice to Proceed

Add the following to each definition:

"If requested by the Owner, both the Notice of Award and Notice to Proceed will be issued by the ENGINEER."

ARTICLE 2 – Preliminary Matters

2.03 Before Starting Construction:

Add the following:

2.03.A.4 "By executing the Contract, the Contractor represents that he visited the site, familiarized himself with the local conditions under which the work is to be performed, and correlated his observations with the requirements of the Contract Documents."

ARTICLE 4 – Commencement and Progress of the Work

4.01.A Commencement of Contract Times; Notice to Proceed:

Delete in its entirety and add the following:

"The date of commencement of the Work is the date established in a Notice to Proceed. If there is no Notice to Proceed, it shall be the date of the Owner-Contractor Agreement or such other date as may be established therein."

4.02 Starting the Work:

Add the following:

4.02.A "The Contractor shall perform no portion of the Work at any time without Contract Documents or, where required, approved shop drawings or Product Data for such portion of the work."

ARTICLE 5 – Site; Subsurface and Physical Conditions, Hazardous Environmental Conditions

Delete Sections 5.03, 5.04, and 5.05

ARTICLE 6 - Bonds and Insurance

6.01 Performance, Payment, and Other Bonds

Delete this entire section.

6.03 Contractor's Liability Insurance:

Delete in its entirety and add the following:

6.03.B.2. "The limits of liability for the insurance required by paragraph 6.03 shall provide coverage for not less than the following amounts:

A. Worker's Compensation

- 1. State Statutory
- 2. Applicable Federal Statutory
- 3. Employer's Liability \$ 1,000,000.00

B. Comprehensive General Liability:
 (Including Premises - Operations; Independent Contractor's Protective; Broad Form Property Damage)

- 1. Bodily Injury:
 - Each Occurrence \$ 1,000,000.00
 - Aggregate \$ 2,000,000.00
- 2. Property Damage:
 - Each Occurrence \$ 1,000,000.00
 - Aggregate \$ 2,000,000.00
 - Comprehensive Umbrella Insurance \$ 4,000,000.00 per occurrence
- 3. XCU Coverage, Remove Exclusion (no)
- 4. Personal Injury:
 - Aggregate \$ 1,000,000.00

C. Comprehensive Automobile Liability:

- 1. Bodily Injury:
 - Each Person \$ 1,000,000.00
 - Each Occurrence \$ 1,000,000.00
- 2. Property Damage:
 - Each Occurrence \$ 1,000,000.00
 - Aggregate \$ 1,000,000.00

D. Additional liability coverage for Owner and ENGINEER shall be provided by endorsement as additional insured on Contractor's General Liability Policy.

Add the following names:

OWNER

ENGINEER

The additional liability coverage for the ENGINEER is not to be construed as to requiring, in any way, that either the Owner or Contractor be obligated to supply insurance protecting the ENGINEER for its liability emanating from professional errors or omissions.

Add the following:

- Excess Liability
 - Umbrella Coverage: \$ 1,000,000.00
- Completed Operations
 - Liability Coverage: \$ 1,000,000.00

6.04 Builder's Risk and Other Property Insurance

Owner shall purchase Builder's Risk insurance if necessary.

ARTICLE 7 – Contractor's Responsibilities

Add the following:

- 7.01.C "The Contract Documents are intended to communicate the nature of the design, concept and scope of the work. The Contractor shall be responsible for the construction and coordination of the parts all systems shall be complete, compatible and fully functional without additional cost."
- 7.03.D. Regular working hours will be 7:00 AM to 6:00 PM, Monday through Friday, with no noise before 8:00 AM or after 5:00 PM.

Supplement paragraphs 7.07 with:

Contractor shall be prohibited from utilizing any other Subcontractors for any portion of the Work hereunder, without the written consent of Owner. Owner's consent to any Subcontractor shall be conditioned upon, but not limited to, Contractor naming Owner as a primary, intended third party beneficiary in the Subcontract. In the event Contractor utilizes a Subcontractor and/or enters in a Subcontract, Contractor shall be deemed to have automatically assigned to Owner any and all of the Subcontractor's guarantees and warranties and assigned to Owner contract rights relating to enforcement of the Subcontract and job specifications (which assignment shall not preclude Contractor from pursuing any of its contract rights directly against the Subcontractor), whether or not such assignments are expressed in or referred to in the Subcontract or any separate document.

7.09.A. Permits

Replace and substitute the following:

"The licensed Contractor shall apply for and obtain all Construction Permits. ENGINEER shall assist the Contractor, when necessary, in obtaining such permits. Owner shall reimburse Contractor for the hard costs of the permits. The Owner shall not pay for Contractor's efforts acquiring permits."

Supplement 7.13 of the SGC with:

Free, clear and unobstructed egress and ingress with respect to all units shall be maintained by Contractor. If, after three days written notice by Owner to Contractor, Contractor has not diligently proceeded with clean up, then Owner may proceed with clean-up work at Contractor's expense.

Add new paragraphs immediately after paragraph 7.15.A of the General Conditions, which are to read as follows:

- A. An approaching Hurricane or Tropical Storm shall be considered an emergency, however the following exceptions to paragraph 7.15.A. of the General Conditions shall apply. Contractor shall make reasonable efforts to protect the Work, the site and adjacent property not designated for work from damage as a result of the hurricane or tropical storm. Contractor shall be entitled to increases in the Contract Time and Contract Price for efforts made to comply with this Section, which shall be accomplished as described in paragraph 7.15.A. of the General Conditions. If the Contractor makes a reasonable effort to protect according to Section 7.15.A., then Contractor shall be liable for damage resulting from the storm only to the extent that such damage is covered by the insurance policies delineated in Article 6 of the General Conditions. If the Contractor fails to make a reasonable effort to protect, then Contractor shall be liable for all damage resulting from the Hurricane or Tropical Storm.

Amend paragraph 7.18 of the GC as follows:

To the fullest extent permitted by law, Contractor shall indemnify and hold harmless Owner and ENGINEER, and their members, directors, officers, agents and employees, from and against all claims, damages, losses and expenses, including but not limited to attorneys' and other professionals' fees, arising out of or resulting from the performance of the work and the obligations imposed by this Agreement, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself) including the loss of use resulting therefrom, but only to the extent caused by the negligence, recklessness, or intentionally wrongful act of the Contractor, or any of its' subcontractors or materialmen, anyone directly or indirectly employed by any of the Contractor, a subcontractor or materialmen, or agents of an of them. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity, which would otherwise exist to any party or person described in this Paragraph. The obligation under this Paragraph is limited to \$1,000,000.00 per occurrence but shall not be

further limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under workers' workmen's compensation acts, disability benefit acts or other employee benefit acts. The foregoing indemnity from Contractor shall be applicable to all losses, damages, expenses or claims for damage or injury to any person or property resulting from the negligence, recklessness or intentional wrongful misconduct of Contractor and persons employed or utilized by Contractor relating to the performance of Work as described in this Contract.

Add a new paragraph immediately after paragraph 7.18.B. of the SGC, which is to read as follows:

- a. The parties agree that \$100.00 of the contract price is specific consideration for the indemnification provided by Contractor under Section 6.20 of the General Conditions.

ARTICLE 14 - Test and Inspections, Correction, Removal or Acceptance of Defective Work

14.02 Tests and Inspections:

Add the following:

14.02.G "All re-testing requested by the ENGINEER shall be paid for by the Contractor."

ARTICLE 15 – Payments to Contractor; Set-Offs; Completion; Correction Period

15.01.B.2.

Insert the following within the first sentence (bold-italicized):

If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing "**and reviewed by the ENGINEER at the off site location**", the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that OWNER has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect OWNER's interest therein, all of which must be satisfactory to OWNER.

Replace paragraph 15.01.B.3 of the SGC with:

With every application for a partial progress payment, Contractor shall submit simultaneously

- a. an executed conditional partial release of lien from Contractor for the current Application and Certificate for Payment (conditioned upon payment by the Owner); and an unconditional Partial Release of Lien from Contractor for the previous Application and Certificate for Payment
- b. a Contractor's Progress Affidavit listing all persons submitting a Notice to Owner who have not been paid and the amounts owned.
- c. an executed unconditional partial release, or a final release of lien as applicable if their work is completed, from each subcontractor, materialmen or supplier working on the project through the date of the prior progress payment.
- d. and an executed partial release, or a final release of lien as applicable if their work is completed, conditional upon receipt of a cleared payment, from each subcontractor, materialmen or supplier working on the project through the date of the current progress payment.

Supplement Paragraph 15.01(B) of the SGC with the following provisions:

If completion is final, a Contractor's Final Affidavit shall be delivered to Owner on forms which the Owner shall provide, indicating that all subcontractors, laborers, materialmen and suppliers have been paid in full for the work completed, and Contractor shall also deliver executed final waiver and release of lien documents from each subcontractor, materialmen and supplier which has provided a timely and proper Notice to Owner.

15.05 *Final Inspection*

Insert the following sentence after the last word 'defective' in the first sentence;

The Final Inspection shall be performed in unison, where the Owner or Owner's representative shall accompany the ENGINEER and CONTRACTOR and participate in identifying discrepancies as well as afford access to otherwise restricted or inaccessible areas within the Owner's property.

ARTICLE 17 – Final Resolution of Disputes

Delete reference to:

Paragraph 16 of the GC is supplemented with:

Disputes arising under this Agreement must first be mediated by a Supreme Court Certified Circuit Civil Mediator in Sarasota County, Florida. The parties agree that the mediation shall occur within thirty (30) days of the date mediation is requested by either party. The Mediator shall be agreed upon but if the parties are unwilling or unable to agree, the parties agree that their respective counsels may select a mediator. The parties agree to abide by the Mediator's Agreement, pay Mediator fees promptly and share them on an equal basis. Litigation may not be commenced until after mediation has been (i) declared an impasse by the Mediator or (ii) terminated in writing by one or both parties. The confidentially provisions of the "Mediation Confidentiality and Privilege Act" shall attach to any such pre-suit mediation. The prevailing party in any action filed to enforce the terms of this Agreement, or arising from the work, shall be entitled to an award of reasonable attorney's fees and costs.

ANY CLAIMS FOR CONSTRUCTION DEFECTS ARE SUBJECT TO THE NOTICE AND CURE PROVISIONS OF CHAPTER 558, FLORIDA STATUTES.

- End of Supplementary Conditions-

01100 – General Requirements

PART I - Scope of Work

1.1 General Project Description

The Work described below will be required at OWNER, Sarasota, Florida. The work to be performed under this contract shall consist of all labor, materials, tools, equipment, supervision, and services necessary to carry out the work described in the specifications and on the plans, and generally described as follows, and in no particular order of construction:

A. The Project consists of, but may not be limited to:

1. Mobilization and provision of all necessary general conditions required to complete the work required.
2. The CONTRACTOR shall file a Notice of Commencement as required and stipulated by current Florida law.
3. Preconstruction documentation of all existing conditions with particular attention to existing unit interiors, landscaping, and roof areas. This must be done with copies submitted to the engineer prior to start of work.
4. Unit owners shall remove all window treatments, furniture, and fixtures for a distance of four feet (4') from any part of all windows to be removed and replaced. Unit owners shall reinstall or replace after all work at an opening is complete.
5. Supply and installation of all new window systems as shown on the drawings. The BASE BID shall utilize the ES Windows system described and shown, and quantities as tabulated on the drawings.
6. Removal and disposal of all existing windows shown for replacement with new.
7. Removal, storage, and reinstallation of windows where necessitated for completion of concrete repairs.
8. Removal and replacement of existing unit entry doors as denoted on plans.
9. Removal and replacement of common area hollow metal doors and frames, including painting of new doors and frames.
10. Removal and replacement of 150 linear feet of existing roof fascia, using pressure treated wood, painted to match existing.
11. Concrete repairs as deemed necessary by the ENGINEER at areas of the work, in the base bid amount of 400 cubic feet. This base bid amount includes up to six (6) concrete repair areas not located on the west face.
12. Stucco repairs as deemed necessary by the ENGINEER at areas of the work, in the base bid amount of 100 square feet. Stucco repairs at concrete repairs shall be included in the concrete repairs. This does not include incidental stucco repairs around openings, that shall be included in the base bid.
13. Preparation of openings as shown and as necessary for the installation of the new windows.
14. Temporary protection as necessary at all work areas.
15. Provision of all necessary interior and exterior sealants required for the completion of the work.
16. Base bid shall include three (3) AAMA 502 tests that shall be observed by the ENGINEER.
17. Restore interior drywall to primed, paint ready surface, including orange peel texture to closely match original texture. Trim, paint, flooring, and any specialty finishes are excluded and are the responsibility of individual owners.
18. Restore all landscaping to conditions that existed prior to starting work, including replacement of destroyed plants and sod, and repair of sprinkler systems.
19. Repairs to any damages to roof from equipment or manpower accessing the roof.
20. Demobilization and clean-up of all work areas.

B. Coordinate the Work described within these specifications and the associated drawings with the property manager and the structural ENGINEER.

C. Schedule Work to facilitate inspections of the work by the ENGINEER. At all times provide safe access to the work areas for the ENGINEER.

1.2 Use of the Existing Building:

A. Maintain the existing building in weather tight and dustproof condition throughout the construction period. Repair any and all damage to building, building contents, grounds, or adjacent structures, etc. caused by construction operations. Take all precautions necessary to protect the building and its occupants during the construction period. As a minimum, the Contractor shall provide hard surface barriers to isolate demolition and construction areas from tenants and unauthorized personnel access.

1.3 Owner Occupancy:

A. The owner will occupy the site and existing buildings during the entire construction period. Cooperate with the Owners during

construction operations to minimize conflicts and facilitate Owner usage.

1.4 Pre-Construction Photographs:

A. Prior to mobilization and commencement of the work, provide three (3) sets of 640 x 480 pixel size photographs on a USB drive along with one (1) video of the Owner's property and adjacent areas to be affected by the Work. Contractor shall specifically document the pre-construction condition and operation of Unit Owner property that will be reused. Any damage found on property not documented shall be considered the responsibility of the Contractor.

1.5 Project Repair Methodology:

A. All attempts shall be made to minimize the inconvenience to the normal usage of the building by the Owner. All work shall be performed as expeditiously as possible, without long delays in work performed in any unit / area once demolition has commenced.

1.6 Associated Responsibilities:

A. Owner Responsibilities

1. The OWNER will provide the Contractor with a reasonable portion of the site that will be ready for the Contractor to start work. All OWNER owned materials will be removed from the work areas.

PART II - Documentation

2.1 Application for Payment

A. Schedule of Values:

1. Submit the Schedule of Values to the ENGINEER at the earliest feasible date, but in no case later than 14 days before the date scheduled for submittal of the first Application for Payment.
2. Provide a breakdown of the Contract Sum in sufficient detail to facilitate continued evaluation of the Applications for Payment and progress reports. Break principal subcontracts amounts down into several line items.
3. For each part of the Work where an Application for Payment may include materials or equipment, purchased, fabricated, and stored, but not yet installed, provide separate line items on the Schedule of Values for initial cost of the materials, for each subsequent stage of completion, and for total installed value of that part of the work.
4. Use AIA Document G 702 and Continuation Sheets G 703 as the form for Application for Payment.
5. Submit three executed copies of each Application for Payment to the ENGINEER. Each copy shall be complete, including waivers of lien, material invoices, and similar attachments, when required.

2.2 Application for Payment at Substantial Completion:

A. General

1. Following issuance of the Certificate of Substantial Completion, submit an Application for Payment; this application shall reflect any Certificates of Partial Substantial Completion issued previously for owner occupancy of designated portions of the Work.
2. Administrative actions and submittals that shall proceed or coincide with this application include:
 - a. Occupancy permits and similar approvals,
 - b. Warranties and maintenance agreements,
 - c. Maintenance instructions,
 - d. Final cleaning,
 - e. List of incomplete work, recognized as exceptions to ENGINEER's Certificate of Substantial Completion.

2.3 Final Certificate and Payment for Application:

A. Final payment, etc. Administrative actions and submittals which must precede or coincide with submittal of the final payment Application for Payment include, but are not limited to the following:

1. Completion of Project closeout requirements,
2. Completion of items specified for completion after Substantial Completion,
3. Transmittal of required Project construction records to Owner,
4. Removal of temporary facilities and services,
5. Removal of surplus materials, rubbish and similar elements,
6. Removal of all Contractors' signage, at end of final building work,
7. Submission of all unconditional release of liens from subcontractors and material suppliers.
8. Submission of final affidavits from the CONTRACTOR.

PART III - Project Coordination

3.1 Coordination:

- A. Coordinate construction activities included under various Sections of these Specifications to assure efficient and orderly execution of each part of the Work. Coordinate construction operations included under different Sections of the Specifications that are dependent upon each other for proper installation, connection, and operation. Refer to **Part I - Scope of Work** above for additional requirements.

3.2 Security:

- A. Restrict the access of all persons entering on the Owner's property in connection with the Work to actual site of the Work.

3.3 Access to Construction Areas:

- A. Maintain unobstructed access to all areas of construction for review by the ENGINEER and Owner's authorized representatives.

3.4 Inspection of Conditions:

- A. Require the installer of each major component to inspect both the substrate and conditions under which Work is to be performed. Do not proceed until unsatisfactory conditions have been corrected in an acceptable manner. Refer to **Part I - Scope of Work** above for additional requirements.

3.5 Manufacturer's Instructions:

- A. Comply with manufacturer's installation instructions and recommendations, to the extent that those instructions and recommendations are more explicit or stringent than requirements contained in the Contract Documents.
 1. Inspect materials or equipment immediately upon delivery and again prior to installation. Reject damaged and defective items.
 2. Recheck measurements and dimensions, before starting each manufactured installation.
 3. Install each component during weather conditions and project status that will ensure the best possible results. Isolate each part of the completed construction from incompatible material as necessary to prevent deterioration.

3.6 Temporary Enclosures

- A. Coordinate temporary enclosures with required inspections and tests, to minimize the necessity of uncovering completed construction for that purpose.

3.7 Job Site Meetings:

- A. A weekly job site meeting will be held with the contractor, ENGINEER, and owner representatives. The Day and time will be agreed upon prior to commencement of the work. The ENGINEER will be available each day for review of the on-going Work.

PART IV - Cutting and Patching

4.1 General

- A. Do not cut and patch structural elements in a manner that would reduce their load-carrying capacity or load-deflection ratio.
- B. Do not load or cause to be loaded, existing structural elements that have been cut or patched with quantities of materials in such concentrated areas that may cause load deflection or damage to the structural repairs.
- C. If any “Hotwork” is to be done, for commercial roofing, welding, cutting, thermite welding, braising, soldering, or grinding, the Contractor shall obtain a separate permit for said work as required by the local authority having jurisdiction.

4.2 Inspection:

- A. Before cutting existing surfaces examine surfaces to be cut and patched and conditions under which cutting and patching is to be performed. Take corrective action before proceeding, if unsafe or unsatisfactory conditions are encountered.
- B. Provide temporary support of Work to be cut.
- C. Protect existing construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of the Project that might be exposed during cutting and patching operations. The Contractor shall be responsible for any water, wind, and dust / dirt debris damage.
- D. Cut existing construction using methods least likely to damage elements to be retained or adjoining construction. In general, where cutting is required use hand or small power tools designed for sawing or grinding, not hammering and chopping. Cut holes and slots neatly to size required with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.

PART V - Temporary Facilities

5.1 Maintenance

- A. Keep temporary services and facilities clean and neat in appearance. Operate in a safe and efficient manner.
- B. Take necessary fire prevention measures.
- C. Do not overload facilities or permit them to interfere with progress.
- D. Do not allow hazardous, dangerous or unsanitary conditions, or public nuisances to develop or persist on the site.

5.2 Utilities and General Conditions

- A. Water: The Owner will provide municipal water. The Contractor will be responsible for distribution.
- B. Electricity: The Owner will provide house electricity. The Contractor will be responsible for distribution. Contractor shall submit power requirements with Bid.
- C. Temporary Toilet Units: Provide self-contained single-occupant toilet units of the chemical, aerated re-circulation, or non-combustion type, properly vented and fully enclosed with a fiber reinforced polyester shell or similar nonabsorbent material.
 - 1. Locate sanitary facilities and other temporary construction and support facilities for easy access. The location of the facilities shall be approved by the Owner prior to placing on site.
- D. First Aid: Comply with governing regulations.
- E. Fire Extinguisher: Provide hand carried, portable UL rated class "A" fire extinguisher for temporary offices and similar spaces. In other locations provide hand carried, portable, UL rated, class "ABC" dry chemical extinguisher, or a combination of extinguisher of NFPA recommended classes for the exposures.
- F. Project Signage: Not applicable.
- G. Collection and Disposal of Waste: Collect waste from construction areas. Comply with requirements of NFPA 241 for removal

of combustible waste material and debris. Enforce requirements strictly. Do not hold materials more than 7 days during normal weather or 3 days when the temperature is expected to rise above 80° F. Handle hazardous, dangerous, or unsanitary waste materials separately from other waste by containerizing properly. Dispose of material in a lawful manner.

- H. Barricades, Warning Signs and Lights: Comply with standards and code requirements for erection of structurally adequate barricades. Paint with appropriate colors, graphics and warning signs to inform personnel and the public of the hazard being protected against. Where appropriate and needed, provide lighting, including flashing red or amber lights.
- I. Environmental Protection: Provide protection, operate temporary facilities and conduct construction in ways and by methods that comply with environmental regulations, and minimize the possibility that air, waterways and subsoil might be contaminated or polluted, or that other undesirable effects might result. Avoid use of tools and equipment which produce harmful noise. Restrict use of noise making tools and equipment to hours that will minimize complaints from persons or firms near the site. Contractor shall provide landscape protection adequate to protect from paint, falling debris, stucco, etc. Protection shall not restrict the normal maintenance, watering or light that might adversely affect the continual healthy growth of landscaping.
- J. Truck and Equipment Access: Limit access to portions of the property or routes designated by the Owner for the Contractor's use. Provide adequate protection of curbs, sidewalks, driveways, etc. Restore damaged areas to condition acceptable to the Owner. Keep driveways and entrances serving the premises clear and available to the Owner and the Owner's employees at all times. Do not use these areas for parking or storage of materials, unless authorized by the Owners. Schedule deliveries to minimize space and time requirements for storage of materials and equipment off site.
- K. Use of the Existing Building: Maintain the existing building in a weather tight and dustproof condition throughout the construction period. Repair damage caused by construction operations. Take all precautions necessary to protect the building and its occupants during the construction period.
- L. Scaffolding, Swing Stages and Hoisting: Should the project be worked by set scaffolding, swing stages, install, brace and connect scaffolding / swing stages to existing structure in strict accordance with the Manufacturer's requirements and all applicable safety standards. Provide adequate scaffold egress "step units" and guardrails in accordance with applicable health and safety standards.
- M. Shoring: It shall be the responsibility of the Contractor to provide all necessary bracing, shoring, or other temporary supports necessary to safeguard all existing or adjacent structures affected by this work.
- N. Enclosures: If doors and or windows, exterior walls are removed, provide temporary enclosures to protect existing units from construction dirt, dust, debris and water ingress and wind. Any damage by such or from the installation and removal of the enclosure is the sole responsibility of the Contractor. Contractor shall provide vision panels approximately 2'-0" x 2'-0" to allow natural light into the unit without dust, dirt, water, and wind. The Contractor shall be responsible for the security of existing apartments and contents adjacent to Work. Mark the unit number on the exterior of each enclosure for reference during review. Contractor shall submit proposed method of unit protection to ENGINEER and Owner for review prior to proceeding with work. Contractor shall provide Unit Owner with suggestions to help protect the interiors of the Units. Should the temporary enclosure be breached by foreign material, the Contractor, as a minimum, shall be required to professionally clean the Owner's carpet, furniture, furnishings, air conditioning ducts, etc. to the Owner's satisfaction.
- O. Secure existing balcony doors if to remain in place to prevent owner access to work area. As a minimum, tape all balcony window and door joints to help protect unit interior from dirt, dust, and debris.
- P. Remove temporary facilities as rapidly as possible as progress of the work will permit or as directed by the ENGINEER.
- Q. Place warning and construction area signs at all perimeters of work area. Place warning signs on sliding glass doors to prevent Owner from entering work area and workers from entering units.
- R. Provide covers for all bulk materials to prevent damage to adjacent areas.
- S. The Contractor shall not be required to replace or repair any Owner additions or improvements that must be removed or damaged for access to carry out the work called for in the Contract. However, the Contractor shall take all precautions necessary, and perform all work as cautiously as required to prevent unnecessary damage to said finishes. Prior to commencement of any work that might cause damage to interior finishes, the Contractor shall contact the Owners representative and ENGINEER to describe possible damage. Damage due to negligence or failure to comply with contract

requirements will be covered as specified in the Contract. However, the Contractor shall be required to repair/replace all base materials necessarily damaged to carry out the work. Such materials shall include, but not be limited to the following – drywall, drywall finishes, ceilings, ceiling finishes, corner bead, caulk, primer, etc.

- T. Contractor shall provide and install barricades/ temporary guardrails at all areas where existing guardrails have been removed.
- U. The Contractor shall conform to all applicable requirements of the Florida Fire Prevention Code, latest edition.

PART VI - Project Cleaning

6.1 General

- A. Employ experienced workers and/or professional cleaners for final cleaning to the condition expected in a normal, commercial building cleaning and maintenance program.

6.2 Existing Surfaces

- A. Clean the site, including landscape, development areas of rubbish, litter and other foreign substances. Sweep paved areas broom clean, remove stains, spill and other foreign deposits. Rake grounds that are neither paved nor planted, to a smooth even textured finish.
- B. Landscaping: The Owner will have the landscaping cut back as far as possible without damaging the live plant materials. Plant material permanently damaged by the Contractor will be replaced at the Contractor's expense.

6.3 Construction Cleaning Damage to Surfaces

- A. Resolution of disputes arising from damage to surfaces shall be in accordance with the provisions of the General Conditions of Construction Contract.

PART VII - Warranties and Bonds

7.1 General

- A. In addition to the following, the conditions outlined within the Standard General Conditions of the Construction Contract, the provisions within the Agreement between the Owner and Contractor, and specific sections within the Project Manual relating to manufactured products, apply to this section.
- B. Warranties shall apply and be provided for manufactured materials and the labor to repair failed materials whether in conjunction with one another or not. The Contractor will provide to the Owner written labor and material warranties for the follow:
 - 1. For a period of five (10) years from the date of Substantial Completion; joint labor and material warranties for the following:
 - a. Concrete repairs
 - c. Window frames paint coating
 - d. Glass
 - 2. For a period of Five (5) years from the date of Final Payment; joint labor and material warranties for the following:
 - a. All other Work performed under this Contract by the Contractor and sub-contractors in accordance with The State of Florida Statutes governing Contractor warranties.

7.2 Disclaimers and Limitations:

- A. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products, nor does it relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.

7.3 Related Damages and Losses:

- A. Related Damages and Losses: When correcting warranted work that has failed, remove and replace other work that has been damaged as a result of such failure or that must be removed and replaced to provide access for correction of warranted work.

7.4 Reinstatement of Warranty:

- A. Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.

7.5 Replacement Cost:

- A. Replacement Cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of the Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective work regardless of whether the Owner has benefited from use of the work through a portion of its anticipated useful service life.

7.6 Owner's Recourse:

- A. Owner's Recourse: Written warranties made to the Owner are in addition to implied warranties, and shall not limit the duties, obligations, rights, and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on time in which the Owner can enforce such other duties, obligations, fights, or remedies.
- B. The Owner reserves the right to reject warranties and to limit selections to products with warranties not in conflict with requirements of the Contract Documents. The Owner reserves the right to refuse to accept work for the Project where a special warranty, certification, or similar commitment is required on such work or part of the work, until evidence is presented that entities required to countersign such commitments are willing to do so.
- C. Submit written warranties to the ENGINEER prior to the date certified for Substantial Completion. If the ENGINEER's Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion for the work, or a designated portion of the work, submit written warranties upon request of the ENGINEER.
- D. Contractor warrants that it will comply with all application and other requirement of each manufacturer or supplier of materials and will ensure that any inspections or other requirements of the manufacturer or supplier for a warranty of the materials, takes place. Manufacturer's representative shall be present to inspect each phase of the work. Contractor shall cause all manufacturer and suppliers offering warranties on their products to issue such warranties to the OWNER.

- End of Section -

2070 – Selective Demolition

PART I - General

1.1 Related Documents

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 Summary

- A. This section requires the selective removal and subsequent off-site disposal of the following:
 1. Removal of existing windows
 2. Removal of existing stucco to permit new window installations
 3. Removal of old bucks and shims with replacement of new as required
 4. Removal and disposal of deteriorated concrete and stucco
 5. Disposal of all materials not designated for reinstallation

1.3 Submittals

- A. General: Submit the following in accordance with Sections 01100 and conditions of contract.
 1. Schedule indicating proposed sequence of operations for selective demolition work to designated representative for review prior to start of work. Include coordination for shutoff, capping, and continuation of utility services as required, together with details for dust, water, wind, and noise control protection.
 2. Provide detailed sequence of demolition and removal work to ensure uninterrupted progress of Owner's onsite operations.
 3. Coordinate with Owner's continuing occupation of portions of existing building with respect to Owner's safe means of ingress and egress at walkways and stairways from private Unit entrances at buildings to grade level private parking shelters.
 4. Photographs of existing conditions of structure surfaces, equipment, and adjacent improvements that might be misconstrued as damage related to removal operations. As a minimum, provide a series of digital photographs with date and sequence number no larger than 640 x 480 pixel size, depicting areas where work is to occur and material which are to be reused. File with designated representative prior to start of work. Special consideration shall be given to Owner's property to be re-used.

1.4 Job Conditions:

- A. General: Examine the site prior to commencing construction and record and report any visible issue that may result in a conflict or restrict this portion of the Work.
 1. Occupancy: Owner will occupy portions of the building immediately adjacent to areas of selective demolition. Conduct selective demolition in manner that will minimize need for disruption of Owner's normal operations. Provide minimum of 72 hours advance notice to Owner of demolition activities that will affect Owner's normal use operations.
 - a. Provide a minimum advance notice of one (1) week to Owners prior to commencing work at egress elements. Notice is to include the approximate time required to complete all work on the elements, including cleaning and inspections.
 2. Conditions existing at time of inspection for bidding purposes will be maintained by Owner in so far as practicable. However, minor variations within the structure may occur by Owner's removal and salvage operations prior to and during the start of selective demolition work. Coordinate Owner's work with this phase of the construction.
 3. Partial Demolition and Removal: Items indicated to be removed but of salvageable value to Contractor may be removed from structure as work progresses. Transport salvaged items from site as they are removed.
 - a. Storage or sale of removed items on site will not be permitted.

4. Protections: Provide temporary barricades and other forms of protection to protect Owners, personnel and public from injury due to selective demolition work.
 - a. Provide protective measures as required to provide free and safe passage of ENGINEER and Owners representatives.
 - c. Erect temporary covered passageways as required by Authorities having jurisdiction.
 - d. Provide interior and exterior shoring, bracing, or support to prevent movement, settlement, or collapse of structure or element to be demolished and adjacent facilities or work to remain.
 - e. Protect from damage existing finish work that is to remain in place and becomes exposed during demolition operations.
 - f. Protect floors with suitable coverings when necessary.
 - g. Provide and maintain temporary protection of the existing structure, automobiles, mechanical equipment, landscaping, etc., where demolition, removal and new work is being done, connections made, materials handled or equipment moved.
 - h. Demolished materials must be elevated off the building to grade in an enclosed chute. Debris must be removed daily.
 - i. Areas beneath demolition work must be barricaded from pedestrians and vehicle traffic while work is being performed.
 - j. Special consideration must be made to the fire exit paths of the building. They are required to be passable by Unit Owners at all times. The Contractor shall maintain these areas and meet all OSHA and local code requirements. Coordinate vacancy of upper level living units with designated representative when exits access is compromised.
 - k. Carefully remove and store items which are to be removed and are designated for re-use. Be responsible for these items during removal, transportation, and storage, prior to replacement.
 - l. Be responsible for any damage to the existing structure or associated equipment due to the insufficiency of protection provided.
 - m. Be responsible for any damage to the existing structure or interior contents due to the insufficiency of protection provided.
 - n. Provide temporary weather protection during intervals between demolition and removal of existing construction on exterior surfaces and installation of new construction to ensure that no water leakage, dust/dirt infiltration or damage occurs to structure or interior areas of existing building.
 - o. Remove protections at completion of work
5. Damages:
 - a. Promptly repair damages caused to adjacent facilities by demolition work
6. Traffic: Conduct selective demolition operations and debris removal to ensure minimum interference with roads, streets, walks, and other adjacent occupied or used facilities.
 - a. Do not close, block, or otherwise obstruct streets, walks, or other occupied or used facilities without written permission from Authorities having jurisdiction.
 - b. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.
7. Flame Cutting: Do not use cutting torches for removal until work area is cleared of flammable materials. At concealed spaces, such as interior of ducts and pipe spaces, verify condition of hidden space before starting flame-cutting operations. Maintain portable fire suppression devices during flame cutting operations.
8. Contractor is responsible for meeting confined space rule.
9. Utility Services
 - a. Maintain existing utilities indicated to remain in service and protect them against damage during demolition operations.
 - b. Do not interrupt site utilities serving occupied or used facilities, except when authorized in writing by authorities having jurisdiction. Provide temporary services during interruptions to existing utilities, as acceptable to Owners and governing Authorities.
3. Maintain fire protection services during selective demolition operations.

4. Environmental Controls: Comply with governing regulations pertaining to environmental protection. Use temporary enclosures and other methods to limit dust and dirt migration.

PART II - Preparation:

2.1 General:

- A. Provide interior and exterior shoring, bracing, or support to prevent movement, settlement, or collapse of areas to be demolished and adjacent facilities to remain.
- B. Cease operations and notify designated representative immediately if safety of structure appears to be endangered. Take precautions to support structure until determination is made for continuing operations.
- C. Owner shall remove equipment, furniture, portable landscaping, fixtures, etc. from work areas prior to the commencement of demolition work and maintain areas free from equipment, furniture, portable landscaping, fixtures, etc. while work is in progress.
 1. Do not commence work in areas where Owners' property, which is scheduled to be removed by Owners', is still in place
 2. Contact designated representative for Owner removal of Owners' property prior to commencing work
- D. Perform selective demolition work in a systematic manner. Use such methods as required to complete work indicated on Drawings in accordance with demolition schedule and governing regulations.
 1. Demolish framing components in small sections. Cut framing at junctures with construction to remain using power-driven saw or hand tools.
 2. Locate demolition equipment throughout structure and promptly remove debris to avoid imposing excessive loads on supporting walls, floors, or framing.
 3. Provide services for effective air and water pollution controls as required by local authorities having jurisdiction.
- E. If unanticipated mechanical, electrical or structural elements that conflict with intended function or design are encountered, investigate and measure both nature and extent of the conflict. Submit report to designated representative in written accurate detail. Pending receipt of directive from Owner's Representative, rearrange selective demolition schedule as necessary to continue overall job progress without undue delay.

2.2 Disposal of Demolished Materials:

- A. Remove from building site, all construction related debris, rubbish, and other materials resulting from demolition operations. Transport and legally dispose of all dunnage off site.

2.3 Cleanup and Repair:

- A. General: Upon completion of demolition work, remove tools, equipment, and demolished materials from site. Remove protections and leave areas clean.
 1. Repair demolition performed in excess of that required. Return elements of construction and surfaces to remain to condition existing prior to start of operations. Repair adjacent construction or surfaces soiled or damaged by selective demolition work.

- End of Section -

03700 – Concrete Repair and Patchwork

PART I - Scope of the Work

1.1 Related Documents

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section. Refer to the owners for this other information.

1.2 Summary

- A. The work under this section of the specifications includes all labor, materials, equipment and services necessary to:
 1. Investigate entire exposed surface area of all exterior structural components by sounding for delaminations, cracks, and spalls; remove all previously patched areas and all surface from damaged area. Review areas with ENGINEER before continuing this phase of the Work.
 2. Repair spalled, cracked, disintegrated, and delaminated concrete surfaces at columns.
 3. Provide and install all required supplementary reinforcement.
 4. Contractor shall be required to maintain and submit prior to each payment request and each review of preparation for repair materials placement, and prior placement of repair materials, a summary of repairs; this summary shall show all areas dimensioned with respect to the structure. The summary shall also contain list of unit quantities for each repair area, along with a total unit quantity; the Contractor shall have the ENGINEER's approval for quantities prior to installation of patchwork.

PART II - Products

2.1 General:

- A. Provide the following products. Alternative products **may** be considered upon submission of product data. NOTE: Alternative products, as well as the products listed below, must be a single source system. "Systems" that require a combination of manufacturers will **not** be considered. The Contractor shall submit manufacturer's recommendations for use for all repair materials used before proceeding with the work. Specifications shall describe preparation, placement, and curing procedures and all limitations. The Contractor shall strictly follow all manufacturers' recommendations.
- B. All products shall be as manufactured by BASF MasterEmaco or SIKA.

PART III - Execution

3.1 General:

- A. Surface preparation, mixing, placement, finishing, and curing shall be in strict accordance with the Manufacturer's recommendations. The following specifications are to be a minimum standard and do not relieve the Contractor from complying with the Manufacturer's recommendations. Contractor shall be a Certified Applicator of the repair system used, and written certification shall be supplied with bid documents.
- B. Contractor shall perform all sounding, investigation of cracks and spalls of structural concrete, marking all possible repair areas. Contractor shall then contact ENGINEER to perform a review of each area prior to demolition. ENGINEER shall determine, on an individual basis, which areas are to be repaired.
- C. Surface Preparation:
 1. Shore structural elements as required and remove finishes.
 2. Saw cut 1/2" deep around perimeter of repair area. Do not cut existing reinforcing steel. Score vertical surface of saw cut.
 3. Remove all loose and delaminated concrete and expose all faces of reinforcing steel or embedded steel items with a maximum of 18# chipping hammer. Note: Demolition shall not be performed within 50 feet of a newly patched repair until such time as patch material has fully cured.

4. Remove concrete until active corrosion of steel is not encountered for a distance of 2" and a minimum of 3/4" behind all exposed steel. Contractor shall limit area of demolition as small as possible to perform work.
5. If exposed reinforcement has 1" or less of concrete coverage, the concrete shall be removed, along the reinforcement steel, until such point is reached that proper coverage is provided. The reinforcement shall then be relocated to a proper position. In areas where this cannot be accomplished, repair material in this area shall be built-up to provide the required coverage. In either case, the ENGINEER shall be contacted to discuss the method of repair for each area encountered.
6. Sandblast all reinforcement steel and embedded steel to remove all rust, scale, and impurities. Bring to an SSPC-SP5 (NACE No.1) Whitmetal Blast-Clean Finish.
7. Immediately following blast cleaning, Contractor shall apply primer as specified in Specification.
8. Contractor shall supply supplementary reinforcement at all areas where existing reinforcement has lost 30% or more of its cross sectional area.
9. Manufacturer's representative shall review preparatory work for all repair areas. Contractor shall provide ENGINEER with written copy of all comments made by Representative.
10. Repair area shall not be left exposed for a period of more than 24 hours.
11. ENGINEER shall be notified 24 hours in advance, for each area to be repaired, when preparatory work is complete. ENGINEER and manufacturer's representative shall review all areas prior to application of repair material.
12. Contractor to install repair material. Contractor to strictly follow all manufacturers' recommendations.

D. Installation of Supplementary Reinforcement:

1. Bars shall be tied in place with galvanized tie wire or plastic straps.
2. Prepare reinforcement as specified.
3. Provide splice lengths as follows:

for #3 bar - 12",
 for #4 bar - 16",
 for #5 bar - 21",
 for #6 bar - 25"

4. Embedment for reinforcement shall be as specified on the drawings but any case, no less than 3/4".
5. Use plastic reinforcement chairs and bolsters as required.

F. Notification

1. Notify ENGINEER for review as directed in repair procedure on drawings. Provide a minimum of 24 hours notice.
 - a. Site inspections are required as follows:
 - i. Upon completion of sounding for verification of proposed repair sites
 - ii. Upon completion of excavations for verification of suitable repair site preparation and measurement
 - iii. Upon application of required anticorrosion agents and bonding agents

PART IV - Warranty

4.1 Provisions of Warranty

- A. The repair materials applied under the terms of this agreement shall be warranted for a period of five (5) years. The work shall be warranted from the date of the completion of the project, as specified within this contract. Warranty shall be for material and labor costs.
- B. The warranty shall not be pro-rated, but be joint and several, and be honored by both the Contractor and the Applicator.
- C. This warranty shall cover failure caused by defective surface preparation, materials, and workmanship. This warranty shall not cover failure caused by fire, vandalism, abuse, settling, or excessive movement of the building or foundations.
- D. Repairs shall be commenced within seven (7) days after notification of defects. Defective areas shall be corrected in conformance to material manufacturer's specifications. Contractor shall provide all labor and materials at no cost to the Authority.

- E. Contractor shall also be responsible for correcting all other materials, surface finishes, and surface treatments described in this Contract.

- F. "Contractor/Applicator" warrants that it will comply with all application and other requirements of each producer or supplier of materials and will ensure that any inspections or other requirements of a producer or supplier for a warranty of the materials takes place. Manufacturer's representative shall be present to inspect each phase of the work. Contractor shall advise manufacturer sufficiently prior to the beginning of each phase of work to facilitate the inspection without delay of the work. Contractor shall cause all manufacturers and suppliers offering warranties on their product to issue such warranties to the Authority for the maximum time granted by such manufacturers and warrant suppliers.

- End of Section -

SECTION 08100**FRONT ENTRY AND COMMON AREA DOORS****PART 1 - GENERAL****1.01 SUMMARY**

- A. Section includes: Furnish and install front entry doors and common area doors

1.02 SYSTEM DESCRIPTION

- A. Performance Requirements: Provide window system that complies with performance requirements indicated, as demonstrated by testing manufacturer's assemblies in accordance with Florida Building Code Test Protocols TAS 201, TAS 202 and TAS 203.
1. Air Infiltration: Completed systems shall have 0.08 CFM/FT² maximum allowable infiltration when tested in accordance with ASTM E 283 at differential static pressure of 6.24 psf (299 Pa).
 2. Water Infiltration: With the doors closed and locked there shall be no uncontrolled water penetration when tested in accordance with ASTM E 331/ E547 at a pressure differential of: 13.5 PSF
 3. Wind Loads: The system shall withstand wind pressure loads normal to wall plane as indicated on drawing sheet S1.0.
 4. Forced Entry Resistance: Windows shall be tested in accordance with ASTM F 588 and meet the requirements of performance grade 10.
 5. Large Missile Impact, Missile Level D, Wind Zone 4, Impact Speed = 50 Ft/sec. There shall be no penetration of the inner plane after impact and no tear longer than 5" and no opening larger that allows a 3" diameter solid sphere to pass through after cycling.

1.03 SUBMITTALS

- A. General: Prepare, review, approve, and submit specified submittals in accordance with "Conditions of the Contract" and Division 1 Submittals Sections. Product data, shop drawings, samples, and similar submittals are defined in "Conditions of the Contract."
- B. Product Data: Submit product data for each door type series specified.
- C. Shop Drawings: Submit shop drawings showing layout, profiles, and product components, including anchorage, Accessories, finish colors and textures.
- D. Samples: Submit verification samples for colors on actual aluminum substrates indicating full color range expected in installed system.
- E. Quality Assurance / Control Submittals:
1. Test Reports: Submit certified test reports showing compliance with specified performance characteristics and physical properties.
 2. Installer Qualification Data: Submit installer qualification data.
- F. Closeout Submittals:
1. Warranty: Submit warranty documents specified herein.
 2. Project Record Documents: Submit project record documents for installed materials in accordance with Division 1 Project Closeout (Project Record Documents) Section.

1.04 QUALITY ASSURANCE

- A. Qualifications:
1. Installer Qualifications: Installer experienced (as determined by contractor) to perform work of this section who has specialized in the installation of work similar to that required for this project. If requested by Owner, submit reference list of completed projects.
 2. Manufacturer Qualifications: Manufacturer capable of providing field service representation during construction process.

1.05 PROJECT CONDITIONS / SITE CONDITIONS

- A. Field Measurements: Verify actual measurements/openings by field measurements before fabrication; show recorded measurements on shop drawings. Coordinate field measurements, fabrication schedule with construction progress to avoid construction delays.

1.06 WARRANTY

- A. Project Warranty: Refer to "Conditions of the Contract" for project warranty provisions.
- B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by an authorized company official.
1. Warranty Period: Manufacturer's one (1) year standard warranty commencing on the substantial date of completion for the project provided that the warranty, in no event, shall start later than six (6) months from the date of shipment by manufacturer.

PART 2 - PRODUCTS**2.01 MANUFACTURERS (Acceptable Manufacturers/Products)**

- A. Front Entry Doors shall be Therma Tru S-100 Fiberglass Flush Panel Wind Borne Debris Resistant with Composite Jambs
- B. Storm Doors shall be Andersen Series 3000.
- C. Common Area doors shall be hot dip galvanized (all six surfaces) hollow metal doors with hot dip galvanized frames.

2.02 MATERIALS

- A. Per the manufacturer.

2.03 ACCESSORIES

- A. Manufacturer's Standard Accessories:
 - 1. Hardware: Manufacturer's standard.
 - 2. Fasteners: All fasteners shall be AISI 300 series stainless steel.
 - 3. Joint Sealants: For installation at perimeters, as specified by the manufacturer.

2.04 RELATED MATERIALS (Specified In Other Sections)

- A. Glass: Refer to drawing sheet S1.0.

2.05 FABRICATION

- A. Frame: per the manufacturer.
- B. Glass: Refer to drawing sheet S1.0.

2.06 FINISHES AND COLORS

- A. Manufacturer's standard, to match existing colors.

PART 3 - GLASS**3.01 LOW E GLASS MONOLITHIC LAMINATED GLASS**

Type: see drawing sheet S1.0.

PART 4 - EXECUTION**4.01 MANUFACTURER'S INSTRUCTIONS / RECOMMENDATIONS**

- A. Compliance: Comply with manufacturer's product data, and installation instructions.

4.02 EXAMINATION

- A. Site Verification of Conditions: Verify conditions (which have been previously installed under other sections) are acceptable for product installation in accordance with manufacturer's instructions.
 - 1. Verify location of preset anchors, perimeter fasteners, and block-outs are in accordance with shop drawings.

4.03 PREPARATION

- A. Adjacent Surfaces Protection: Protect adjacent work areas and finish surfaces from damage during product installation.

4.04 INSTALLATION

- A. General: Install manufacturer's system in accordance with shop drawings and specifications, using skilled craftspeople.
 - 1. Provide adequate shimming and set doors, frames, and materials plumb, square and level.
 - 2. Anchor to structure according to substrate and wind Loads as specified.
 - 3. Adjust windows for proper operation after installation.
 - 4. Apply sealant at joints and opening perimeters, wipe off excess, and leave exposed sealant surfaces clean and smooth.

4.05 FIELD QUALITY CONTROL

- A. Manufacturer's Field Services: Upon request, provide manufacturer's field service consisting of site visit for inspection of product installation in accordance with manufacturer's instructions.
- B. Field Test: Perform field test in accordance with AAMA 502, to determine air and water tightness of the system, in presence of the window manufacturer, the general contractor, and owner.

4.06 ADJUSTING AND CLEANING

- A. Cleaning: The General Contractor shall clean installed products in accordance with manufacturer's instructions prior to owner's acceptance, and remove construction debris from project site.
- B. Protection: The General Contractor shall protect the installed product's finish surfaces from damage during construction.

END OF SECTION

SECTION 08210**GLAZED ALUMINUM WINDOW WALLS****ES WINDOWS LLC, SERIES 8000 ALUMINUM WINDOW WALL - L.M.I.****PART 1 - GENERAL****1.01 SUMMARY**

- A. Section includes: Furnish and install aluminum architectural windows complete with hardware and related components as shown on drawings and specified in this section
 - 1. ES Windows LLC, Series 8000 Aluminum Window Wall. Large Missile Impact
- B. Related Sections:
 - 1. Sealants: Dow Corning® 983 Structural Glazing Sealant.
 - 2. Single Source Requirement: All window products shall be by the same manufacturer.

1.02 SYSTEM DESCRIPTION

- A. Performance Requirements: Provide window system that complies with performance requirements indicated, as demonstrated by testing manufacturer's assemblies in accordance with Florida Building Code Test Protocols TAS 201, TAS 202 and TAS 203.
 - 1. Air Infiltration: Completed systems shall have 0.08 CFM/FT² maximum allowable infiltration when tested in accordance with ASTM E 283 at differential static pressure of 6.24 psf (299 Pa).
 - 2. Water Infiltration: With the sashes closed and locked there shall be no uncontrolled water penetration when tested in accordance with ASTM E 331/ E547 at a pressure differential of: 13.5 PSF
 - 3. Wind Loads: The system shall withstand wind pressure loads normal to wall plane as indicated on drawing sheet S1.0.
 - 4. Forced Entry Resistance: Windows shall be tested in accordance with ASTM F 588 and meet the requirements of performance grade 10.
 - 5. Large Missile Impact, Missile Level D, Wind Zone 4, Impact Speed = 50 Ft/sec. There shall be no penetration of the inner plane after impact and no tear longer than 5" and no opening larger that allows a 3" diameter solid sphere to pass through after cycling.

1.03 SUBMITTALS

- A. General: Prepare, review, approve, and submit specified submittals in accordance with "Conditions of the Contract" and Division 1 Submittals Sections. Product data, shop drawings, samples, and similar submittals are defined in "Conditions of the Contract."
- B. Product Data: Submit product data for each window type series specified.
- C. Shop Drawings: Submit shop drawings showing layout, profiles, and product components, including anchorage, Accessories, finish colors and textures.
- D. Samples: Submit verification samples for colors on actual aluminum substrates indicating full color range expected in installed system.
- E. Quality Assurance / Control Submittals:
 - 1. Test Reports: Submit certified test reports showing compliance with specified performance characteristics and physical properties.
 - 2. Installer Qualification Data: Submit installer qualification data.
- F. Closeout Submittals:
 - 1. Warranty: Submit warranty documents specified herein.
 - 2. Project Record Documents: Submit project record documents for installed materials in accordance with Division 1 Project Closeout (Project Record Documents) Section.

1.04 QUALITY ASSURANCE

- A. Qualifications:
 - 1. Installer Qualifications: Installer experienced (as determined by contractor) to perform work of this section who has specialized in the installation of work similar to that required for this project. If requested by Owner, submit reference list of completed projects.
 - 2. Manufacturer Qualifications: Manufacturer capable of providing field service representation during construction process.

1.05 PROJECT CONDITIONS / SITE CONDITIONS

- A. Field Measurements: Verify actual measurements/openings by field measurements before fabrication; show recorded measurements on shop drawings. Coordinate field measurements, fabrication schedule with construction progress to avoid construction delays.

1.06 WARRANTY

- A. Project Warranty: Refer to "Conditions of the Contract" for project warranty provisions.
- B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by an authorized company official.
 - 1. Warranty Period: Manufacturer's one (1) year standard warranty commencing on the substantial date of completion for the project provided that the warranty, in no event, shall start later than six (6) months from the date of shipment by manufacturer.

PART 2 - PRODUCTS

2.01 MANUFACTURERS (Acceptable Manufacturers/Products)

- A. Acceptable Manufacturers: ES Windows LLC.
 - 1. Glazed Window Walls: ES Windows LLC, Series 8000 Aluminum Window Wall
- B. Window Wall Systems:
 - 1. Description: 5" Nominal Frame depth. Horizontal and vertical members butted and mechanically fastened. Factory assembled.
 - 2. Components: Manufacturer's standard extruded aluminum frames.
 - 3. Configuration: Fixed.
 - 4. Glazing: Manufacturer's standard glazing stops with EPDM glazing gaskets at the exterior and Dow Corning® 983 Structural Silicone Sealant on the interior.

2.02 MATERIALS

- A. Extrusions: Alloy and temper recommended by aluminum window manufacturer for strength, corrosion resistance, and application of required finish, complying with ASTM B 221 (ASTM B 221M): 6063-T6 Aluminum Alloy.

2.03 ACCESSORIES

- A. Manufacturer's Standard Accessories:
 - 1. Hardware: Manufacturer's standard.
 - 2. Fasteners: All fasteners shall be AISI 300 series stainless steel.
 - 3. Joint Sealants: For installation at perimeter of aluminum-framed systems, as specified on the drawings.

2.04 RELATED MATERIALS (Specified In Other Sections)

- A. Glass: Refer to drawing sheet S1.0.

2.05 FABRICATION

- A. Frame: Horizontal members butted and mechanically fastened to horizontals with four screws per end into integral screw splines. All joints are factory-sealed with sealant conforming to AAMA 800-92.
- B. Mullions: Mullions shall be of extruded aluminum as detailed on approved shop drawings and must provide adequate structural properties to resist wind pressure as specified.
- C. Glass: Refer to drawing sheet S1.0.

2.06 FINISHES AND COLORS

- A. Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes
- B. High Performance Organic Coating Finish:
 - 1. Type Factory applied 2 or 3-coat as required by color and meeting AAMA 2605 specifications.
 - 2. Acceptable coatings: AAMA 2605.
 - 3. Colors: AAMA 2605 – PPG Duranar Bone White UC43350
- C. Finishes Testing:
 - 1. Apply 0.5% solution NaOH, sodium hydroxide, to small area of finished sample area; leave in place for sixty minutes; lightly wipe off NaOH; do not clean area further.
 - 2. Submit samples with test area noted on each sample.

PART 3 - GLASS**3.02 LOW E GLASS MONOLITHIC LAMINATED GLASS**

Type: see drawing sheet S1.0.

PART 4 - EXECUTION**4.01 MANUFACTURER'S INSTRUCTIONS / RECOMMENDATIONS**

- A. Compliance: Comply with manufacturer's product data, and installation instructions.

4.02 EXAMINATION

- A. Site Verification of Conditions: Verify conditions (which have been previously installed under other sections) are acceptable for product installation in accordance with manufacturer's instructions.
 - 1. Verify location of preset anchors, perimeter fasteners, and block-outs are in accordance with shop drawings.

4.03 PREPARATION

- A. Adjacent Surfaces Protection: Protect adjacent work areas and finish surfaces from damage during product installation.
 - 1. Aluminum Surface Protection: Protect aluminum surfaces from contact with lime, mortar, cement, acids, and other harmful contaminants.

4.04 INSTALLATION

- A. General: Install manufacturer's system in accordance with shop drawings and specifications, using skilled craftspeople.
 - 1. Provide adequate shimming and set windows and materials plumb, square and level.
 - 2. Anchor to structure according to substrate and wind Loads as specified.
 - 3. Adjust windows for proper operation after installation. Verify weep holes are open and weep covers are installed correctly.
 - 4. Apply sealant at joints and opening perimeters, wipe off excess, and leave exposed sealant surfaces clean and smooth

4.05 FIELD QUALITY CONTROL

- A. Manufacturer's Field Services: Upon request, provide manufacturer's field service consisting of site visit for inspection of product installation in accordance with manufacturer's instructions.
- B. Field Test: Perform field test in accordance with AAMA 502, to determine air and water tightness of the system, in presence of the window manufacturer, the general contractor, and owner.

4.06 ADJUSTING AND CLEANING

- A. Cleaning: The General Contractor shall clean installed products in accordance with manufacturer's instructions prior to owner's acceptance, and remove construction debris from project site.
- B. Protection: The General Contractor shall protect the installed product's finish surfaces from damage during construction.

END OF SECTION

SECTION 08211**OUTSWING CASEMENT WINDOW****ES WINDOWS LLC, SERIES ES-5000 OUTSWING ALUMINUM CASEMENT WINDOW - L.M.I.****PART 1 - GENERAL****1.01 SUMMARY**

- A. Section includes: Furnish and install aluminum architectural windows complete with hardware and related components as shown on drawings and specified in this section
 - 1. ES Windows LLC, Series ES-5000 Outswing Casement Window. Large and Small Missile Impact Resistant.
- B. Related Sections:
 - 1. Sealants: Dow Corning® 983 Structural Glazing Sealant, Dow Corning® 795 Silicone Building Sealant, Dow Corning® 791 Silicone Weatherproofing Sealant
 - 2. Glass and Glazing: Refer to drawing sheet S1.0.
 - 3. Single Source Requirement: All window products shall be by the same manufacturer.

1.02 SYSTEM DESCRIPTION

- A. Performance Requirements: Provide window system that complies with performance requirements indicated, as demonstrated by testing manufacturer's assemblies in accordance with Florida Building Code Test Protocols TAS 201, TAS 202 and TAS 203.
 - 1. Air Infiltration: Completed systems shall have 0.08 CFM/FT² maximum allowable infiltration when tested in accordance with ASTM E 283 at differential static pressure of 6.24 psf (299 Pa).
 - 2. Water Infiltration: With the vents closed and locked there shall be no uncontrolled water penetration when tested in accordance with ASTM E 331/ E547 at a pressure differential of: 12.75 PSF.
 - 3. Wind Loads: The system shall withstand wind pressure loads normal to wall plane as indicated:
 - a. Exterior Walls: see drawing sheet S1.0.
 - 4. Forced Entry Resistance: Windows shall be tested in accordance to ASTM F 588 and meet the requirements of performance grade 10.
 - 5. Large Missile Impact, Missile Level D, Wind Zone 4, Impact Speed = 50 Ft/sec. There shall be no penetration of the inner plane after impact and no tear longer than 5" and no opening larger that allows a 3" diameter solid sphere to pass through after cycling.

1.03 SUBMITTALS

- A. General: Prepare, review, approve, and submit specified submittals in accordance with "Conditions of the Contract" and Division 1 Submittals Sections. Product data, shop drawings, samples, and similar submittals are defined in "Conditions of the Contract."
- B. Product Data: Submit product data for each window type series specified.
- C. Shop Drawings: Submit shop drawings showing layout, profiles, and product components, including anchorage, Accessories, finish colors and textures.
- D. Samples: Submit verification samples for colors on actual aluminum substrates indicating full color range expected in installed system.
- E. Quality Assurance / Control Submittals:
 - 1. Test Reports: Submit certified test reports showing compliance with specified performance characteristics and physical properties.
 - 2. Installer Qualification Data: Submit installer qualification data.
- F. Closeout Submittals:
 - 1. Warranty: Submit warranty documents specified herein.
 - 2. Project Record Documents: Submit project record documents for installed materials in accordance with Division 1 Project Closeout (Project Record Documents) Section.

1.04 QUALITY ASSURANCE

- A. Qualifications:
 - 1. Installer Qualifications: Installer experienced (as determined by contractor) to perform work of this section who has specialized in the installation of work similar to that required for this project. If requested by Owner, submit reference list of completed projects.
 - 2. Manufacturer Qualifications: Manufacturer capable of providing field service representation during construction process.

1.05 PROJECT CONDITIONS / SITE CONDITIONS

- A. Field Measurements: Verify actual measurements/openings by field measurements before fabrication; show recorded measurements on shop drawings. Coordinate field measurements, fabrication schedule with construction progress to avoid construction delays.

1.06 WARRANTY

- A. Project Warranty: Refer to "Conditions of the Contract" for project warranty provisions.
- B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by an authorized company official.
 - 1. Warranty Period: Manufacturer's one (1) year standard warranty commencing on the substantial date of completion for the project provided that the warranty, in no event, shall start later than six (6) months from the date of shipment by manufacturer.

PART 2 - PRODUCTS

2.01 MANUFACTURERS (Acceptable Manufacturers/Products)

- A. Acceptable Manufacturers: ES Windows LLC.
 - 1. Operable windows: ES Windows LLC, Series ES-5000 Outswing Casement Window.
- B. Window Systems:
 - 1. Description: 2 1/8" Frame depth. 1/2" Frame flange. (Flush frame adapter optional) Horizontal and vertical members butted and mechanically fastened. Field removable vent for installation and maintenance. Factory assembled.
 - 2. Components: Manufacturer's standard extruded aluminum frame and vent.
 - 3. Configuration: Outswing Casement Window.
 - 4. Glazing: Manufacturer's standard glazing stops with SILICONE glazing gaskets at the exterior and Dow Corning® Structural Silicone Sealant on integral fin at the interior (Dow Corning® 983 Structural Glazing Sealant, Dow Corning® 795 Silicone Building Sealant).

2.02 MATERIALS

- A. Extrusions: Alloy and temper recommended by aluminum window manufacturer for strength, corrosion resistance, and application of required finish, complying with ASTM B 221 (ASTM B 221M): 6063-T6 and 6063-T5 Aluminum Alloy.

2.03 ACCESSORIES

- A. Manufacturer's Standard Accessories:
 - 1. Hardware: Extruded aluminum vent latch at sill. Optional sweep lock at meeting rail.
 - 2. Fasteners: All fasteners shall be AISI 300 series stainless steel.
 - 3. Balances: Select balances in accordance with AAMA 101, Section 2.2.1.3.2 and AAMA 902, Section 8.1.
 - a. Class 2 Block & Tackle balances shall be of appropriate size and capacity to hold vent in position and permit smooth operation.
 - b. Class 5 Heavy duty spiral balances shall be of appropriate size and capacity to hold vent in position and permit smooth operation.
 - 4. Weatherstrip: Urethane foam weatherseal at sill, and Pile with polypropylene center fin in remaining locations.
 - 5. Screens (Optional): extruded tubular aluminum frame with window finish and dark Fiberglass mesh.
 - 6. Joint Sealants: For installation at perimeter of aluminum-framed systems refer to the drawings.

2.04 RELATED MATERIALS (Specified In Other Sections)

- A. Glass: Refer to drawing sheet S1.0.

2.05 FABRICATION

- A. Frame: Vertical members butted and mechanically fastened to notched horizontals with two screws per end into integral screw splines. Meeting rail attached to notched verticals with two screws per end into integral screw splines. All joints are factory-sealed with sealant conforming to AAMA 800-92.
- B. Vent: Horizontal members butted and mechanically fastened to notched verticals with two screws per end into integral screw splines.
- C. Mullions: Mullions shall be of extruded aluminum as detailed on approved shop drawings and must provide adequate structural properties to resist wind pressure as specified.
- D. Glass: Refer to drawing sheet S1.0.

2.06 FINISHES AND COLORS

- A. Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes
- B. High Performance Organic Coating Finish:
 - 1. Type Factory applied 2 or 3-coat as required by color and meeting AAMA 2605 specifications.
 - 2. Acceptable coatings: AAMA 2605.
 - 3. Colors: AAMA 2605 – PPG Duranar Bone White UC43350
- C. Finishes Testing:
 - 1. Apply 0.5% solution NaOH, sodium hydroxide, to small area of finished sample area; leave in place for sixty minutes; lightly wipe off NaOH; do not clean area further.
 - 2. Submit samples with test area noted on each sample.

PART 3 - GLASS

3.03 LOW E GLASS LAMINATED GLASS

Type: see drawing sheet S1.0.

PART 4 - EXECUTION

4.01 MANUFACTURER'S INSTRUCTIONS / RECOMMENDATIONS

- A. Compliance: Comply with manufacturer's product data, and installation instructions.

4.02 EXAMINATION

- A. Site Verification of Conditions: Verify conditions (which have been previously installed under other sections) are acceptable for product installation in accordance with manufacturer's instructions.
 - 1. Verify location of preset anchors, perimeter fasteners, and block-outs are in accordance with shop drawings.

4.03 PREPARATION

- A. Adjacent Surfaces Protection: Protect adjacent work areas and finish surfaces from damage during product installation.
 - 1. Aluminum Surface Protection: Protect aluminum surfaces from contact with lime, mortar, cement, acids, and other harmful contaminants.

4.04 INSTALLATION

- A. General: Install manufacturer's system in accordance with shop drawings and specifications, using skilled craftspeople.
 - 1. Provide adequate shimming and set windows and materials plumb, square and level.
 - 2. Anchor to structure according to substrate and wind Loads as specified.
 - 3. Adjust windows for proper operation after installation. Verify weep holes are open and weep covers are installed correctly.
 - 4. Apply sealant at joints and opening perimeters, wipe off excess, and leave exposed sealant surfaces clean and smooth

4.05 FIELD QUALITY CONTROL

- A. Manufacturer's Field Services: Upon request, provide manufacturer's field service consisting of site visit for inspection of product installation in accordance with manufacturer's instructions.
- B. Field Test: Perform field test in accordance with AAMA 502, to determine air and water tightness of the system, in presence of the window manufacturer, the general contractor, and owner.

4.06 ADJUSTING AND CLEANING

- A. Cleaning: The General Contractor shall clean installed products in accordance with manufacturer's instructions prior to owner's acceptance and remove construction debris from project site.
- B. Protection: The General Contractor shall protect the installed product's finish surfaces from damage during construction.

END OF SECTION

SECTION 08212**ALUMINUM WINDOWS****ES WINDOWS LLC, SERIES EL100 ALUMINUM SINGLE HUNG WINDOW - L.M.I.****PART 1 - GENERAL****1.01 SUMMARY**

- A. Section includes: Furnish and install aluminum architectural windows complete with hardware and related components as shown on drawings and specified in this section
 - 1. Es Windows LLC, Series EL100 Aluminum Single Hung Window. Large Missile Impact.
- B. Related Sections:
 - 1. Sealants: Dow Corning® 983 Structural Glazing Sealant.
 - 2. Glass and Glazing: Refer to drawing sheet S1.0.
 - 3. Single Source Requirement: All window products shall be by the same manufacturer.

1.02 SYSTEM DESCRIPTION

- A. Performance Requirements: Provide window system that comply with performance requirements indicated, as demonstrated by testing manufacturer's assemblies in accordance with South Florida Building Code Test Protocols TAS 201, TAS 202 and TAS 203.
 - 1. Air Infiltration: Completed systems shall have 0.30 CFM/FT² (5.5 m³/h·m²) maximum allowable infiltration when tested in accordance with ASTM E 283 at differential static pressure of 6.24 psf (299 Pa).
 - 2. Water Infiltration: With the sashes closed and locked there shall be no uncontrolled water penetration when tested in accordance with ASTM E 331/ E547 at a pressure differential of: 12.0 PSF (574.5 Pa)
 - 3. Wind Loads: The system shall withstand wind pressure loads normal to wall plane as indicated:
 - a. Exterior Walls: see drawing sheet S1.0.
 - 4. Forced Entry Resistance: Windows shall be tested in accordance to ASTM F 588 and meet the requirements of performance grade 10.
 - 5. Large Missile Impact, Missile Level D, Wind Zone 4, Impact Speed = 50 Ft/sec. There shall be no penetration of the inner plane after impact and no tear longer than 5" and no opening larger that allows a 3" diameter solid sphere to pass through after cycling.

1.03 SUBMITTALS

- A. General: Prepare, review, approve, and submit specified submittals in accordance with "Conditions of the Contract" and Division 1 Submittals Sections. Product data, shop drawings, samples, and similar submittals are defined in "Conditions of the Contract."
- B. Product Data: Submit product data for each window type series specified.
- C. Shop Drawings: Submit shop drawings showing layout, profiles, and product components, including anchorage, accessories, finish colors and textures.
- D. Samples: Submit verification samples for colors on actual aluminum substrates indicating full color range expected in installed system.
- E. Quality Assurance / Control Submittals:
 - 1. Test Reports: Submit certified test reports showing compliance with specified performance characteristics and physical properties.
 - 2. Installer Qualification Data: Submit installer qualification data.
- F. Closeout Submittals:
 - 1. Warranty: Submit warranty documents specified herein.
 - 2. Project Record Documents: Submit project record documents for installed materials in accordance with Division 1 Project Closeout (Project Record Documents) Section.

1.04 QUALITY ASSURANCE

- A. Qualifications:
 - 1. Installer Qualifications: Installer experienced (as determined by contractor) to perform work of this section who has specialized in the installation of work similar to that required for this project. If requested by Owner, submit reference list of completed projects.
 - 2. Manufacturer Qualifications: Manufacturer capable of providing field service representation during construction process.

1.05 PROJECT CONDITIONS / SITE CONDITIONS

- A. Field Measurements: Verify actual measurements/openings by field measurements before fabrication; show recorded measurements on shop drawings. Coordinate field measurements, fabrication schedule with construction progress to avoid construction delays.

1.06 WARRANTY

- A. Project Warranty: Refer to "Conditions of the Contract" for project warranty provisions.
- B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by an authorized company official.
 - 1. Warranty Period: Manufacturer's one (1) year standard warranty commencing on the substantial date of completion for the project provided that the warranty, in no event, shall start later than six (6) months from the date of shipment by manufacturer.

PART 2 - PRODUCTS

2.01 MANUFACTURERS (Acceptable Manufacturers/Products)

- A. Acceptable Manufacturers: ES Windows LLC.
 - 1. Operable windows: Es Windows LLC, Series EL100 Aluminum Single Hung Window.
- B. Window Systems:
 - 1. Description: 3" Frame depth. 1/2" Frame flange. (Flush frame adapter optional) Horizontal and vertical members butted and mechanically fastened. Field removable sash for installation and maintenance. Factory assembled.
 - 2. Components: Manufacturer's standard extruded aluminum frame and sash.
 - 3. Configuration: Single Hung.
 - 4. Glazing: Manufacturer's standard glazing stops with EPDM glazing gaskets at the exterior and Dow Corning® 983 Structural Silicone Sealant on integral fin at the interior.

2.02 MATERIALS

- A. Extrusions: Alloy and temper recommended by aluminum window manufacturer for strength, corrosion resistance, and application of required finish, complying with ASTM B 221 (ASTM B 221M): 6063-T6 Aluminum Alloy.

2.03 ACCESSORIES

- A. Manufacturer's Standard Accessories:
 - 1. Hardware: Extruded aluminum vent latch at sill. Optional sweep lock at meeting rail.
 - 2. Fasteners: All fasteners shall be AISI 300 series stainless steel.
 - 3. Balances: Select balances in accordance with AAMA 101, Section 2.2.1.3.2 and AAMA 902, Section 8.1.
 - a. Class 5 Heavy duty spiral balances shall be of appropriate size and capacity to hold sash in position and permit smooth operation.
 - 4. Weatherstrip: Urethane foam weatherseal at sill, and Pile with polypropylene center fin in remaining locations.
 - 5. Screens (Optional): extruded tubular aluminum frame with window finish and dark Fiberglass mesh.
 - 6. Joint Sealants: For installation at perimeter of aluminum-framed systems refer to the drawings.

2.04 RELATED MATERIALS (Specified In Other Sections)

- A. Glass: Refer to drawing sheet S1.0.

2.05 FABRICATION

- A. Frame: Vertical members butted and mechanically fastened to notched horizontals with two screws per end into integral screw splines. Meeting rail attached to notched verticals with two screws per end into integral screw splines. All joints are factory-sealed with sealant conforming to AAMA 800-92.
- B. Sash: Horizontal members butted and mechanically fastened to notched verticals with two screws per end into integral screw splines.
- C. Mullions: Mullions shall be of extruded aluminum as detailed on approved shop drawings and must provide adequate structural properties to resist wind pressure as specified.
- D. Glass: Refer to drawing sheet S1.0.

2.06 FINISHES AND COLORS

- A. Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes
- B. High Performance Organic Coating Finish:
 - 1. Type Factory applied 2 or 3-coat as required by color and meeting AAMA 2605 specifications.
 - 2. Acceptable coatings: AAMA 2605.
 - 3. Colors: AAMA 2605 – PPG Duranar Bone White UC43350
- C. Finishes Testing:
 - 1. Apply 0.5% solution NaOH, sodium hydroxide, to small area of finished sample area; leave in place for sixty minutes; lightly wipe off NaOH; do not clean area further.
 - 2. Submit samples with test area noted on each sample.

PART 3 - GLASS

3.04 LOW E GLASS LAMINATED GLASS

Type: see drawing sheet S1.0.

PART 4 - EXECUTION

4.01 MANUFACTURER'S INSTRUCTIONS / RECOMMENDATIONS

- A. Compliance: Comply with manufacturer's product data, and installation instructions.

4.02 EXAMINATION

- A. Site Verification of Conditions: Verify conditions (which have been previously installed under other sections) are acceptable for product installation in accordance with manufacturer's instructions.
 - 1. Verify location of preset anchors, perimeter fasteners, and block-outs are in accordance with shop drawings.

4.03 PREPARATION

- A. Adjacent Surfaces Protection: Protect adjacent work areas and finish surfaces from damage during product installation.
 - 1. Aluminum Surface Protection: Protect aluminum surfaces from contact with lime, mortar, cement, acids, and other harmful contaminants.

4.04 INSTALLATION

- A. General: Install manufacturer's system in accordance with shop drawings and specifications, using skilled craftspeople.
 - 1. Provide adequate shimming and set windows and materials plumb, square and level.
 - 2. Anchor to structure according to substrate and wind Loads as specified.
 - 3. Adjust windows for proper operation after installation. Verify weep holes are open and weep covers are installed correctly.
 - 4. Apply sealant at joints and opening perimeters, wipe off excess, and leave exposed sealant surfaces clean and smooth

4.05 FIELD QUALITY CONTROL

- A. Manufacturer's Field Services: Upon request, provide manufacturer's field service consisting of site visit for inspection of product installation in accordance with manufacturer's instructions.
- B. Field Test: Perform field test in accordance with AAMA 502, to determine air and water tightness of the system, in presence of the window manufacturer, the general contractor, and owner.

4.06 ADJUSTING AND CLEANING

- A. Cleaning: The General Contractor shall clean installed products in accordance with manufacturer's instructions prior to owner's acceptance, and remove construction debris from project site.
- B. Protection: The General Contractor shall protect the installed product's finish surfaces from damage during construction.

END OF SECTION

SECTION 08213**ALUMINUM WINDOWS****ES WINDOWS LLC, SERIES EL200 ALUMINUM HORIZONTAL SLIDING WINDOW - L.M.I.****PART 1 - GENERAL****1.01 SUMMARY**

- A. Section includes: Furnish and install aluminum architectural windows complete with hardware and related components as shown on drawings and specified in this section
 - 1. Es Windows LLC, Series EL200 Aluminum Horizontal Sliding Window. Large Missile Impact.
- B. Related Sections:
 - 1. Sealants: Dow Corning® 983 Structural Glazing Sealant.
 - 2. Glass and Glazing: Refer to drawing sheet S1.0.
 - 3. Single Source Requirement: All window products shall be by the same manufacturer.

1.02 SYSTEM DESCRIPTION

- A. Performance Requirements: Provide window system that comply with performance requirements indicated, as demonstrated by testing manufacturer's assemblies in accordance with Florida Building Code Test Protocols TAS 201, TAS 202 and TAS 203.
 - 1. Air Infiltration: Completed systems shall have 0.30 CFM/FT² (5.5 m³/h·m²) maximum allowable infiltration when tested in accordance with ASTM E 283 at differential static pressure of 6.24 psf (299 Pa).
 - 2. Water Infiltration: With the sashes closed and locked there shall be no uncontrolled water penetration when tested in accordance with ASTM E 331/ E547 at a pressure differential of: 12.0 PSF (574.5 Pa)
 - 3. Wind Loads: The system shall withstand wind pressure loads normal to wall plane as indicated:
 - a. Exterior Walls: see drawing sheet S1.0.
 - 4. Forced Entry Resistance: Windows shall be tested in accordance to ASTM F 588 and meet the requirements of performance grade 10.
 - 5. Large Missile Impact, Missile Level D, Wind Zone 4, Impact Speed = 50 Ft/sec. There shall be no penetration of the inner plane after impact and no tear longer than 5" and no opening larger that allows a 3" diameter solid sphere to pass through after cycling.

1.03 SUBMITTALS

- A. General: Prepare, review, approve, and submit specified submittals in accordance with "Conditions of the Contract" and Division 1 Submittals Sections. Product data, shop drawings, samples, and similar submittals are defined in "Conditions of the Contract."
- B. Product Data: Submit product data for each window type series specified.
- C. Shop Drawings: Submit shop drawings showing layout, profiles, and product components, including anchorage, accessories, finish colors and textures.
- D. Samples: Submit verification samples for colors on actual aluminum substrates indicating full color range expected in installed system.
- E. Quality Assurance / Control Submittals:
 - 1. Test Reports: Submit certified test reports showing compliance with specified performance characteristics and physical properties.
 - 2. Installer Qualification Data: Submit installer qualification data.
- F. Closeout Submittals:
 - 1. Warranty: Submit warranty documents specified herein.
 - 2. Project Record Documents: Submit project record documents for installed materials in accordance with Division 1 Project Closeout (Project Record Documents) Section.

1.04 QUALITY ASSURANCE

- A. Qualifications:
 - 1. Installer Qualifications: Installer experienced (as determined by contractor) to perform work of this section who has specialized in the installation of work similar to that required for this project. If requested by Owner, submit reference list of completed projects.
 - 2. Manufacturer Qualifications: Manufacturer capable of providing field service representation during construction process.

1.05 PROJECT CONDITIONS / SITE CONDITIONS

- A. Field Measurements: Verify actual measurements/openings by field measurements before fabrication; show recorded measurements on shop drawings. Coordinate field measurements, fabrication schedule with construction progress to avoid construction delays.

1.06 WARRANTY

- A. Project Warranty: Refer to "Conditions of the Contract" for project warranty provisions.
- B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by an authorized company official.
 - 1. Warranty Period: Manufacturer's one (1) year standard warranty commencing on the substantial date of completion for the project provided that the warranty, in no event, shall start later than six (6) months from the date of shipment by manufacturer.

PART 2 - PRODUCTS

2.01 MANUFACTURERS (Acceptable Manufacturers/Products)

- A. Acceptable Manufacturers: ES Windows LLC.
 - 1. Operable windows: Es Windows LLC, Series EL200 Aluminum Horizontal Sliding Window.
- B. Window Systems:
 - 1. Description: 3" Frame depth. 1/2" Frame flange. (Flush frame adapter optional) Horizontal and vertical members butted and mechanically fastened. Field removable sash for installation and maintenance. Factory assembled.
 - 2. Components: Manufacturer's standard extruded aluminum frame and sash.
 - 3. Configuration: Sliding Window
 - 4. Glazing: Manufacturer's standard glazing stops with EPDM glazing gaskets at the exterior and Dow Corning® 983 Structural Silicone Sealant on integral fin at the interior.

2.02 MATERIALS

- A. Extrusions: Alloy and temper recommended by aluminum window manufacturer for strength, corrosion resistance, and application of required finish, complying with ASTM B 221 (ASTM B 221M): 6063-T6 Aluminum Alloy.

2.03 ACCESSORIES

- A. Manufacturer's Standard Accessories:
 - 1. Hardware: Extruded aluminum vent latch at jamb. Optional sweep lock at meeting rail.
 - 2. Fasteners: All fasteners shall be AISI 300 series stainless steel.
 - 3. Weatherstrip: Urethane foam weatherseal at sill, and Pile with polypropylene center fin in remaining locations.
 - 4. Screens (Optional): extruded tubular aluminum frame with window finish and dark Fiberglass mesh.
 - 5. Joint Sealants: For installation at perimeter of aluminum-framed systems, refer to drawings.

2.04 RELATED MATERIALS (Specified In Other Sections)

- A. Glass: Refer to drawing sheet S1.0.

2.05 FABRICATION

- A. Frame: Vertical members butted and mechanically fastened to notched horizontals with two screws per end into integral screw splines. Meeting rail attached to notched verticals with two screws per end into integral screw splines. All joints are factory-sealed with sealant conforming to AAMA 800-92.
- B. Sash: Horizontal members butted and mechanically fastened to notched verticals with two screws per end into integral screw splines.
- C. Mullions: Mullions shall be of extruded aluminum as detailed on approved shop drawings and must provide adequate structural properties to resist wind pressure as specified.
- D. Glass: Refer to drawing sheet S1.0.

2.06 FINISHES AND COLORS

- A. Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes.
- B. High Performance Organic Coating Finish:
 - 1. Type Factory applied 2 or 3-coat as required by color and meeting AAMA 2605 specifications.
 - 2. Acceptable coatings: AAMA 2605.
 - 3. Colors: AAMA 2605 – PPG Duranar Bone White UC43350

C. Finishes Testing:

1. Apply 0.5% solution NaOH, sodium hydroxide, to small area of finished sample area; leave in place for sixty minutes; lightly wipe off NaOH; do not clean area further.
2. Submit samples with test area noted on each sample.

PART 3 - GLASS

3.05 LOW E GLASS LAMINATED GLASS

Type: see drawing sheet S1.0.

PART 4 - EXECUTION

4.01 MANUFACTURER'S INSTRUCTIONS / RECOMMENDATIONS

- A. Compliance: Comply with manufacturer's product data, and installation instructions.

4.02 EXAMINATION

- A. Site Verification of Conditions: Verify conditions (which have been previously installed under other sections) are acceptable for product installation in accordance with manufacturer's instructions.
1. Verify location of preset anchors, perimeter fasteners, and block-outs are in accordance with shop drawings.

4.03 PREPARATION

- A. Adjacent Surfaces Protection: Protect adjacent work areas and finish surfaces from damage during product installation.
1. Aluminum Surface Protection: Protect aluminum surfaces from contact with lime, mortar, cement, acids, and other harmful contaminants.

4.04 INSTALLATION

- A. General: Install manufacturer's system in accordance with shop drawings and specifications, using skilled craftspeople.
1. Provide adequate shimming and set windows and materials plumb, square and level.
 2. Anchor to structure according to substrate and wind Loads as specified.
 3. Adjust windows for proper operation after installation. Verify weep holes are open and weep covers are installed correctly.
 4. Apply sealant at joints and opening perimeters, wipe off excess, and leave exposed sealant surfaces clean and smooth

4.05 FIELD QUALITY CONTROL

- A. Manufacturer's Field Services: Upon request, provide manufacturer's field service consisting of site visit for inspection of product installation in accordance with manufacturer's instructions.
- B. Field Test: Perform field test in accordance with AAMA 502, to determine air and water tightness of the system, in presence of the window manufacturer, the general contractor, and owner.

4.06 ADJUSTING AND CLEANING

- A. Cleaning: The General Contractor shall clean installed products in accordance with manufacturer's instructions prior to owner's acceptance and remove construction debris from project site.
- B. Protection: The General Contractor shall protect the installed product's finish surfaces from damage during construction.

END OF SECTION

SECTION 08214**ALUMINUM WINDOWS****ES WINDOWS LLC, SERIES EL150 ALUMINUM FIXED WINDOW - L.M.I.****PART 1 - GENERAL****1.01 SUMMARY**

- A. Section includes: Furnish and install aluminum architectural windows complete with hardware and related components as shown on drawings and specified in this section
 - 1. ES Windows LLC, Series EL150 Aluminum Fixed Window. Large Missile Impact.
- B. Related Sections:
 - 1. Sealants: Dow Corning® 983 Structural Glazing Sealant.
 - 2. Glass and Glazing: Refer to drawing sheet S1.0.
 - 3. Single Source Requirement: All products listed below shall be by the same manufacturer.

1.02 SYSTEM DESCRIPTION

- A. Performance Requirements: Provide window system that comply with performance requirements indicated, as demonstrated by testing manufacturer's assemblies in accordance with South Florida Building Code Test Protocols TAS 201, TAS 202 and TAS 203.
 - 1. Air Infiltration: Completed systems shall have 0.30 CFM/FT² (5.5 m³/h·m²) maximum allowable infiltration when tested in accordance with ASTM E 283 at differential static pressure of 6.24 psf (299 Pa).
 - 2. Water Infiltration: With the sashes closed and locked there shall be no uncontrolled water penetration when tested in accordance with ASTM E 331/ E547 at a pressure differential of: 12.0 PSF (574.5 Pa)
 - 3. Wind Loads: The system shall withstand wind pressure loads normal to wall plane as indicated:
 - a. Exterior Walls: see drawing sheet S1.0.
 - 4. Forced Entry Resistance: Windows shall be tested in accordance to ASTM F 588 and meet the requirements of performance grade 10.
 - 5. Large Missile Impact, Missile Level D, Wind Zone 4, Impact Speed = 50 Ft/sec. There shall be no penetration of the inner plane after impact and no tear longer than 5" and no opening larger that allows a 3" diameter solid sphere to pass through after cycling.

1.03 SUBMITTALS

- A. General: Prepare, review, approve, and submit specified submittals in accordance with "Conditions of the Contract" and Division 1 Submittals Sections. Product data, shop drawings, samples, and similar submittals are defined in "Conditions of the Contract."
- B. Product Data: Submit product data for each window type series specified.
- C. Shop Drawings: Submit shop drawings showing layout, profiles, and product components, including anchorage, accessories, finish colors and textures.
- D. Samples: Submit verification samples for colors on actual aluminum substrates indicating full color range expected in installed system.
- E. Quality Assurance / Control Submittals:
 - 1. Test Reports: Submit certified test reports showing compliance with specified performance characteristics and physical properties.
 - 2. Installer Qualification Data: Submit installer qualification data.
- F. Closeout Submittals:
 - 1. Warranty: Submit warranty documents specified herein.
 - 2. Project Record Documents: Submit project record documents for installed materials in accordance with Division 1 Project Closeout (Project Record Documents) Section.

1.04 QUALITY ASSURANCE

- A. Qualifications:
 - 1. Installer Qualifications: Installer experienced (as determined by contractor) to perform work of this section who has specialized in the installation of work similar to that required for this project. If requested by Owner, submit reference list of completed projects.
 - 2. Manufacturer Qualifications: Manufacturer capable of providing field service representation during construction process.

1.05 PROJECT CONDITIONS / SITE CONDITIONS

- A. Field Measurements: Verify actual measurements/openings by field measurements before fabrication; show recorded measurements on shop drawings. Coordinate field measurements, fabrication schedule with construction progress to avoid construction delays.

1.06 WARRANTY

- A. Project Warranty: Refer to "Conditions of the Contract" for project warranty provisions.
- B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by an authorized company official.
 - 1. Warranty Period: Manufacturer's one (1) year standard warranty commencing on the substantial date of completion for the project provided that the warranty, in no event, shall start later than six (6) months from the date of shipment by manufacturer.

PART 2 - PRODUCTS

2.01 MANUFACTURERS (Acceptable Manufacturers/Products)

- A. Acceptable Manufacturers: ES Windows LLC.
 - 1. Operable windows: Es Windows LLC, Series EL150 Aluminum Fixed Window.
- B. Window Systems:
 - 1. Description: 2 15/16" Frame depth. 1/2" Frame flange. (Flush frame optional) Horizontal and vertical members butted and mechanically fastened. Field removable sash for installation and maintenance. Factory assembled.
 - 2. Components: Manufacturer's standard extruded aluminum frame and sash.
 - 3. Configuration: Fixed.
 - 4. Glazing: Manufacturer's standard glazing stops with EPDM glazing gaskets at the exterior and Dow Corning® 983 Structural Silicone Sealant on integral fin at the interior.

2.02 MATERIALS

- A. Extrusions: Alloy and temper recommended by aluminum window manufacturer for strength, corrosion resistance, and application of required finish, complying with ASTM B 221 (ASTM B 221M): 6063-T6 Aluminum Alloy.

2.03 ACCESSORIES

- A. Manufacturer's Standard Accessories:
 - 1. Hardware: Non-operable
 - 2. Fasteners: All fasteners shall be AISI 300 series stainless steel.
 - 3. Weatherstrip: Urethane foam weatherseal at sill, and Pile with polypropylene center fin in remaining locations.
 - 4. Joint Sealants: For installation at perimeter of aluminum-framed systems see drawings.

2.04 RELATED MATERIALS (Specified In Other Sections)

- A. Glass: Refer to drawing sheet S1.0.

2.05 FABRICATION

- A. Frame: Vertical members butted and mechanically fastened to notched horizontals with two screws per end into integral screw splines. Meeting rail attached to notched verticals with two screws per end into integral screw splines. All joints are factory-sealed with sealant conforming to AAMA 800-92.
- B. Mullions: Mullions shall be of extruded aluminum as detailed on approved shop drawings and must provide adequate structural properties to resist wind pressure as specified.
- C. Glass: Refer to Division 8 Glass and Glazing Section for glass materials.

2.06 FINISHES AND COLORS

- A. A. Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes
- B. High Performance Organic Coating Finish:
 - 1. Type Factory applied 2 or 3-coat as required by color and meeting AAMA 2605 specifications.
 - 2. Acceptable coatings: AAMA 2605.
 - 3. Colors: AAMA 2605 – PPG Duranar Bone White UC43350
- C. Finishes Testing:
 - 1. Apply 0.5% solution NaOH, sodium hydroxide, to small area of finished sample area; leave in place for sixty minutes; lightly wipe off NaOH; do not clean area further.

2. Submit samples with test area noted on each sample.

PART 3 - GLASS

3.06 LOW E GLASS LAMINATED GLASS

Type: see drawing sheet S1.0.

PART 4 - EXECUTION

4.01 MANUFACTURER'S INSTRUCTIONS / RECOMMENDATIONS

- A. Compliance: Comply with manufacturer's product data, and installation instructions.

4.02 EXAMINATION

- A. Site Verification of Conditions: Verify conditions (which have been previously installed under other sections) are acceptable for product installation in accordance with manufacturer's instructions.
 1. Verify location of preset anchors, perimeter fasteners, and block-outs are in accordance with shop drawings.

4.03 PREPARATION

- A. Adjacent Surfaces Protection: Protect adjacent work areas and finish surfaces from damage during product installation.
 1. Aluminum Surface Protection: Protect aluminum surfaces from contact with lime, mortar, cement, acids, and other harmful contaminants.

4.04 INSTALLATION

- A. General: Install manufacturer's system in accordance with shop drawings and specifications, using skilled craftspeople.
 1. Provide adequate shimming and set windows and materials plumb, square and level.
 2. Anchor to structure according to substrate and wind Loads as specified.
 3. Adjust windows for proper operation after installation. Verify weep holes are open and weep covers are installed correctly.
 4. Apply sealant at joints and opening perimeters, wipe off excess, and leave exposed sealant surfaces clean and smooth

4.05 FIELD QUALITY CONTROL

- A. Manufacturer's Field Services: Upon request, provide manufacturer's field service consisting of site visit for inspection of product installation in accordance with manufacturer's instructions.
- B. Field Test: Perform field test in accordance with AAMA 502, to determine air and water tightness of the system, in presence of the window manufacturer, the general contractor, and owner.

4.06 ADJUSTING AND CLEANING

- A. Cleaning: The General Contractor shall clean installed products in accordance with manufacturer's instructions prior to owner's acceptance, and remove construction debris from project site.
- B. Protection: The General Contractor shall protect the installed product's finish surfaces from damage during construction.

END OF SECTION

SECTION 08413**ALUMINUM-FRAMED SLIDING GLASS DOOR****ESWindows LLC, SERIES ES-SGD2020 ALUMINUM SLIDING DOOR – L.M.I.****PART 1 - GENERAL****1.01 SUMMARY**

- A. Section includes: Aluminum Sliding Doors.
 - 1. ES Windows LLC, Series ES-SGD 2020 Sliding Glass Door.
- B. Related Sections:
 - 1. Sealants: Dow Corning® 983 Structural Glazing Sealant, Dow Corning® 795 Silicone Building Sealant, Dow Corning® 791 Silicone Weatherproofing Sealant.
 - 2. Glass and Glazing: see drawing sheet S1.0
 - 3. Single Source Requirement: All products listed below shall be by the same manufacturer.

1.02 SYSTEM DESCRIPTION

- A. : Provide window systems that comply with performance requirements indicated, as demonstrated by testing manufacturer's assemblies in accordance with South Florida Building Code Test Protocols TAS 201, TAS 202 and TAS 203.
 - 1. Air Infiltration: Completed systems shall have 0.06 CFM/FT² (1.1 m³/h·m²) maximum allowable infiltration when tested in accordance with ASTM E283 at differential static pressure of 6.24 psf (299 Pa).
 - 2. Water Infiltration: No uncontrolled water when tested in accordance with ASTM E 331 at test pressure differential of: 12 PSF (or when required, field tested in accordance with AAMA 503).
 - 3. Wind Loads: Completed system shall withstand wind pressure loads normal to wall plane indicated:
 - a. Exterior Walls: see drawing sheet S1.0.
 - 4. Large Missile Impact, Missile Level D, Wind Zone 4, Impact Speed = 50 Ft/sec.
No penetration of the inner plane.
 - 5. Force Entry Resistance: Test Performed simultaneously with 300 lb. forces applied perpendicular to the door panel within 6" of the locks and within 6" at the top and the bottom.
 - 6. Thermal Movement: Provide for thermal movement caused by 180 degrees F. (82.2 degrees C.) surface temperature, without causing buckling stresses on glass, joint seal failure, undue stress on structural elements, damaging loads on fasteners, reduction of performance, or detrimental effects.

1.03 SUBMITTALS

- A. General: Prepare, review, approve, and submit specified submittals in accordance with "Conditions of the Contract" and Division 1 Submittals Sections. Product data, shop drawings, samples, and similar submittals are defined in "Conditions of the Contract."
- B. Product Data: Submit product data for each type door series specified.
- C. Shop Drawings: Submit shop drawings showing layout, profiles, and product components, including anchorage, accessories, finish colors and textures.
- D. Samples: Submit verification samples for colors on actual aluminum substrates indicating full color range expected in installed system.
- E. Quality Assurance / Control Submittals:
 - 1. Test Reports: Submit certified test reports showing compliance with specified performance characteristics and physical properties.
 - 2. Installer Qualification Data: Submit installer qualification data.
- F. Closeout Submittals:
 - 1. Warranty: Submit warranty documents specified herein.
 - 2. Project Record Documents: Submit project record documents for installed materials in accordance with Division 1 Project Closeout (Project Record Documents) Section.

1.04 QUALITY ASSURANCE

- A. Qualifications:
 - 1. Installer Qualifications: Installer experienced (as determined by contractor) to perform work of this section who has specialized in the installation of work similar to that required for this project. If requested by Owner, submit reference list of completed projects.
 - 2. Manufacturer Qualifications: Manufacturer capable of providing field service representation during construction process.

1.05 PROJECT CONDITIONS / SITE CONDITIONS

- A. Field Measurements: Verify actual measurements/openings by field measurements before fabrication; show recorded measurements on shop drawings. Coordinate field measurements, fabrication schedule with construction progress to avoid construction delays.

1.06 WARRANTY

- A. Project Warranty: Refer to "Conditions of the Contract" for project warranty provisions.
- B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by an authorized company official.

1. Warranty Period: See manufacturer's warranty on Finish, Glass, & Parts.

PART 2 - PRODUCTS

2.01 MANUFACTURERS (Acceptable Manufacturers/Products)

- A. Acceptable Manufacturers: ESWindows LLC.
 1. Impact Resistant Sliding Doors: ESWindows LLC, ES-SGD 2020 Aluminum Sliding Door.
 2. Description: Frame depth: 4 7/8" (2 track), 6 15/16" (3 tracks), 9" (4 track), 11 1/16" (5 track)
 3. Coastal / Contemporary Handle & Thumb Turn
 4. 2" Interlock Sightline / 3 3/4" Lock Stile Sightline / 2 3/4" Head Sightline
 5. Dual Mortise Lock
 6. 4 1/4" Sill Riser Painted to Match Panels
 7. Level 3 Reinforcement
 8. Corner Construction: Fabricate door corners joined by screw spline.
 9. Glazing: Manufacturer's standard glazing stops with SILICONE U glazing gaskets, (Dow Corning® 983 Structural Glazing Sealant, Dow Corning® 795 Silicone Building Sealant.

2.02 MATERIALS

- A. Extrusions: Alloy and temper recommended by aluminum manufacturer for strength, corrosion resistance, and application of required finish, complying with ASTM B 221 (ASTM B 221M): 6063-T6 Aluminum Alloy.

2.03 ACCESSORIES

- A. Manufacturer's Standard Accessories:
 1. Fasteners: All fasteners shall be AISI 300 series stainless steel.
 2. Joint Sealants: For installation at perimeter of aluminum-framed systems, as specified in Division 07 Section "Joint Sealants."

2.04 RELATED MATERIALS

- A. Glass: see drawing sheet S1.0

2.05 FABRICATION

- A. Frame: Vertical members butted and mechanically fastened to horizontals with two screws per end into integral screw splines. Meeting rail attached to verticals with two screws per end into integral screw splines. All joints are factory-sealed with sealant conforming to AAMA 800-92.
- B. Leaf: Horizontal members butted and mechanically fastened to verticals with two screws per end into integral screw splines.
- C. Mullions: Mullions shall be of extruded aluminum as detailed on approved shop drawings and must provide adequate structural properties to resist wind pressure as specified.
- D. Glass: Refer to drawing sheet S1.0

2.06 FINISHES AND COLORS

- A. Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes
- B. High Performance Organic Coating Finish:
 1. Type Factory applied 2 or 3-coat as required by color and meeting AAMA 2605 specifications.
 2. Acceptable coatings: AAMA 2605.
 3. Colors: AAMA 2605 – PPG Duranar Bone White UC43350
- C. Finishes Testing:
 1. Apply 0.5% solution NaOH, sodium hydroxide, to small area of finished sample area; leave in place for sixty minutes; lightly wipe off NaOH; do not clean area further.
 2. Submit samples with test area noted on each sample.

PART 3 - GLASS

3.07 LOW E GLASS MONOLITHIC LAMINATED GLASS

See drawing sheet S1.0

PART 4 - EXECUTION

4.01 MANUFACTURER'S INSTRUCTIONS / RECOMMENDATIONS

- A. Compliance: Comply with manufacturer's product data, and installation instructions.

4.02 EXAMINATION

- A. Site Verification of Conditions: Verify conditions (which have been previously installed under other sections) are acceptable for product installation in accordance with manufacturer's instructions.
 1. Verify location of preset anchors, perimeter fasteners, and block-outs are in accordance with shop drawings.

4.03 PREPARATION

- A. Adjacent Surfaces Protection: Protect adjacent work areas and finish surfaces from damage during product installation.
 - 1. Aluminum Surface Protection: Protect aluminum surfaces from contact with lime, mortar, cement, acids, and other harmful contaminants.

4.04 INSTALLATION

- A. General: Install manufacturer's system in accordance with shop drawings, and within specified tolerances.

4.05 FIELD QUALITY CONTROL

- A. Manufacturer's Field Services: Upon request, provide manufacturer's field service consisting of site visit for inspection of product installation in accordance with manufacturer's instructions.

4.06 ADJUSTING AND CLEANING

- A. Cleaning: The General Contractor shall clean installed products in accordance with manufacturer's instructions prior to owner's acceptance, and remove construction debris from project site. Legally dispose of debris.
- B. Protection: The General Contractor shall protect the installed product's finish surfaces from damage during construction.

END OF SECTION

09210 – Portland Cement Plaster Repairs**PART I - General****1.1 Related Documents**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 Scope of Work

- A. Work of this Section includes all labor, materials, equipment, and services necessary to:
 - 1. Provide temporary protection for all existing surfaces adjacent to this work as well as other work that may be damaged by this work.
 - 2. Remove and replace existing loose, cracked and delaminated stucco at those areas where existing stucco is to remain. Provide straight vertical and horizontal saw cut lines around delaminated stucco. At those locations where host structure has hard trowel finish, roughen existing host surfaces to receive new stucco to a 1/16" minimum profile. Just prior to application of new stucco treat existing surfaces with water-based, non- re-emulsifying bonding agent and replace with new stucco. New stucco shall butt with existing adjacent. Feather over existing stucco to visually blend and to match finish of existing adjacent. Where overlapping occurs, Contractor shall remove all finishes off existing stucco to remain to aid in the bond between new and old. New stucco finish shall match existing and / or adjacent finish. At the first location of stucco repairs the Contractor shall complete the repairs to the satisfaction of the Engineer that will become the project standard for all stucco repair work. .

1.3 Submittals

- A. General:
 - 1. Submit the following in accordance with Conditions of Contract and Division 1, Specification Sections.
 - a. Product data consisting of manufacturer's product specifications and installation instructions for each product, including data showing compliance with the requirements.
 - b. Material Certificates:
 - c. Producer's certificate for each kind of plaster aggregate indicated evidencing that materials comply with requirements.

PART II Products**2.1 Delivery, Storage, and Handling**

- A. Deliver materials in original packages, containers, bearing brand name and identification of manufacturer.
- B. Store materials inside, under cover, and in manner to keep them dry, protected from weather, direct sunlight, surface contamination, aging, corrosion, and damage from construction traffic and other causes.
- C. Handle lath to prevent damage to edges, ends, or surfaces. Protect metal corner beads and trim from being bent or damaged.

2.2 Project Conditions

- A. Environmental Requirements, General:
 - 1. Comply with requirements of referenced plaster application standards and recommendations of plaster manufacturer for environmental conditions before, during, and after application of plaster.
- B. Protect contiguous work from soiling, spattering, moisture deterioration and other harmful effects that might result from plastering.

2.3 Plaster Accessories for Portland Cement Plaster

A. General:

1. Comply with material provisions of ASTM C 1063; coordinate depth of accessories with thickness and number of coats required.

2.4 Portland Cement Materials

A. Base Coat Cements: Type as indicated below:

1. Portland Cement, ASTM C 150, Type I of II.

B. Finish Coat Cement: Type as indicated below:

1. Portland Cement, ASTM C 150, Type I, White,

C. Factory-Prepared Finish Coat:

1. Manufacturer's standard product requiring addition of water only;
2. Color; white unless otherwise indicated.

D. Lime:

1. Special hydrated lime for finishing purposes, ASTM C206, Type S, or special hydrated lime for masonry purposes, ASTM C 207, Type S.
2. Sand Aggregate for Base Coats: ASTM C 897.
3. Aggregate for Finish Coats: ASTM C 897 and as indicated below.
 - a. Manufactured of natural white sand.
4. Fiber for Base Coat:
 - a. Alkaline-resistant (AR) glass or polypropylene fibers, 1/2" long, free of contaminates, manufactured for use in Portland cement plaster.

2.6 Miscellaneous Materials

- A. Water for Mixing and Finishing Plaster: Drinkable and free of substances capable of affecting plaster set or of damaging plaster, lath, or accessories.
- B. Bonding Agent for Portland Cement Plaster: ASTM C 932.
- C. All lath products shall be solid zinc on asphalt impregnated paper backing

PART III - Portland Cement Plaster Mixes and Compositions

3.1 General:

- A. Comply with ASTM C 926 for Portland cement plaster base and finish coat mixes as applicable to plaster bases, materials, and other requirements indicated.

3.2 Portland Cement Plaster Base Coat Mixes and Compositions:

- A. Proportion materials for respective base coats in parts by volume for cementitious materials and in parts by volume per sum of cementitious materials for aggregates to comply with the following requirements for each method of application and plaster base indicated.
- B. Adjust mix proportions below within limits specified to attain workability.

1. Fiber Content: Add fiber to the following mixes after ingredients have mixed at least two (2) minutes. Comply with fiber manufacturer's directions but not to exceed 2 lbs. per cubic foot of cementitious materials. Reduce aggregate quantities accordingly to maintain workability.

C. Two-Coat Work over Concrete Unit Masonry or Concrete:

1. Base Coats: 1 part Portland cement, 3/4 to 1-1/2 parts lime, 3 to 4 parts sand.

or

1. Base Coats: 1 part masonry cement, 3 to 4 parts sand.

3.3 Job-Mixed Portland Cement Plaster Finish Coats:

- A. Proportion materials for finish coats in parts by volume for cementitious materials and parts by volume per sum of cementitious materials for aggregates to comply with the following requirements:

1. 1 part Portland cement, 3/4 - 1-1/2 parts lime, 3 parts sand.

or

1. 1 part Portland cement, 1 part masonry cement, 3 parts sand.

or

1. 1 part Portland cement, 1-1/2 to 2 parts lime, 3 parts sand.

or

1. 1 part masonry cement, 1-1/2 parts sand.

3.4 Factory-Prepared Portland Cement Finish Coats:

- A. Add water only; comply with finish coat manufacturer's directions.

3.5 Mixing

- A. Mechanically mix cementitious and aggregate materials for plasters to comply with applicable referenced application standard and with recommendations of plaster manufacturer.

PART IV - Execution

4.1 Portland Cement Plaster Application

- A. Portland Cement Plaster Application Standard:

1. Apply Portland cement plaster materials, compositions, and mixes to comply with ASTM C 926.

- B. Number of Coats:

1. Apply Portland cement plaster, of composition indicated, to comply with the following requirements:

- a. Use two-coat work for a total thickness of 5/8" over the following plaster bases:

- i. Concrete and unit masonry.

- b. Use one coat work over surface with 1/4" or less of existing thickness.

NOTE: adjust thickness to match that of adjacent areas.

2. Concrete, cast-in-place or pre-cast when surface complies with ASTM C 926 for plaster bonded direct to solid base.
 3. **Finish Coat: Finish to match existing texture. Feather or texture as required to blend finish of new to match existing adjacent finish. The first patch area of stucco shall be submitted as the project standard upon acceptance by the Engineer.**
- C. Moisture-cure Portland cement plaster base and finish coats to comply with ASTM C 926, including recommendations for time between coats and curing in "Annex A2 Design Considerations".

4.3 Cutting and Patching

- A. Cut, patch, point up, and repair plaster as necessary to accommodate other work and to restore cracks, dents, and imperfections.
- B. Repair or replace work to eliminate blisters, buckles, excessive crazing and check cracking, dry outs, efflorescence, sweat outs, and similar defects and where bond to the substrate has failed.
- C. Sand smooth trowel finishes slightly to remove trowel marks and arises.

4.4 Cleaning and Protection

- A. Remove temporary protection and enclosures of all existing surfaces and other work and legally dispose of disposable protection materials.
- B. When plastering work is completed, remove unused materials, containers, and equipment and clean surfaces of plaster splatter, drippings and debris.
- C. Promptly remove plaster from glass, standing and running trim, hard surface finished floor surfaces, and other surfaces that are not scheduled to be plastered.
- D. Clean plaster spillage and splatter daily.
- E. Do not use metal scrapers to remove plaster from metal surfaces.
- F. Use of razor blades to clean plaster from glass is discouraged and may result in damage to glass surface. Refer to the General Requirements section of these specifications for contractor responsibilities for replacement of property damaged during construction.
- G. Carpet floor material damaged by plaster spills or splatter shall be cleaned by a professional cleaner.
- H. Severe spillage may result in the replacement of finish materials at the sole expense of the contractor.
- I. Repair floors, walls, and other surfaces that have been stained, marred, or otherwise damaged during the plastering work.
- J. Provide final protection and maintain conditions in a manner suitable to installer, and ensure plasterwork is without damage or deterioration at time of Substantial Completion.

- End of Section -

09900 – Painting**PART I - Scope of Work****1.1 Related Documents**

Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1, Specification Sections, apply to this Section.

1.2 Pre-bid Documents

- A. Each bidder submitting a Proposal for this Contract shall be responsible to fully inspect the site of the proposed work and to acquaint himself with the nature, quantities, and Scope of Work to be accomplished.
- B. Each bidder should be aware of any precautions necessary to prevent damage to any existing facilities, whether or not they appear in the Specifications.

1.3 Summary

- A. This Section includes surface preparation, painting, and finishing of damaged, repaired, and replaced exposed exterior surfaces including but not limited to; walls, slab soffits, slab edges, columns, parapet walls, and all other exterior surfaces that may be affected by the work.
- B. The Contractor shall be responsible for all surface testing, surface preparation, priming, and finish coats specified in this Section. The Contractor shall provide a written review, prepared by their Paint Manufacturer, of the specified products, millage, preparation, application standards, and either confirm the specified is agreeable to the existing conditions or provide revised recommendations.
- C. Colors and finishes are to match existing.
- D. The Contractor and paint manufacturer shall be responsible for providing a properly prepared and sound substrate to apply the new specified system.

1.4 Submittals

- A. General: Submit the following according to Conditions of the Contract and Division 1 Specification Sections.
- B. Product data for each paint system specified, including block fillers and primers.
 - 1. Provide the manufacturer's and Contractor's requirements for surface preparation.
 - 2. Provide the manufacturer's technical information including label analysis and instructions for handling, storage, and application of each material proposed for use.
 - 3. List each material and cross-reference the specific coating, finish system, and application. Identify each material by the manufacturer's catalog number and general classification.
- C. Certification by the manufacturer that products supplied comply with local regulations controlling use of volatile organic compounds (VOCs).
- D. Samples for initial color selection in the form of manufacturer's color charts.

1.5 Quality Assurance

- A. Applicator Qualifications:
 - 1. Engage an experienced applicator who has completed painting system applications similar in material and extent to those indicated for the Project that have resulted in a construction record of

successful in-service performance.

- B. Single-Source Responsibility: Provide primers, sealants, and undercoat paint produced by the same manufacturer as the finish coats.
- C. Field Samples:
 - 1. On wall surfaces and other exterior surfaces (ceilings, shaded and bright areas), duplicate finishes of prepared samples.
 - 2. Provide full-coat finish samples on at least 100 sq. ft. of surface until required sheen, color, and texture are obtained; simulate finished lighting conditions for review of in-place work.
 - 3. All unsatisfactory work will be removed.
 - 4. Final acceptance of colors will be from job-applied samples.

1.6 Delivery, Storage, and Handling

- A. Deliver materials to the job site in the manufacturer's original, unopened packages and containers bearing manufacturer's name and label, and the following information:
 - 1. Product name or title of material.
 - 2. Product description (generic classification or binder type).
 - 3. Manufacturer's stock number and date of manufacture.
 - 4. Contents by volume, for pigment and vehicle constituents.
 - 5. Thinning instructions.
 - 6. Application instructions.
 - 7. Color name and number.
- B. Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45°F (7°C) and as recommended by the manufacturer).
- C. Maintain containers used in storage in a clean condition, free of foreign materials and residue.
- D. Protect products from freezing.
- E. Keep storage area neat and orderly
- F. Remove oily rags and waste daily.
- G. Take necessary measures to ensure that workers and work areas are protected from fire and health hazards resulting from handling, mixing, and application.

1.7 Job Conditions

- A. Apply water-based paints only when the temperature of surfaces to be painted and surrounding air temperatures are between 50°F(10°C) and 90°F(32°C) and as recommended by manufacturer.
- B. Apply solvent-thinned paints only when the temperature of surfaces to be painted and surrounding air temperatures are between 45°F(7°C) and 95°F(45°C) and as recommended by manufacturer.
- C. Do not apply paint in rain, fog, or mist; or when the relative humidity exceeds 85%; or at temperatures less than 5°F(3°C) above the dew point; or to damp or wet surfaces and as recommended by manufacturer.
 - 1. Painting may continue during inclement weather if surfaces and areas to be painted are enclosed and heated within temperature limits specified by the manufacturer during application and drying periods.

1.8 Warranty

- A. General:

1. Warranties specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and are in addition to and run concurrent with other warranties made by the Contractor under requirements of the Contract Documents.

B. Manufacturer's Warranty:

1. Submit a written warranty to the Owners signed by the coatings manufacturer agreeing to repair or replace coatings that do not meet the requirements or that deteriorate as defined in this Section within the Warranty period indicated.
2. Warrant that the materials will perform in accordance with these Specifications and adhere to the substrate and be free from blistering, peeling, excessive chalk, uniform fade or loss of adhesion.

C. Applicator's Warranty:

1. Submit a written Warranty to the Owners signed by the paint applicator agreeing to repair or replace coatings that do not meet the requirements or that deteriorate as defined in this Section within the Warranty period indicated below.
2. Warrant that the materials will not exhibit blistering, peeling, excessive chalk, uniform fade, loss of adhesion, or water intrusion due to improper application or surface preparation.
3. Surface preparation and application shall be specified by the coatings manufacturer.

D. Warranty Period:

1. The coating system applied under the terms of this Agreement shall be warranted for a period of five (5) years.
2. The work shall be warranted from the date of Substantial Completion of the project.

PART II - Products

2.1 Manufacturers

- A. Manufacturer: Sherwin Williams, to match paint used at the last painting cycle – Sherwin Williams Resilience Exterior Satin.

2.2 Paint Materials, General

A. Material Compatibility:

1. Provide block fillers, primers, finish coat materials, and related materials that are compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by the manufacturer based on testing and field experience.

B. Material Quality:

1. Provide the manufacturer's best-quality trade sale paint material of the various coating types specified.
2. Paint material containers not displaying manufacturer's product identification will not be acceptable.
3. Proprietary Names:
 - a. Use of manufacturer's proprietary product names to designate colors of materials is not intended to imply that products named are required to be used to the exclusion of equivalent products or other manufacturers.
 - b. Furnish the manufacturer's material data and certificates of performance for proposed substitutions.

C. Colors:

1. Provide color selections to match existing building colors.

2.3 Products

A. Cleaners:

1. Provide the manufacturer's recommended factory-formulated cleaners that are compatible with the substrate and finish coats indicated.

2.4 Undercoat Materials

A. Undercoat materials:

1. Provide the manufacturer's recommended factory-formulated undercoat materials that are compatible with the substrate and finish coats indicated.

2.5 Exterior Finish Paint Material

A. Finish paint:

1. Provide the manufacturer's recommended factory-formulated finish-coat materials that are compatible with the substrate and undercoats indicated.

PART III - Execution

3.1 Examination

- A. Examine substrates and conditions under which painting will be performed for compliance with paint application requirements.
- B. Provide, for review by ENGINEER, all field testing to support preparatory work requirements with Bid package.
- C. Surfaces receiving paint must be thoroughly dry before paint is applied.
 1. Do not begin to apply paint until unsatisfactory conditions have been corrected.
 2. Start of painting will be construed as the Applicator's acceptance of surfaces and conditions within a particular area.

3.2 Preparation

A. General:

1. Thoroughly clean all surfaces to receive full compliment of coatings.
2. Steel components to receive full compliment of paint are to be stripped clean of all existing coatings.
3. Prepare repaired areas to receive paint.
4. Prepare and detail all joints and meeting surfaces as required by manufacturer.
5. Solvent wipe all metal to be caulked.
6. Re-caulk all areas where previous caulking was removed and caulk specified areas where no caulking exists.
7. Follow manufacturer's recommendations.
8. All sealants shall be tooled.
9. Apply a complete and continuous bead of caulk/sealant over joints in the following areas:
 - a. All junctions, including hose bibs, light fixtures, electrical panels, windows, doors, all enclosures, end joints and meeting joints and penetrations through surfaces to receive coating or paint.
 - b. All cementitious siding material joints, including cementitious material to cementitious material, cementitious material to metal, cementitious materials to wood, cementitious material to stucco and wood to stucco.
 - c. All exterior penetrations or attachments to the walls as well as all inside and outside vertical and horizontal angles.
10. Remove all existing signage, reinstalling signs over freshly painted surfaces. Reattach signs using stainless steel fasteners installed into predrilled, pre-urethane filled holes.
11. Cleaning:
 - a. Use cleaners in strict accordance with the manufacturer's directions and recommendations.

- b. Before applying paint or other surface treatments, clean the substrates of substances that could impair the bond of the various coatings.
- c. Remove oil and grease prior to cleaning.
- d. Remove existing coatings from steel by wire brush or sandblasting.
 - e. Schedule wire brushing / sandblasting, cleaning and painting so dust and other contaminants from the cleaning process will not fall on wet, newly painted surfaces.

12. Surface Painting:

- a. Prepare surfaces to be painted according to the manufacturer's instructions for each particular substrate condition and as specified.
- b. Provide barrier coats over incompatible primers or remove and re-prime.
- c. Notify ENGINEER in writing about anticipated problems using the specified finish-coat material with substrate primed by others.

13. Cementitious materials:

- a. Clean and prepare panels to be painted in strict accordance with the manufacturer's directions and recommendations.
- b. Remove efflorescence, chalk, dust, dirt, grease, oils, and release agents.
- c. Roughen surfaces, as required, to remove glaze and prepare surfaces per the recommendations of the manufacturer.
- d. If hardeners or sealers have been used to improve curing, use mechanical methods of surface preparation.
- e. Use abrasive blast-cleaning methods if recommended by the paint manufacturer.

14. Determine alkalinity and moisture content of surfaces by performing appropriate tests.

- a. If surfaces are sufficiently alkaline to cause the finish paint to blister and burn, correct this condition before application.
- b. Do not paint surfaces where moisture content exceeds that permitted in manufacturer's printed directions.

15. Wood:

- a. Clean surfaces of dirt, oil, and other foreign substances with scrapers, mineral spirits, and sandpaper, as required.
- b. Sand surfaces exposed to view smooth and dust off.
- c. Scrape and clean small, dry, seasoned knots, and apply a thin coat of white shellac or other recommended knot sealer before applying primer.
- d. After priming, fill holes and imperfections in finish surfaces with putty or plastic wood filler.
- e. Sand smooth when dried.
- f. Prime, stain, or seal wood to be painted immediately upon delivery.
- g. Prime edges and faces of repaired wood.
- h. If new wood sections are installed, back-prime prior to installing.
- i. Seal tops, bottoms, and cutouts of unprimed wood doors with a heavy coat of varnish or sealer immediately upon delivery.

16. Materials preparation:

- a. Carefully mix and prepare paint materials according to manufacturer's directions.
- b. Maintain containers used in mixing and applying paint in a clean condition, free of foreign materials and residue.
- c. Stir material before application to produce a mixture of uniform density; stir as required during application.
- d. Do not stir surface film into material.
- e. Remove film and, if necessary, strain material before using.
- f. Use only thinners approved by the paint manufacturer and only within recommended limits.

B. Application

1. General:

- a. Apply paint according to manufacturer's directions.
- b. Use applicators and techniques best suited for substrate and type of material being applied.
- c. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, peeling paint or conditions detrimental to formation of a durable paint film.
- d. Provide finish coats that are compatible with primers used.
- e. The number of coats and the film thickness required are the same regardless of the application method.
- f. Do not apply succeeding coats until the previous coat has cured as recommended by the manufacturer.
- g. Sand between applications where sanding is required to produce a smooth even surface according to the manufacturer's directions.
- h. Apply additional coats if undercoats, stains, or other conditions show through final coat of paint until paint film is of uniform finish, color, and appearance.
- i. Give special attention to ensure that surfaces, including edges, corners, crevices, welds, and exposed fasteners, receive a dry film thickness equivalent to that of flat surfaces.
- j. The term "exposed surface" includes areas visible when permanent or built-in features, connector covers, grilles, and similar components are in place.
- k. Extend coatings in these areas, as required, to maintain the system integrity and provide desired protection.
- l. Paint surfaces behind movable equipment the same as similar exposed surfaces. Before the final installation of equipment, paint surfaces behind permanently fixed equipment.
- M. All applied sealant is to be coated with paint.

C. Scheduled Painting:

1. Apply the first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.

2. Allow sufficient time between successive coats to permit proper drying.

3. Do not re-coat until paint has dried to where it feels firm, does not deform or feel sticky under moderate thumb pressure, and where application of another coat of paint does not cause the undercoat to lift or lose adhesion.

4. Application Procedure: Apply paints and coatings by brush, roller, spray, or other applicators according to the manufacturer's directions.

a. Brushes:

i. Use brushes best suited for the material applied.

b. Rollers:

i. Use rollers of carpet, velvet back or high pile sheep's wool as recommended by the manufacturer for the material and texture required.

c. Spray Equipment:

i. Use airless spray equipment with orifice size as recommended by the manufacturer for the material and texture required.

5. Minimum Coating Thickness:

a. Apply materials no thinner than the manufacturer's recommended spreading rate.

b. Provide the total dry film thickness of the entire system as recommended by the manufacturer and herein.

6. Block Fillers:

a. Apply block fillers to concrete masonry block at a rate to ensure complete coverage with pores filled.

7. Prime Coats:

a. Before applying finish coats, apply a prime coat of material, as recommended by the manufacturer, to material that is required to be painted or finished and that has not been prime-coated by others.

- b. Re-coat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to ensure a finish coat with no burn-through or other defects due to insufficient sealing.

PART IV - Field Quality Control

4.1 Examination

- A. The Contractor and manufacturer's representative shall examine substrate and conditions under which coating systems will be applied for compliance with requirements.
- B. The Contractor shall provide ENGINEER with written approval from manufacturer's representative on the substrate prior to proceeding.
- C. The Contractor shall complete and submit a inspection report form for each area.
 1. Dry film thickness will be checked with a properly calibrated Nordson Mikrotest dry film thickness gauge, or by other specifically approved instrument.
 2. These checks will be done by the paint manufacturer's representative with ENGINEER present.
 3. The location of the areas to be checked will be provided by the ENGINEER.
- D. It will be the Contractor's responsibility to own and use wet film thickness gauge to check his application thickness as he proceeds.

4.2 Cleanup:

- A. At the end of each workday, remove empty cans, rags, rubbish, and other discarded paint material from the site.
 1. After completing painting, clean glass and paint-spattered surfaces.
 2. Remove spattered paint by washing and scraping.
 3. Be careful not to scratch or damage adjacent finished surfaces.
 4. Protect work of other trades, whether being painted or not, against damage by painting.
 5. Correct damage by cleaning, repairing or replacing, and repainting, as acceptable to ENGINEER and Owner.
- F. Provide "**Caution -Wet Paint**" signs to protect newly painted finishes.
- G. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.
- H. All landscaping shall be fully protected against damage during each stage of the paint in project.

4.3 Exterior Paint Schedule

- A. General:
 1. The following specifications are given as an example for a minimum standard.
 2. The Contractor shall submit for approval upon request prior to contract award the manufacturer and product he / she is bidding along with the manufacturer's requirements and recommendations regarding execution and preparation for the projects and proposed products. Acceptable manufacturers include Sherwin Williams, Florida Paints, and Benjamin Moore.

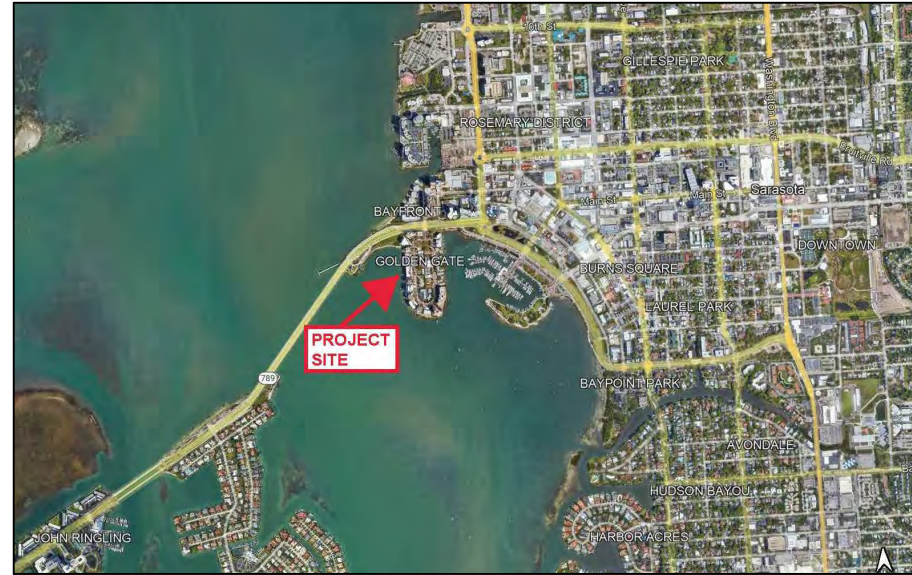
- End of Section -



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	SARASOTA, FLORIDA	Sketch #:	S1.0 By: BS
Part:	REPAIRS	Date:	03-08-23

BRIAN STIRLING, PE 34927



SITE LOCATION PLAN



SITE PLAN

NOTES

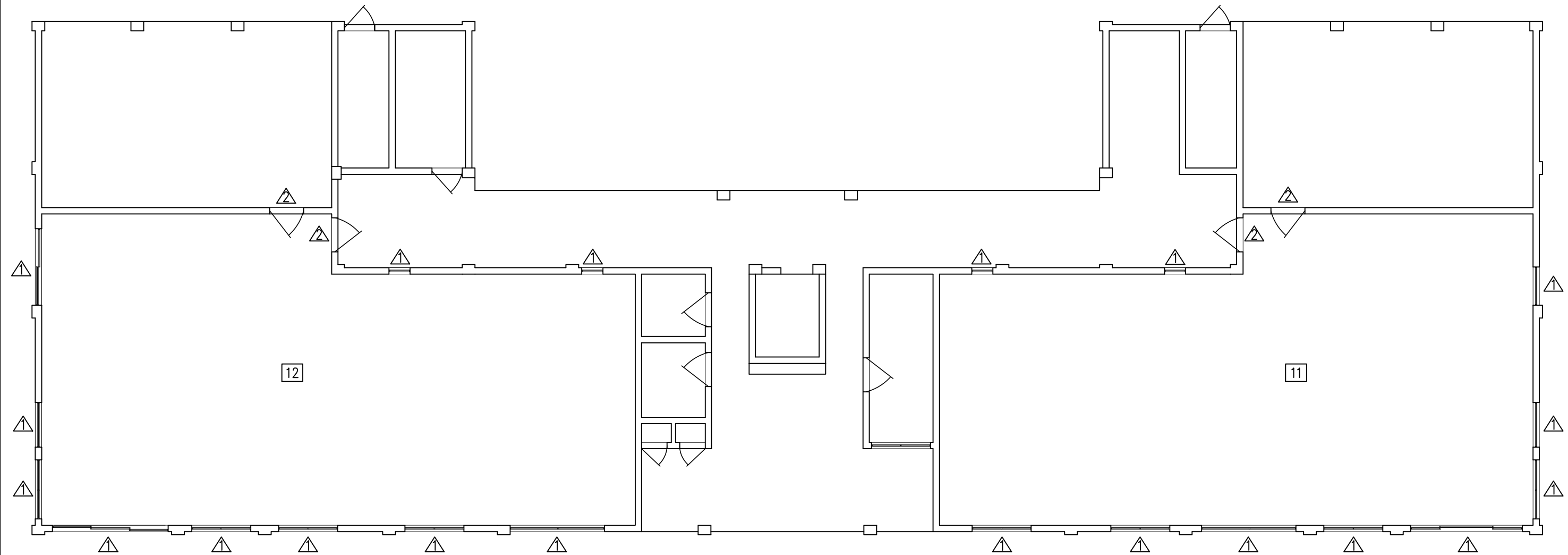
1. THESE DOCUMENTS ARE FOR THE EXTERIOR RESTORATION, WATERPROOFING, AND PAINTING PROJECT OF HARBOR HOUSE WEST CONDOMINIUM.
2. THE PROJECT IS INTENDED TO REPAIR EXTERIOR WALLS TO MEET THE WIND LOAD REQUIREMENTS STATED HEREIN.
3. ALL WINDOWS AND DOORS WILL BE REPLACED WITH NEW CODE COMPLIANT PRODUCTS AS SPECIFIED. IN SOME CASES, EXISTING PRODUCTS MAY BE REMOVED AND REINSTALLED PROVIDED THEY FULLY COMPLY WITH THE REQUIREMENTS STATED HEREIN. THIS WILL BE AT THE FULL DISCRETION OF THE ENGINEER OF RECORD.
4. REFER ALSO TO THE SPECIFICATIONS AND ALL DRAWINGS.
5. WIND LOAD CRITERIA IS AS FOLLOWS:
 - a. 2020 FLORIDA BUILDING CODE AND 2020 FLORIDA BUILDING CODE, EXISTING BUILDING
 - b. ASCE 7-16
 - c. DESIGN WIND SPEED 150 MPH 3 SECOND GUST ULTIMATE STRENGTH DESIGN
 - d. EXPOSURE D
 - e. BUILDING CATEGORY II, I = 1.00
 - f. FULLY ENCLOSED BUILDING, GCPI = +/-0.18
 - g. COMPONENT AND CLADDING DESIGN PRESSURES, PSF, BASED UPON ALLOWABLE STRESS DESIGN, AS FOLLOWS:
 - i. ZONE 4 +58 AND -58
 - ii. ZONE 5 +58 AND -93
 - h. ZONE 5 IS WITHIN 10 FEET OF THE BUILDING CORNERS; ALL OTHER AREAS ARE ZONE 4.
 - i. DESIGN PRESSURES MAY BE REDUCED FOR LARGER OPENING SIZES, THESE ARE BASED UPON 1 SQUARE FEET.
6. ALL PRODUCTS MUST BE INSTALLED IN COMPLETE ACCORDANCE WITH THE PRODUCT APPROVALS.
7. THE WORK DOES NOT CHANGE ANY OCCUPANCY TYPES OR BUILDING SIZE, THIS IS A REPAIR PROJECT ONLY AS DEFINED BY THE CODES REFERENCED ABOVE.



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1ST FLOOR PLAN- WINDOW SCHEMATIC

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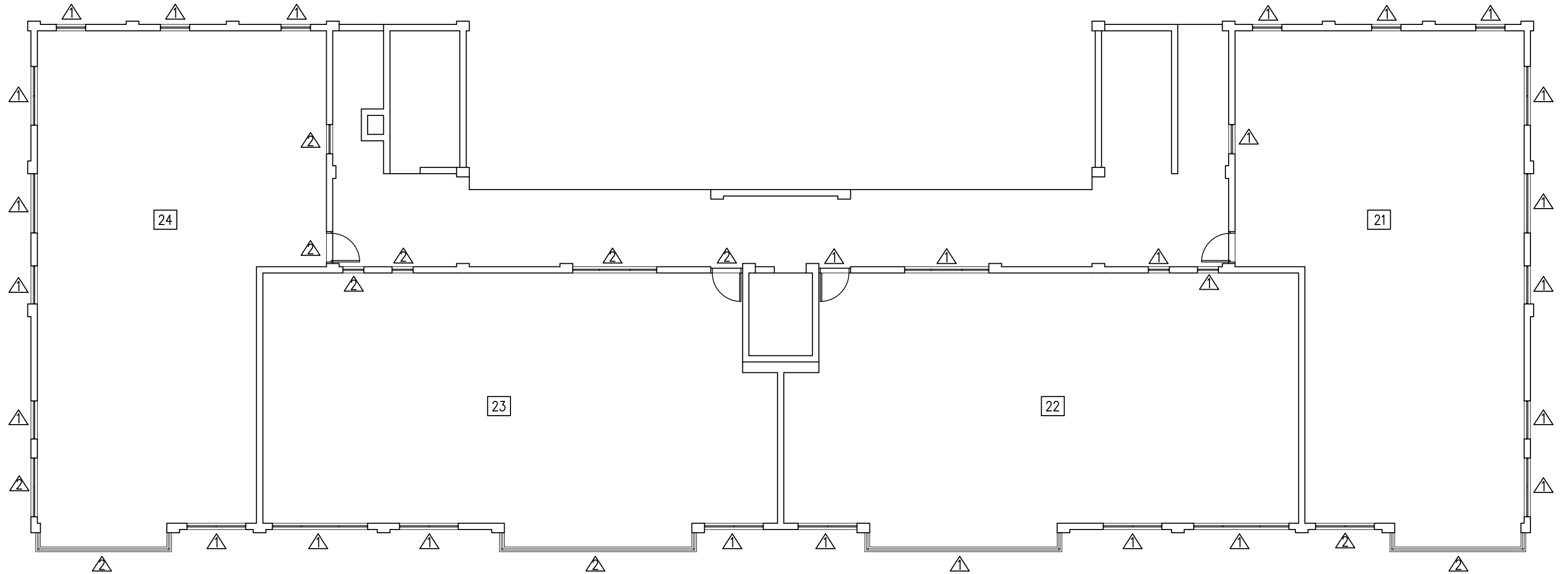
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	SARASOTA, FLORIDA	Sketch #:	S1.2 By: BS
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2ND FLOOR PLAN- WINDOW SCHEMATIC

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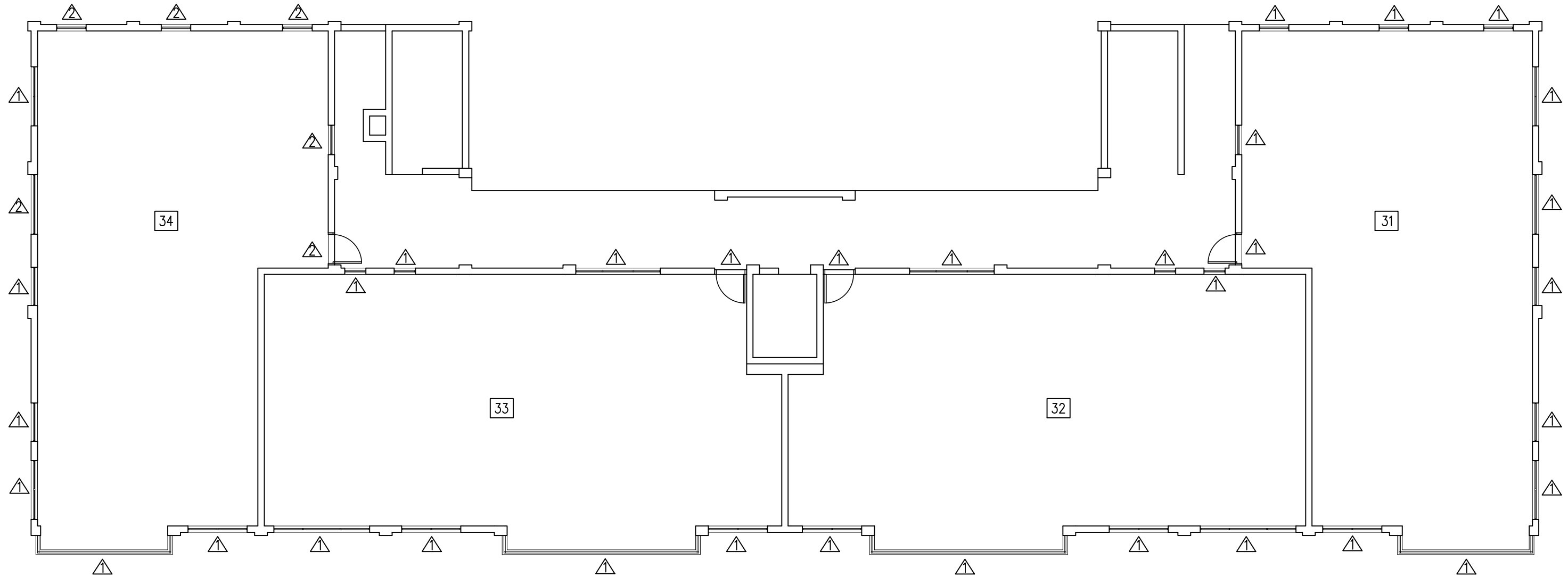
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	SARASOTA, FLORIDA	Sketch #:	S1.3 By: BS
Part:	REPAIRS	Date:	03-08-23

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3RD FLOOR PLAN- WINDOW SCHEMATIC

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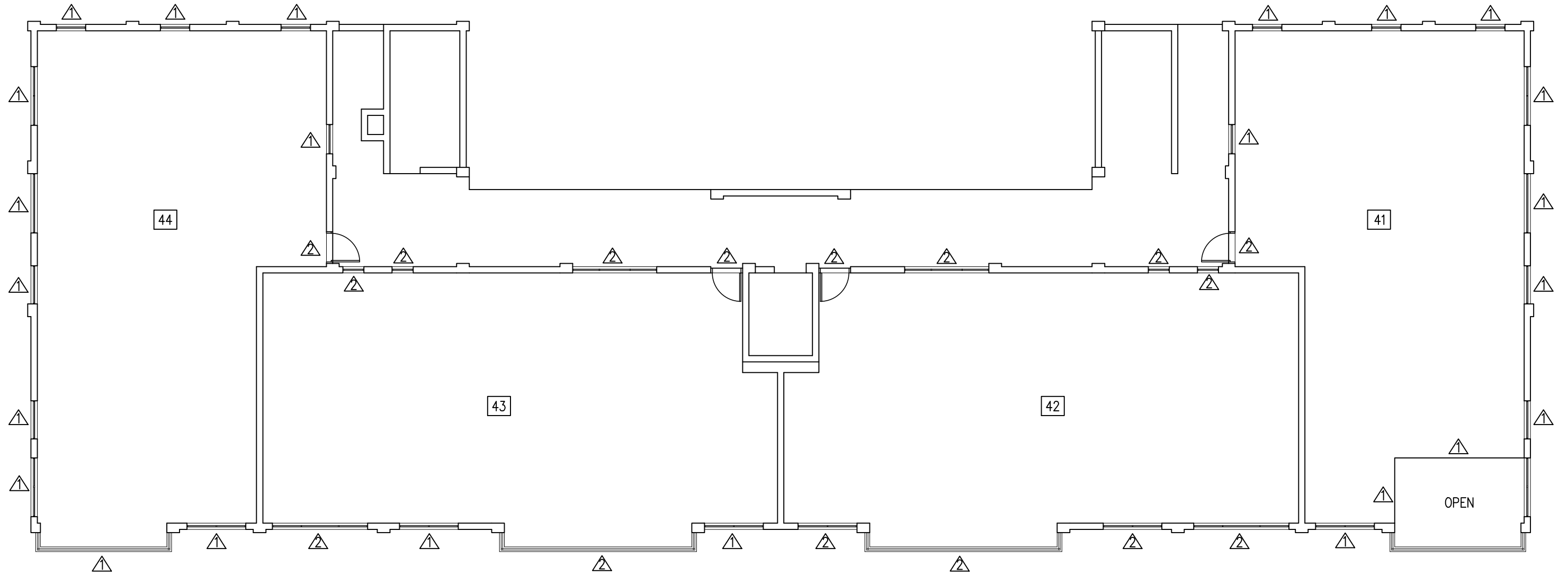
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	SARASOTA, FLORIDA	Sketch #:	S1.4 By: BS
Part:	REPAIRS	Date:	03-08-23

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4TH FLOOR PLAN- WINDOW SCHEMATIC

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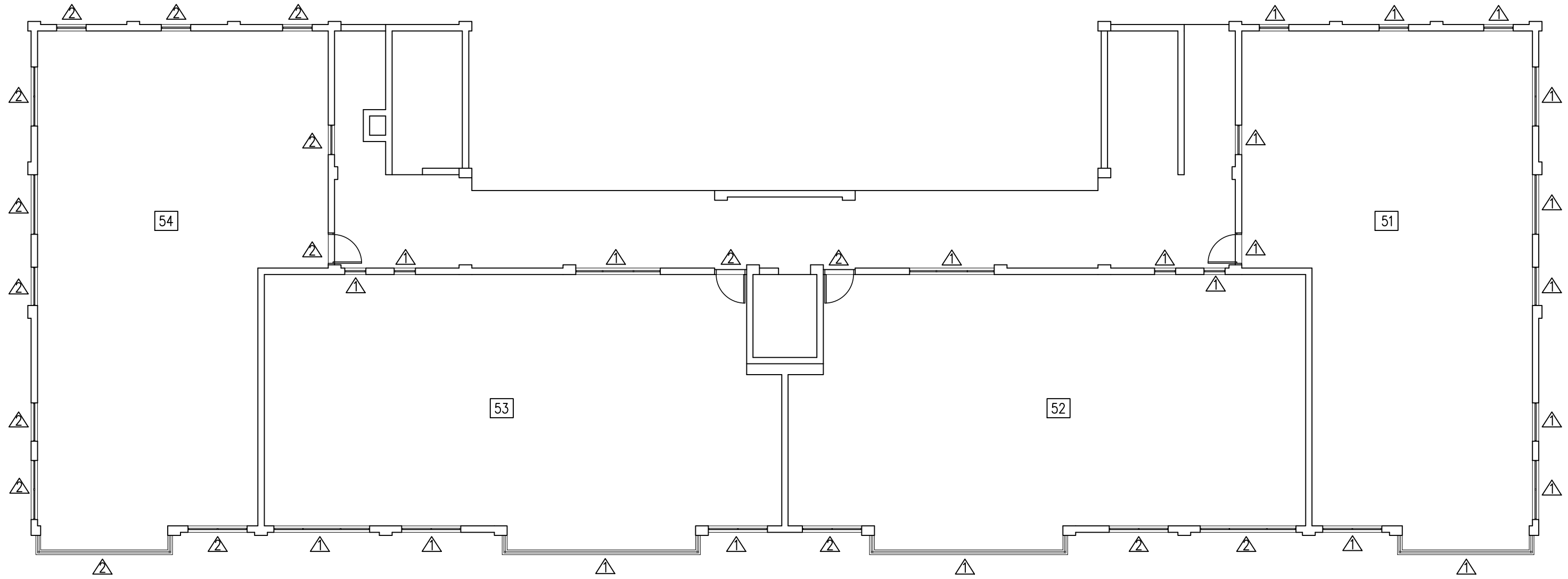
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	SARASOTA, FLORIDA	Sketch #:	S1.5 By: BS
Part:	REPAIRS	Date:	03-08-23

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5TH FLOOR PLAN- WINDOW SCHEMATIC

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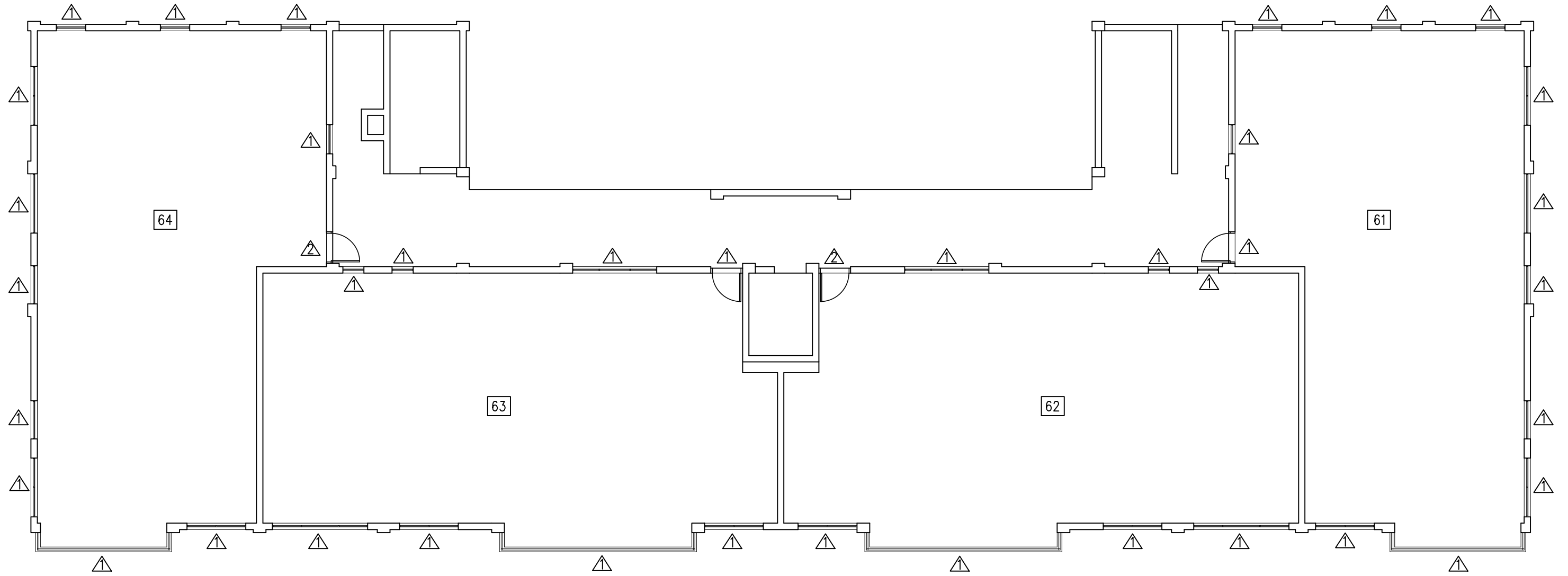
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Part:	REPAIRS	Date:	03-08-23

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5TH FLOOR PLAN- WINDOW SCHEMATIC

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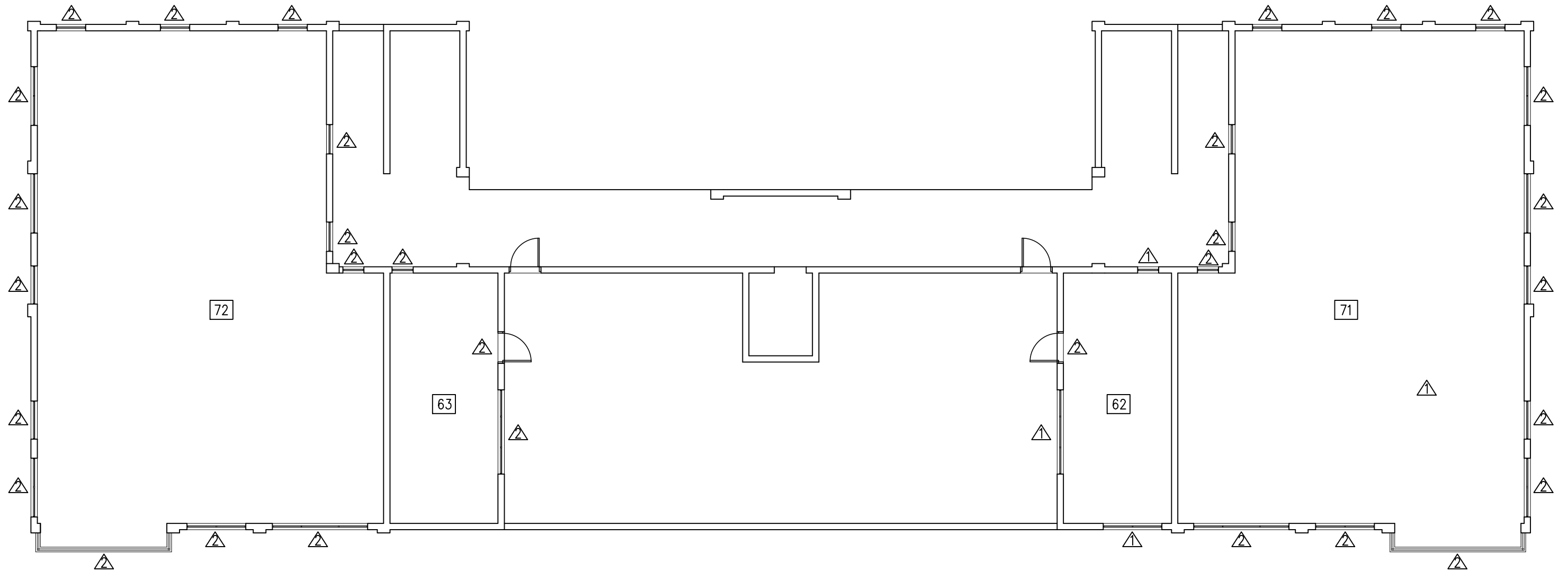
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Part:	REPAIRS	Date:	03-08-23

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7TH FLOOR PLAN- WINDOW SCHEMATIC

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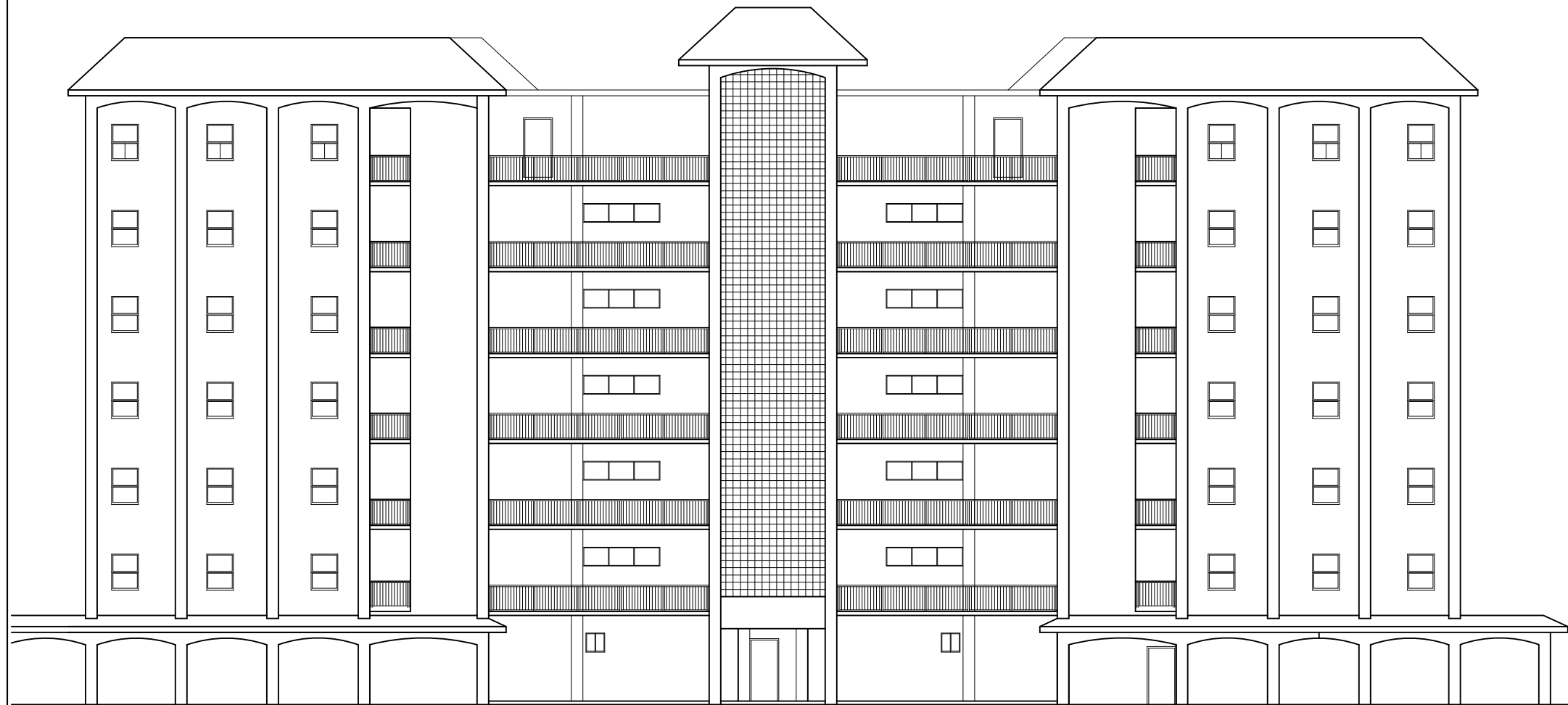
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Part:	REPAIRS	Date:	03-08-23

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EAST EXTERIOR ELEVATION

N.T.S.



NORTH EXTERIOR ELEVATION

N.T.S.

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Project:	HARBOR HOUSE WEST	Proj #:	S2021-042
	SARASOTA, FLORIDA	Sketch #:	S2.2 By: BS
Part:	REPAIRS	Date:	03-08-23

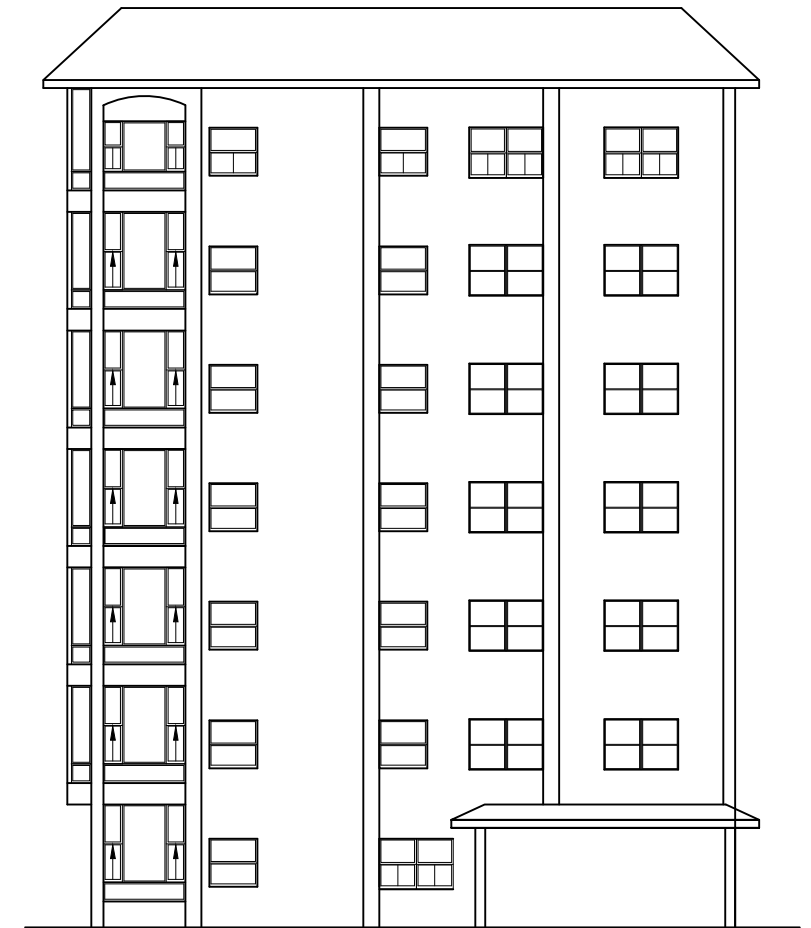
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WEST EXTERIOR ELEVATION

N.T.S.

NOTE:
 WINDOW CONFIGURATIONS VARY FROM
 THAT SHOWN. SEE WINDOW SCHEDULE.



SOUTH EXTERIOR ELEVATION

N.T.S.

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ALL SIZES ARE APPROXIMATE. TO BE CONFIRMED BY CONTRACTOR.

Project: HARBOR HOUSE WEST

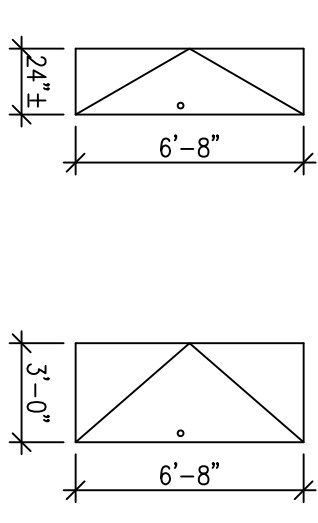
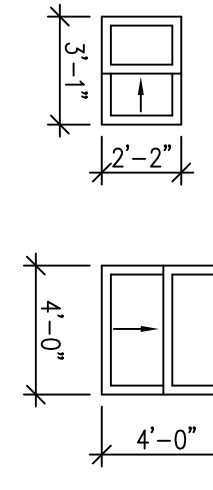
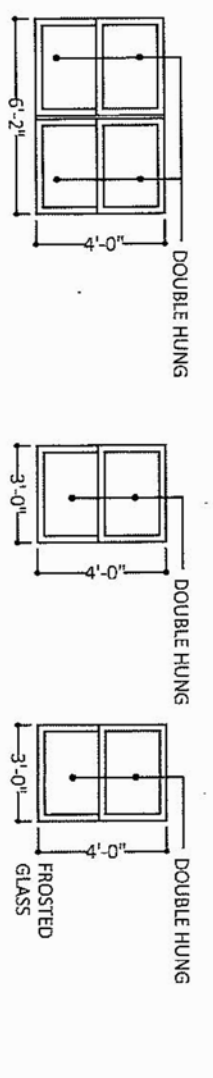
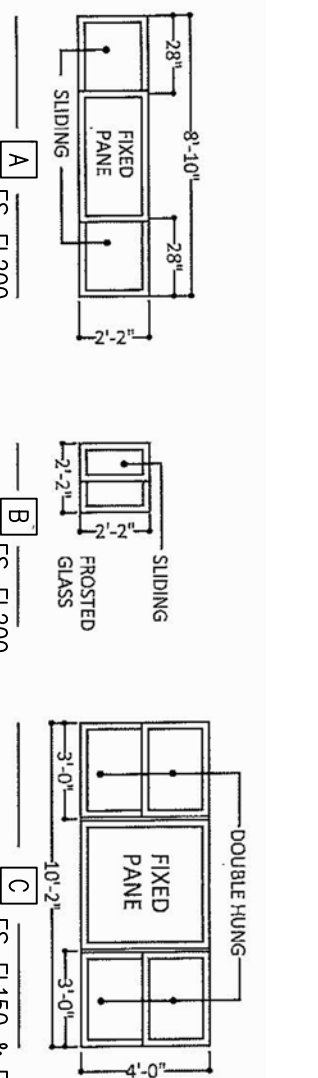
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Part: REPAIRS

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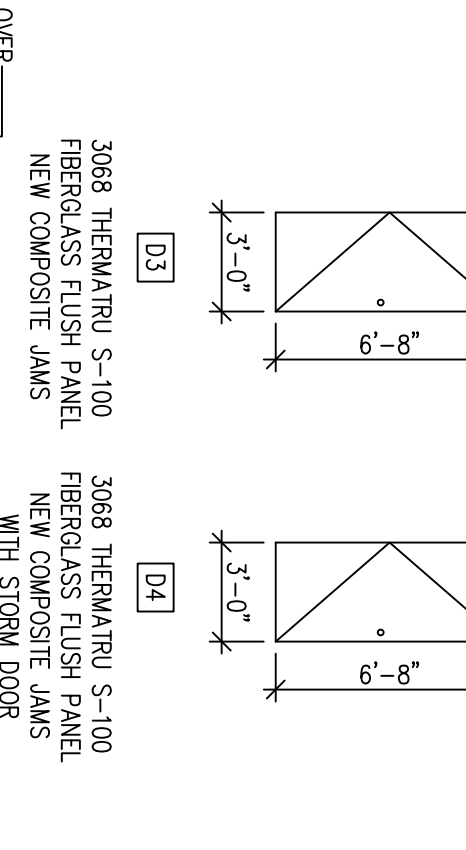
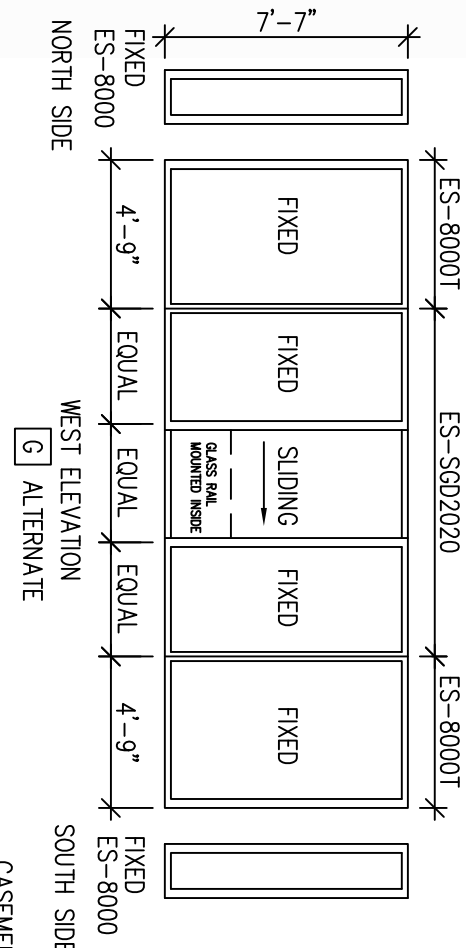
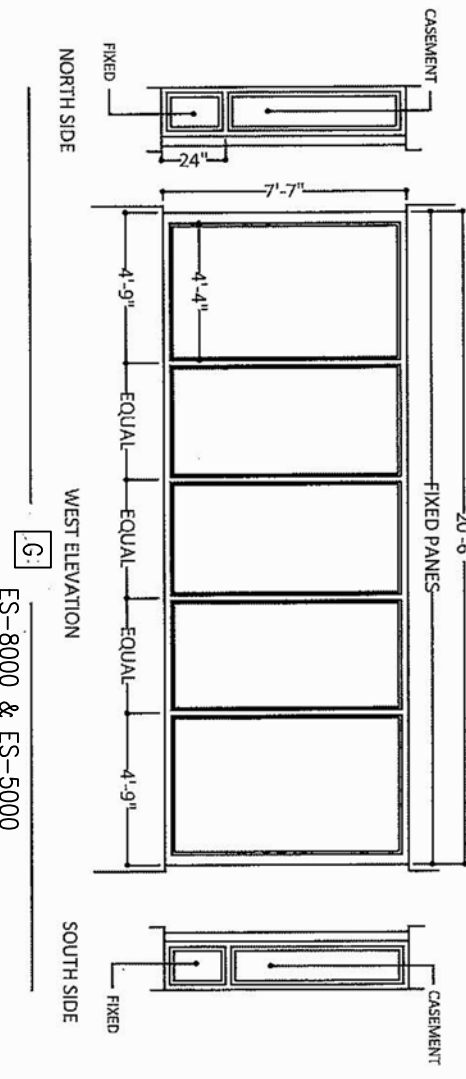
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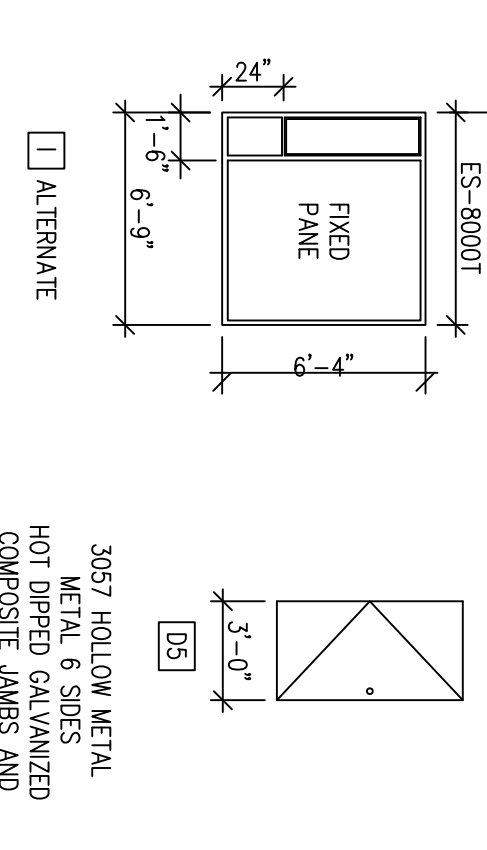
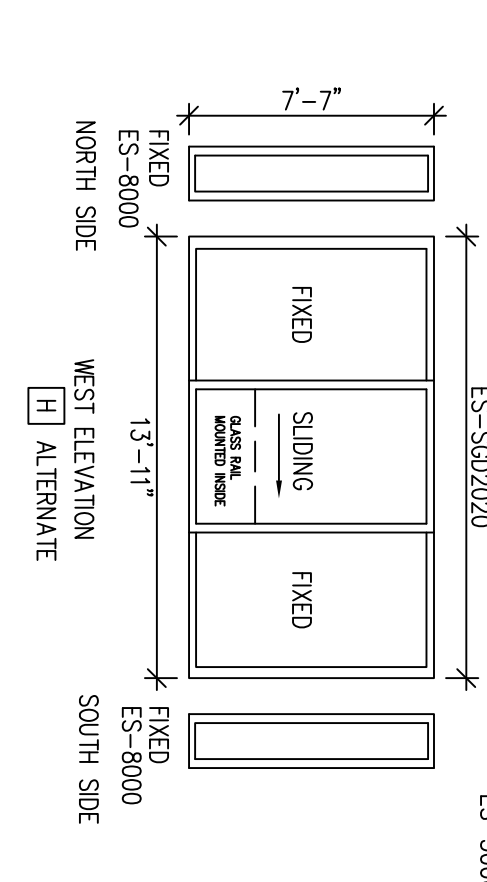
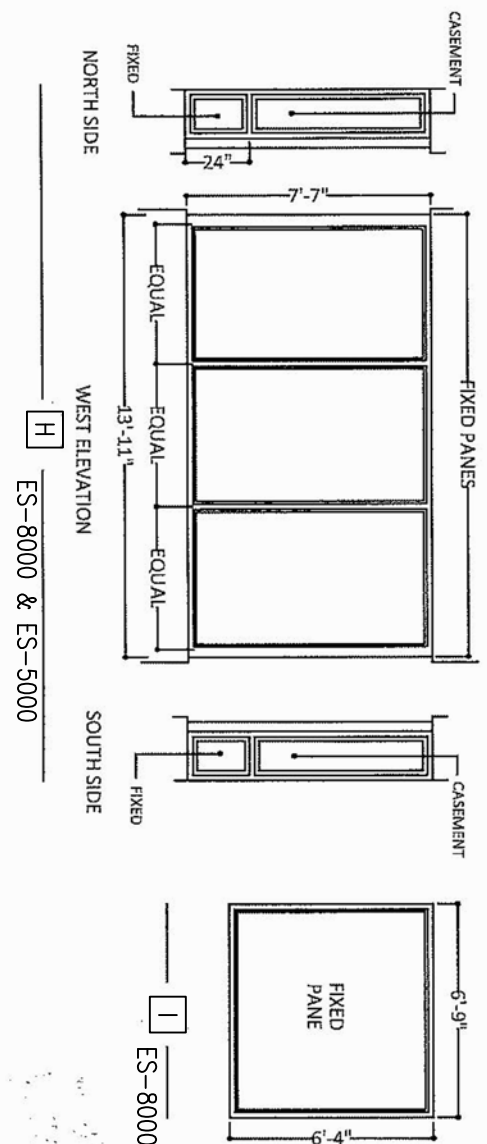


2068 THERMATRU S-100 3068 HOLLOW METAL
 FIBERGLASS FLUSH PANEL METAL 6 SIDES
 NEW COMPOSITE JAMS HOT DIPPED GALVANIZED
 AND CASING REPLACE HOT DIPPED
 GALVANIZED FRAME

BRIAN STIRLING, PE 34927



3068 THERMATRU S-100 3068 THERMATRU S-100
 FIBERGLASS FLUSH PANEL FIBERGLASS FLUSH PANEL
 NEW COMPOSITE JAMS NEW COMPOSITE JAMS
 WITH STORM DOOR
 ANDERSON WINDOWS SERIES 3000



3057 HOLLOW METAL
 METAL 6 SIDES
 HOT DIPPED GALVANIZED
 COMPOSITE JAMBS AND
 CASINGS