

(Exhibit 1)  
**State of Florida**  
**DEPARTMENT OF TRANSPORTATION**  
**INVITATION TO BID**

Sealed bids will be received and publicly opened and read aloud by the Florida Department of Transportation (hereinafter referred to as Owner) at the following date, location, and local time: Thursday September 14, 2017 at the Florida Department of Transportation, District 6 office, 1000 NW 111 Avenue, Miami, FL 33172 in the Procurement Conference Room 6204-A.

**FINANCIAL PROJECT NO.:** 438874-1-52-01 **CONTRACT NO.:** E-6L49

**PROJECT NAME:** DISTRICT SIX ADAM LEIGH CANN BUILDING WATERPROOFING PROJECT – PHASE 4.

**PROJECT LOCATION:** 1000 NW 111<sup>TH</sup> AVE. MAIMI, FLORIDA 33172

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**PROJECT DESCRIPTION:** NEW IMPACT-RATED LOBBY WINDOW WALL AND RELATED INTERIOR AND EXTERIOR REMEDIAL WORK.

**PRE-BID MEETING** (check appropriately)       *Mandatory*,       *Non-Mandatory*, or       *Not Applicable*

If a pre-bid meeting is scheduled (mandatory “or” non-mandatory) it will be held at the following location, date and local time:   

Monday, August 7, 2017 at Florida Department of Transportation, District 6, 1000 NW 111th Avenue, Miami, FL 33172 in the Procurement Conference Room 6204-A.

Owner representatives will be present to discuss plans, specifications, and conditions of the project. The Owner’s Project Manager is: Ruel Umbay and may be reached at: 305-470-5455 or Ruel.Umbay@dot.state.fl.us.

*NOTE: Any contractor who fails to attend a mandatory pre-bid meeting will not be eligible to bid on the project.*

Bid Proposal documents will not be accepted after: 10:00 A.M., Thursday, September 14, 2017.

**MINORITY BUSINESS ENTERPRISES (MBE) UTILIZATION:** The Owner encourages the recruitment and utilization of certified and non-certified minority businesses. The Owner, its contractors, suppliers, and consultants should take all necessary and reasonable steps to ensure that minority businesses have an opportunity to compete for and perform contract work for the Owner in a nondiscriminatory environment.

**BID PROPOSAL:** Bids must be submitted in full accordance with the requirements of the Drawings, Specifications, Bidding Conditions, and Contractual Conditions, which are contained in Exhibit "A" Scope of Work.

**PREQUALIFICATION requirements:**

- Each bidder shall provide proof of current contractor license issued by the State of Florida and, if a Florida Corporation, a copy of the Corporate Charter as prequalification of their eligibility.
- Statement that the prime bidder (the firm, not the individual) has been actively involved in providing the Services required as per Exhibit "A" Scope of Work for a minimum of three continuous years and have provided services for a single commercial office facility, similar in size (or larger) and providing a minimum of three (3) verifiable customer references by completing the "**Certification of Experience Documentation**" form.

**BID BOND:** If the bid amount exceeds \$100,000, the bidder must provide with the bid, a Bid Guaranty of five percent (5%) of the actual total bid in the form of a certified check, cashier's check, treasurer's check, bank draft of any national or state bank, or a surety Bid Bond made payable to the Department of Transportation. A Bid Guaranty in an amount less than five percent (5%) of the actual bid will invalidate the bid. Bid Bonds shall conform to the Departments Bid/Proposal Bond Form furnished with the proposal package.

**ADDITIONAL DOCUMENTS TO BE SUBMITTED WITH THE BID:**

- Drug Free Workplace form
- Bid Bond

The bid will be rejected if any of these requirements are not included either with the bid or provided to the Owner prior to the Letting. After the bid opening, the lowest responsive bidder shall qualify in accordance with this contract document.

**PERFORMANCE BOND and LABOR AND MATERIALS PAYMENT BOND:** If the contract award amount exceeds \$100,000, both a Performance Bond and a Labor and Material Payment Bond of 100% each of the contract sum are required at the time of award.

**INSURANCE:** The awarded Bidder is responsible for maintaining the insurance coverage specified in the Non-Technical Specifications for the duration of this project.

**BID POSTING / CONTRACT AWARD:** The Bid Tabulation and Notice of Award Recommendation will be posted at the following location, date and local time:

**Wednesday, September 20, 2017 at OR before 5:00 P.M. at:**

<http://www.dot.state.fl.us/contractsadministrationdistrict6/FCO/FCO.shtm>

In the event the Bid Tabulation and Notice of Award Recommendation cannot be posted in this manner, all bidders will be notified by certified United States Mail, return receipt requested, express or fax delivery, receipt requested. If no protest is filed the Owner will award the contract to the qualified, responsive low bidder. The Owner reserves the right to reject any or all bids.

**BID SOLICITATION/AWARD/NON-AWARD PROTEST RIGHTS:** Any person adversely affected by this Bid Solicitation shall file a notice of protest within 72 hours of receipt of the bid documents in accordance with Section 120.57(3), Florida Statutes and Rule Chapter 28-110, Florida Administrative Code. Any person adversely affected by the intended decision of the Owner to award a contract or to reject all bids shall file a notice of protest within 72 hours after the posting of the Summary of Bids (bid tabulation). If notice of intended decision is given by certified mail, express or fax delivery, the adversely affected person must file the notice of protest within 72 hours after receipt of the notice of intent.

A formal written protest must be filed within 10 days after filing the notice of protest. The formal written protest shall state with particularity the facts and law upon which the protest is based. All protests must be submitted in accordance with Section 120.569 and 120.57, Florida Statutes. The required notice of protest and formal protest must each be timely filed with the Clerk of Agency Proceedings, Office of General Counsel, 605 Suwannee Street, Room 550, MS-58, Tallahassee, Florida, 32399-0450. Failure to file a protest within the time prescribed in Section 120.57(3), Florida Statutes, shall constitute a waiver of proceedings under Chapter 120, Florida Statutes.

**DISCRIMINATION CLAUSE:** An entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity, per Section 287.134(3)(a), Florida Statutes.

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

STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION



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District Six Contract Supervisor,  
Nadine Chinapoo

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION  
**DRUG-FREE WORKPLACE PROGRAM CERTIFICATION**

375-040-18  
PROCUREMENT  
03/17

287.087 Preference to businesses with drug-free workplace programs. --Whenever two or more bids, proposals, or replies that are equal with respect to price, quality, and service are received by the state or by any political subdivision for the procurement of commodities or contractual services, a bid, proposal, or reply received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. In order to have a drug-free workplace program, a business shall:

(1) Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.

(2) Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.

(3) Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).

(4) In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than 5 days after such conviction.

(5) Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community by, any employee who is so convicted.

(6) Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

**Does the individual responding to this solicitation certify that their firm has implemented a drug-free workplace program in accordance with the provision of Section 287.087, Florida Statutes, as stated above?**

**YES**

**NO**

NAME OF BUSINESS: \_\_\_\_\_

(Exhibit 13)  
**BID BOND**

KNOW ALL MEN BY THESE PRESENTS: That we, \_\_\_\_\_, as Principal (Bidder), and \_\_\_\_\_ as Surety, are held and firmly bound unto the Florida Department of Transportation (hereinafter called the Owner), in the full and just sum of FIVE PERCENT (5%) of the actual bid total on the Bid Proposal, in lawful money of the United States of America, to be paid to the Owner, to which payment well and truly to be made we bind ourselves, our heirs, executors, administrators, successors, and assignees, jointly and severally and firmly be these presents:

WHEREAS, the Principal is herewith submitting a bid to the State of Florida, Department of Transportation for constructing or otherwise improving a building(s) in \_\_\_\_\_ County, particularly known as \_\_\_\_\_, Financial Project No(s) \_\_\_\_\_.

NOW, THEREFORE, THE CONDITION OF THE ABOVE OBLIGATION IS SUCH, that if the Principal shall execute the Contract Agreement and give bond for the faithful performance thereof within ten (10) days after being notified in writing of the award of such contract to Principal, or if the Surety shall pay the Owner the full amount of this bond, then this obligation shall be void; otherwise it shall remain in full force and effect.

SIGNED, SEALED, AND DATED THIS \_\_\_\_\_ day of \_\_\_\_\_, YR \_\_\_\_\_

NAME OF SURETY: \_\_\_\_\_ (Affix Surety Seal)

By: \_\_\_\_\_ (Agent or Attorney-In-Fact)

Printed Name: \_\_\_\_\_

Address (City, State, Zip): \_\_\_\_\_

Telephone #: \_\_\_\_\_ FAX #: \_\_\_\_\_ FEID No.: \_\_\_\_\_

Countersigned: \_\_\_\_\_ Florida Licensed Agent)

Printed Name: \_\_\_\_\_

Address (City, State, Zip): \_\_\_\_\_

Telephone #: \_\_\_\_\_ FAX #: \_\_\_\_\_

The following statement is to be completed regarding the Florida Licensed Agent: STATE OF FLORIDA  
COUNTY OF: \_\_\_\_\_

Before me, the above signed authority, personally appeared \_\_\_\_\_ who is personally known to me or has produced \_\_\_\_\_ (type of identification), identification and is duly sworn, deposes and says that he/she is a duly authorized insurance agent, properly licensed under the laws of the State of Florida to represent \_\_\_\_\_ of \_\_\_\_\_

\_\_\_\_\_ a company authorized to make corporate Surety Bonds under the laws of Florida and acceptable as Surety on Federal Bonds and that he/she has signed or countersigned the above bond on the Surety's behalf. Sworn, and subscribed to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_.

My Commission Expires: \_\_\_\_\_ Signature: \_\_\_\_\_  
Notary Public, State of Florida at Large

NOTES:

- 1. The Bidder is not required to sign this document, as execution of the Bid Proposal specifically binds the principal bidder to the obligations arising from this document. Failure of the principal bidder to execute the Bid Proposal, or failure of the surety to execute this document, shall result in the bid being declared non-responsive.
- 2. Power of Attorney showing authority of Surety's Agent or Attorney-In-Fact must be furnished with this form. Affix Corporate Seal of Surety. No Bid Guaranty is required if the total amount of the bid is \$100,000 or less.



## **Florida Department of Transportation | District VI**

**Adam Leigh Cann Headquarters Building | 1000 N.W. 111<sup>th</sup> Avenue | Miami |**

**Scope of Work: District Six -Adam Leigh Cann Building Envelope  
Project - Phase 4**

**June 08, 2017**



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**6. SCHEMATIC BUILDING LAYOUT SHOWING Window WALL LOCATIONS & FIELD PICTURES AS OF JUNE 8<sup>TH</sup>, 2017**

**7. SCHEMATIC WALL SECTIONS / ELEVATIONS**

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## 1. APPLICABLE CODES AND STANDARDS:

Comply with the Florida Building Code (FBC), all or portions of following codes and requirements: Incorporated into and made a part of FBC.

- Florida Building Code, 2014 5<sup>TH</sup> Edition.
- NFPA 101, Life Safety Code, 2015 with Florida modifications.

It is the responsibility of the future Contractor Team to conduct a thorough Florida Building Code Analysis.

### General

- The Adam Leigh District VI Headquarters is located at 1000 NW 111th Avenue, Miami Florida. Its location places it within the jurisdiction of the City of Sweetwater Building Department.
- Built under the *South Florida Building Code* in force at the time, the original 1985 structure houses various FDOT departments.
- Approximate area of 81,760 square feet distributed over two stories.

**Occupancy** (per FBC, Chapter 3)

**Business Group B** – *“Building or structure for office, professional or service type transactions...”* Any improvement or building envelope replacement will not change the use of the building.

**Construction Classification** (per FBC, Chapter 6)

Construction Classification, Type II A, per section 602, *“where the primary structural frame as defined in section 202 is of noncombustible materials...”*

**Classification of Work** (Per FBC for Existing Buildings, Chapter 4)

To be determined by future Design Professional Team however, the Florida Building Code for Existing Buildings, classifies any repair, alteration or construction into Alteration Levels 1, 2 or 3 depending on the extent, type or cost of the proposed construction.

### End of Section

Exhibit “A”, Scope of Work: District Six-Adam Leigh Cann Building Envelope Water Proofing Project - Phase 4



## 2. PROJECT INTENT:

The nature of this project is to provide the performance criteria required for a new Miami-Dade County impact-rated window wall storefront system located at the existing lobby (referenced as room # 174 on the FDOT provided permit set dated 07-15-85). **The contractors perusing this project shall be responsible for visiting the site in order to familiarize themselves with the site and scope of work needed to provide new construction as indicated herein and in addition, estimate the quantities needed for the project.**

The areas requiring demolition and new construction will be limited to the locations identified on the Schematics Drawings and Key Plan. The existing construction pertaining to this project consists of the follows building systems:

### Exterior Stucco Wall System

- Cement plaster on metal lath.
- Gypsum wall board sheathing.
- Aluminum storefront and glazing.
- Aluminum sunscreen shutters.
- 6 inch cold formed metal framing.
- Fiberglass batt insulation.

### Existing Exterior Appurtenances

- Security cameras.
  - Electrical conduits.
- 

### Existing Roofing

- Aluminum copings.
- Lightning protection.
- Bituminous roofing felts.
- Rigid insulation.
- Roof drains.
- Aluminum fiber reinforced bituminous flashing.

### Existing Interior Conditions

- Painted gypsum wall board.
- Acoustical tile suspended ceiling.
- VCT floor covering.

**End of Section**



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### **3. SCOPE OF WORK:**

The following scope of work is general in nature.

The objective of this Scope of Work is for the replacement of the existing material, as outlined in items 3 above, associated with the replacement of the new Window Wall Storefront System. The materials used for this project shall be as identified in the Specification section. **The contractor shall be responsible for providing materials, labor, permitting and all other associated cost for a complete and watertight project.**

All materials used on the project shall be new and provided with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.

The new storefront system shall consist of the materials identified in the project specifications and summarized as follows:

#### **Exterior Stucco Wall System**

- Cement plaster on metal lath.
- Gypsum wall board sheathing.
- Aluminum storefront and glazing.
- Aluminum sunscreen shutters.
- 6 inch cold formed metal framing.
- Fiberglass batt insulation.

#### **Exterior Appurtenances (if applicable)**

- Reinstall security cameras.
- Remove any abandoned electrical conduits and/ or reinstall electrical conduits pertaining to exterior electrical equipment.

#### **Roof Patching Associated with the New Installation of the EIFS**

- Aluminum copings.
- Reinstalling the lighting protection.  
Bituminous roofing felts.
- Rigid insulation.
- Aluminum fiber reinforced bituminous flashing.

#### **Interior Conditions**

- Gypsum wall board.
- Painting of all new gypsum wall boards.
- Floor finishes including but not limited to resilient floor tile and resilient base.

#### **Structural Conditions**

- The Contractor and Contractor team will be responsible for performing a complete survey of all of the rusted the structural steel. Refer to "Structural Criteria".

**End of Section**



#### **4. STRUCTURAL CRITERIA:**

In addition to the water infiltration affecting the exterior wall systems, water may have migrated to the interior structural steel and possibly caused rusting, which may or may not affect the structural integrity of the steel. The Contractor and Contractor team will be responsible for performing a complete survey of all of the rusted structural steel. The steel shall be calibrated to determine the percentage of the rusted steel and whether any structural modifications will be required. If required a professional structural engineer licensed in the State of Florida shall perform the inspection of the structural steel. The report shall include the findings of the survey. If it is determined that any of the steel must be reinforced, the engineer shall provide calculations and details. The details should indicate all of the components necessary and sizes to reinforce the existing structural members. In addition, show the attachments, such as bolts and/ or welding, required to support the existing loads. The report and any calculations and details must be signed and sealed by the engineer of record conducting the survey. Refer to pictures on next page for examples where water intrusion may have caused rusting.

In event the steel must be reinforced, the following minimum standard should be followed:

- Structural Steel: Elements of structural-steel frame, as classified by AISC 303, "Code of Standard Practice for Steel Buildings and Bridges.
- Welding Qualifications: Qualify procedures and personnel according to AWS D1.1, "Structural Welding Code - Steel."
- W-Shapes: ASTM A 992.
- Channels, Angles, Plates and Bars: ASTM A 36.
- High-Strength Bolts: Install high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts" for type of bolt and type of joint required.
- Weld Connections: Comply with AWS D1.1 for tolerances, appearances, welding procedure specifications, weld quality, and methods used in correcting welding work.

**End of Section**



## SECTION 011000 - SUMMARY

### PART 1 - GENERAL

#### 1.1 PROJECT REQUIREMENTS

- A. The Contractor, along with design professionals, shall be responsible for visiting the site and verifying all the existing conditions and quantities in the field, at the locations where the new work is to be performed.

#### 1.2 SUMMARY

- A. The purpose of this project is to replace the existing storefront system located within the Adam Leigh Cann District Headquarters Lobby and provide new materials as specified herein.
  - 1. Remove and dispose of all of the existing exterior walls / materials consisting of aluminum storefront & glazing, stucco walls and all associated materials including but not limited to the following:
    - a. Windows and louvers and associated storm shutters
    - b. Rusted steel stud framing
    - c. Water damaged fire proofing
    - d. Interior materials damage due to water infiltration including materials containing mold.
  - 2. Install new materials, but not limited to the materials as described herein, to provide a complete watertight building.
  - 3. Inspect and provide roof patching in areas associated with the proposed storefront replacement.
  - 4. Remove and reinstall all security cameras, lightning protection and any other systems associated and/ or appurtenances with the removal and construction of the new storefront.
- B. The Contractor will be responsible for visiting the site, inspecting areas requiring water mitigation and noting areas and quantities require for corrective measures necessary to provide a complete watertight building at the afore mentioned exterior walls and roof locations.

#### 1.3 PROJECT INFORMATION

- A. Project Identification:
  - 1. Project Location: Adam Leigh Cann District Headquarters (excluding the executive offices annex), 1000 NW 111<sup>th</sup> Avenue, Miami, Florida 33172.
- B. Owner: Florida Department of Transportation (FDOT).
  - 1. FDOT's Representative: Ruel Umbay

#### 1.4 PHASED CONSTRUCTION

- A. The Work shall be conducted in phases:
  - 1. Phasing Plan: The Contractor, before proceeding with any work, shall develop a Phasing Plan with FDOT's input, to determine the best course of action to provide the least amount of disturbance to FDOT's daily operations. Upon FDOT's approval, each phase shall be substantially completed before proceeding to the next phase.

- B. Before commencing Work of each phase, the Contractor shall submit an updated copy of the construction schedule showing the sequence, commencement and completion dates, and move-out and -in dates of FDOT's personnel for all phases of the Work.

## **1.5 ACCESS TO SITE**

- A. General: Before proceeding with any work the Contractor shall have a meeting with FDOT to discuss site access for demolition and construction operations.
- B. Use of Site: Limit use of Project site to work in areas of demolition and new construction. Do not disturb portions of Project site beyond areas in which the Work is necessary.
  - 1. Limits: Confine demolition and constructions operations to the building areas requiring water mitigation work.
  - 2. Driveways, Walkways and Entrances: Keep driveways parking areas, loading areas, and entrances serving premises clear and available to FDOT's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
    - a. Schedule deliveries to minimize use of driveways and entrances by construction operations.
    - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- C. Condition of Existing Building: Maintain portions of existing building affected by construction operations in a weather tight condition throughout construction period. Repair any damage caused by construction operations.
- D. Meet with FDOT to discuss security measures necessary during demolition and construction activities

## **1.6 COORDINATION WITH OCCUPANTS**

- A. FDOT will be occupying the building or portions of the building during demolition and construction.

## **1.7 HURRICANE EVENT REQUIREMENTS**

- A. In the event of a hurricane, the Contractor shall take all necessary precautions to secure all materials and equipment.
  - 1. Secure all materials and equipment before the anticipated hurricane arrival.
  - 2. Secure and/or remove all materials and equipment in a manner that will prevent wind blow debris from causing damage to the existing building and/or surrounding buildings.
  - 3. Secure all temporary construction.
  - 4. After the hurricane event clears, remove and dispose of all wind blow debris around the construction areas before proceeding with work.

## **1.8 WORK RESTRICTIONS**

- A. Work Restrictions, General: Comply with restrictions on construction operations.
  - 1. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Monday – Friday; 8:00 AM-4:30PM.

- C. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by FDOT or others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:
  - 1. Notify FDOT not less than two days in advance of proposed utility interruptions.
  - 2. Obtain FDOT's written permission before proceeding with utility interruptions.
- D. Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, or other disruption to FDOT.
  - 1. Notify FDOT not less than two days in advance of proposed disruptive operations.
  - 2. Obtain FDOT's written permission before proceeding with disruptive operations.
- E. Nonsmoking Building: Smoking is not permitted within the building or within 25 feet of entrances, operable windows, or outdoor-air intakes.
- F. Controlled Substances: Use of tobacco products and other controlled substances within the existing building and Project site is not permitted.
- G. Employee Identification: Coordinate with FDOT the types of identification tags for Contractor personnel working on Project site. Require personnel to use identification tags at all times
- H. Employee Screening: Comply with FDOT's requirements for drug and background screening of Contractor personnel working on Project site.
  - 1. Maintain list of approved screened personnel with FDOT's representative.

**PART 2 - PRODUCTS (Not Used)**

**PART 3- EXECUTION (Not Used)**

**END OF SECTION 011000**

## SECTION 024119 - SELECTIVE DEMOLITION

### PART 3 - GENERAL

#### 3.1 PROJECT REQUIREMENTS

- A. The Contractor, along with design professionals, shall be responsible for visiting the site and verifying all the existing conditions and quantities in the field, at the locations where the new work is to be performed.

**Note: The Contractor shall install temporary galvanized metal framing with gypsum wall (GWB). No drop barriers/cloths allowed.**

#### 3.2 SUMMARY

- A. Section Includes:
1. Demolition and removal of selected portions of building systems for the installation of Storefront System new materials.
  2. Salvaging materials for reuse.

#### 3.3 DEFINITIONS

- A. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and salvaged or removed and reinstalled.
- B. Existing to Remain: Existing items of construction that are not to be permanently removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.
- C. Remove and Salvage: Carefully detach from existing construction, in a manner to prevent damage, ready for reuse.

#### 3.4 MATERIAL OWNERSHIP

- A. Unless otherwise indicated, demolition waste becomes property of Contractor.

#### 3.5 FIELD CONDITIONS

- A. FDOT will occupy portions of building immediately adjacent to selective demolition areas. Conduct selective demolition so as FDOT's operations will not be disrupted.
- B. Conditions existing at time of inspection for bidding purpose will be maintained by FDOT as far as practical.
- C. Hazardous Materials: Hazardous materials are present in buildings and structures to be selectively demolished. A report on the presence of hazardous materials is on file for review and use. Examine report to become aware of locations where hazardous materials are present.
1. Hazardous material remediation will be performed under a separate contract.
  2. FDOT will provide material safety data sheets for suspected hazardous materials that are known to be present in buildings and structures to be selectively demolished because of building operations or processes performed there.
- D. Storage or sale of removed items or materials on-site is not permitted.

- E. Utility Service: Maintain existing utilities in service and protect them against damage during selective demolition operations.
  - 1. Maintain fire-protection facilities in service during selective demolition operations.

## **PART 4 - PRODUCTS**

### **4.1 PERFORMANCE REQUIREMENTS**

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ANSI/ASSE A10.6 and NFPA 241.

## **PART 5 - EXECUTION**

### **5.1 EXAMINATION**

- A. Review record documents of existing construction provided by FDOT. FDOT does not guarantee that existing conditions are same as those indicated in record documents.
- B. Survey existing conditions and correlate with requirements to determine extent of selective demolition required.
  - 1. Remove and dispose materials in areas where new materials will be installed.
  - 2. At portions of the interior that require demolition, all of the adjacent materials which have not been damaged by water infiltrations, shall be removed and salvaged for reuse such as the suspended ceiling system.

### **5.2 PREPARATION**

- A. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
- B. Temporary Facilities: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.

**Note: The Contractor shall install temporary galvanized metal framing with gypsum wall (GWB). No drop barriers/cloths allowed.**

- 1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.
  - 2. Provide temporary weather protection and security during interval between selective demolition of existing construction on exterior surfaces and new construction, to prevent unwanted entrance to the facility, water leakage and damage to structure and interior areas.
  - 3. Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.
  - 4. Cover and protect furniture, furnishings, and equipment that have not been removed.
  - 5. Provide temporary dust control to prevent the spread of dust to all occupied areas.
- C. Temporary Shoring: Based on the engineering report (see Section 4) if required for removal of rusted steel, provide and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.

1. Strengthen or add new supports when required during progress of selective demolition.
2. All temporary structural supports shall be designed by a structural engineer licensed in the State of Florida.

### **5.3 SELECTIVE DEMOLITION, GENERAL**

- A. General: Demolish and remove existing construction only to the extent required by new construction. Use methods required to complete the Work within limitations of governing regulations and as follows:
1. Proceed with selective demolition systematically, from higher to lower level. Complete selective demolition operations above each floor or tier before disturbing supporting members on the next lower level.
  2. Neatly cut openings and holes plumb, square, and true to the extent necessary for the installation of the new materials. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.
  3. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations as required by NFPA.
  4. Maintain adequate ventilation when using cutting torches.
  5. Remove all water damaged materials or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
  6. Where required by the engineering report (see Section 4) the contractor shall remove structural framing members and lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.
  7. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
  8. Dispose of demolished items and materials promptly.
- B. Removed and Reinstalled Items:
1. Clean and repair items to functional condition adequate for intended reuse.
  2. Pack or crate items after cleaning and repairing in a manner not to damage the materials.
  3. Reinstall items in locations where originally removed. Comply with installation requirements for new materials and equipment. See individual specification sections. Provide connections, supports, and miscellaneous materials necessary to make item functional for intended use.
- C. Existing Items to Remain: Protect construction to remain against damage and soiling during selective demolition. When permitted by FDOT, items may be removed to a suitable, protected storage location during selective demolition and reinstalled in their original locations after selective demolition operations are complete.

### **5.4 DISPOSAL OF DEMOLISHED MATERIALS**

- A. General: Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain FDOT's property, remove demolished materials from Project site.
1. Do not allow demolished materials to accumulate on-site.
  2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
  3. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
- B. Burning: Do not burn demolished materials.

- C. Disposal: Transport demolished materials off FDOT's property and legally dispose of them.

## 5.5 CLEANING

- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

## 5.6 SELECTIVE DEMOLITION SCHEDULE

- A. The contractor shall exercise care during the course of demolition. Only remove and demolish the materials necessary for the installation of the new construction as indicated on the Schematic Drawings. Any existing material, scheduled to remain, damaged during the course shall be replaced by the contractor at no additional cost to FDOT.
- B. Existing Construction to Be Removed but not limited to the following:
  - 1. All aluminum storefronts at existing lobby only.
    - a. After the removal, thoroughly clean all openings of sealant, fasteners, mildew and any other materials that may affect the installation of the new aluminum storefronts.
  - 2. All Exterior Insulation Finishing System (EIFS), and sheathing to existing steel studs. Remove all water damage and molded batt insulation.
    - a. Inspect all of the existing steel columns, beams, and stud framing and tracks. Remove all rusted framing, tracks and associated interior gypsum wall board and clean areas for new framing. Cut interior gypsum wall board at center line of vertical steel studs to allow for the installation of gypsum wall board from centerline to centerline of existing stud. Care is to be taken not to disturb the existing fire resistive material when removing the existing steel studs and tracks.
    - b. Where possible cut tracks between studs to allow nesting of new tracks.
  - 3. All water damaged stucco, mesh and sheathing to existing steel studs. Remove all water damage and molded batt insulation.
    - a. Inspect all of the existing steel stud framing and tracks. Remove all rusted framing, tracks and associated interior gypsum wall board and clean areas for new framing. Cut interior gypsum wall board at center line of vertical steel studs to allow for the installation of gypsum wall board from centerline to centerline of existing stud. Care is to be taken not to disturb the existing fire resistive material when removing the existing steel studs and tracks.
    - b. Where possible cut tracks between studs to allow nesting of new tracks.
  - 4. Remove all storm proof shutters and fasteners located at the existing EIFS and stucco exterior walls only.
  - 5. Remove all abandoned pvc piping at the locations of the new work.
  - 6. Remove all interior ceiling tiles and suspension systems a minimum distance of 4 feet to the next full ceiling tile.
  - 7. Remove all damaged or undamaged vct, bases and adhesives to a minimum distance of 3 feet to the next full tile from the face of the interior gypsum wall board.
- C. Existing Items to Be Removed and Reinstalled:
  - 1. Ceiling systems that have not been damage due to water infiltration and located on the exterior walls where the new Storefront System will be installed.
  - 2. Existing security cameras
  - 3. Existing lightning protection
  - 4. Existing conduits and outlets
- D. Existing Items to Remain:
  - 1. Interior gypsum wall board where the steel studs have not been removed due to rusting. All interior finishes not damaged by water or mold.

**END OF SECTION 024119**

## SECTION 030130 – CONCRETE PATCHING

### PART 6 - GENERAL

#### 6.1 PROJECT REQUIREMENTS

- A. The Contractor, along with design professionals, shall be responsible for visiting the site and verifying all the existing conditions and quantities in the field, at the locations where the new work is to be performed.

#### 6.2 SUMMARY

- A. Section Includes:
  - 1. Removal of deteriorated concrete and subsequent replacement and patching for placement of new waterproofing.

#### 6.3 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Each manufacturer shall employ factory-trained technical representatives who are available for consultation and Project-site inspection and assistance at no additional cost.
- B. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer to applying materials specified herein.

#### 6.4 DELIVERY, STORAGE, AND HANDLING

- A. Comply with manufacturer's written instructions for minimum and maximum temperature requirements and other conditions for storage.
- B. Store cementitious materials off the ground, under cover, and in a dry location.
- C. Store aggregates covered and in a dry location; maintain grading and other required characteristics and prevent contamination.

#### 6.5 FIELD CONDITIONS

- A. Environmental Limitations for Epoxies: Do not apply when air and substrate temperatures are outside limits permitted by manufacturer. During hot weather, cool epoxy components before mixing, store mixed products in shade, and cool unused mixed products to retard setting. Do not apply to wet substrates unless approved by manufacturer.
  - 1. Use only Class A epoxies when substrate temperatures are below or are expected to go below 40 deg F within 8 hours.
  - 2. Use only Class A or B epoxies when substrate temperatures are below or are expected to go below 60 deg F within 8 hours.
  - 3. Use only Class C epoxies when substrate temperatures are above and are expected to stay above 60 deg F for 8 hours.
- B. Cold-Weather Requirements for Cementitious Materials: Do not apply unless concrete-surface and air temperatures are above 40 deg F and will remain so for at least 48 hours after completion of Work.
- C. Cold-Weather Requirements for Cementitious Materials: Comply with the following procedures:

1. When air temperature is below 40 deg F, heat patching-material ingredients and existing concrete to produce temperatures between 40 and 90 deg F.
  2. When mean daily air temperature is between 25 and 40 deg F, cover completed Work with weather-resistant insulating blankets for 48 hours after repair or provide enclosure and heat to maintain temperatures above 32 deg F within the enclosure for 48 hours after repair.
  3. When mean daily air temperature is below 25 deg F, provide enclosure and heat to maintain temperatures above 32 deg F within the enclosure for 48 hours after repair.
- D. Hot-Weather Requirements for Cementitious Materials: Protect repair work when temperature and humidity conditions produce excessive evaporation of water from patching materials. Provide artificial shade and wind breaks, and use cooled materials as required. Do not apply to substrates with temperatures of 90 deg F and above.

## **PART 7 - PRODUCTS**

### **7.1 MATERIALS, GENERAL**

- A. Source Limitations: Obtain each color, grade, finish, type, and variety of product from single source with resources to provide products of consistent quality in appearance and physical properties.
- B. VOC Content: Provide materials that comply with VOC limits of authorities having jurisdiction.

### **7.2 BONDING AGENTS**

- A. Epoxy Bonding Agent: ASTM C 88, Type V and free of VOCs.
  1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
    - a. BASF Construction Chemicals - Building Systems.
    - b. Euclid Chemical Company (The); an RPM company.
    - c. Sika Corporation; Construction Product Division.

### **7.3 PATCHING MORTAR**

- A. Patching Mortar, General:
  1. Only use patching mortars that are recommended by manufacturer for each applicable vertical use orientation.
  2. Color and Aggregate Texture: Provide patching mortar and aggregates of colors and sizes necessary to produce patching mortar that matches existing, adjacent, exposed concrete. Blend several aggregates if necessary to achieve suitable matches.
  3. Coarse Aggregate for Patching Mortar: ASTM C 33, washed aggregate, Size No. 8, Class 5S. Add to patching-mortar mix only as permitted by patching-mortar manufacturer.
- B. Cementitious Patching Mortar: Packaged, dry mix for repair of concrete.
  1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
    - a. BASF Construction Chemicals - Building Systems.
    - b. Euclid Chemical Company (The); an RPM company.
    - c. Sika Corporation; Construction Product Division.

## **7.4 MIXES**

- A. General: Mix products, in clean containers, according to manufacturer's written instructions.
  - 1. Do not add water, thinners, or additives unless recommended by manufacturer.
  - 2. When practical, use manufacturer's premeasured packages to ensure that materials are mixed in proper proportions. When premeasured packages are not used, measure ingredients using graduated measuring containers; do not estimate quantities or use shovel or trowel as unit of measure.
  - 3. Do not mix more materials than can be used within time limits recommended by manufacturer. Discard materials that have begun to set.
- B. Dry-Pack Mortar: Mix patching-mortar dry ingredients with just enough liquid to form damp cohesive mixture that can be squeezed by hand into a ball but is not plastic.

## **PART 8 - EXECUTION**

### **8.1 EXAMINATION**

- A. Notify FDOT seven days in advance of dates when areas of deteriorated or delaminated concrete and deteriorated reinforcing bars will be located.
- B. Locate areas of deteriorated or delaminated concrete using hammer and mark boundaries. Mark areas for removal by simplifying and squaring off boundaries. At walls make boundaries level and plumb.
- C. Perform surveys as the Work progresses to detect hazards resulting from concrete patching work.

### **8.2 PREPARATION**

- A. Ensure that supervisory personnel are on-site and on duty when concrete patching work begins and during its progress.
- B. Remove any existing sealant or other material that may interfere with the patching work.
- C. Preparation for Removal of Deteriorated Concrete: Examine construction to be patched to determine best methods to safely and effectively perform concrete patching work. Examine adjacent work to determine what protective measures, in any, will be necessary. Make explorations, probes, and inquiries as necessary to determine condition of construction to be removed in the course of repair.
  - 1. Verify that affected utilities have been disconnected and capped.
  - 2. Inventory and record the condition of items to be removed for reinstallation or salvage, if any.
- D. Protect persons, motor vehicles, surrounding surfaces of building being restored, building site, plants, and surrounding buildings from harm resulting from concrete patching work.
  - 1. Comply with each product manufacturer's written instructions for protections and precautions. Protect against adverse effects of products and procedures on people and adjacent materials, components, and vegetation.
  - 2. Use only proven protection methods appropriate to each area and surface being protected.
  - 3. Provide barricades, barriers, and temporary directional signage to exclude public from areas where concrete patching work is being performed.
  - 4. Erect temporary protective covers over walkways and at points of pedestrian and vehicular entrance and exit that must remain in service during course of concrete maintenance work.
  - 5. Contain dust and debris generated by concrete patching work and prevent it from reaching the public or adjacent surfaces.

6. Use water-mist sprinkling and other wet methods to control dust only with adequate, approved procedures and equipment that ensure that such water will not create a hazard or adversely affect other building areas or materials.
  7. Protect the existing ground surfaces and plants along haul routes from damage and wear.
  8. Protect adjacent surfaces and equipment by covering them with heavy polyethylene film and waterproof masking tape. If practical, remove items, store, and reinstall after potentially damaging operations are complete.
  9. Neutralize and collect alkaline and acid wastes for disposal off Owner's property.
  10. Dispose of debris and runoff from operations by legal means and in a manner that prevents soil erosion, undermining of paving and foundations, damage to landscaping, and water penetration into building interiors.
- E. Concrete Removal:
1. Remove deteriorated and delaminated concrete by breaking up.
  2. Remove additional concrete if necessary to provide a depth of removal of at least 1/2 inch over entire removal area.
  3. Test areas where concrete has been removed by tapping with hammer, and remove additional concrete until unsound and disbonded concrete is completely removed.
  4. Provide surfaces with a fractured profile of at least 1/8 inch that are approximately perpendicular or parallel to original concrete surfaces. At walls, make top and bottom surfaces level unless otherwise directed.
  5. Thoroughly clean removal areas of loose concrete, dust, and debris.

### **8.3 APPLICATION**

- A. General: Comply with manufacturer's written instructions and recommendations for application of products, including surface preparation.
- B. Epoxy Bonding Agent: Apply to reinforcing by brush, roller, or spray according to manufacturer's written instructions, leaving no pinholes or other uncoated areas. Place patching mortar or concrete while epoxy is still tacky. If epoxy dries, recoat before placing patching mortar or concrete.
- C. Placing Patching Mortar: Place as follows unless otherwise recommended in writing by manufacturer:
1. Provide forms where necessary to confine patch to required shape.
  2. Wet substrate and forms thoroughly and then remove standing water.
  3. Pretreatment: Apply bonding agent.
  4. General Placement: Place patching mortar by troweling toward edges of patch to force intimate contact with edge surfaces. For large patches, fill edges first and then work toward center, always troweling toward edges of patch.
  5. Vertical Patching: Place material in lifts of not more than 1 inch nor less than 1/4 inch. Do not feather edge.
  6. Consolidation: After each lift is placed, consolidate material and screed surface.
  7. Multiple Lifts: Where multiple lifts are used, score surface of lifts to provide a rough surface for placing subsequent lifts. Allow each lift to reach final set before placing subsequent lifts.
  8. Finishing: Allow surfaces of lifts that are to remain exposed to become firm and then finish to a surface matching adjacent concrete.
  9. Curing: Wet-cure cementitious patching materials, including polymer-modified cementitious patching materials, for not less than seven days by water-fog spray or water-saturated absorptive cover.

- D. Dry-Pack Mortar: Use for deep cavities where required. Place as follows unless otherwise recommended in writing by manufacturer:
1. Provide forms where necessary to confine patch to required shape.
  2. Wet substrate and forms thoroughly and then remove standing water.
  3. Pretreatment: Apply specified bonding agent.
  4. Place dry-pack mortar into cavity by hand, and compact tightly into place. Do not place more material at a time than can be properly compacted. Continue placing and compacting until patch is approximately level with surrounding surface.
  5. After cavity is filled and patch is compacted, trowel surface to match profile and finish of surrounding concrete. A thin coat of patching mortar may be troweled into the surface of patch to help obtain required finish.
  6. Wet-cure patch for not less than seven days by water-fog spray or water-saturated absorptive cover.

**END OF SECTION 030130**

## SECTION 05120 - STRUCTURAL STEEL

### PART 9 - GENERAL

#### 9.1 SUMMARY

- A. This Section includes structural steel as defined in AISC "Code of Standard Practice" and as shown on the drawings.

#### 9.2 PERFORMANCE REQUIREMENTS

- A. Structural Performance: Engineer structural-steel connections required by the Contract Documents to be selected or completed by fabricator to withstand design loadings indicated.
  - 1. Engineering Responsibility: Engage a fabricator who utilizes a qualified licensed professional engineer to prepare calculations, Shop Drawings, and other structural data for structural-steel connections.

#### 9.3 SUBMITTALS

- A. Product Data: For each product indicated.
- B. Shop Drawings: Show fabrication of structural-steel components, including connections, splices, holes, welds, and bolts.
  - 1. Include Shop Drawings and structural analysis data signed and sealed by the qualified licensed professional engineer responsible for their preparation.
- C. Mill certificates.
- D. Welding certificates.

#### 9.4 QUALITY ASSURANCE

- A. Fabricator Qualifications: A qualified fabricator who participates in the AISC Quality Certification Program and is designated an AISC-Certified Plant, Category I, conventional steel structures.
- B. Comply with applicable provisions in AISC's "**Specification for Structural Steel Buildings--Allowable Stress Design and Plastic Design.**"
- C. Welding: Qualify procedures and personnel according to AWS D1.1, "Structural Welding Code--Steel."

#### 9.5 STORAGE AND PROTECTION

- A. Store steel members off ground and protect steel members and packaged materials from erosion and deterioration.
- B. Store fasteners in a protected place. Clean and re-lubricate bolts and nuts that become dry or rusty before use.

### PART 10 - PRODUCTS

## 10.1 MATERIALS

- A. Structural-Steel Shapes, Plates, and Bars: **ASTM A 36/A 36M.**
- B. Cold-Formed Structural-Steel Tubing: ASTM A 500, Grade B.
- C. Primer: **SSPC-Paint 11; modified alkyd primer lead and chromate free, minimum 55% solids.**
- D. Nonmetallic, Shrinkage-Resistant Grout: Premixed, ASTM C 1107, of consistency suitable for application.

## 10.2 FABRICATION

- A. Fabricate and assemble structural steel in shop to greatest extent possible. Fabricate structural steel according to AISC specifications referenced in this Section and in Shop Drawings.
  - 1. Comply with fabrication tolerance limits in AISC's "Code of Standard Practice for Steel Buildings and Bridges" for structural steel.
  - 2. Weld Connections: Comply with AWS D1.1 for procedures, appearance and quality of welds, and methods used in correcting welding work.
- B. Shop Priming: Shop prime steel, except surfaces embedded in concrete or mortar, surfaces to be field welded, surfaces to be high-strength bolted with slip-critical connections, and surfaces to receive sprayed-on fireproofing.

Surface preparation: After inspection and before shipping, clean steel work to be painted. Remove loose rust, loose mill scale, and spatter, slag or flux deposits. Clean steel in accordance with SSPC: the Society for Protective Coatings. Use SSPC-SP 6, "Commercial Blast Cleaning" for steel to be painted or receive a coating and SSPC-SP 2, "Hand Tool Cleaning," or SSPC-SP 3, "Power Tool Cleaning" for all other conditions.

- 1. Priming: Immediately after surface preparation, apply primer according to manufacturer's written instructions and at rate recommended by SSPC to provide a dry film thickness of not less than 2 mils. Use priming methods that result in full coverage of joints, corners, edges, and exposed surfaces.

## 10.3 SOURCE QUALITY CONTROL

- A. Owner will engage an independent testing and inspecting agency to perform shop tests and inspections and to prepare test reports. Comply with Part 3 "Field Quality Control" Article.

## PART 11 - EXECUTION

### 11.1 ERECTION

- A. Examination: Verify elevations of concrete and masonry bearing surfaces and locations of anchorages for compliance with requirements.
- B. Erect structural steel accurately in locations and to elevations indicated and according to AISC specifications referenced in this Section.
- C. Base and Bearing Plates: Clean concrete and masonry bearing surfaces of bond-reducing materials and roughen surfaces before setting base and bearing plates. Clean bottom surface of base and bearing plates and set on wedges, shims, or setting nuts as required.

1. Tighten anchor bolts, cut off wedges or shims flush with edge of base or bearing plate, and pack grout solidly between bearing surfaces and plates.
- D. Maintain erection tolerances of structural steel within AISC's "Code of Standard Practice for Steel Buildings and Bridges."
- E. Weld Connections: Comply with AWS D1.1 for procedures, appearance and quality of welds, and methods used in correcting welding work.

## **11.2 FIELD QUALITY CONTROL**

- A. Owner will engage a qualified testing and inspecting agency to perform field tests and inspections and to prepare test reports.
1. Correct deficiencies in or remove and replace structural steel that test reports and inspections indicate do not comply with specified requirements.
  2. Additional testing, at Contractor's expense, will be performed to determine compliance of corrected Work with specified requirements.
  3. In addition to visual inspection, welded connections will be tested and inspected according to AWS D1.1 procedures.

**END OF SECTION 05120**

## SECTION 054000 - COLD-FORMED METAL FRAMING

### PART 12 - GENERAL

#### 12.1 PROJECT REQUIREMENTS

- A. The Contractor, along with design professionals, shall be responsible for visiting the site and verifying all the existing conditions and quantities in the field, at the locations where the new work is to be performed.

#### 12.2 SUMMARY

- A. Section Includes:
  - 1. Exterior non-load-bearing wall framing.

#### 12.3 QUALITY ASSURANCE

- A. Product Tests: Mill certificates or data from a qualified independent testing agency, indicating steel sheet complies with requirements, including base-metal thickness, yield strength, tensile strength, total elongation, chemical requirements, and metallic-coating thickness.
- B. Welding Qualifications: Qualify procedures and personnel according to the following:
  - 1. AWS D1.1/D1.1M, "Structural Welding Code - Steel."
  - 2. AWS D1.3/D1.3M, "Structural Welding Code - Sheet Steel."

#### 12.4 DELIVERY, STORAGE, AND HANDLING

- A. Protect cold-formed steel framing from corrosion, moisture staining, deformation, and other damage during delivery, storage, and handling.

### PART 13 - PRODUCTS

#### 13.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
  - 1. ClarkWestern Building Systems, Inc.
  - 2. Dietrich Metal Framing; a Worthington Industries Company.
  - 3. MarinoWARE.

#### 13.2 PERFORMANCE REQUIREMENTS

- A. Structural Performance: Provide cold-formed steel framing capable of withstanding design loads of the existing steel studs and tracks.
  - 1. Conform to the requirements of the Florida Building Code.
  - 2. Contractor to verify the thickness of the existing steel studs and tracks.
- B. Cold-Formed Steel Framing Design Standards:
  - 1. Wall Studs: AISI S211.

- C. AISI Specifications and Standards: Comply with AISI S100 and AISI S200.
- D. Fire-Resistance Ratings: Confirm the existing fire resistance requirements of the existing exterior wall and provide similar rating complying with the requirements of ASTM E119.

### **13.3 COLD-FORMED STEEL FRAMING, GENERAL**

- A. Steel Sheet: ASTM A 1003/A 1003M, Structural Grade, Type H, metallic coated, of grade and coating weight as follows:
  - 1. Grade: As required for structural performance but not less than the existing.
  - 2. Coating: G60.

### **13.4 EXTERIOR NON-LOAD-BEARING WALL FRAMING**

- A. Steel Studs: Manufacturer's standard C-shaped steel studs, punched, with stiffened flanges, and as follows:
  - 1. Minimum Base-Metal Thickness: Not less than the existing steel studs.
  - 2. Flange Width: To match existing.
- B. Steel Track: Manufacturer's standard U-shaped steel track, of web depths indicated, unpunched, with unstiffened flanges, and as follows:
  - 1. Minimum Base-Metal Thickness: Not less than the existing.
  - 2. Flange Width: To match existing.
- C. Kickers: To match existing.

### **13.5 ANCHORS, CLIPS, AND FASTENERS**

- A. Expansion Anchors: Fabricated from corrosion-resistant materials, with allowable load or strength design capacities calculated according to ICC-ES AC193 and ACI 318 greater than or equal to the design load, as determined by testing per ASTM E 488 conducted by a qualified testing agency.
- B. Power-Actuated Anchors: Fastener system of type suitable for application indicated, fabricated from corrosion-resistant materials, with allowable load capacities calculated according to ICC-ES AC70, greater than or equal to the design load, as determined by testing per ASTM E 1190 conducted by a qualified testing agency.
- C. Mechanical Fasteners: ASTM C 1513, corrosion-resistant-coated, self-drilling, self-tapping, steel drill screws.
  - 1. Head Type: Low-profile head beneath sheathing, manufacturer's standard elsewhere.
- D. Welding Electrodes: Comply with AWS standards.

### **13.6 MISCELLANEOUS MATERIALS**

- A. Galvanizing Repair Paint: SSPC-Paint 20 or MIL-P-21035B.
- B. Shims: Load bearing, high-density multi-monomer plastic, and non-leaching; or of cold-formed steel of same grade and coating as framing members supported by shims.
- C. Cement Grout: Portland cement, ASTM C 150, Type I; and clean, natural sand, ASTM C 404. Mix at ratio of 1 part cement to 2-1/2 parts sand, by volume, with minimum water required for placement and hydration.

- D. Nonmetallic, Non-shrink Grout: Premixed, nonmetallic, noncorrosive, non-staining grout containing selected silica sands, portland cement, shrinkage-compensating agents, and plasticizing and water-reducing agents, complying with ASTM C 1107/C 1107M, with fluid consistency and 30-minute working time.
- E. Urethane Joint Sealant: Single component, non-sag, Class 50.

### **13.7 FABRICATION**

- A. Fabricate cold-formed steel framing and accessories plumb, square, and true to line, and with connections securely fastened, according to referenced AISI's specifications and standards, manufacturer's written instructions.

## **PART 14 - EXECUTION**

### **14.1 EXAMINATION**

- A. Verify that all of the existing rusted steel studs and tracks have been removed along with any mildew.
- B. Examine supporting substrates and abutting structural framing for conditions affecting performance of the Work.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

### **14.2 PREPARATION**

- A. Remove existing spray on fireproofing only as much of the materials as needed to complete installation of cold-formed framing without reducing thickness of fire-resistive materials below that are required to obtain fire-resistance rating indicated. Protect existing spray on fireproofing from damage.
- B. Where required, install load bearing shims or grout between bottom track and the top of foundation wall or slab at locations with a gap larger than 1/4 inch to ensure a uniform bearing surface on supporting concrete construction.

### **14.3 INSTALLATION, GENERAL**

- A. Install cold-formed steel framing according to AISI S200 and to manufacturer's written instructions.
- B. Install cold-formed steel framing and accessories plumb, square, and true to line with the existing framing, and with connections securely fastened.
  - 1. Cut framing members by sawing or shearing; do not torch cut.
  - 2. Fasten cold-formed steel framing members in the same manner as the existing to support the required loading.
- C. Install framing members in one-piece lengths unless splice connections are indicated for track or tension members.
- D. Install insulation, specified in Section 072100 "Thermal Insulation," in built-up exterior framing members, such as headers, sills, boxed joists, and multiple studs at openings, that are inaccessible on completion of framing work.

#### **14.4 EXTERIOR NON-LOAD-BEARING WALL INSTALLATION**

- A. Install new tracks nested into the existing.
- B. Fasten both flanges of studs to top and bottom track. Space studs to match existing.
- C. Isolate non-load-bearing steel framing, similar to the existing, from building structure to prevent transfer of vertical loads while providing lateral support.
- D. Install horizontal bridging in wall studs, spaced vertically in rows but not more than the existing bracing.
- E. Install miscellaneous framing and connections, including stud kickers, web stiffeners, clip angles, continuous angles, anchors, and fasteners, to provide a complete and stable wall-framing system to match the existing.
- F. Install a continuous bead of sealant along the exterior perimeter between the bottom track and the foundation walls.

#### **14.5 REPAIRS AND PROTECTION**

- A. Galvanizing Repairs: Prepare and repair damaged galvanized coatings on fabricated and installed cold-formed steel framing with galvanized repair paint according to ASTM A 780 and manufacturer's written instructions. Repair all new and existing that may have been damaged during the installation of the new framing.

**END OF SECTION 05400**

## **SECTION 061053 - MISCELLANEOUS ROUGH CARPENTRY**

### **PART 15 - GENERAL**

#### **15.1 PROJECT REQUIREMENTS**

- A. The Contractor, along with design professionals, shall be responsible for visiting the site and verifying all the existing conditions and quantities in the field, at the locations where the new work is to be performed.

#### **15.2 SUMMARY**

- A. Section Includes:
  1. Wood blocking and nailers
  2. Roof sheathing.
  3. Cant strips

#### **15.3 QUALITY ASSURANCE**

- A. Testing Agency Qualifications: For testing agency providing classification marking for fire-retardant treated material, an inspection agency acceptable to authorities having jurisdiction that periodically performs inspections to verify that the material bearing the classification marking is representative of the material tested.

#### **15.4 DELIVERY, STORAGE, AND HANDLING**

- A. Stack lumber flat with spacers beneath and between each bundle to provide air circulation. Protect lumber from weather by covering with waterproof sheeting, securely anchored. Provide for air circulation around stacks and under coverings.

### **PART 16 - PRODUCTS**

#### **16.1 WOOD PRODUCTS, GENERAL**

- A. Lumber: DOC PS 20 and applicable rules of grading agencies indicated. If no grading agency is indicated, provide lumber that complies with the applicable rules of any rules-writing agency certified by the ALSC Board of Review. Provide lumber graded by an agency certified by the ALSC Board of Review to inspect and grade lumber under the rules indicated.
  1. Where nominal sizes are indicated, provide actual sizes required by DOC PS 20 for moisture content specified. Where actual sizes are indicated, they are minimum dressed sizes for dry lumber.
  2. Provide dressed lumber, S4S, unless otherwise indicated.
- B. Maximum Moisture Content of Lumber: 19 percent.

#### **16.2 FIRE-RETARDANT-TREATED MATERIALS**

- A. General: Where fire-retardant-treated materials are indicated, use materials complying with requirements in this article, that are acceptable to authorities having jurisdiction, and with fire-test-response characteristics specified as determined by testing identical products per test method indicated by a qualified testing agency.
- B. Fire-Retardant-Treated Lumber by Pressure Process: Products with a flame spread index of 25 or less when tested according to ASTM E 84, and with no evidence of significant progressive combustion when the test is

extended an additional 20 minutes, and with the flame front not extending more than 10.5 feet beyond the centerline of the burners at any time during the test.

1. Use treatment that does not promote corrosion of metal fasteners.
  2. Interior Type A: Treated materials shall have a moisture content of 28 percent or less when tested according to ASTM D 3201 at 92 percent relative humidity. Use where exterior type is not indicated.
- C. Kiln-dry lumber after treatment to a maximum moisture content of 19 percent.]
- D. Identify fire-retardant-treated wood with appropriate classification marking of testing and inspecting agency acceptable to authorities having jurisdiction.
- E. Application: Treat all miscellaneous carpentry.

### **16.3 WOOD-PRESERVATIVE-TREATED MATERIALS**

- A. Preservative Treatment by Pressure Process: AWPA U1; Use Category UC2 for interior construction not in contact with the ground, Use Category UC3b for exterior construction not in contact with the ground.
1. Preservative Chemicals: Acceptable to authorities having jurisdiction and containing no arsenic or chromium.
- B. Kiln-dry lumber after treatment to a maximum moisture content of 19 percent. Do not use material that is warped or does not comply with requirements for untreated material.
- C. Mark lumber with treatment quality mark of an inspection agency approved by the ALSC Board of Review.
- D. Mark plywood with appropriate classification marking of an inspection agency acceptable to authorities having jurisdiction.
- E. Application: Treat the following items
1. Nailers, cant strips, blocking, and similar members in connection with roofing, and flashing.
  2. Wood sills, blocking, and similar concealed members in contact with masonry or concrete.
  3. Plywood roof sheathing.

### **16.4 MISCELLANEOUS LUMBER**

- A. General: Provide miscellaneous lumber indicated and lumber for support or attachment of other construction, including the following:
1. Blocking.
  2. Cant strips
  3. Nailers.
- B. For items of dimension lumber size, provide Construction or No. 2 grade lumber of any species
- C. For blocking , cant strips and nailers used for attachment of other construction, select and cut lumber to eliminate knots and other defects that will interfere with attachment of other work.

### **16.5 ROOF SHEATHING**

- A. Plywood Roof Sheathing: Exterior sheathing.
1. Nominal Thickness: As required to match existing.

## **16.6 FASTENERS**

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this article for material and manufacture.
  - 1. Where carpentry is exposed to weather, in ground contact, pressure-preservative treated, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M
- B. Nails, Brads, and Staples: ASTM F 1667.
- C. Power-Driven Fasteners: NES NER-272.
- D. Wood Screws: ASME B18.6.1.
- E. Screws for Fastening to Metal Framing: ASTM C 954, length as recommended by screw manufacturer for material being fastened.
- F. Lag Bolts: ASME B18.2.1.
- G. Bolts: Steel bolts complying with ASTM A 307, Grade A; with ASTM A 563 hex nuts and, where indicated, flat washers.

## **PART 17 - EXECUTION**

### **17.1 INSTALLATION, GENERAL**

- A. Set carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit carpentry to other construction; scribe and cope as needed for accurate fit. Locate nailers, blocking, and similar supports to comply with requirements for attaching other construction.
- B. Sort and select lumber so that natural characteristics will not interfere with installation or with fastening other materials to lumber. Do not use materials with defects that interfere with function of member or pieces that are too small to use with minimum number of joints or optimum joint arrangement.

### **17.2 WOOD BLOCKING, CANT STRIPS AND NAILER INSTALLATION**

- A. Install where required for attaching other work. Form to shapes required and cut as required for true line and level of attached work. Coordinate locations with other work involved.

**END OF SECTION 061053**

## SECTION 061600 - SHEATHING

### PART 18 - GENERAL

#### 18.1 PROJECT REQUIREMENTS

- A. The Contractor, along with design professionals, shall be responsible for visiting the site and verifying all the existing conditions and quantities in the field, at the locations where the new work is to be performed.

#### 18.2 SUMMARY

- A. Section Includes:
  - 1. Wall sheathing.

#### 18.3 DELIVERY, STORAGE, AND HANDLING

- A. Stack panels flat with spacers beneath and between each bundle to provide air circulation. Protect sheathing from weather by covering with waterproof sheeting, securely anchored. Provide for air circulation around stacks and under coverings.

### PART 19 - PRODUCTS

#### 19.1 EXTERIOR WALL SHEATHING

- A. Glass-Mat Gypsum Wall Sheathing: ASTM C 1177/1177M.
  - 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
    - a. G-P Gypsum Corporation; Dens-Glass Gold.
    - b. National Gypsum Company; Gold Bond e(2)XP.
    - c. United States Gypsum Co.; Securock.
  - 2. Type and Thickness: Regular, 1/2 inch thick.
- B. Exterior Cement Board: ASTM C 1325, Type A.
  - 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
    - a. C-Cure.
    - b. Custom Building Products
    - c. USG Corporation.
  - 2. Thickness: 1/2 inch.

## **19.2 FASTENERS**

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this article for material and manufacture.
  - 1. For wall sheathing, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M of Type 304 stainless steel.
- B. Screws for Sheathing to Cold-Formed Metal Framing: Steel drill screws, in length recommended by sheathing manufacturer for thickness of sheathing to be attached, with organic-polymer or other corrosion-protective coating having a salt-spray resistance of more than 800 hours according to ASTM B 117.
  - 1. For steel framing less than 0.0329 inch thick, use screws that comply with ASTM C 1002.
  - 2. For steel framing from 0.033 to 0.112 inch thick, use screws that comply with ASTM C 954.
  - 3. For fastening exterior cement board use only screws complying with ASTM C 954 modified flat head. Bugle type not acceptable.

## **PART 20 - EXECUTION**

### **20.1 INSTALLATION, GENERAL**

- A. Do not proceed until all demolition and removal work has been completed.
- B. Ensure any, and/ or all steel stud work installation has been completed.
- C. Do not use materials with defects that impair quality of sheathing or pieces that are too small to use with minimum number of joints or optimum joint arrangement. Arrange joints so that pieces do not span between fewer than three support members.
- D. Cut panels at penetrations, edges, and other obstructions of work; fit tightly against abutting construction unless otherwise indicated.
- E. Coordinate wall sheathing installation with flashing and joint-sealant installation so these materials are installed in sequence and manner that prevent exterior moisture from passing through completed assembly.
- F. Do not bridge building expansion joints; cut and space edges of panels to match spacing of structural support elements.
- G. Coordinate sheathing installation with installation of materials installed over sheathing so sheathing is not exposed to precipitation or left exposed at end of the workday when rain is forecast.

### **20.2 GYPSUM SHEATHING INSTALLATION**

- A. Comply with GA-253 and with manufacturer's written instructions.
  - 1. Fasten gypsum sheathing to cold-formed metal framing with screws.
  - 2. Install boards with a 3/8-inch gap where non-load-bearing construction abuts structural elements.
  - 3. Install boards with a 1/4-inch gap where they abut masonry or similar materials that might retain moisture, to prevent wicking.
- B. Apply fasteners so heads bear tightly against face of sheathing, but do not cut into facing.
- C. Vertical Installation: Install board vertical edges centered over studs. Abut ends and edges of each board with those of adjacent boards. Attach boards at perimeter and within field of board to each stud.

1. Space fasteners approximately 8 inches o.c. and set back a minimum of 3/8 inch from edges and ends of boards.

### **20.3 EXTERIOR CEMENT BOARD INSTALLATION**

- A. Exterior Cement Board: Install on metal framing to comply with cement-board manufacturer's written instructions and evaluation report acceptable to authorities having jurisdiction. Install board with steel drill screws spaced no more than 8 inches o.c. along framing with perimeter fasteners at least 3/8 inch but less than 5/8 inch from edges of boards.

**END OF SECTION 061600**

## **SECTION 071326 - SELF-ADHERING SHEET WATERPROOFING**

### **PART 21 - GENERAL**

#### **21.1 PROJECT REQUIREMENTS**

- A. The Contractor, along with design professionals, shall be responsible for visiting the site and verifying all the existing conditions and quantities in the field, at the locations where the new work is to be performed.

#### **21.2 SUMMARY**

- A. Section Includes:
  - 1. Modified bituminous sheet waterproofing.
- B. Related Sections
  - 1. "Section 030130 Concrete Patching" for patching existing concrete foundation.

#### **21.3 QUALITY ASSURANCE**

- A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by waterproofing manufacturer.

#### **21.4 FIELD CONDITIONS**

- A. Environmental Limitations: Apply waterproofing within the range of ambient and substrate temperatures recommended by waterproofing manufacturer. Do not apply waterproofing to a damp or wet substrate.
  - 1. Do not apply waterproofing in snow, rain, fog, or mist.
- B. Maintain adequate ventilation during preparation and application of waterproofing materials.

#### **21.5 WARRANTY**

- A. Manufacturer's Warranty: Manufacturer's standard materials-only warranty in which manufacturer agrees to furnish replacement waterproofing material for waterproofing that does not comply with requirements or that fails to remain watertight within specified warranty period.
  - 1. Warranty Period: Five years from date of Substantial Completion.

### **PART 22 - PRODUCTS**

#### **22.1 MATERIALS, GENERAL**

- A. Source Limitations for Waterproofing System: Obtain waterproofing materials from single source from single manufacturer.

## 22.2 MODIFIED BITUMINOUS SHEET WATERPROOFING

- A. Modified Bituminous Sheet: Minimum 60-mil nominal thickness, self-adhering sheet consisting of 56 mils of rubberized asphalt laminated on one side to a 4-mil-thick, polyethylene-film reinforcement, and with release liner on adhesive side.
  - 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
    - a. Carlisle Coatings & Waterproofing Inc.; CCW MiraDRI 860/861.
    - b. Grace, W. R., & Co. - Conn.; Bituthene 3000/Low Temperature.
    - c. Nervastral, Inc.; BITU-MEM.
  - 2. Physical Properties:
    - a. Tensile Strength, Membrane: 325 psi minimum; ASTM D 412, Die C, modified.
    - b. Ultimate Elongation: 300 percent minimum; ASTM D 412, Die C, modified.
    - c. Low-Temperature Flexibility: Pass at minus 25 deg F; ASTM D 1970.
    - d. Crack Cycling: Unaffected after 100 cycles of 1/8-inch movement; ASTM C 836.
    - e. Puncture Resistance: 50 lbf minimum; ASTM E 154.
    - f. Water Absorption: 0.1 percent weight-gain maximum after 48-hour immersion at 70 deg F; ASTM D 570.
    - g. Water Vapor Permeance: 0.05 perms maximum; ASTM E 96/E 96M, Water Method.

## 22.3 AUXILIARY MATERIALS

- A. General: Furnish auxiliary materials recommended by waterproofing manufacturer for intended use and compatible with sheet waterproofing.
- B. Primer: Liquid primer recommended for substrate by sheet-waterproofing material manufacturer.
- C. Surface Conditioner: Liquid, waterborne surface conditioner recommended for substrate by sheet-waterproofing material manufacturer.
- D. Liquid Membrane: Elastomeric, two-component liquid, cold fluid applied, of trowel grade or low viscosity.
- E. Substrate Patching Membrane: Low-viscosity, two-component, modified asphalt coating.
- F. Sealant: Silicone as recommended by manufacturer.
- G. Protection Course: See "Section 061600- Sheathing" for exterior cement board.

## PART 23 - EXECUTION

### 23.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements and other conditions affecting performance of the waterproofing.
  - 1. Verify that the existing concrete has been patched to provide an acceptable surface for the application of the new waterproofing.
  - 2. Verify that concrete has cured and aged for minimum time period recommended in writing by waterproofing manufacturer.
  - 3. Verify that substrate is visibly dry and within the moisture limits recommended in writing by manufacturer. Test for capillary moisture by plastic sheet method according to ASTM D 4263.

- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### **23.2 SURFACE PREPARATION**

- A. Clean, prepare, and treat substrates according to manufacturer's written instructions. Provide clean, dust-free, and dry substrates for waterproofing application.
- B. Mask off adjoining surfaces not receiving waterproofing to prevent spillage and overspray affecting other construction.
- C. Remove grease, oil, bitumen, form-release agents, paints, curing compounds, and other penetrating contaminants or film-forming coatings from concrete.
- D. Remove fins, ridges, mortar, and other projections and fill honeycomb, aggregate pockets, holes, and other voids.
- E. Prepare, fill, prime, and treat joints and cracks in substrates. Remove dust and dirt from joints and cracks according to ASTM D 4258.
- F. Bridge and cover expansion joints with overlapping sheet strips of widths according to manufacturer's written instructions.
  - 1. Invert and loosely lay first sheet strip over center of joint. Firmly adhere second sheet strip to first and overlap to substrate.
- G. Prepare, treat, and seal vertical surfaces at terminations and penetrations through waterproofing and at drains and protrusions according to ASTM D 6135.

### **23.3 MODIFIED BITUMINOUS SHEET-WATERPROOFING APPLICATION**

- A. Install modified bituminous sheets according to waterproofing manufacturer's written instructions and recommendations in ASTM D 6135.
- B. Apply primer to substrates at required rate and allow it to dry. Limit priming to areas that will be covered by sheet waterproofing in same day. Re-prime areas exposed for more than 24 hours.
- C. Apply and firmly adhere sheets over area to receive waterproofing. Accurately align sheets and maintain uniform 2-1/2-inch minimum lap widths and end laps. Overlap and seal seams, and stagger end laps to ensure watertight installation.
  - 1. When ambient and substrate temperatures range between 25 and 40 deg F, install self-adhering, modified bituminous sheets produced for low-temperature application. Do not use low-temperature sheets if ambient or substrate temperature is higher than 60 deg F.
- D. Apply continuous sheets over already-installed sheet strips, bridging substrate cracks, construction, and contraction joints.
- E. Seal edges of sheet-waterproofing terminations with mastic.
- F. Where applicable, install sheet-waterproofing and auxiliary materials to tie into adjacent waterproofing.
- G. Repair tears, voids, and lapped seams in waterproofing not complying with requirements. Slit and flatten fishmouths and blisters. Patch with sheet waterproofing extending 6 inches beyond repaired areas in all directions.

- H. Immediately install protection course with butted joints over waterproofing membrane.
  - 1. Seal joint between the exterior cement board protection board and the EIFS.

#### **23.4 PROTECTION, REPAIR, AND CLEANING**

- A. Protect waterproofing from damage and wear during remainder of construction period.
- B. Correct deficiencies in or remove waterproofing that does not comply with requirements; repair substrates, reapply waterproofing, and repair sheet flashings.
- C. Clean spillage and soiling from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

**END OF SECTION 071326**

## SECTION 072100 - THERMAL INSULATION

### PART 24 - GENERAL

#### 24.1 PROJECT REQUIREMENTS

- A. The Contractor, along with design professionals, shall be responsible for visiting the site and verifying all the existing conditions and quantities in the field, at the locations where the new work is to be performed.

#### 24.2 SUMMARY

- A. Section Includes:
  - 1. Glass-fiber blanket insulation.

#### 24.3 QUALITY ASSURANCE

- A. Surface-Burning Characteristics: As determined by testing identical products according to ASTM E 84 by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.

#### 24.4 DELIVERY, STORAGE, AND HANDLING

- A. Protect insulation materials from physical damage and from deterioration due to moisture, soiling, and other sources. Store inside and in a dry location. Comply with manufacturer's written instructions for handling, storing, and protecting during installation.

### PART 25 - PRODUCTS

#### 25.1 GLASS-FIBER BLANKET INSULATION

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
  - 1. CertainTeed Corporation.
  - 2. Johns Manville.
  - 3. Owens Corning.
- B. Unfaced, Glass-Fiber Blanket Insulation: ASTM C 665, Type I; with maximum flame-spread and smoke-developed indexes of 25 and 50, respectively, per ASTM E 84; passing ASTM E 136 for combustion characteristics.
  - 1. Thickness of Insulation: To match existing.

### PART 26 - EXECUTION

#### 26.1 PREPARATION

- A. Verify that new steel studs framing has been installed and ready to receive insulation.
- B. Clean substrates of substances that are harmful to insulation or that interfere with insulation attachment.

## **26.2 INSTALLATION, GENERAL**

- A. Comply with insulation manufacturer's written instructions applicable to products and applications indicated.
- B. Install insulation that is undamaged, dry, and unsoiled and that has not been left exposed to rain at any time.
- C. Extend insulation to envelop entire area to be insulated. Cut and fit tightly around obstructions and fill voids with insulation. Remove projections that interfere with placement.

## **26.3 INSTALLATION OF INSULATION FOR FRAMED CONSTRUCTION**

- A. Apply insulation units to substrates by method indicated, complying with manufacturer's written instructions.
- B. Glass-Fiber Blanket Insulation: Install in cavities formed by framing members according to the following requirements:
  - 1. Use insulation widths and lengths that fill the cavities formed by framing members. If more than one length is required to fill the cavities, provide lengths that will produce a snug fit between ends.
  - 2. Place insulation in cavities formed by framing members to produce a friction fit between edges of insulation and adjoining framing members.
  - 3. Maintain 3-inch clearance of insulation around recessed lighting fixtures not rated for or protected from contact with insulation.
  - 4. For metal-framed wall cavities where cavity heights exceed 96 inches, support unfaced blankets mechanically.

## **26.4 PROTECTION**

- A. Protect installed insulation from damage due to harmful weather exposures, physical abuse, and other causes. Provide temporary coverings or enclosures where insulation is subject to abuse and cannot be concealed and protected by permanent construction immediately after installation.

**END OF SECTION 072100**

## SECTION 072419 - EXTERIOR INSULATION AND FINISH SYSTEM (EIFS)

### PART 27 - GENERAL

#### 27.1 PROJECT REQUIREMENTS

- A. The Contractor, along with design professionals, shall be responsible for visiting the site and verifying all the existing conditions and quantities in the field, at the locations where the new work is to be performed.

#### 27.2 SUMMARY

- A. Section includes water-drainage exterior insulation and finish system (EIFS).
- B. Related Sections:
  - 1. Section 061600 "Sheathing" for Glass-Mat Gypsum Wall Sheathing and Exterior Cement Board.
  - 2. Section 079200 "Joint Sealants" for sealing joints in EIFS with elastomeric joint sealants.

#### 27.3 PERFORMANCE REQUIREMENTS

- A. EIFS Performance: Comply with the following:
  - 1. Bond Integrity: Free from bond failure within EIFS components or between system and supporting wall construction, resulting from exposure to fire, wind loads, weather, or other in-service conditions.
  - 2. Weather tightness: Resistant to water penetration from exterior into water-drainage EIFS and assemblies behind it or through them into interior of building that results in deterioration of thermal-insulating effectiveness or other degradation of EIFS and assemblies behind it, including substrates, supporting wall construction, and interior finish, and including a means that allows water entering into an EIFS assembly to drain to the exterior.
- B. Class PB EIFS: Provide EIFS having physical properties and structural performance that comply with the Basis of Design material as indicated in paragraph 2.1 A.
- C. Reinforcing Mesh: Provide reinforcing mesh to meet the impact requirement of the Miami Dade County and Florida Building Code for impact resistant.

#### 27.4 QUALITY ASSURANCE

- A. Installer Qualifications: An installer who is certified in writing by EIFS manufacturer as qualified to install manufacturer's system using trained workers and having a minimum of 5 years experience.
- B. Source Limitations: Obtain EIFS from single source from single EIFS manufacturer and from sources approved by EIFS manufacturer as compatible with system components.
- C. Fire-Test-Response Characteristics: Provide EIFS and system components with the following fire-test-response characteristics as determined by testing identical EIFS and system components per test method indicated below by UL or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify products with appropriate markings of applicable testing agency.
  - 1. Intermediate-Scale Multistory Fire Test: Tested mockup, representative of completed multistory wall assembly of which EIFS is a part, complies with NFPA 285 for test method and required fire-test-response characteristics of exterior non-load-bearing wall panel assemblies containing foam-plastic insulation.
  - 2. Radiant Heat Exposure: No ignition of EIFS when tested according to NFPA 268.

3. Surface-Burning Characteristics: Provide insulation board, adhesives, base coats, and finish coats with flame-spread index of 25 or less and smoke-developed index of 450 or less, per ASTM E 84.

## **27.5 DELIVERY, STORAGE, AND HANDLING**

- A. Deliver materials in original, unopened packages with manufacturers' labels intact and clearly identifying products.
- B. Store materials inside and under cover; keep them dry and protected from weather, direct sunlight, surface contamination, aging, corrosion, damaging temperatures, construction traffic, and other causes.
  1. Stack insulation board flat and off the ground.
  2. Protect plastic insulation against ignition at all times. Do not deliver plastic insulating materials to Project site before installation time.
  3. Complete installation and concealment of plastic materials as rapidly as possible in each area of construction.

## **27.6 PROJECT CONDITIONS**

- A. Weather Limitations: Maintain ambient temperatures above 40 deg F for a minimum of 24 hours before, during, and after adhesives or coatings are applied. Do not apply EIFS adhesives or coatings during rainfall. Proceed with installation only when existing and forecasted weather conditions and ambient outdoor air, humidity, and substrate temperatures permit EIFS to be applied, dried, and cured according to manufacturers' written instructions and warranty requirements.

## **27.7 COORDINATION**

- A. Coordinate installation of EIFS with related Work specified in other Sections to ensure that wall assemblies, including sheathing, weather-resistant sheathing paper, flashing, trim, joint sealants, windows, and doors, are protected against damage from the effects of weather, age, corrosion, moisture, and other causes. Do not allow water to penetrate behind flashing and drainage plane that is behind water-drainage EIFS.

# **PART 28 - PRODUCTS**

## **28.1 MANUFACTURERS**

- A. Basis-of-Design Product: Subject to compliance with requirements, provide Dryvit Outsulation Plus MD System or an comparable approved equal.

## **28.2 MATERIALS**

- A. Compatibility: Provide water-resistive coating, adhesive, fasteners, board insulation, reinforcing meshes, base-and finish-coat systems, sealants, and accessories that are compatible with one another and with substrates and approved for use by EIFS manufacturer for Project.
- B. Air and Water Resistive Barrier Components
  1. Air and Water-Resistive Barrier at Joints: Flexible polymer based non cementitious water –resistive coating and air barrier for sealing joints between and penetrations through sheathing; textured.
  2. Sheathing Joint Tape: Open weave fiberglass mesh with pressure sensitive adhesive for sealing joints between and penetrations through sheathing.

3. Air and Water-Resistive Barrier: Liquid sprayed water resistive membrane/air barrier adhesive.
- C. Flashing Material:
  1. Liquid Applied: Flexible water based polymer applied over a grid tape recommended in writing by EIFS manufacturer.
- D. Insulation Adhesive: EIFS manufacturer's standard formulation designed for indicated use; compatible with substrate; and complying with the following:
  1. Job-mixed formulation of portland cement complying with ASTM C 150, Type I, and polymer-based adhesive specified for base coat.
- E. Molded, Rigid Cellular Polystyrene Board Insulation: Comply with ASTM E2430 and ASTM C 578, Type I; EIFS manufacturer's requirements, and the following:
  1. Aging: Before cutting and shipping, age insulation in block form by air drying for not less than six weeks or by another method approved by EIMA that produces equivalent results.
  2. Flame-Spread and Smoke-Developed Indexes: 25 and 450 or less, respectively, per ASTM E 84.
  3. Thickness: 1 ½ inch.
- F. Reinforcing Mesh: Balanced, alkali-resistant, open-weave, glass-fiber mesh treated for compatibility with other EIFS materials. Provide reinforcing mesh to meet the requirement of the Miami Dade County and Florida Building Code for impact resistant.
  1. Standard-Impact Reinforcing Mesh.
  2. High-Impact Reinforcing Mesh.
  3. Corner Reinforcing Mesh.
- G. Base-Coat Materials: EIFS manufacturer's standard mixture complying with the following requirements:
  1. Job-mixed formulation of portland cement complying with ASTM C 150, Type I, white or natural color; and manufacturer's standard polymer-emulsion adhesive designed for use with portland cement.
- H. Primer: EIFS manufacturer's standard factory-mixed, elastomeric-polymer primer for preparing base-coat surface for application of finish coat.
- I. Finish-Coat Materials: EIFS manufacturer's standard acrylic-based coating with enhanced mildew resistance complying with the following:
  1. Factory-mixed formulation of polymer-emulsion binder, colorfast mineral pigments, sound fine stone particles, and fillers.
  2. Colors: As selected from manufacturers' full range.
- J. Drainage Track Strip: Manufacturer's standard corrugated sheet plastic.
- K. Water: Potable.

### **28.3 ELASTOMERIC SEALANTS**

- A. Elastomeric Sealant Products: See Section 079200 "Joint Sealants" for products corresponding to description indicated below:
  1. Single-component, non-sag, neutral-curing silicone sealant.
- B. Sealant Color: Selected from manufacturer's full range.

## **28.4 MIXING**

- A. General: Comply with EIFS manufacturer's requirements for combining and mixing materials. Do not introduce admixtures, water, or other materials except as recommended by EIFS manufacturer. Mix materials in clean containers. Use materials within time period specified by EIFS manufacturer or discard.

## **PART 29 - EXECUTION**

### **29.1 EXAMINATION**

- A. Examine areas to receive EIFS to ensure that all water damaged materials have been removed.
- B. Verify that all waterproofing material and protection cementitious board have been installed.
- C. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of EIFS.
- D. Examine roof edges, wall framing, flashings, openings, substrates, and junctures at other construction for suitable conditions where EIFS will be installed.
- E. Proceed with installation only after unsatisfactory conditions have been corrected.
  - 1. Begin coating application only after surfaces are dry.
  - 2. Application of coating indicates acceptance of surfaces and conditions.

### **29.2 PREPARATION**

- A. Protect contiguous work from moisture deterioration and soiling caused by application of EIFS. Provide temporary covering and other protection needed to prevent spattering of exterior finish coats on other work.
- B. Protect EIFS, substrates, and wall construction behind them from inclement weather during installation. Prevent penetration of moisture behind drainage plane of EIFS and deterioration of substrates.
- C. Prepare and clean substrates to comply with EIFS manufacturer's written instructions to obtain optimum bond between substrate and adhesive for insulation.

### **29.3 EIFS INSTALLATION, GENERAL**

- A. Comply with EIFS manufacturer's written instructions for installation of EIFS as applicable to each type of substrate indicated.

### **29.4 SUBSTRATE PROTECTION APPLICATION**

- A. Primer/Sealer: Apply over substrates to protect substrates from degradation and where required by EIFS manufacturer for improving adhesion of insulation to substrate.
- B. Water-Resistive Coatings: Apply over substrates to protect substrates from degradation and to provide water-/weather-resistive barrier.
  - 1. Tape and seal joints, exposed edges, terminations, and inside and outside corners of sheathing unless otherwise indicated by EIFS manufacturer's written instructions.

- C. Flexible-Membrane Flashing: Install over weather-resistive barrier, applied and lapped to shed water; seal at openings, penetrations, terminations, and where indicated by EIFS manufacturer's written instructions to protect wall assembly from degradation. Prime substrates, if required, and install flashing to comply with EIFS manufacturer's written instructions and details.

## 29.5 INSULATION INSTALLATION

- A. Board Insulation: Adhesively attach insulation to substrate in compliance with ASTM C 1397, EIFS manufacturer's written instructions, and the following:
  - 1. Apply adhesive to insulation vertical notched-trowel configuration in a manner that results in coating the entire surface of sheathing with adhesive once insulation is adhered to sheathing unless EIFS manufacturer's written instructions specify using primer/sealer with ribbon-and-dab method. Apply adhesive to a thickness not less than 3/8 inch for field mixed, measured from surface of insulation before placement.
  - 2. Press and slide insulation into place. Apply pressure over the entire surface of insulation to accomplish uniform contact, high initial grab, and overall level surface.
  - 3. Allow adhered insulation to remain undisturbed for period recommended by EIFS manufacturer, but not less than 24 hours, before beginning rasping and sanding insulation, or applying base coat and reinforcing mesh.
  - 4. Begin first course of insulation from a level base line and work upward.
  - 5. Stagger vertical joints of insulation boards in successive courses to produce running bond pattern. Locate joints so no piece of insulation is less than 12 inches wide or 6 inches high. Offset joints not less than 6 inches from corners of window and door openings.
    - a. Adhesive Attachment: Offset joints of insulation not less than 6 inches from horizontal and 4 inches from vertical joints in sheathing.
  - 6. Interlock ends at internal and external corners.
  - 7. Abut insulation tightly at joints within and between each course to produce flush, continuously even surfaces without gaps or raised edges between boards. If gaps greater than 1/16 inch occur, fill with insulation cut to fit gaps exactly; insert insulation without using adhesive or other material.
  - 8. Cut insulation to fit openings, corners, and projections precisely and to produce edges and shapes complying with details indicated.
  - 9. Rasp or sand flush entire surface of insulation to remove irregularities projecting more than 1/32 inch from surface of insulation and to remove yellowed areas due to sun exposure; do not create depressions deeper than 1/16 inch
  - 10. Form joints for sealant application by leaving gaps between adjoining insulation edges and between insulation edges and dissimilar adjoining surfaces. Make gaps wide enough to produce joint widths a minimum of 3/4 inch after encapsulating joint substrates with base coat and reinforcing mesh.
  - 11. Treat exposed edges of insulation as follows:
    - a. Except for edges forming substrates of sealant joints, encapsulate with base coat, reinforcing mesh, and finish coat.
    - b. Encapsulate edges forming substrates of sealant joints within EIFS or between EIFS and other work with base coat and reinforcing mesh.
  - 12. Coordinate installation of flashing and insulation to produce wall assembly that does not allow water to penetrate behind flashing and water-/weather-resistive barrier.
- B. Expansion Joints: Install at locations indicated, where required by EIFS manufacturer, and as follows:
  - 1. Where EIFS adjoin dissimilar substrates, materials, and construction, including other EIFS.

## **29.6 BASE-COAT INSTALLATION**

- A. Base Coat: Apply to exposed surfaces of insulation in minimum thickness recommended in writing by EIFS manufacturer.
- B. Reinforcing Mesh: Embed type indicated below in wet base coat to produce wrinkle-free installation with mesh continuous at corners and overlapped not less than 2-1/2 inches. Do not lap reinforcing mesh within 8 inches of corners. Completely embed mesh, applying additional base-coat material, so reinforcing-mesh color and pattern are not visible. Install number and type of reinforcing mesh to comply with the impact performance requirements in paragraph 1.3
  - 1. Standard-impact reinforcing mesh.
  - 2. High-impact reinforcing mesh.
  - 3. Corner reinforcing mesh.
- C. Additional Reinforcing Mesh: Apply strip reinforcing mesh around openings extending 4 inches beyond perimeter. Apply additional 9-by-12-inch strip reinforcing mesh diagonally at corners of openings (re-entrant corners). Apply 8-inch wide strip reinforcing mesh at both inside and outside corners unless base layer of mesh is lapped not less than 4 inches on each side of corners.
  - 1. Embed strip reinforcing mesh in base coat before applying first layer of reinforcing mesh.
- D. Double Base-Coat Application: Apply second base coat in same manner and thickness as first application except without reinforcing mesh. Do not apply until first base coat has cured.

## **29.7 FINISH-COAT INSTALLATION**

- A. Primer: Apply over dry base coat according to EIFS manufacturer's written instructions.
- B. Finish Coat: Apply over dry primed base coat, maintaining a wet edge at all times for uniform appearance, in thickness required by EIFS manufacturer to produce a uniform finish of color and texture matching approved sample and free of cold joints, shadow lines, and texture variations.
- C. Sealer Coat: Apply over dry finish coat, in number of coats and thickness required by EIFS manufacturer.

## **29.8 INSTALLATION OF JOINT SEALANTS**

- A. Prepare joints and apply sealants, of type and at intersection of adjacent materials, to comply with applicable requirements in Section 079200 "Joint Sealants" and in ASTM C 1481.
  - 1. Apply joint sealants after base coat has cured but before applying finish coat.
  - 2. Clean surfaces to receive sealants to comply with indicated requirements and EIFS manufacturer's written instructions.
  - 3. Apply primer recommended in writing by sealant manufacturer for surfaces to be sealed.
  - 4. Install sealant backing to control depth and configuration of sealant joint and to prevent sealant from adhering to back of joint.
  - 5. Apply masking tape to protect areas adjacent to sealant joints. Remove tape immediately after tooling joints, without disturbing joint seal.

## **29.9 FIELD QUALITY CONTROL**

- A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.
- B. Inspections: Air-barrier materials, accessories, and installation are subject to inspection for compliance with requirements. Inspections may include the following:

1. Continuity of air-barrier system has been achieved throughout the building envelope with no gaps or holes.
2. Continuous structural support of air-barrier system has been provided.
3. Site conditions for application temperature and dryness of substrates have been maintained.
4. Maximum exposure time of materials to UV deterioration has not been exceeded.
5. Surfaces have been primed, if applicable.
6. Laps in strips and transition strips have complied with minimum requirements and have been shingled in the correct direction (or mastic has been applied on exposed edges), with no fishmouths.
7. Termination mastic has been applied on cut edges.
8. Strips and transition strips have been firmly adhered to substrate.
9. Compatible materials have been used.
10. Transitions at changes in direction and structural support at gaps have been provided.
11. Connections between assemblies (air-barrier and sealants) have complied with requirements for cleanliness, surface preparation and priming, structural support, integrity, and continuity of seal.
12. All penetrations have been sealed.

C. Tests: As determined by testing agency from among the following tests:

1. Quantitative Air-Leakage Testing: Air-barrier assemblies will be tested for air leakage according to ASTM E 783.
2. Adhesion Testing: Air-barrier assemblies will be tested for minimum air-barrier adhesion of 30 lbf/sq. in. according to ASTM D 4541 for each 600 sq. ft. of installed air barrier or part thereof.

D. Air barriers will be considered defective if they do not pass tests and inspections.

1. Apply additional air-barrier material, according to manufacturer's written instructions, where inspection results indicate insufficient thickness.
2. Remove and replace deficient air-barrier components for retesting as specified above.

E. Repair damage to air barriers caused by testing; follow manufacturer's written instructions.

## **29.10 CLEANING AND PROTECTION**

A. Remove temporary covering and protection of other work. Promptly remove coating materials from window and door frames and other surfaces outside areas indicated to receive EIFS coatings.

**END OF SECTION 072419**

## **SECTION 075000 – ROOF PATCHING**

### **PART 30 - GENERAL**

#### **30.1 PROJECT REQUIREMENTS**

- A. The Contractor, along with design professionals, shall be responsible for visiting the site and verifying all the existing conditions and quantities in the field, at the locations where the new work is to be performed.

#### **30.2 SUMMARY**

- A. This Section includes the following:
  - 1. Roof patching.
  - 2. Protection of existing roofing system.

#### **30.3 MATERIAL OWNERSHIP**

- A. Except for roofing not requiring repairs or patching, removed roofing materials shall become Contractor's property and shall be removed from Project site.

#### **30.4 DEFINITIONS**

- A. Existing Membrane Roofing System: Roofing membrane, surfacing, and components and accessories between deck and roofing membrane.
- B. Roof Patching: Removal of roofing system where there has been water infiltration and/or mold and components that have been water damaged and provide new system to match existing at locations where new EIFS has been provided.
- C. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and reinstalled.
- D. Existing to Remain: Existing roofing system not part of the new EIFS construction.

#### **30.5 PERFORMANCE REQUIREMENTS**

- A. General Performance: Installed roof patching systems to withstand existing FM requirements, existing uplift pressures, thermally induced movement, reflectance and exposure to weather without failure due to defective manufacture, fabrication, installation, or other defects in construction. Membrane roofing and base flashings shall remain watertight.
- B. Material Compatibility: Provide roof patching materials that are compatible with existing and one another under conditions of service and application required, as demonstrated by membrane roofing manufacturer based on testing and field experience.

#### **30.6 QUALITY ASSURANCE**

- A. Installer Qualifications: Installer of patching systems shall have a minimum of 5 years.

- B. Regulatory Requirements: Comply with governing EPA notification regulations before beginning any roofing removal. Comply with hauling and disposal regulations of authorities having jurisdiction.
- C. Exterior Fire-Test Exposure: Where required, materials shall conform to ASTM E 108, for the Class roofing systems to match the existing. Materials shall be identified with appropriate markings of applicable testing agency.
- D. Fire-Resistance Ratings: Where required, provide fire-resistance-rated roof assemblies to match the existing assemblies and tested for fire resistance per ASTM E 119 by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.

### **30.7 PROJECT CONDITIONS**

- A. FDOT will occupy portions of building immediately below roof patching area. Conduct operations so FDOT's operations will not be disrupted. Provide FDOT with not less than 24 hours' notice of activities that may affect operations.
  - 1. Coordinate work activities daily with FDOT so protective dust or water leakage covers can be placed over sensitive equipment or furnishings, shut down HVAC and fire-alarm or -detection equipment if needed, and evacuate occupants from below the work area if desired.
- B. Protect building, walkways, site improvements, exterior plantings, and landscaping from damage or soiling from roof patching operations.
- C. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities.
- D. FDOT assumes no responsibility for condition of areas to be roof patched.
  - 1. Conditions existing at time of inspection for bidding will be maintained by FDOT as far as practical.
- E. Weather Limitations: Proceed with roof patching preparation only when existing and forecasted weather conditions permit Work to proceed without water entering into existing roofing system or building.
- F. Hazardous Materials: Hazardous materials are present in buildings and structures to be selectively demolished. A report on the presence of hazardous materials is on file for review and use. Examine report to become aware of locations where hazardous materials are present.
  - 1. Hazardous material remediation will be performed under a separate contract..
  - 2. FDOT will provide material safety data sheets for suspected hazardous materials that are known to be present in buildings and structures to be selectively demolished because of building operations or processes performed there.

## **PART 31 - PRODUCTS**

### **31.1 PERFORMANCE REQUIREMENTS**

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning roofing removal. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ANSI/ASSE A10.6 and NFPA 241.

## **31.2 INFILL MATERIALS**

- A. Use patching and infill materials compatible with existing roofing system and performance requirements but not limited to the following:
  - 1. Roofing membranes.
  - 2. Recovery boards
  - 3. Roof expansion joints
  - 4. Insulation
  - 5. Primers and adhesives
  - 6. Flashing
- B. Selection of materials and design of any temporary roofing will be the responsibility of Contractor.

## **31.3 AUXILIARY PATCHING MATERIALS**

- A. General: Auxiliary patching materials recommended by roofing system manufacturer for intended use and compatible with components of existing membrane roofing system.

## **PART 32 - EXECUTION**

### **32.1 PREPARATION**

- A. Inspect the existing roof and determine areas to be removed and patched based on the locations of the new EIFS.
- B. Where expansion joints have been removed due to new construction, examine roof-joint openings, inside surfaces of parapets that interface with roof expansion joints, for suitable conditions where roof expansion joints will be installed.
- C. Protect existing membrane roofing system that is not to be patched.
  - 1. Limit traffic and material storage to areas of existing roofing membrane that have been protected.
  - 2. Maintain temporary protection and leave in place until roof patching has been completed.
- D. Where and when required, coordinate with FDOT to shut down air intake equipment in the vicinity of the Work. Cover air intake louvers before proceeding with reroofing work that could affect indoor air quality or activate smoke detectors in the ductwork.
- E. During roof patching operations, have sufficient and suitable materials on-site to facilitate rapid installation of temporary protection in the event of unexpected rain.
- F. Maintain roof drains in functioning condition.
  - 1. If roof drains will be temporarily blocked or unserviceable due to roof patching, provide alternative drainage method to remove water and eliminate ponding. Do not permit water to enter into or under existing membrane roofing system components that are to remain.
- G. Where affected, verify that rooftop utilities and service piping have been shut off before commencing Work.

### **32.2 REMOVING EXISTING DAMAGED ROOFING SYSTEMS**

- A. Remove existing roofing membrane, flashing and other membrane roofing system and flashing material that are associated with the new EIFS down to the deck and/ or parapet.
  - 1. Neatly cut existing membrane, flashing and any water damaged or molded insulation down to the existing deck.

2. Remove any mechanical fasteners and adhesives.

### **32.3 DECK PREPARATION**

- A. Inspect deck after removal of existing roofing system.
  1. Ensure that the existing deck is dry and suitable for new insulation and methods of attachment.
  2. Remove any rust on the existing steel decks that may affect the installation of the new roof patching system.
  3. Verify that the existing concrete substrate is visibly dry and free of moisture. Test for capillary moisture by plastic sheet method according to ASTM D 4263 or by pouring 1 pint of hot roofing asphalt on deck at start of each day's work and at start of each roof area or plane. Do not proceed with roofing work if moisture condenses under the plastic sheet or if asphalt test sample foams or can be easily and cleanly stripped after cooling.
  4. Verify that existing substrate is dry before proceeding with installation of the roof patch. Spot check substrates with a non-destructive moisture and humidity meter.

### **32.4 ROOF PATCHING**

- A. Ensure that the existing deck and roofing material is dry and suitable for the new rigid insulation, roofing plys and other materials required to meet the performance of the existing roof.
  1. Broom clean existing substrate.
  2. Install insulation under area of roof patching to achieve required thickness and to maintain the existing roof slope. In areas where there is more than one layer of insulation, cut back the existing insulation to maintain a minimum overlap of 6 inches. Adhere or mechanically fasten insulation as required to match the existing performance of the existing roof system and deck.
  3. Install the roofing plys in a shingled manner and overlap the existing the minimum dimension recommended by the roofing material manufacturer.

### **32.5 BASE FLASHINGS**

- A. Where required, remove existing base flashing that has been damaged due to the installation of the new construction.
  1. Clean substrates of contaminants such as asphalt, sheet materials, dirt, and debris.
- B. Do not damage metal counterflashings that are to remain. Replace metal counterflashings damaged during removal with counterflashings of same metal, weight or thickness, and finish.
- C. Inspect parapet sheathing and framing for deterioration and damage.
  1. Remove existing parapet sheathing that has been water damaged or contains mold and replace with new treated plywood sheathing, thickness to match existing
  2. If parapet framing has deteriorated or contains mold, remove and replace new treated lumber thickness to match existing.
  3. Plywood parapet sheathing and any roof wood blocking is specified in Division 06 Section Miscellaneous Rough Carpentry."
- D. Install new flashing material to match existing. Provide the necessary laps recommended by the manufacturer and install per manufacturers' written instructions.

### **32.6 ROOF EXPANSION JOINTS**

- A. General: Comply with manufacturer's written instructions for handling and installing roof expansion joints.

1. Anchor roof expansion joints securely in place, with provisions for required movement. Use fasteners, protective coatings, sealants, and miscellaneous items as required to complete roof expansion joints.
2. Install roof expansion joints true to line and elevation; with limited oil-canning and without warping, jogs in alignment, buckling, or tool marks and to align with existing.
3. Provide for linear thermal expansion of roof expansion joint materials.
4. Provide uniform profile of roof expansion joint throughout its length; do not stretch or squeeze membranes.
5. Provide uniform, neat seams.
6. Install roof expansion joints to fit substrates and to result in watertight performance.
7. Torch cutting of roof expansion joints is not permitted.
8. Splice roof expansion joint with the existing to result in a watertight performance.

#### 32.7 DISPOSAL

- A. Collect and place demolished materials in containers. Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on-site.
  1. Storage or sale of demolished items or materials on-site will not be permitted.
- B. Transport demolished materials off FDOT's property. Legally dispose of them.

**END OF SECTION 075000**

## SECTION 077100 - ROOF SPECIALTIES

### PART 33 - GENERAL

#### 33.1 PROJECT REQUIREMENTS

- A. The Contractor, along with design professionals, shall be responsible for visiting the site and verifying all the existing conditions and quantities in the field, at the locations where the new work is to be performed.

#### 33.2 SUMMARY

- A. Section Includes:
  - 1. Copings.

#### 33.3 PERFORMANCE REQUIREMENTS

- A. General Performance: Roof specialties shall withstand exposure to weather and resist thermally induced movement without failure, rattling, leaking, or fastener disengagement due to defective manufacture, fabrication, installation, or other defects in construction.
- B. Wind Design Standard: Manufacture and install copings capable of resisting the following design pressures:
  - 1. Design Pressure:
    - a. As required by Miami Dade County and Florida Building Code requirements.
- C. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes to prevent buckling, opening of joints, hole elongation, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects. Provide clips that resist rotation and avoid shear stress as a result of thermal movements. Base calculations on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.

#### 33.4 DELIVERY, STORAGE, AND HANDLING

- A. Do not store roof specialties in contact with other materials that might cause staining, denting, or other surface damage. Store roof specialties away from uncured concrete and masonry.
- B. Protect strippable protective covering on roof specialties from exposure to sunlight and high humidity, except to extent necessary for the period of roof specialties installation.

### PART 34 - PRODUCTS

#### 34.1 UNDERLAYMENT MATERIALS

- A. Apply underlayment material compatible with the existing roofing and flashing systems.

#### 34.2 MISCELLANEOUS MATERIALS

- A. General: Provide materials and types of fasteners, protective coatings, sealants, and other miscellaneous items required by manufacturer for a complete installation and to match existing.

- B. Fasteners: Manufacturer's recommended fasteners, suitable for application and designed to meet performance requirements and to match existing.
- C. Elastomeric Sealant:
  - 1. Exterior Face of Coping: ASTM C 920, elastomeric silicone polymer sealant of type, grade, class, and use classifications required by roofing-specialty manufacturer for each application.
  - 2. Interior Face (Roofing Side): Butyl Sealant: ASTM C 1311, single-component, solvent-release butyl rubber sealant.
- D. Asphalt Roofing Cement: ASTM D 4586, asbestos free, of consistency required for application.

### **34.3 COPINGS**

- A. Copings: Manufactured coping system consisting of formed-metal coping cap in section lengths not exceeding 12 feet, anchorage to match existing; corner units, end cap units, and concealed splice plates with same finish as coping caps.
  - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
    - a. Architectural Products Company.
    - b. Hickman Company, W. P.
    - c. MM Systems Corporation.
  - 2. Coping-Cap Material: To match existing.
    - a. Finish: To match existing
    - b. Color: To match existing
  - 3. Corners: Factory mitered continuously welded to existing and to make watertight.
  - 4. Coping-Cap Attachment Method: To match existing fabricated from coping-cap material.
  - 5. Face Leg Cleats: Concealed, continuous galvanized-steel sheet.
  - 6. Size: Vertical face on the exterior to lap bottom of wood block by a minimum of 4 inches and rear (facing the roof) shall match the existing.

### **34.4 GENERAL FINISH REQUIREMENTS**

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- C. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

## **PART 35 - EXECUTION**

### **35.1 EXAMINATION**

- A. Ensure all roof patching has been completed and areas are acceptable for the installation of the roof specialties.

- B. Examine substrates, areas, and conditions, with Installer present, to verify actual locations, dimensions, and other conditions affecting performance of the Work.
- C. Examine walls and parapets for suitable conditions for roof specialties.
- D. Verify that substrate is sound, dry, smooth, clean, sloped for drainage, and securely anchored.
- E. Proceed with installation only after unsatisfactory conditions have been corrected.

### **35.2 UNDERLAYMENT INSTALLATION**

- A. Underlayment: Install with adhesive for temporary anchorage to minimize use of mechanical fasteners under roof specialties. Apply in shingle fashion to shed water, with lapped joints of not less than 2 inches.

### **35.3 INSTALLATION, GENERAL**

- A. General: Install roof specialties according to manufacturer's written instructions. Anchor roof specialties securely in place, with provisions for thermal and structural movement. Use fasteners, solder, protective coatings, separators, sealants, and other miscellaneous items as required to complete roof-specialty systems.
  - 1. Install roof specialties level, plumb, true to line and elevation; with limited oil-canning and without warping, jogs in alignment, buckling, or tool marks.
  - 2. Provide uniform, neat seams with minimum exposure of solder and sealant.
  - 3. Install roof specialties to fit substrates and to result in watertight performance. Verify shapes and dimensions of surfaces to be covered before manufacture.
- B. Metal Protection: Protect metals against galvanic action by separating dissimilar metals from contact with each other or with corrosive substrates by painting contact surfaces with bituminous coating or by other permanent separation as recommended by manufacturer.
  - 1. Coat concealed side of roof specialties with bituminous coating where in contact with wood, ferrous metal, or cementitious construction.
  - 2. Bed flanges in thick coat of asphalt roofing cement where required by manufacturers of roof specialties for waterproof performance.
- C. Expansion Provisions: Allow for thermal expansion of exposed roof specialties.
  - 1. Space movement joints at a maximum of 12 feet with no joints within 18 inches of corners or intersections.
  - 2. When ambient temperature at time of installation is between 40 and 70 deg F, set joint members for 50 percent movement each way. Adjust setting proportionately for installation at higher ambient temperatures.
- D. Fastener Sizes: Use fasteners of sizes that will penetrate recommended by fastener manufacturer to achieve maximum pull-out resistance.
- E. Seal joints as required for watertight construction. Place sealant to be completely concealed in joint. Do not install sealants at temperatures below 40 deg F. In addition install sealant as follows:
  - 1. Install a continuous bead of sealant under the vertical legs of the coping on both the exterior face and interior face.

### **35.4 COPING INSTALLATION**

- A. Install cleats, anchor plates, and other anchoring and attachment accessories and devices with anchor to match existing.
- B. Anchor copings to meet performance requirements and to match with the existing coping anchorage.
- C. Provide a corner transition between the existing coping and the new coping.
- D. Seal all joints at the bottom of the coping between the coping and the face of wall and roofing material.

### **35.5 CLEANING AND PROTECTION**

- A. Clean off excess sealants.
- B. Remove temporary protective coverings and strippable films as roof specialties are installed. On completion of installation, clean finished surfaces including removing unused fasteners, metal filings, pop rivet stems, and pieces of flashing. Maintain roof specialties in a clean condition during construction.
- C. Replace roof specialties that have been damaged or that cannot be successfully repaired by finish touchup or similar minor repair procedures.

**END OF SECTION 077100.**

## **SECTION 078100 - APPLIED FIREPROOFING**

### **PART 36 - GENERAL**

#### **36.1 PROJECT REQUIREMENTS**

- A. The Contractor, along with design professionals, shall be responsible for visiting the site and verifying all the existing conditions and quantities in the field, at the locations where the new work is to be performed.

#### **36.2 SUMMARY**

- A. Section includes sprayed fire-resistive materials (SFRM).

#### **36.3 QUALITY ASSURANCE**

- A. **Installer Qualifications:** A firm or individual certified, licensed, or otherwise qualified by fireproofing manufacturer as experienced and with sufficient trained staff to install manufacturer's products according to specified requirements.
  - 1. Certify that the new fireproofing is compatible with the existing and that it meets the properties specified in paragraph 2.2 B. below.

#### **36.4 PRECONSTRUCTION TESTING**

- A. **Preconstruction Testing Service:** Engage a qualified testing agency to perform preconstruction testing on fireproofing.
  - 1. At the site, provide test specimens and assemblies representative of proposed materials and construction.
  - 2. Show how the new material will overlap the existing to provide the required fire rating.
- B. **Preconstruction Adhesion and Compatibility Testing:** Test for compliance with requirements for specified performance and test methods.
  - 1. **Bond Strength:** Test for cohesive and adhesive strength according to ASTM E 736. Provide bond strength indicated in referenced fire-resistance design, but not less than minimum specified in Part 2.
  - 2. **Density:** Test for density according to ASTM E 605. Provide density indicated in referenced fire-resistance design, but not less than minimum specified in Part 2.
  - 3. Verify that manufacturer, through its own laboratory testing or field experience, attests that primers or coatings are compatible with fireproofing.
  - 4. Schedule sufficient time for testing and analyzing results to prevent delaying the Work.
  - 5. For materials failing tests, obtain applied-fireproofing manufacturer's written instructions for corrective measures including the use of specially formulated bonding agents or primers.

#### **36.5 FIELD CONDITIONS**

- A. **Environmental Limitations:** Do not apply fireproofing when ambient or substrate temperature is 44 deg F or lower unless temporary protection and heat are provided to maintain temperature at or above this level for 24 hours before, during, and for 24 hours after product application.

- B. Ventilation: Ventilate building spaces during and after application of fireproofing, providing complete air exchanges according to manufacturer's written instructions. Use natural means or, if they are inadequate, forced-air circulation until fireproofing dries thoroughly.

## **PART 37 - PRODUCTS**

### **37.1 MATERIALS, GENERAL**

- A. Assemblies: Provide fireproofing, including auxiliary materials, according to requirements of each fire-resistance design and manufacturer's written instructions.
- B. Fire-Resistance Design: Apply new spray fire resistive material to comply with the existing hourly fire rating and according to ASTM E 119 by a qualified testing agency. Identify products with appropriate markings of applicable testing agency. New material shall be compatible with the existing material.
- C. Asbestos: Provide products containing no detectable asbestos.

### **37.2 SPRAYED FIRE-RESISTIVE MATERIALS**

- A. SFRM: Manufacturer's standard, factory-mixed, lightweight, dry formulation, complying with existing fire-resistance design.
  - 1. Products: Subject to compliance with requirements, the following manufactures products that comply to the Fire Resistance Design requirements and compatible with the existing materials, may be incorporated into the Work include, but are not limited to, the following:
    - a. Carboline Company
    - b. Grace, W. R. & Co. - Conn.; Grace Construction Products.
    - c. Southwest Fireproofing Products Co.
- B. The following properties shall match the properties of the existing material
  - 1. Bond Strength: Minimum cohesive and adhesive strength based on field testing according to ASTM E 736.
  - 2. Density: Tested in accordance to ASTM E 605.
  - 3. Thickness: Measured according to requirements of fire-resistance design or ASTM E 605.
  - 4. Combustion Characteristics: ASTM E 136.
  - 5. Surface-Burning Characteristics: Comply with ASTM E 84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
    - a. Flame-Spread Index: 10 or less.
    - b. Smoke-Developed Index: 10 or less.
  - 6. Compressive Strength: According to ASTM E 761.
  - 7. Corrosion Resistance: No evidence of corrosion according to ASTM E 937.
  - 8. Deflection: No cracking, spalling, or delamination according to ASTM E 759.
  - 9. Air Erosion: Maximum weight loss in 24 hours according to ASTM E 859.

### **37.3 AUXILIARY MATERIALS**

- A. General: Provide auxiliary materials that are compatible with fireproofing and substrates and are approved by UL or another testing and inspecting agency acceptable to authorities having jurisdiction for use in fire-resistance designs indicated.

- B. Bonding Agent: Product approved by fireproofing manufacturer and complying with requirements in UL's "Fire Resistance Directory" or in the listings of another qualified testing agency acceptable to authorities having jurisdiction.

## **PART 38 - EXECUTION**

### **38.1 EXAMINATION**

- A. Examine all of the existing spray on fireproofing. Remove any fireproofing that has loss adhesion, has diminished in thickness and/or has been damaged due to water infiltration.
- B. Examine existing fireproofing to determine the properties before applying new fireproofing.
- C. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for substrates and other conditions affecting performance of the Work and according to each fire-resistance design. Verify compliance with the following:
  - 1. Substrates are free of dirt, oil, grease, rolling compounds, mill scale, loose scale, incompatible primers, paints, and encapsulants, or other foreign substances capable of impairing bond of fireproofing with substrates under conditions of normal use or fire exposure.
  - 2. Objects penetrating fireproofing, including clips, hangers, support sleeves, and similar items, are securely attached to substrates.
  - 3. Substrates receiving fireproofing are not obstructed by ducts, piping, equipment, or other suspended construction that will interfere with fireproofing application.
- D. Conduct tests according to fireproofing manufacturer's written recommendations to verify that substrates are free of substances capable of interfering with bond.
- E. Prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.
- F. Proceed with installation only after unsatisfactory conditions have been corrected.

### **38.2 PREPARATION**

- A. Cover other work subject to damage from fallout or overspray of fireproofing materials during application.
- B. Clean substrates of substances that could impair bond of fireproofing including all rust due to and flaking due to water infiltration.

### **38.3 APPLICATION**

- A. Construct fireproofing assemblies that are compatible with existing, tested, and substantiated by test reports; for thickness, primers, sealers, topcoats, finishing, and other materials and procedures affecting fireproofing work.
- B. Comply with fireproofing manufacturer's written instructions for mixing materials, application procedures, and types of equipment used to mix, convey, and apply fireproofing; as applicable to particular conditions of installation and as required to achieve fire-resistance ratings indicated.
- C. Coordinate application of fireproofing with other construction to minimize need to cut or remove fireproofing.
  - 1. Do not begin applying fireproofing until clips, hangers, supports, sleeves, and other items penetrating fireproofing are in place.

2. Defer installing construction items that would interfere with applying fireproofing until application of fireproofing is completed.
- D. Install auxiliary materials as required and according to fire-resistance design and fireproofing manufacturer's written recommendations for conditions of exposure and intended use if required to match existing. For auxiliary materials, use attachment and anchorage devices of type recommended in writing by fireproofing manufacturer.
  - E. Spray apply fireproofing to maximum extent possible. Following the spraying operation in each area, complete the coverage by trowel application or other placement method recommended in writing by fireproofing manufacturer.
  - F. Extend fireproofing in full thickness over entire area of each substrate to be protected. Lap existing fireproofing as necessary to ensure proper coverage for rating required.
  - G. Install body of fireproofing in a single course unless otherwise recommended in writing by fireproofing manufacturer.
  - H. Cure fireproofing according to fireproofing manufacturer's written recommendations.
  - I. Do not install enclosing or concealing construction until after fireproofing has been applied, inspected, and tested and corrections have been made to deficient applications.

#### **38.4 FIELD QUALITY CONTROL**

- A. Special Inspections: Engage a qualified special inspector to perform the following special inspections:
  1. Test and inspect as required by the IBC, 1704.10.
- B. Perform the tests and inspections of completed Work in successive stages. Do not proceed with application of fireproofing for the next area until test results for previously completed applications of fireproofing show compliance with requirements. Tested values must equal or exceed values as specified and as indicated and required for approved fire-resistance design.
- C. Fireproofing will be considered defective if it does not pass tests and inspections.
  1. Remove and replace fireproofing that does not pass tests and inspections, and retest.
  2. Apply additional fireproofing, per manufacturer's written instructions, where test results indicate insufficient thickness, and retest.
- D. Prepare test and inspection reports.

#### **38.5 CLEANING, PROTECTING, AND REPAIRING**

- A. Cleaning: Immediately after completing spraying operations in each containable area of Project, remove material overspray and fallout from surfaces of other construction and clean exposed surfaces to remove evidence of soiling.
- B. Protect fireproofing, according to advice of manufacturer and Installer, from damage resulting from construction operations or other causes, so fireproofing will be without damage or deterioration at time of Substantial Completion.
- C. As installation of other construction proceeds, inspect fireproofing and repair damaged areas and fireproofing removed due to work of other trades.

- D. Repair fireproofing damaged by other work before concealing it with other construction.
- E. Repair fireproofing by reapplying it using same method as original installation or using manufacturers recommended trowel-applied product.

**END OF SECTION 078100**

## SECTION 079200 - JOINT SEALANTS

### PART 39 - GENERAL

#### 39.1 PROJECT REQUIREMENTS

- A. The Contractor, along with design professionals, shall be responsible for visiting the site and verifying all the existing conditions and quantities in the field, at the locations where the new work is to be performed.

#### 39.2 SUMMARY

- A. Section Includes:
  - 1. Silicone joint sealants.
  - 2. Latex joint sealants.

#### 39.3 PRECONSTRUCTION TESTING

- A. Preconstruction Field-Adhesion Testing: Before installing sealants, field test their adhesion to Project joint substrates as follows:
  - 1. Locate test joints as directed.
  - 2. Conduct field tests for each application indicated below:
    - a. Each kind of sealant and joint substrate indicated.
    - b. Test Method: Test joint sealants according to Method A, Field-Applied Sealant Joint Hand Pull Tab, in Appendix X1 in ASTM C 1193 or Method A, Tail Procedure, in ASTM C 1521.
      - 1) For joints with dissimilar substrates, verify adhesion to each substrate separately; extend cut along one side, verifying adhesion to opposite side. Repeat procedure for opposite side.
  - 3. Report whether sealant failed to adhere to joint substrates or tore cohesively. Include data on pull distance used to test each kind of product and joint substrate. For sealants that fail adhesively, retest until satisfactory adhesion is obtained.
  - 4. Evaluation of Preconstruction Field-Adhesion-Test Results: Sealants not evidencing adhesive failure from testing, in absence of other indications of noncompliance with requirements, will be considered satisfactory. Do not use sealants that fail to adhere to joint substrates during testing.

#### 39.4 QUALITY ASSURANCE

- A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of units required for this Project.
- B. Source Limitations: Obtain each kind of joint sealant from single source from single manufacturer.
- C. Product Testing: Test joint sealants using a qualified testing agency.
  - 1. Testing Agency Qualifications: An independent testing agency qualified according to ASTM C 1021 to conduct the testing indicated.

## **39.5 PROJECT CONDITIONS**

- A. Do not proceed with installation of joint sealants under the following conditions:
1. When ambient and substrate temperature conditions are outside limits permitted by joint-sealant manufacturer.
  2. When joint substrates are wet.
  3. Where joint widths are less than those allowed by joint-sealant manufacturer for applications required.
  4. Where contaminants capable of interfering with adhesion have not yet been removed from joint substrates.

## **39.6 WARRANTY**

- A. Special Installer's Warranty: Manufacturer's standard form in which Installer agrees to repair or replace joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.
1. Warranty Period: Two years from date of Substantial Completion.
- B. Special warranties specified in this article exclude deterioration or failure of joint sealants from the following:
1. Movement of the structure caused by structural settlement or errors attributable to design or construction resulting in stresses on the sealant exceeding sealant manufacturer's written specifications for sealant elongation and compression.
  2. Disintegration of joint substrates from natural causes exceeding design specifications.
  3. Mechanical damage caused by individuals, tools, or other outside agents.
  4. Changes in sealant appearance caused by accumulation of dirt or other atmospheric contaminants.

## **PART 40 - PRODUCTS**

### **40.1 MATERIALS, GENERAL**

- A. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by joint-sealant manufacturer, based on testing and field experience.

### **40.2 SILICONE JOINT SEALANTS**

- A. Single-Component, Nonsag, Neutral-Curing Silicone Joint Sealant: ASTM C 920, Type S, Grade NS, Class 50, for Use NT.
1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
    - a. Dow Corning Corporation; 791.
    - b. GE Advanced Materials - Silicones; SilPruf SCS2000.
    - c. Pecora Corporation; 895

### **40.3 LATEX JOINT SEALANTS**

- A. Latex Joint Sealant: Acrylic latex or siliconized acrylic latex, ASTM C 834, Type OP, Grade NF.

1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
  - a. BASF Building Systems; Sonolac.
  - b. Pecora Corporation; AC-20+.
  - c. Tremco Incorporated; Tremflex 834.

#### **40.4 JOINT SEALANT BACKING**

- A. General: Provide sealant backings of material that are non-staining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.
- B. Cylindrical Sealant Backings: ASTM C 1330, Type C (closed-cell material with a surface skin) and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance.

#### **40.5 MISCELLANEOUS MATERIALS**

- A. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.
- B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming joint substrates and adjacent nonporous surfaces in any way, and formulated to promote optimum adhesion of sealants to joint substrates.
- C. Masking Tape: Non-staining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

### **PART 41 - EXECUTION**

#### **41.1 EXAMINATION**

- A. Examine joints to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting joint-sealant performance.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

#### **41.2 PREPARATION**

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions and the following requirements:
  1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant, including dust, paints (except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer), old joint sealants, oil, grease, waterproofing, water repellents, water, surface dirt, and frost.
  2. Clean porous joint substrate surfaces by brushing, grinding, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining after cleaning operations above by vacuuming or blowing out joints with oil-free compressed air. Porous joint substrates include the following:

- a. Precast Concrete.
  - b. Plaster covered cum and poured in place concrete
  - c. Exterior insulation and finish systems.
3. Clean nonporous joint substrate surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants. Nonporous joint substrates include the following:
- a. Metal.
- B. **Joint Priming:** Prime joint substrates where recommended by joint-sealant manufacturer or as indicated by preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.
- C. **Masking Tape:** Use masking tape where required to prevent contact of sealant or primer with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

### **41.3 INSTALLATION OF JOINT SEALANTS**

- A. **General:** Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated, unless more stringent requirements apply.
- B. **Sealant Installation Standard:** Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.
- C. **Install sealant backings of kind to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.**
- 1. Do not leave gaps between ends of sealant backings.
  - 2. Do not stretch, twist, puncture, or tear sealant backings.
  - 3. Remove absorbent sealant backings that have become wet before sealant application and replace them with dry materials.
- D. **Install sealants using proven techniques that comply with the following and at the same time backings are installed:**
- 1. Place sealants so they directly contact and fully wet joint substrates.
  - 2. Completely fill recesses in each joint configuration.
  - 3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- E. **Tooling of Non-sag Sealants:** Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified in subparagraphs below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.
- 1. Remove excess sealant from surfaces adjacent to joints.
  - 2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
  - 3. Provide concave joint profile per Figure 8A in ASTM C 1193, unless otherwise indicated.

#### **41.4 FIELD QUALITY CONTROL**

- A. Field-Adhesion Testing: Field test joint-sealant adhesion to joint substrates as follows:
1. Extent of Testing: Test completed and cured sealant joints as follows:
    - a. Perform 5 tests for the first 500 feet of joint length for each kind of sealant and joint substrate.
    - b. Perform 1 test for each 500 feet of joint length thereafter or 1 test per each floor per elevation.
  2. Test Method: Test joint sealants according to Method A, Field-Applied Sealant Joint Hand Pull Tab, in Appendix X1 in ASTM C 1193 or Method A, Tail Procedure, in ASTM C 1521.
    - a. For joints with dissimilar substrates, verify adhesion to each substrate separately; extend cut along one side, verifying adhesion to opposite side. Repeat procedure for opposite side.
  3. Inspect tested joints and report on the following:
    - a. Whether sealants filled joint cavities and are free of voids.
    - b. Whether sealant dimensions and configurations comply with specified requirements.
    - c. Whether sealants in joints connected to pulled-out portion failed to adhere to joint substrates or tore cohesively. Include data on pull distance used to test each kind of product and joint substrate. Compare these results to determine if adhesion passes sealant manufacturer's field-adhesion hand-pull test criteria.
  4. Record test results in a field-adhesion-test log. Include dates when sealants were installed, names of persons who installed sealants, test dates, test locations, whether joints were primed, adhesion results and percent elongations, sealant fill, sealant configuration, and sealant dimensions.
  5. Repair sealants pulled from test area by applying new sealants following same procedures used originally to seal joints. Ensure that original sealant surfaces are clean and that new sealant contacts original sealant.
- B. Evaluation of Field-Adhesion Test Results: Sealants not evidencing adhesive failure from testing or noncompliance with other indicated requirements will be considered satisfactory. Remove sealants that fail to adhere to joint substrates during testing or to comply with other requirements. Retest failed applications until test results prove sealants comply with indicated requirements.

#### **41.5 CLEANING**

- A. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

#### **41.6 PROTECTION**

- A. Protect joint sealants during and after curing period from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately so installations with repaired areas are indistinguishable from original work.

#### **41.7 JOINT-SEALANT SCHEDULE**

- A. Joint-Sealant Application: Exterior joints in vertical surfaces and horizontal non-traffic surfaces.
1. Joint Locations:

- a. Construction joints between adjacent material and new EIFS.
    - b. Perimeter joints between materials listed above and frames of storefronts and louvers.
  2. Silicone Joint Sealant: Single component, non-sag, neutral curing, Class 50.
  3. Joint-Sealant Color: To match EIFS color.
- B. Joint-Sealant Application: Interior joints in vertical surfaces and horizontal non-traffic surfaces.
1. Joint Locations:
    - a. Interior surfaces at joints where existing materials have been removed and new have been provided.
  2. Joint Sealant: Latex.
  3. Joint-Sealant Color: To match adjacent material.

**END OF SECTION 079200**

## SECTION 084110 - ALUMINUM-FRAMED STOREFRONTS

### PART 42 - GENERAL

#### 42.1 PROJECT REQUIREMENTS

- A. The Contractor, along with design professionals, shall be responsible for visiting the site and verifying all the existing conditions and quantities in the field, at the locations where the new work is to be performed.

#### 42.2 SUMMARY

- A. Section Includes:
  - 1. Storefront framing for ribbon walls in new EIFS.
- B. Related Sections
  - 1. "Section 088000 Glazing" for glass requirements.

#### 42.3 PERFORMANCE REQUIREMENTS

- A. General: Storefront system to meet all requirements of the Miami Dade County and Florida Building Code for air, water, structural and impact resistant requirements.
  - 1. Manufacturer: Manufacturers are to have tested proof, performed by an independent testing laboratory, that the storefront system has passed all of the requirements for Miami Dade County indicated above and Notice of Acceptance for Large Missile Impact.
- B. General Performance: Aluminum-framed systems shall withstand the effects of the following performance requirements without exceeding performance criteria or failure due to defective manufacture, fabrication, installation, or other defects in construction:
  - 1. Movements of supporting structure indicated on Drawings including, but not limited to, story drift and deflection from uniformly distributed and concentrated live loads.
  - 2. Dimensional tolerances of building frame and other adjacent construction.
  - 3. Failure includes the following:
    - a. Deflection exceeding specified limits.
    - b. Thermal stresses transferring to building structure.
    - c. Framing members transferring stresses, including those caused by thermal and structural movements to glazing.
    - d. Loosening or weakening of fasteners, attachments, and other components.
    - e. Sealant failure.
- C. Structural Loads:
  - 1. Wind Loads: Conforming to the requirements of Miami Dade County and the Florida Building Code.
  - 2. Storefront system shall have sufficient capacity to resist the following ASD wind pressures:

**Windows- +/-49.1 psf**

**Doors- +/-47.0 psf**

- D. Supplemental Structural Steel Framing:

1. Dependent on the dimensional limitations of the Miami Dade County Notice of Acceptance for the storefront system, supplemental structural steel framing may be required.
- E. Deflection of Framing Members:
1. Deflection Normal to Wall Plane: Limited to edge of glass in a direction perpendicular to glass plane shall not exceed  $L/175$  of the glass edge length for each individual glazing lite or an amount that restricts edge deflection of individual glazing lites to  $3/4$  inch, whichever is less.
- F. Structural-Test Performance: Provide aluminum-framed systems tested according to ASTM E 330 as follows:
1. When tested at positive and negative wind-load design pressures, systems do not evidence deflection exceeding specified limits.
  2. When tested at 150 percent of positive and negative wind-load design pressures, systems, including anchorage, do not evidence material failures, structural distress, and permanent deformation of main framing members exceeding 0.2 percent of span.
  3. Test Durations: As required by design wind velocity, but not fewer than 10 seconds.
- G. Windborne-Debris-Impact-Resistance Performance: Provide aluminum-framed systems that pass missile-impact and cyclic-pressure tests when tested according to ASTM E 1886 and testing information in ASTM E 1996 or AAMA 506.
1. Large-Missile Impact: For aluminum-framed systems located within 30 feet of grade.
  2. Small-Missile Impact: For aluminum-framed systems located more than 30 feet above grade.
- H. Air Infiltration: Provide aluminum-framed systems with maximum air leakage through fixed glazing and framing areas of 0.05 cfm/sq. ft. of fixed wall area when tested according to ASTM E 283 at a minimum static-air-pressure difference of 6.24 lbf/sq. ft.
- I. Water Penetration under Static Pressure: Provide aluminum-framed systems that do not evidence water penetration through fixed glazing and framing areas when tested according to ASTM E 331 at a minimum static-air-pressure difference of 20 percent of positive wind-load design pressure, but not less than 15 lbf/sq. ft.
- J. Thermal Movements: Provide aluminum-framed systems that allow for thermal movements resulting from the following maximum change (range) in ambient and surface temperatures. Base engineering calculation on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.
1. Temperature Change (Range): As required for location temperature range.
  2. Test Performance: No buckling; stress on glass; sealant failure; excess stress on framing, anchors, and fasteners; or reduction of performance when tested according to AAMA 501.5.

#### **42.4 QUALITY ASSURANCE**

- A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of units required for this Project and having a minimum of 5 years experience.
- B. Testing Agency Qualifications: Qualified according to ASTM E 699 for testing indicated.
- C. Engineering Responsibility: Prepare data for aluminum-framed systems, including Shop Drawings, based on testing and engineering analysis of manufacturer's standard units in systems similar to those indicated for this Project.
- D. Source Limitations for Aluminum-Framed Systems: Obtain from single source from single manufacturer.

## 42.5 PROJECT CONDITIONS

- A. Field Measurements: Verify actual locations of structural supports for aluminum-framed systems by field measurements before fabrication and indicate measurements on Shop Drawings.

## 42.6 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of aluminum-framed systems that do not comply with requirements or that fail in materials or workmanship within specified warranty period.
  - 1. Failures include, but are not limited to, the following:
    - a. Structural failures including, but not limited to, excessive deflection.
    - b. Noise or vibration caused by thermal movements.
    - c. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
    - d. Water leakage through fixed glazing and framing areas.
  - 2. Warranty Period: Manufacturers standard one year warranty.

## PART 43 - PRODUCTS

### 43.1 MANUFACTURERS

- A. Basis-of-Design Product: Subject to compliance with requirements, provide Delta Doors DHA-500 Impact Storefronts System or comparable product by the following:
  - 1. SMI Systems

### 43.2 MATERIALS

- A. Aluminum: Alloy and temper recommended by manufacturer for type of use and finish indicated.
  - 1. Sheet and Plate: ASTM B 209.
  - 2. Extruded Bars, Rods, Profiles, and Tubes: ASTM B 221.
  - 3. Extruded Structural Pipe and Tubes: ASTM B 429.
  - 4. Structural Profiles: ASTM B 308/B 308M.
  - 5. Welding Rods and Bare Electrodes: AWS A5.10/A5.10M.
- B. Steel Reinforcement: Manufacturer's standard zinc-rich, corrosion-resistant primer, complying with SSPC-PS Guide No. 12.00; applied immediately after surface preparation and pretreatment. Select surface preparation methods according to recommendations in SSPC-SP COM and prepare surfaces according to applicable SSPC standard.
  - 1. Structural Shapes, Plates, and Bars: ASTM A 36/A 36M.
  - 2. Cold-Rolled Sheet and Strip: ASTM A 1008/A 1008M.
  - 3. Hot-Rolled Sheet and Strip: ASTM A 1011/A 1011M.

### 43.3 FRAMING SYSTEMS

- A. Framing Members: Manufacturer's standard extruded-aluminum framing members of thickness required and reinforced as required to support imposed loads.
  - 1. Construction: Non-thermal.

2. Glazing System: Manufacturers standard.
  3. Glazing Plane: Manufacturers standard.
- B. Brackets and Reinforcements: Manufacturer's standard high-strength aluminum with non-staining, nonferrous shims for aligning system components.
- C. Fasteners and Accessories: Manufacturer's standard corrosion-resistant, non-staining, nonbleeding fasteners and accessories compatible with adjacent materials.
1. Use self-locking devices where fasteners are subject to loosening or turning out from thermal and structural movements, wind loads, or vibration.
  2. Reinforce members as required to receive fastener threads.
  3. Use exposed fasteners with countersunk Phillips screw heads, finished to match framing system.
- D. Concealed Flashing: Manufacturer's standard corrosion-resistant, non-staining, nonbleeding flashing compatible with adjacent materials.
- E. Framing System Gaskets and Sealants: Manufacturer's standard, recommended by manufacturer for joint type.

#### **43.4 GLAZING SYSTEMS**

- A. Glazing: As specified in Section 088000 "Glazing."
- B. Glazing Gaskets: Manufacturer's standard compression types; replaceable, molded or extruded, of profile and hardness required to maintain watertight seal.
- C. Spacers and Setting Blocks: Manufacturer's standard elastomeric type.

#### **43.5 ACCESSORY MATERIALS**

- A. Sill Flashing: Extruded aluminum to match storefront.
- B. Joint Sealants: For installation at perimeter of aluminum-framed systems, as specified in Section 079200 "Joint Sealants."
- C. Bituminous Paint: Cold-applied, asphalt-mastic paint complying with SSPC-Paint 12 requirements except containing no asbestos; formulated for 30-mil thickness per coat.

#### **43.6 FABRICATION**

- A. Form or extrude aluminum shapes before finishing.
- B. Weld in concealed locations to greatest extent possible to minimize distortion or discoloration of finish. Remove weld spatter and welding oxides from exposed surfaces by descaling or grinding.
- C. Framing Members, General: Fabricate components that, when assembled, have the following characteristics:
1. Profiles that are sharp, straight, and free of defects or deformations.
  2. Accurately fitted joints with ends coped or mitered.
  3. Means to drain water passing joints, condensation within framing members, and moisture migrating within the system to exterior.
  4. Physical and thermal isolation of glazing from framing members.
  5. Accommodations for thermal and mechanical movements of glazing and framing to maintain required glazing edge clearances.

6. Provisions for field replacement of glazing: Manufacturers standard.
  7. Fasteners, anchors, and connection devices that are concealed from view to greatest extent possible.
- D. After fabrication, clearly mark components to identify their locations in Project according to Shop Drawings.

### **43.7 ALUMINUM FINISHES**

- A. Color and Gloss: To match existing.

## **PART 44 - EXECUTION**

### **44.1 EXAMINATION**

- A. Examine areas and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### **44.2 INSTALLATION**

- A. General:
1. Comply with manufacturer's written instructions.
  2. Do not install damaged components.
  3. Fit joints to produce hairline joints free of burrs and distortion.
  4. Rigidly secure non-movement joints.
  5. Install anchors with separators and isolators to prevent metal corrosion and electrolytic deterioration.
  6. Seal joints watertight unless.
- B. Metal Protection:
1. Where aluminum will contact dissimilar metals, protect against galvanic action by painting contact surfaces with primer or applying sealant or tape, or by installing nonconductive spacers as recommended by manufacturer for this purpose.
  2. Where aluminum will contact concrete or masonry, protect against corrosion by painting contact surfaces with bituminous paint.
- C. Install components to drain water passing joints, condensation occurring within framing members, and moisture migrating within the system to exterior.
- D. Install components plumb and true in alignment with established lines and grades, and without warp or rack.
- E. Install glazing as specified in Section 088000 "Glazing."
- F. Install perimeter joint sealants as specified in Section 079200 "Joint Sealants" to produce weathertight installation.

### **44.3 ERECTION TOLERANCES**

- A. Install aluminum-framed systems to comply with the following maximum erection tolerances:

1. Location and Plane: Limit variation from true location and plane to 1/8 inch in 12 feet 1/4 inch over total length.
  2. Alignment:
    - a. Where surfaces abut in line, limit offset from true alignment to 1/16 inch.
    - b. Where surfaces meet at corners, limit offset from true alignment to 1/32 inch.
- B. Diagonal Measurements: Limit difference between diagonal measurements to 1/8 inch.

#### **44.4 FIELD QUALITY CONTROL**

- A. Testing Agency: Engage a qualified independent testing and inspecting agency to perform field tests and inspections and prepare test reports.
- B. Testing Services: Testing and inspecting of representative areas to determine compliance of installed systems with specified requirements shall take place as follows and in successive stages as indicated on Drawings. Do not proceed with installation of the next area until test results for previously completed areas show compliance with requirements.
  1. Air Infiltration: Areas shall be tested for air leakage of 1.5 times the rate specified for laboratory testing under Part 1 "Performance Requirements" Article, but not more than 0.09 cfm/sq. ft. of fixed wall area when tested according to ASTM E 783 at a minimum static-air-pressure difference of 6.24 lbf/sq. ft.
  2. Water Spray Test: Before installation of interior finishes has begun, a minimum area of 50 feet by 1 story of aluminum-framed systems designated by Owner shall be tested according to AAMA 501.2 and shall not evidence water penetration.
- C. Repair or remove work where test results and inspections indicate that it does not comply with specified requirements.
- D. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.

#### **44.5 ADJUSTING, CLEANING, AND PROTECTION**

- A. Clean exposed surfaces immediately after installing storefronts. Avoid damaging protective coatings and finishes. Remove excess sealants, glazing materials, dirt, and other substances.
  1. Keep protective films and coverings in place until final cleaning.
- B. Protect storefront surfaces from contact with contaminating substances resulting from construction operations. If contaminating substances do contact storefront surfaces, remove contaminants immediately according to manufacturer's written instructions.

**END OF SECTION 084110**

## SECTION 088000 - GLAZING

### PART 45 - GENERAL

#### 45.1 PROJECT REQUIREMENTS

- A. The Contractor, along with design professionals, shall be responsible for visiting the site and verifying all the existing conditions and quantities in the field, at the locations where the new work is to be performed.

#### 45.2 SUMMARY

- A. Section includes glazing for the following products and applications, including those specified in other Sections where glazing requirements are specified by reference to this Section:
1. Storefront framing.

#### 45.3 PERFORMANCE REQUIREMENTS

- A. General: Glazing system to meet all requirements of the Miami Dade County for impact resistant requirements.
1. Manufacturer: Manufacturer's are to have tested proof, performed by an independent testing laboratory that the glazing system has passed all of the requirements for Miami Dade County indicated above and Notice of Acceptance for Large Missile Impact.
  2. Glazing system shall have sufficient capacity to resist the following ASD wind pressures:

**Windows- +/-49.1 psf**

**Doors- +/-47.0 psf**

- B. General: Installed glazing systems shall withstand normal thermal movement and wind and impact loads without failure, including loss or glass breakage attributable to the following: defective manufacture, fabrication, or installation; failure of sealants or gaskets to remain watertight and airtight; deterioration of glazing materials; or other defects in construction.

#### 45.4 PRECONSTRUCTION TESTING

- A. Preconstruction Adhesion and Compatibility Testing: Test each glazing material type, tape sealant, gasket, glazing accessory, and glass-framing member for adhesion to and compatibility with elastomeric glazing sealants.
1. Testing will not be required if data are submitted based on previous testing of current sealant products and glazing materials matching those submitted.
  2. Use ASTM C 1087 to determine whether priming and other specific joint-preparation techniques are required to obtain rapid, optimum adhesion of glazing sealants to glass, tape sealants, gaskets, and glazing channel substrates.
  3. Test no fewer than four Samples of each type of material, including joint substrates, shims, sealant backings, secondary seals, and miscellaneous materials.
  4. Schedule sufficient time for testing and analyzing results to prevent delaying the Work.
  5. For materials failing tests, submit sealant manufacturer's written instructions for corrective measures including the use of specially formulated primers.

#### 45.5 QUALITY ASSURANCE

- A. Sealant Testing Agency Qualifications: An independent testing agency qualified according to ASTM C 1021 to conduct the testing indicated.

- B. Source Limitations for Glass: Obtain all glass from single source from single manufacturer for each glass type.
- C. Source Limitations for Glazing Accessories: Obtain from single source from single manufacturer for each product and installation method.
- D. Glazing Publications: Comply with published recommendations of glass product manufacturers and organizations below, unless more stringent requirements are indicated. Refer to these publications for glazing terms not otherwise defined in this Section or in referenced standards.
  - 1. GANA Publications: GANA's "Laminated Glazing Reference Manual" and GANA's "Glazing Manual."
- E. Safety Glazing Labeling: Safety glazing labeling shall be permanently marked with certification label of the SGCC or another certification agency acceptable to authorities having jurisdiction. Label shall indicate manufacturer's name, type of glass, thickness, and safety glazing standard with which glass complies.

#### **45.6 DELIVERY, STORAGE, AND HANDLING**

- A. Protect glazing materials according to manufacturer's written instructions. Prevent damage to glass and glazing materials from condensation, temperature changes, direct exposure to sun, or other causes.

#### **45.7 PROJECT CONDITIONS**

- A. Environmental Limitations: Do not proceed with glazing when ambient and substrate temperature conditions are outside limits permitted by glazing material manufacturers and when glazing channel substrates are wet from rain, frost, condensation, or other causes.
  - 1. Do not install glazing sealants when ambient and substrate temperature conditions are outside limits permitted by sealant manufacturer or below 40 deg F.

#### **45.8 WARRANTY**

- A. Manufacturer's Special Warranty for Coated-Glass Products: Manufacturer's standard form in which coated-glass manufacturer agrees to replace coated-glass units that deteriorate within specified warranty period. Deterioration of coated glass is defined as defects developed from normal use that are not attributed to glass breakage or to maintaining and cleaning coated glass contrary to manufacturer's written instructions. Defects include peeling, cracking, and other indications of deterioration in coating.
  - 1. Warranty Period: Ten years from date of Substantial Completion.
- B. Manufacturer's Special Warranty on Laminated Glass: Manufacturer's standard form in which laminated-glass manufacturer agrees to replace laminated-glass units that deteriorate within specified warranty period. Deterioration of laminated glass is defined as defects developed from normal use that are not attributed to glass breakage or to maintaining and cleaning laminated glass contrary to manufacturer's written instructions. Defects include edge separation, delamination materially obstructing vision through glass, and blemishes exceeding those allowed by referenced laminated-glass standard.
  - 1. Warranty Period: Five years from date of Substantial Completion.

## **PART 46 - PRODUCTS**

### **46.1 GLASS PRODUCTS, GENERAL**

- A. Strength: Annealed float glass, Kind HS heat-treated float glass needed to comply with "Performance Requirements" Article.
- B. Thermal and Optical Performance Properties: Provide glass with performance properties, as determined to match existing, as indicated in manufacturer's published test data, based on procedures indicated below:
  - 1. For laminated-glass lites, properties are based on products of construction indicated.
  - 2. Solar Heat-Gain Coefficient and Visible Transmittance: Center-of-glazing values, according to NFRC 200 and based on LBL's WINDOW 5.2 computer program.
  - 3. Visible Reflectance: Center-of-glazing values, according to NFRC 300.

### **46.2 GLASS PRODUCTS**

- A. Heat-Treated Float Glass: ASTM C 1048; Type I; Quality-Q3; Class I (clear) unless otherwise indicated; of kind and condition indicated.
  - 1. Fabrication Process: By horizontal (roller-hearth) process with roll-wave distortion parallel to bottom edge of glass as installed.
  - 2. For coated vision glass, comply with requirements for Condition C (other coated glass).
- B. Reflective-Coated Vision Glass: ASTM C 1376, coated by pyrolytic process, and complying with other requirements specified.
  - 1. Coating Color: To match existing.
  - 2. Visible Light Transmittance: Minimum percent to match existing.
  - 3. Outdoor Visible Reflectance: Maximum percent to match existing.

### **46.3 LAMINATED GLASS**

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
  - 1. Cardinal Glass
  - 2. PPG Industries, Inc.
  - 3. Viracon.
- B. Windborne-Debris-Impact-Resistant Laminated Glass: ASTM C 1172, and complying with testing requirements in 16 CFR 1201 for Category II materials, with "Windborne-Debris-Impact Resistance" Paragraph in "Glass Products, General" Article, and with other requirements specified. Use materials that have a proven record of no tendency to bubble, discolor, or lose physical and mechanical properties after fabrication and installation.
  - 1. Construction: Laminate glass with manufacturer standard interlayer to meet the performance requirements for Windborne Debris-Impact Resistance.

### **46.4 GLAZING MATERIAL**

- A. Provide glazing material to meet the manufacturers performance criteria indicated in Paragraph 1.2 above. Materials used are to meet the following requirements:

1. Dense Compression Gaskets: Molded or extruded gaskets of profile and hardness required to maintain watertight seal, made from one of the following:
  - a. Neoprene complying with ASTM C 864.
  - b. EPDM complying with ASTM C 864.
  - c. Silicone complying with ASTM C 1115.
  - d. Thermoplastic polyolefin rubber complying with ASTM C 1115.
2. Soft Compression Gaskets: Extruded or molded, closed-cell, integral-skinned neoprene, EPDM, silicone, or thermoplastic polyolefin rubber gaskets complying with ASTM C 509, Type II, black; of profile and hardness required to maintain watertight seal.
3. Glazing Sealant: Neutral-curing silicone glazing sealant complying with ASTM C 920, Type S, Grade NS, Class 100/50, Use NT.
4. Glazing Sealant: Neutral-curing silicone glazing sealant complying with ASTM C 920, Type S, Grade NS, Class 50, Use NT.
5. Glazing Sealant: Neutral-curing silicone glazing sealant complying with ASTM C 920, Type S, Grade NS, Class 25, Use NT.
6. Back-Bedding Mastic Glazing Tapes: Preformed, butyl-based, 100 percent solids elastomeric tape; non-staining and non-migrating in contact with nonporous surfaces; with or without spacer rod as recommended in writing by tape and glass manufacturers for application indicated; and complying with ASTM C 1281 and AAMA 800.

#### **46.5 MISCELLANEOUS GLAZING MATERIALS**

- A. General: Provide products of material, size, and shape complying with referenced glazing standard, requirements of manufacturers of glass and other glazing materials for application indicated, and with a proven record of compatibility with surfaces contacted in installation.
- B. Cleaners, Primers, and Sealers: Types recommended by sealant or gasket manufacturer.
- C. Setting Blocks: Elastomeric material with a Shore, Type A durometer hardness of 85, plus or minus 5.
- D. Spacers: Elastomeric blocks or continuous extrusions of hardness required by glass manufacturer to maintain glass lites in place for installation indicated.
- E. Edge Blocks: Elastomeric material of hardness needed to limit glass lateral movement (side walking).
- F. Cylindrical Glazing Sealant Backing: ASTM C 1330, Type O (open-cell material), of size and density to control glazing sealant depth and otherwise produce optimum glazing sealant performance.

#### **46.6 LAMINATED-GLASS TYPES**

- A. Glass Type: Laminated glass with two plies of heat-strengthened float glass.
  1. Thickness of Each Glass Ply: 1/4 inch.
  2. Interlayer Thickness: 0.075.
  3. Reflective Coating: To match existing.
  4. Provide safety glazing labeling.

## **PART 47 - EXECUTION**

### **47.1 EXAMINATION**

- A. Examine framing, glazing channels, and stops, with Installer present, for compliance with the following:
  - 1. Manufacturing and installation tolerances, including those for size, squareness, and offsets at corners.
  - 2. Presence and functioning of weep systems.
  - 3. Minimum required face and edge clearances.
  - 4. Effective sealing between joints of glass-framing members.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### **47.2 PREPARATION**

- A. Clean glazing channels and other framing members receiving glass immediately before glazing. Remove coatings not firmly bonded to substrates.
- B. Examine glazing units to locate exterior and interior surfaces. Label or mark units as needed so that exterior and interior surfaces are readily identifiable. Do not use materials that will leave visible marks in the completed work.

### **47.3 GLAZING, GENERAL**

- A. Comply with combined written instructions of manufacturers of glass, sealants, gaskets, and other glazing materials, unless more stringent requirements are indicated, including those in referenced glazing publications.
- B. Adjust glazing channel dimensions as required by Project conditions during installation to provide necessary bite on glass, minimum edge and face clearances, and adequate sealant thicknesses, with reasonable tolerances.
- C. Protect glass edges from damage during handling and installation. Remove damaged glass from Project site and legally dispose of off Project site. Damaged glass is glass with edge damage or other imperfections that, when installed, could weaken glass and impair performance and appearance.
- D. Apply primers to joint surfaces where required for adhesion of sealants, as determined by preconstruction testing.
- E. Install setting blocks in sill rabbets, sized and located to comply with referenced glazing publications, unless otherwise required by glass manufacturer. Set blocks in thin course of compatible sealant suitable for heel bead.
- F. Do not exceed edge pressures stipulated by glass manufacturers for installing glass lites.
- G. Provide spacers for glass lites where length plus width is larger than 50 inches.
  - 1. Locate spacers directly opposite each other on both inside and outside faces of glass. Install correct size and spacing to preserve required face clearances, unless gaskets and glazing tapes are used that have demonstrated ability to maintain required face clearances and to comply with system performance requirements.
  - 2. Provide 1/8-inch minimum bite of spacers on glass and use thickness equal to sealant width. With glazing tape, use thickness slightly less than final compressed thickness of tape.
- H. Provide edge blocking where indicated or needed to prevent glass lites from moving sideways in glazing channel, as recommended in writing by glass manufacturer and according to requirements in referenced glazing publications.

- I. Set glass lites in each series with uniform pattern, draw, bow, and similar characteristics.
- J. Where wedge-shaped gaskets are driven into one side of channel to pressurize sealant or gasket on opposite side, provide adequate anchorage so gasket cannot walk out when installation is subjected to movement.
- K. Square cut wedge-shaped gaskets at corners and install gaskets in a manner recommended by gasket manufacturer to prevent corners from pulling away; seal corner joints and butt joints with sealant recommended by gasket manufacturer.

#### **47.4 CLEANING AND PROTECTION**

- A. Protect exterior glass from damage immediately after installation by attaching crossed streamers to framing held away from glass. Do not apply markers to glass surface. Remove nonpermanent labels and clean surfaces.
- B. Protect glass from contact with contaminating substances resulting from construction operations. If, despite such protection, contaminating substances do come into contact with glass, remove substances immediately as recommended in writing by glass manufacturer.
- C. Remove and replace glass that is broken, chipped, cracked, or abraded or that is damaged from natural causes, accidents, and vandalism, during construction period.
- D. Wash glass on both exposed surfaces in each area of Project not more than four days before date scheduled for inspections that establish date of Substantial Completion. Wash glass as recommended in writing by glass manufacturer.

**END OF SECTION 088000**

## SECTION 092900 - GYPSUM BOARD

### PART 48 - GENERAL

#### 48.1 PROJECT REQUIREMENTS

- A. The Contractor, along with design professionals, shall be responsible for visiting the site and verifying all the existing conditions and quantities in the field, at the locations where the new work is to be performed.

#### 48.2 SUMMARY

- A. Section Includes:
  - 1. Interior gypsum board.

#### 48.3 DELIVERY, STORAGE AND HANDLING

- A. Store materials inside under cover and keep them dry and protected against weather, condensation, direct sunlight, construction traffic, and other potential causes of damage. Stack panels flat and supported on risers on a flat platform to prevent sagging.

#### 48.4 FIELD CONDITIONS

- A. Environmental Limitations: Comply with ASTM C 840 requirements or gypsum board manufacturer's written recommendations, whichever are more stringent.
- B. Do not install paper-faced gypsum panels until installation areas are enclosed and conditioned.
- C. Do not install panels that are wet, those that are moisture damaged, and those that are mold damaged.
  - 1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
  - 2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

### PART 49 - PRODUCTS

#### 49.1 GYPSUM BOARD, GENERAL

- A. Size: Provide maximum lengths and widths available that will minimize joints in each area and that correspond with support system indicated.

#### 49.2 INTERIOR GYPSUM BOARD

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
  - 1. CertainTeed Corp.
  - 2. Georgia-Pacific Gypsum LLC.
  - 3. USG Corporation.

- B. Gypsum Wallboard: ASTM C 1396/C 1396M.
  - 1. Thickness: To match existing.
  - 2. Long Edges: Tapered and featured rounded or beveled for prefilling.
- C. Gypsum Board, Type X: ASTM C 1396/C 1396M.
  - 1. Thickness: 5/8 inch
  - 2. Long Edges: Tapered and featured rounded or beveled for prefilling.

### **49.3 TRIM ACCESSORIES**

- A. Interior Trim: ASTM C 1047.
  - 1. Material: Galvanized or aluminum-coated steel sheet or rolled zinc.
  - 2. Shapes: As required to complete installing new to existing

### **49.4 JOINT TREATMENT MATERIALS**

- A. General: Comply with ASTM C 475/C 475M.
- B. Joint Tape:
  - 1. Interior Gypsum Board: Paper.
- C. Joint Compound for Interior Gypsum Board: For each coat use formulation that is compatible with other compounds applied on previous or for successive coats.
  - 1. Prefilling: At open joints and damaged surface areas, use setting-type taping compound.
  - 2. Embedding and First Coat: For embedding tape and first coat on joints, fasteners, and trim flanges, use drying-type, all-purpose compound.
  - 3. Fill Coat: For second coat, use drying-type, all-purpose compound.
  - 4. Finish Coat: For third coat, use drying-type, all-purpose compound.

### **49.5 AUXILIARY MATERIALS**

- A. General: Provide auxiliary materials that comply with referenced installation standards and manufacturer's written recommendations.
- B. Steel Drill Screws: ASTM C 1002, unless otherwise indicated.
  - 1. Use screws complying with ASTM C 954 for fastening panels to steel members from 0.033 to 0.112 inch thick.
- C. Sealants : See Section 079200 "Joint Sealants".

## **PART 50 - EXECUTION**

### **50.1 EXAMINATION**

- A. Examine areas and substrates for compliance with requirements and other conditions affecting performance.
- B. Examine panels before installation. Reject panels that are wet, moisture damaged, and mold damaged.

- C. Proceed with installation only after unsatisfactory conditions have been corrected.

## **50.2 APPLYING AND FINISHING PANELS, GENERAL**

- A. Comply with ASTM C 840.
- B. Install panels with face side out. Butt panels together for a light contact at edges and ends with not more than 1/16 inch of open space between panels. Do not force into place.
- C. Locate edge and end joints over supports. Do not place tapered edges against cut edges or ends. Rasp ends of existing cut joint to allow for proper taping and compound. Stagger vertical joints on opposite sides of partitions. Do not make joints other than control joints at corners of framed openings.
- D. Attachment to Steel Framing: Attach panels so leading edge or end of each panel is attached to open (unsupported) edges of stud flanges first.

## **50.3 APPLYING INTERIOR GYPSUM BOARD**

- A. Single-Layer Application:
  - 1. On partitions/walls, apply gypsum panels vertically (parallel to framing) unless required by fire-resistance-rated assembly, and minimize end joints.
    - a. Stagger abutting end joints not less than one framing member in alternate courses of panels.
  - 2. Fastening Methods: Apply gypsum panels to supports with steel drill screws.

## **50.4 INSTALLING TRIM ACCESSORIES**

- A. General: For trim with back flanges intended for fasteners, attach to framing with same fasteners used for panels. Otherwise, attach trim according to manufacturer's written instructions.

## **50.5 FINISHING GYPSUM BOARD**

- A. General: Treat gypsum board joints, interior angles, edge trim, control joints, penetrations, fastener heads, surface defects, and elsewhere as required to prepare gypsum board surfaces for decoration. Promptly remove residual joint compound from adjacent surfaces.
- B. Prefill open joints and damaged surface areas.
- C. Apply joint tape over gypsum board joints.
- D. Gypsum Board Finish Levels: Finish panels levels to match existing and according to ASTM C 840:

## **50.6 PROTECTION**

- A. Protect adjacent surfaces from drywall compound and promptly remove from floors and other non-drywall surfaces. Repair surfaces stained, marred, or otherwise damaged during drywall application.
- B. Protect installed products from damage from weather, condensation, direct sunlight, construction, and other causes during remainder of the construction period.
- C. Remove and replace panels that are wet, moisture damaged, and mold damaged.

1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

**END OF SECTION 092900**

## SECTION 095123 - ACOUSTICAL TILE CEILINGS

### PART 51 - GENERAL

#### 51.1 PROJECT REQUIREMENTS

- A. The Contractor, along with design professionals, shall be responsible for visiting the site and verifying all the existing conditions and quantities in the field, at the locations where the new work is to be performed.

#### 51.2 SUMMARY

- A. Section Includes:
  - 1. Acoustical tiles for ceilings and suspension system.
- B. Related Requirements:
  - 1. Section 024119 "Selective Demolition" for removing existing acoustical tile ceilings.

#### 51.3 DELIVERY, STORAGE, AND HANDLING

- A. Deliver acoustical tiles, suspension-system components, and accessories to Project site in original, unopened packages and store them in a fully enclosed, conditioned space where they will be protected against damage from moisture, humidity, temperature extremes, direct sunlight, surface contamination, and other causes.
- B. Before installing acoustical tiles, permit them to reach room temperature and a stabilized moisture content.
- C. Handle acoustical tiles carefully to avoid chipping edges or damaging units in any way.

#### 51.4 FIELD CONDITIONS

- A. Environmental Limitations: Do not install acoustical tile ceilings until spaces are enclosed and weatherproof, wet work in spaces is complete and dry, work above ceilings is complete, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.

### PART 52 - PRODUCTS

#### 52.1 PERFORMANCE REQUIREMENTS

- A. Surface-Burning Characteristics: Comply with ASTM E 84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
  - 1. Flame-Spread Index: Provide material meeting the requirements if the existing complying with ASTM E 1264.
  - 2. Smoke-Developed Index: To match existing.
- B. Fire-Resistance Ratings: If required to match existing, comply with ASTM E 119; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
  - 1. Indicate design designations from UL's "Fire Resistance Directory" or from the listings of another qualified testing agency.

## **52.2 ACOUSTICAL TILES, GENERAL**

- A. Source Limitations:
  - 1. Acoustical Ceiling Tile: Obtain each type from single source from single manufacturer.
  - 2. Suspension System: Obtain each type from single source from single manufacturer.
- B. Source Limitations: Obtain each type of acoustical ceiling tile and supporting suspension system from single source from single manufacturer.
- C. Acoustical Tile Standard: Provide manufacturer's standard tiles of configuration that comply with ASTM E 1264 classifications as designated by types, patterns, acoustical ratings, and light reflectance.
- D. Acoustical Tile Colors and Patterns: Match appearance characteristics indicated for each product type.

## **52.3 ACOUSTICAL TILES**

- A. Manufacturers: Provide material from a ceiling manufacturer that will provide the following
- B. Classification: Provide tiles complying with ASTM E 1264 for type, form, and pattern as follows:
  - 1. Type and Form: To match existing
  - 2. Pattern: To match existing.
- C. Thickness, Color, Edge Configuration and Size: To match existing.
- D. LR, NRC, CAC, and AC: To match existing

## **52.4 METAL SUSPENSION SYSTEMS, GENERAL**

- A. Metal Suspension-System Standard: Where possible use existing hangers and supports. If not, provide manufacturer's standard metal suspension systems of types, structural classifications, and finishes that comply with applicable requirements in ASTM C 635/C 635M.
- B. Attachment Devices: Size for five times the design load indicated in ASTM C 635/C 635M, Table 1, "Direct Hung,"
  - 1. Anchors in Existing Precast Concrete: Anchors of type and material indicated below, with holes or loops for attaching hangers of type indicated and with capability to sustain, without failure, a load equal to five times that imposed by ceiling construction, as determined by testing according to ASTM E 488 or ASTM E 1512 as applicable, conducted by a qualified testing and inspecting agency.
    - a. Determine the existing thickness of the existing precast concrete structure to ensure the fasteners do not penetrate the slab.
    - b. Type: Post-installed expansion anchors.
    - c. Corrosion Protection: Carbon-steel components zinc plated to comply with ASTM B 633, Class Fe/Zn 5 for Class SC 1 service condition.
  - 2. Power-Actuated Fasteners in Concrete: Fastener system of type suitable for application indicated, fabricated from corrosion-resistant materials, with clips or other accessory devices for attaching hangers of type indicated, and with capability to sustain, without failure, a load equal to 10 times that imposed by ceiling construction, as determined by testing according to ASTM E 1190, conducted by a qualified testing and inspecting agency.
- C. Wire Hangers, Braces, and Ties: Provide wires complying with the following requirements:

1. Zinc-Coated, Carbon-Steel Wire: ASTM A 641/A 641M, Class 1 zinc coating, soft temper.
2. Size: Select wire diameter so its stress at three times hanger design load (ASTM C 635/C 635M, Table 1, "Direct Hung") will be less than yield stress of wire, but provide not less than diameter wire to match existing.

## **52.5 METAL SUSPENSION SYSTEM, EDGE MOLDINGS AND TRIM**

- A. Manufacturers: Provide material from a ceiling suspension system manufacturer that will provide the following to match existing:
  1. Direct-Hung, Double-Web Suspension System: Main and cross runners roll formed from and capped with cold-rolled steel sheet, pre-painted, electrolytically zinc coated, or hot-dip galvanized according to ASTM A 653/A 653M, G30 coating designation.
  2. Roll-Formed, Sheet-Metal Edge Moldings and Trim: Type and profile manufacturer's standard moldings for edges and penetrations; formed from sheet metal of same material, finish, color, and profile to match existing.

## **PART 53 - EXECUTION**

### **53.1 EXAMINATION**

- A. Verify that all moisture damaged ceiling tiles and suspension systems have been removed.
- B. Examine substrates, areas, and conditions that may affect the installation of the new or salvaged for reuse ceiling tiles and suspension system, and other conditions affecting performance of the Work.
- C. Examine all new and salvaged for reuse acoustical tiles and suspension systems before installation. Reject materials that are wet, moisture damaged, or mold damaged.
- D. Coordinate the extent of acoustical tile ceilings with the demolition of the ceiling.
- E. Proceed with installation only after unsatisfactory conditions have been corrected.

### **53.2 INSTALLATION OF SUSPENDED ACOUSTICAL TILE CEILINGS**

- A. General: Install acoustical panel ceilings to comply with ASTM C 636/C 636M and seismic design requirements indicated, according to manufacturer's written instructions and CISCA's "Ceiling Systems Handbook."
- B. Suspend ceiling hangers from building's structural members and as follows:
  1. Install hangers plumb and free from contact with insulation or other objects within ceiling plenum that are not part of supporting structure or of ceiling suspension system.
  2. Splay hangers only where required, to miss obstructions; offset resulting horizontal forces by bracing, counter-splaying, or other equally effective means.
  3. Where width of ducts and other construction within ceiling plenum produces hanger spacings that interfere with location of hangers at spacing required to support standard suspension-system members, install supplemental suspension members and hangers in form of trapezes or equivalent devices.
  4. Secure wire hangers to ceiling suspension members and to supports above with a minimum of three tight turns. Connect hangers directly either to structures or to inserts, eye screws, or other devices that are secure and appropriate for substrate and that will not deteriorate or otherwise fail due to age, corrosion, or elevated temperatures. Where possible use the inserts where moisture damaged hangers have been removed only if not rusted.
  5. Do not support ceilings directly from permanent metal forms or floor deck.

6. When steel framing does not permit installation of hanger wires at spacing required, install carrying channels or other supplemental support for attachment of hanger wires.
  7. Do not attach hangers to steel deck tabs.
  8. Space hangers not more than the spacing supporting the existing ceiling.
- C. Install edge moldings and trim of type indicated at perimeter of acoustical tile ceiling area and where necessary to conceal edges of acoustical tiles. Fasten to wall to match the existing

### **53.3 CLEANING**

- A. Clean exposed surfaces of acoustical tile ceilings, including trim and edge moldings. Comply with manufacturer's written instructions for cleaning and touchup of minor finish damage. Remove and replace tiles and other ceiling components that cannot be successfully cleaned and repaired to permanently eliminate evidence of damage.

**END OF SECTION 095123.**

## SECTION 096513 - RESILIENT BASE AND ACCESSORIES

### PART 54 - GENERAL

#### 54.1 PROJECT REQUIREMENTS

- A. The Contractor, along with design professionals, shall be responsible for visiting the site and verifying all the existing conditions and quantities in the field, at the locations where the new work is to be performed.

#### 54.2 SUMMARY

- A. Section Includes:

- 1. Resilient base.

#### 54.3 QUALITY ASSURANCE

- A. Fire-Test-Response Characteristics: As determined by testing identical products according to ASTM E 648 or NFPA 253 by a qualified testing agency.

- 1. Critical Radiant Flux Classification: Class II, not less than 0.22 W/sq. cm.

#### 54.4 DELIVERY, STORAGE, AND HANDLING

- A. Store resilient products and installation materials in dry spaces protected from the weather, with ambient temperatures maintained within range recommended by manufacturer, but not less than 50 deg F or more than 90 deg F.

#### 54.5 PROJECT CONDITIONS

- A. Maintain ambient temperatures within range recommended by manufacturer, but not less than 70 deg F or more than 95 deg F, in spaces to receive resilient products during the following time periods:

- 1. 48 hours before installation.
- 2. During installation.
- 3. 48 hours after installation.

- B. Until Substantial Completion, maintain ambient temperatures within range recommended by manufacturer, but not less than 55 deg F or more than 95 deg F.

- C. Install resilient products after other finishing operations, including painting, have been completed.

### PART 55 - PRODUCTS

#### 55.1 RESILIENT BASE

- A. Manufacturers: Provide material from a Resilient Base manufacturer that will provide the following standards based on materials required to match existing:

- 1. Resilient Base Standard: ASTM F 1861.
- 2. Material Requirement: To match existing

3. Style: Cove or straight to match existing.
4. Minimum Thickness and Height: To match existing
5. Colors and Patterns: To match existing.

## **55.2 INSTALLATION MATERIALS**

- A. Trowelable Leveling and Patching Compounds: Latex-modified, portland cement based or blended hydraulic-cement-based formulation provided or approved by manufacturer for applications indicated.
- B. Adhesives: Water-resistant type recommended by manufacturer to suit resilient products and substrate conditions indicated.

## **PART 56 - EXECUTION**

### **56.1 EXAMINATION**

- A. Verify that any moisture or water damage base and gwb has been removed.
- B. Verify that finishes of substrates comply with tolerances and other requirements specified in other Sections and that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might interfere with adhesion of resilient products.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

### **56.2 PREPARATION**

- A. Prepare substrates according to manufacturer's written instructions to ensure adhesion of resilient products.
- B. Fill cracks, holes, and depressions in substrates with trowelable leveling and patching compound and remove bumps and ridges to produce a uniform and smooth substrate.
- C. Do not install resilient products until they are same temperature as the space where they are to be installed.
  1. Move resilient products and installation materials into spaces where they will be installed at least 48 hours in advance of installation.
- D. Sweep and vacuum clean substrates to be covered by resilient products immediately before installation.

### **56.3 RESILIENT BASE INSTALLATION**

- A. Comply with manufacturer's written instructions for installing resilient base.
- B. Remove any loose base that is not damaged. Clean substrate as recommended by the manufacturer and reinstall base.
- C. Apply resilient base to walls, columns, pilasters, casework and cabinets in toe spaces, and other permanent fixtures in rooms and areas where base is required.
- D. Install resilient base in lengths as long as practicable without gaps at seams and with tops of adjacent pieces aligned.
- E. Tightly adhere resilient base to substrate throughout length of each piece, with base in continuous contact with horizontal and vertical substrates.

- F. Do not stretch resilient base during installation.
- G. On masonry surfaces or other similar irregular substrates, fill voids along top edge of resilient base with manufacturer's recommended adhesive filler material.
- H. Job-Formed Corners:
  - 1. Outside Corners: Use straight pieces of maximum lengths possible. Form without producing discoloration (whitening) at bends.
  - 2. Inside Corners: Use straight pieces of maximum lengths possible.

#### **56.4 CLEANING AND PROTECTION**

- A. Comply with manufacturer's written instructions for cleaning and protection of resilient products.
- B. Perform the following operations immediately after completing resilient product installation:
  - 1. Remove adhesive and other blemishes from exposed surfaces.
- C. Protect resilient products from mars, marks, indentations, and other damage from construction operations and placement of equipment and fixtures during remainder of construction period.
- D. Cover resilient products until Substantial Completion.

**END OF SECTION 096513**

## SECTION 096519 - RESILIENT TILE FLOORING

### PART 57 - GENERAL

#### 57.1 PROJECT REQUIREMENTS

- A. The Contractor, along with design professionals, shall be responsible for visiting the site and verifying all the existing conditions and quantities in the field, at the locations where the new work is to be performed.

#### 57.2 SUMMARY

- A. Section Includes:
  - 1. Resilient tile flooring to match existing
- B. Related Requirements:
  - 1. Section 024119 "Selective Demolition" for removing existing floor coverings.
  - 2. Section 096513 "Resilient Base and Accessories" for resilient base, and other accessories installed with resilient floor coverings.

#### 57.3 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified installer who employs workers for this Project who are competent in techniques required by manufacturer for floor tile installation indicated.
- B. Fire-Test-Response Characteristics: As determined by testing identical products according to ASTM E 648 or NFPA 253 by a qualified testing agency.
  - 1. Critical Radiant Flux Classification: Class II, not less than 0.22 W/sq. cm.

#### 57.4 DELIVERY, STORAGE, AND HANDLING

- A. Store floor tile and installation materials in dry spaces protected from the weather, with ambient temperatures maintained within range recommended by manufacturer, but not less than 50 deg F or more than 90 deg F .Store floor tiles on flat surfaces.

#### 57.5 PROJECT CONDITIONS

- A. Maintain ambient temperatures within range recommended by manufacturer, but not less than 70 deg F or more than 95 deg F, in spaces to receive floor tile during the following time periods:
  - 1. 48 hours before installation.
  - 2. During installation.
  - 3. 48 hours after installation.
- B. Until Substantial Completion, maintain ambient temperatures within range recommended by manufacturer, but not less than 55 deg F or more than 95 deg F.
- C. Close spaces to traffic during floor tile installation.

- D. Close spaces to traffic for 48 hours after floor tile installation.
- E. Install floor tile after other finishing operations, including painting, have been completed.

## **PART 58 - PRODUCTS**

### **58.1 RESILIENT TILE FLOORING**

- A. Manufacturers: Provide material from a Resilient Base manufacturer that will provide the following standards based on materials required to match existing:
  - 1. Solid Vinyl Floor Tile: ASTM F 1700.
  - 2. Rubber Floor Tile: ASTM F 1344
  - 3. Vinyl Composition Tile: ASTM F 1066
- B. Class: To match existing.
- C. Type: To match existing..
- D. Thickness: To match existing.
- E. Size: .To match existing.
- F. Colors and Patterns: To match existing.

### **58.2 INSTALLATION MATERIALS**

- A. Trowelable Leveling and Patching Compounds: Latex-modified, portland cement based or blended hydraulic-cement-based formulation provided or approved by manufacturer for applications indicated.
- B. Adhesives: Water-resistant type recommended by manufacturer to suit floor tile and substrate conditions indicated.
- C. Floor Polish: Provide protective liquid floor polish products as recommended by manufacturer.

## **PART 59 - EXECUTION**

### **59.1 EXAMINATION**

- A. Verify that any moisture or water damage resilient tiles and adhesives have been removed.
- B. Examine substrates for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- C. Verify that finishes of substrates comply with tolerances and other requirements specified in other Sections and that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might interfere with adhesion of floor tile.
- D. Coordination the extent of resilient tile flooring with the demolition of the resilient tile flooring.
- E. Proceed with installation only after unsatisfactory conditions have been corrected.

## **59.2 PREPARATION**

- A. Prepare substrates according to manufacturer's written instructions to ensure adhesion of resilient products.
- B. Concrete Substrates: Prepare according to ASTM F 710.
  - 1. Verify that substrates are dry and free of curing compounds, sealers, and hardeners.
  - 2. Remove substrate coatings and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, using mechanical methods recommended by manufacturer. Do not use solvents.
  - 3. Alkalinity and Adhesion Testing: Perform tests recommended by manufacturer. Proceed with installation only after substrates pass testing.
  - 4. Moisture Testing: Follow manufacturer recommendations for testing the existing concrete for moisture, humidity and mold.
  - 5. Proceed with installation only after substrates pass testing.
- C. Fill cracks, holes, and depressions in substrates with trowelable leveling and patching compound and remove bumps and ridges to produce a uniform and smooth substrate.
- D. Do not install floor tiles until they are same temperature as space where they are to be installed.
  - 1. Move resilient products and installation materials into spaces where they will be installed at least 48 hours in advance of installation.
- E. Sweep and vacuum clean substrates to be covered by resilient products immediately before installation.

## **59.3 FLOOR TILE INSTALLATION**

- A. Comply with manufacturer's written instructions for installing floor tile.
- B. Lay tiles to follow existing patterns.
- C. Scribe, cut, and fit floor tiles to butt neatly and tightly to vertical surfaces and permanent fixtures including built-in furniture, cabinets, pipes, outlets, and door frames.
- D. Extend floor tiles into toe spaces, door reveals, closets, and similar openings. Extend floor tiles to center of door openings.
- E. Adhere floor tiles to flooring substrates using a full spread of adhesive applied to substrate to produce a completed installation without open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks, and other surface imperfections.

## **59.4 CLEANING AND PROTECTION**

- A. Comply with manufacturer's written instructions for cleaning and protection of floor tile.
- B. Perform the following operations immediately after completing floor tile installation:
  - 1. Remove adhesive and other blemishes from exposed surfaces.
  - 2. Sweep and vacuum surfaces thoroughly.
  - 3. Damp-mop surfaces to remove marks and soil.
- C. Protect floor tile products from mars, marks, indentations, and other damage from construction operations and placement of equipment and fixtures during remainder of construction period.

- D. Floor Polish: Remove soil, visible adhesive, and surface blemishes from floor tile surfaces before applying liquid floor polish. In rooms where tiles have been replaced apply floor polish to entire floor.
  - 1. Number of coat(s) as recommended by the manufacturer.
- E. Cover floor tile until Substantial Completion.

**END OF SECTION 096519**

## SECTION 096816 - SHEET CARPETING

### PART 60 - GENERAL

#### 60.1 PROJECT REQUIREMENTS

- A. The Contractor, along with design professionals, shall be responsible for visiting the site and verifying all the existing conditions and quantities in the field, at the locations where the new work is to be performed.

#### 60.2 SUMMARY

- A. Section Includes:
  - 1. Sheet carpet to match existing.
- B. Related Requirements:
  - 1. Section 024119 "Selective Demolition" for removing existing floor coverings.
  - 2. Section 096513 "Resilient Base and Accessories" for resilient wall base and accessories installed with carpet.

#### 60.3 QUALITY ASSURANCE

- A. Installer Qualifications: An experienced Installer who is certified by the International Certified Floorcovering Installers Association at the Commercial II certification level.

#### 60.4 QUALITY ASSURANCE

- A. Fire-Test-Response Characteristics: As determined by testing identical products according to ASTM E 648 or NFPA 253 by a qualified testing agency.
  - 1. Critical Radiant Flux Classification: Class II, not less than 0.22 W/sq. cm.

#### 60.5 DELIVERY, STORAGE, AND HANDLING

- A. Comply with CRI 104.

#### 60.6 FIELD CONDITIONS

- A. Comply with CRI 104 for temperature, humidity, and ventilation limitations.
- B. Environmental Limitations: Do not deliver or install carpet until spaces are enclosed and weathertight, wet work in spaces is complete and dry, and ambient temperature and humidity conditions are maintained at occupancy levels during the remainder of the construction period.
- C. Do not install carpet over concrete slabs until slabs have cured, are sufficiently dry to bond with adhesive, and have pH range recommended by carpet manufacturer.

## **PART 61 - PRODUCTS**

### **61.1 CARPET**

- A. Manufacturers: Provide material from a Sheet Carpeting manufacturer that will provide the following standards based on materials required to match existing:
- B. Color: To match existing.
- C. Pattern: To match existing.
- D. Fiber Content: To match existing.
- E. Pile Characteristic: To match existing.
- F. Yarn Twist: To match existing.
- G. Yarn Count: To match existing.
- H. Density: To match existing.
- I. Pile Thickness: To match existing.
- J. Stitches: To match existing.
- K. Gage: To match existing.
- L. Face Weight: To match existing.
- M. Total Weight: To match existing.
- N. Primary Backing: Manufacturer's standard material. Ensure the pile height matches the existing.
- O. Performance Characteristics: As follows:
  - 1. Appearance Retention Rating: Moderate traffic, 2.5 minimum per ASTM D 7330.

### **61.2 INSTALLATION ACCESSORIES**

- A. Trowelable Leveling and Patching Compounds: Latex-modified, hydraulic-cement-based formulation provided or recommended by carpet manufacturer.
- B. Adhesives: Water-resistant, mildew-resistant, non-staining type to suit products and subfloor conditions that comply with flammability requirements for installed carpet and is recommended or provided by carpet manufacturer.
- C. Seam Adhesive: Hot-melt adhesive tape or similar product recommended by carpet manufacturer for sealing and taping seams and butting cut edges at backing to form secure seams and to prevent pile loss at seams.

## **PART 62 - EXECUTION**

### **62.1 EXAMINATION**

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for maximum moisture content, alkalinity range, installation tolerances, and other conditions affecting carpet performance. Examine carpet for type, color, pattern to match existing and potential defects.
- B. Concrete Subfloors: Verify that concrete slabs comply with ASTM F 710 and the following:
  - 1. Slab substrates are dry and free of curing compounds, sealers, hardeners, old adhesives and other materials that may interfere with adhesive bond. Determine adhesion and dryness characteristics by performing bond and moisture tests recommended by carpet manufacturer.
  - 2. Subfloors are free of cracks, ridges, depressions, scale, and foreign deposits.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

### **62.2 PREPARATION**

- A. General: Comply with CRI 104, Section 7.3, "Site Conditions; Floor Preparation," and with carpet manufacturer's written installation instructions for preparing substrates.
- B. Use trowelable leveling and patching compounds, according to manufacturer's written instructions, to fill cracks, holes, depressions, and protrusions in substrates. Fill or level cracks, holes and depressions 1/8 inch wide or wider, and protrusions more than 1/32 inch, unless more stringent requirements are required by manufacturer's written instructions.
- C. Remove coatings other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, without using solvents. Use mechanical methods recommended in writing by carpet manufacturer.
- D. Broom and vacuum clean substrates to be covered immediately before installing carpet.

### **62.3 INSTALLATION**

- A. Comply with CRI 104 and carpet manufacturer's written installation instructions for the following:
  - 1. Verify the type of the existing installation and use same installation method.
- B. Comply with carpet manufacturer's written recommendations for seam locations and direction of carpet; maintain uniformity of carpet direction and lay of pile.
- C. Cut and fit carpet to butt tightly to vertical surfaces, permanent fixtures, and built-in furniture including cabinets, pipes, outlets, edgings, thresholds, and nosings. Bind or seal cut edges as recommended by carpet manufacturer.
- D. Extend carpet into toe spaces, door reveals, closets, open-bottomed obstructions, removable flanges, alcoves, and similar openings.
- E. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on finish flooring as marked on subfloor. Use nonpermanent, non-staining marking device.
- F. Install patterns, if required, to match the existing.

## **62.4 CLEANING AND PROTECTING**

- A. Perform the following operations immediately after installing carpet:
  - 1. Remove excess adhesive, seam sealer, and other surface blemishes using cleaner recommended by carpet manufacturer.
  - 2. Remove yarns that protrude from carpet surface.
  - 3. Vacuum carpet in the entire room using commercial machine with face-beater element.
- B. Protect installed carpet to comply with CRI 104, Section 16, "Protecting Indoor Installations."
- C. Protect carpet against damage from construction operations and placement of equipment and fixtures during the remainder of construction period. Use protection methods recommended in writing by carpet manufacturer.

**END OF SECTION 096816**

## SECTION 099123 - INTERIOR PAINTING

### PART 63 - GENERAL

#### 63.1 PROJECT REQUIREMENTS

- A. The Contractor, along with design professionals, shall be responsible for visiting the site and verifying all the existing conditions and quantities in the field, at the locations where the new work is to be performed.

#### 63.2 SUMMARY

- A. Section includes surface preparation and the application of paint systems on the following interior substrates:
  - 1. Gypsum board.

#### 63.3 DELIVERY, STORAGE, AND HANDLING

- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F.
  - 1. Maintain containers in clean condition, free of foreign materials and residue.
  - 2. Remove rags and waste from storage areas daily.

#### 63.4 FIELD CONDITIONS

- A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F.
- B. Do not apply paints when relative humidity exceeds 85 percent; at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.

### PART 64 - PRODUCTS

#### 64.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
  - 1. Benjamin Moore & Co.
  - 2. ICI Paints.
  - 3. Sherwin-Williams Company (The).

#### 64.2 PAINT, GENERAL

- A. Material Compatibility:
  - 1. Provide materials for use within each paint system that are compatible with the existing paint systems.
- B. Colors: To match the existing color.

### **64.3 PRIMERS/SEALERS**

- A. Primer Sealer, Latex, Interior

### **64.4 WATER-BASED PAINTS**

- A. Latex, Interior, Flat,
  - 1. .Gloss to match existing

## **PART 65 - EXECUTION**

### **65.1 EXAMINATION**

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
  - 1. Gypsum Board: 12 percent.
- C. Gypsum Board Substrates: Verify that finishing compound is sanded smooth.
- D. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
- E. Proceed with coating application only after unsatisfactory conditions have been corrected.
  - 1. Application of coating indicates acceptance of surfaces and conditions.

### **65.2 PREPARATION**

- A. Comply with manufacturer's written instructions and recommendations in "MPI Manual" applicable to substrates indicated.
- B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
  - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
- C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.

### **65.3 APPLICATION**

- A. Apply paints according to manufacturer's written instructions.
  - 1. Use applicators and techniques suited for paint and substrate indicated.
  - 2. Paint surfaces behind movable equipment and furniture same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed equipment or furniture with prime coat only.
  - 3. Paint front and backsides of access panels, removable or hinged covers, and similar hinged items to match exposed surfaces.

- B. Paint areas where new gypsum wall board has been installed. Where new gypsum wall board has been installed the entire wall shall be painted with 2 topcoats.
- C. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.
- D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

#### **65.4 CLEANING AND PROTECTION**

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

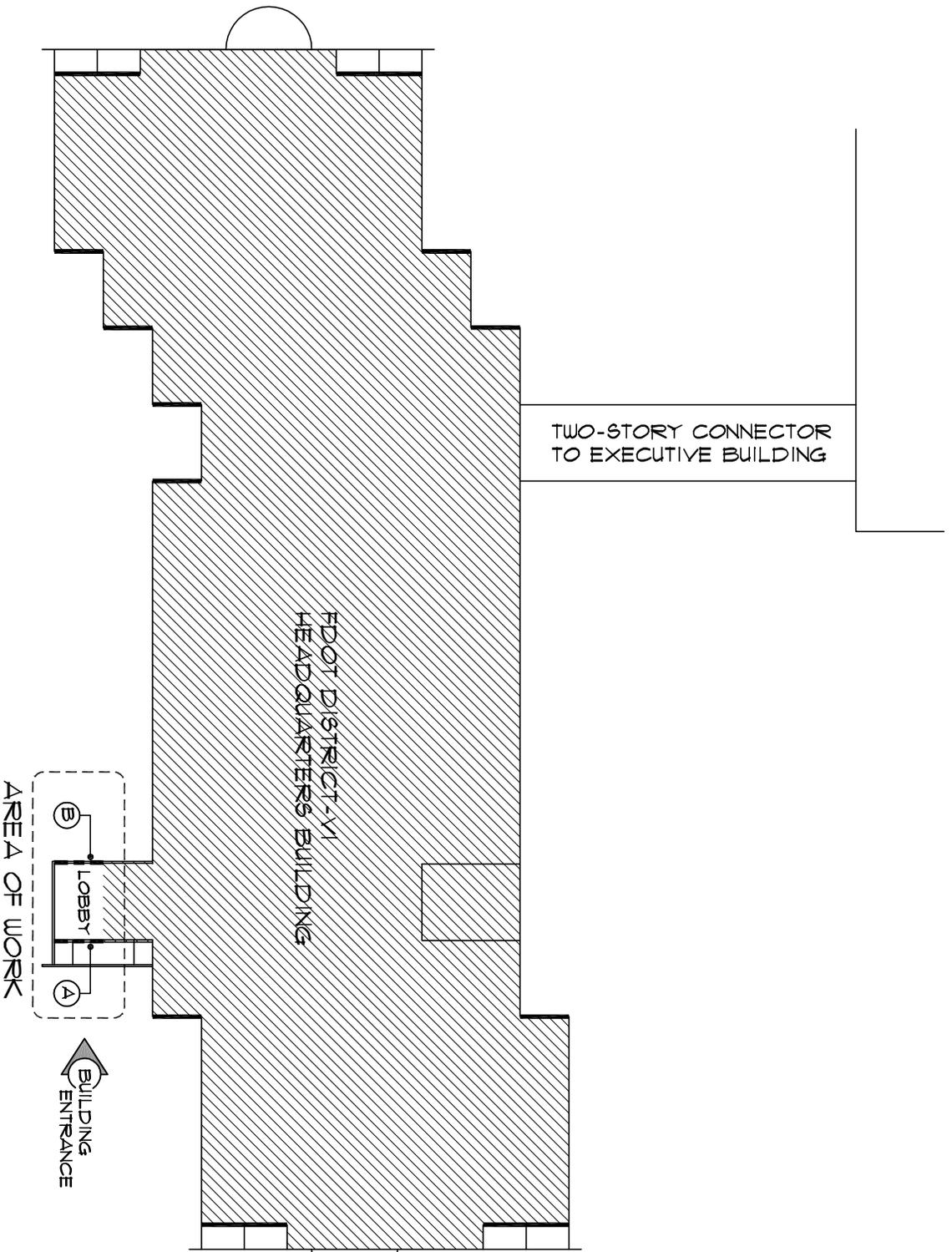
#### **65.5 INTERIOR PAINTING SCHEDULE**

- A. Gypsum Board Substrates:
  - 1. Latex System:
    - a. Prime Coat: 1 coat primer sealer, latex, interior.
    - b. Topcoat: 2 coats latex, interior.

**END OF SECTION 099123**



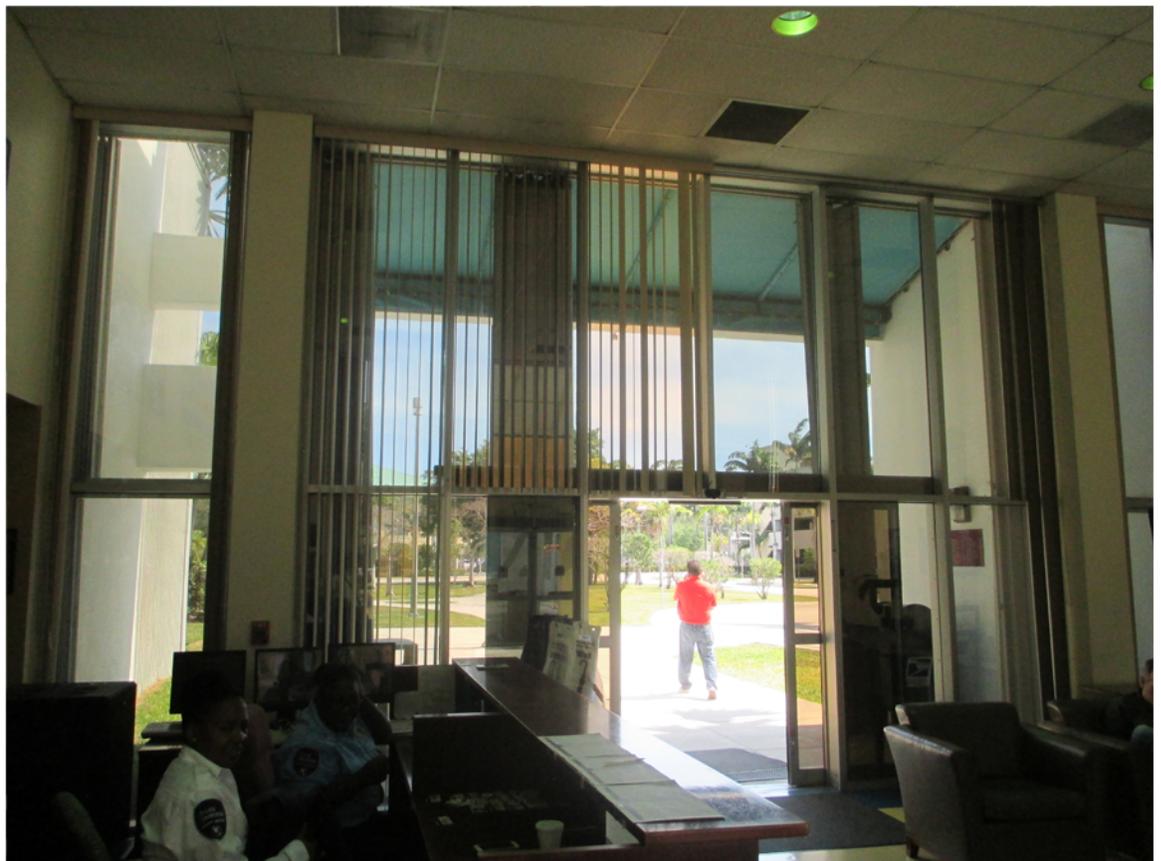
# LOCATION PLAN - STOREFRONT WALL (FIRST FLOOR)



LEGEND	
SYMBOL	DESCRIPTION
--- (dashed line)	GLAZING WALL / STOREFRONT TO BE REPLACED
— (solid line)	EXISTING WALL TO REMAIN UNDISTURBED



Interior view of lobby glazing system (South Elevation)



Interior view of lobby glazing system (North Elevation)



Existing glazing system on South Elevation



Existing automated door at south entry



Current stucco condition throughout



Existing hurricane shutters



Existing stucco at North Entry



Existing glazing at North (west)



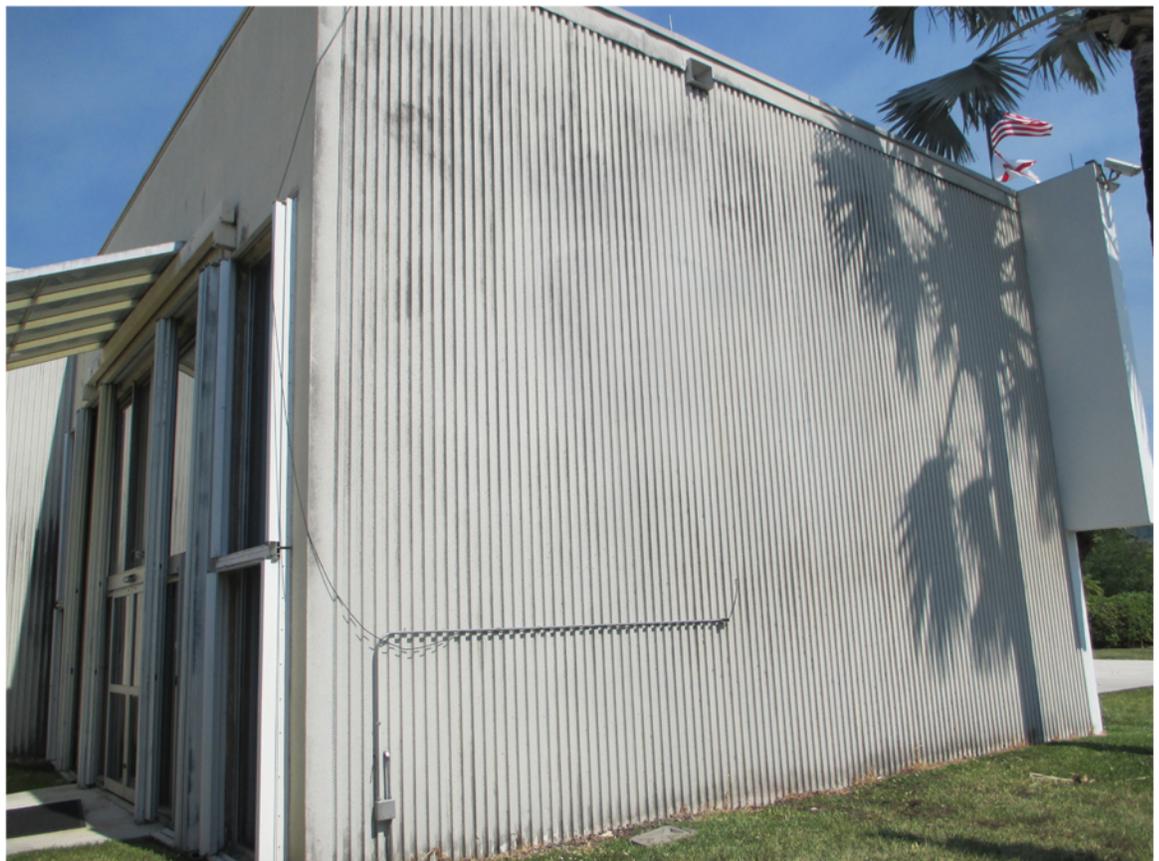
Existing shutters and glazing system



Existing glazing at North (east)

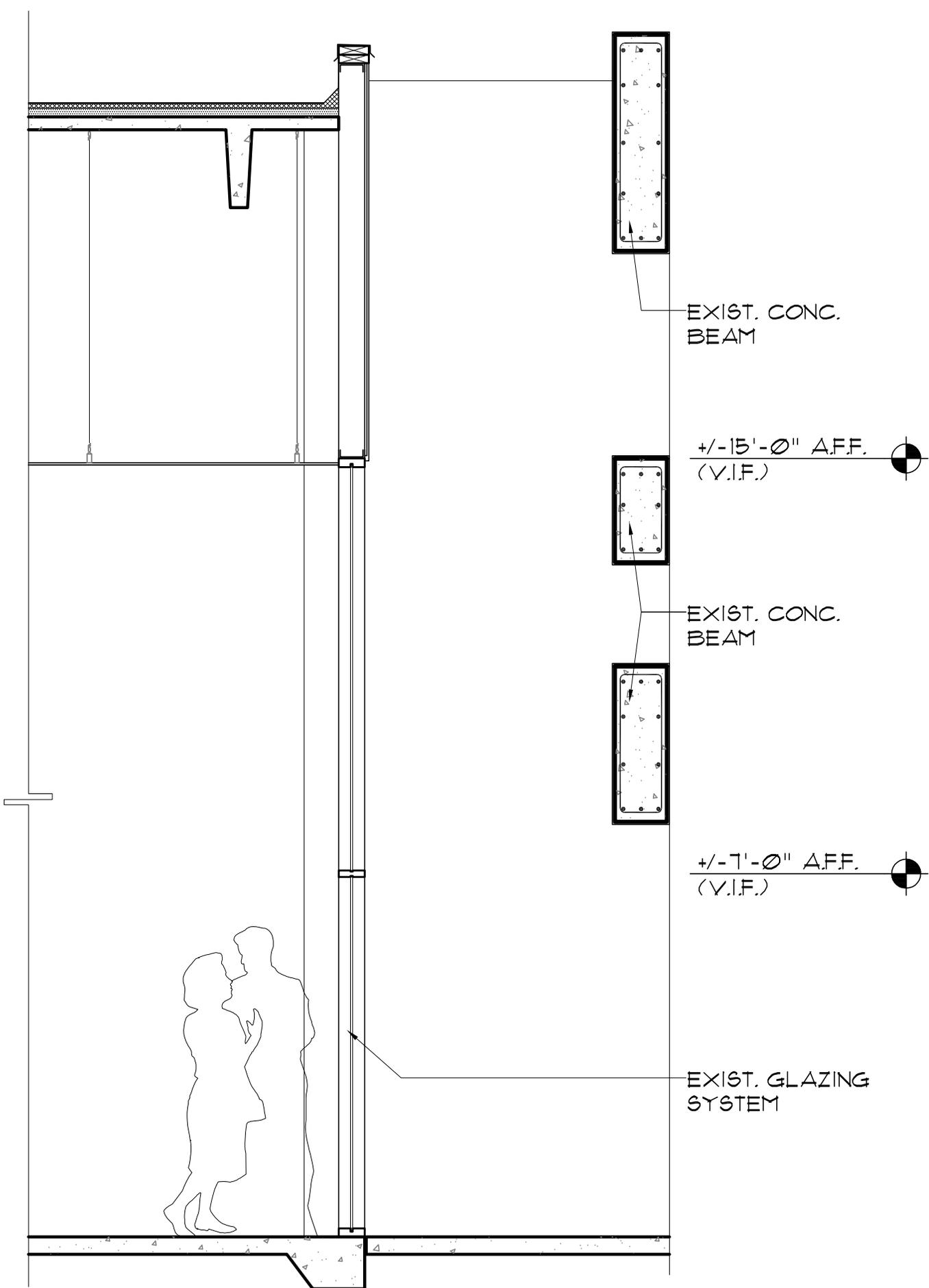


Lobby Entry Wall on North Facade



View of lobby from east





EXIST. CONC.  
BEAM

+/- 15'-0" A.F.F.  
(V.I.F.)

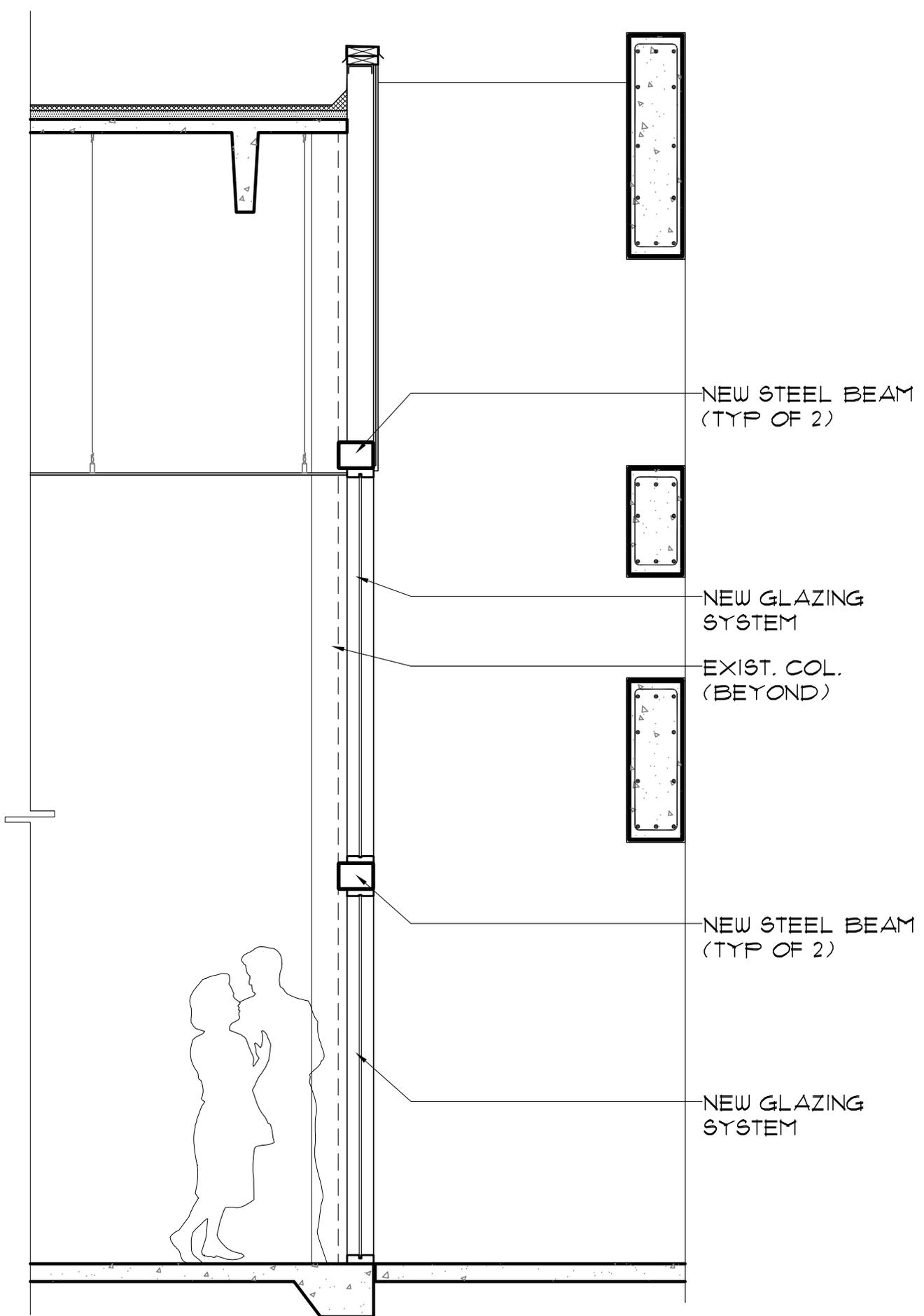
EXIST. CONC.  
BEAM

+/- 7'-0" A.F.F.  
(V.I.F.)

EXIST. GLAZING  
SYSTEM

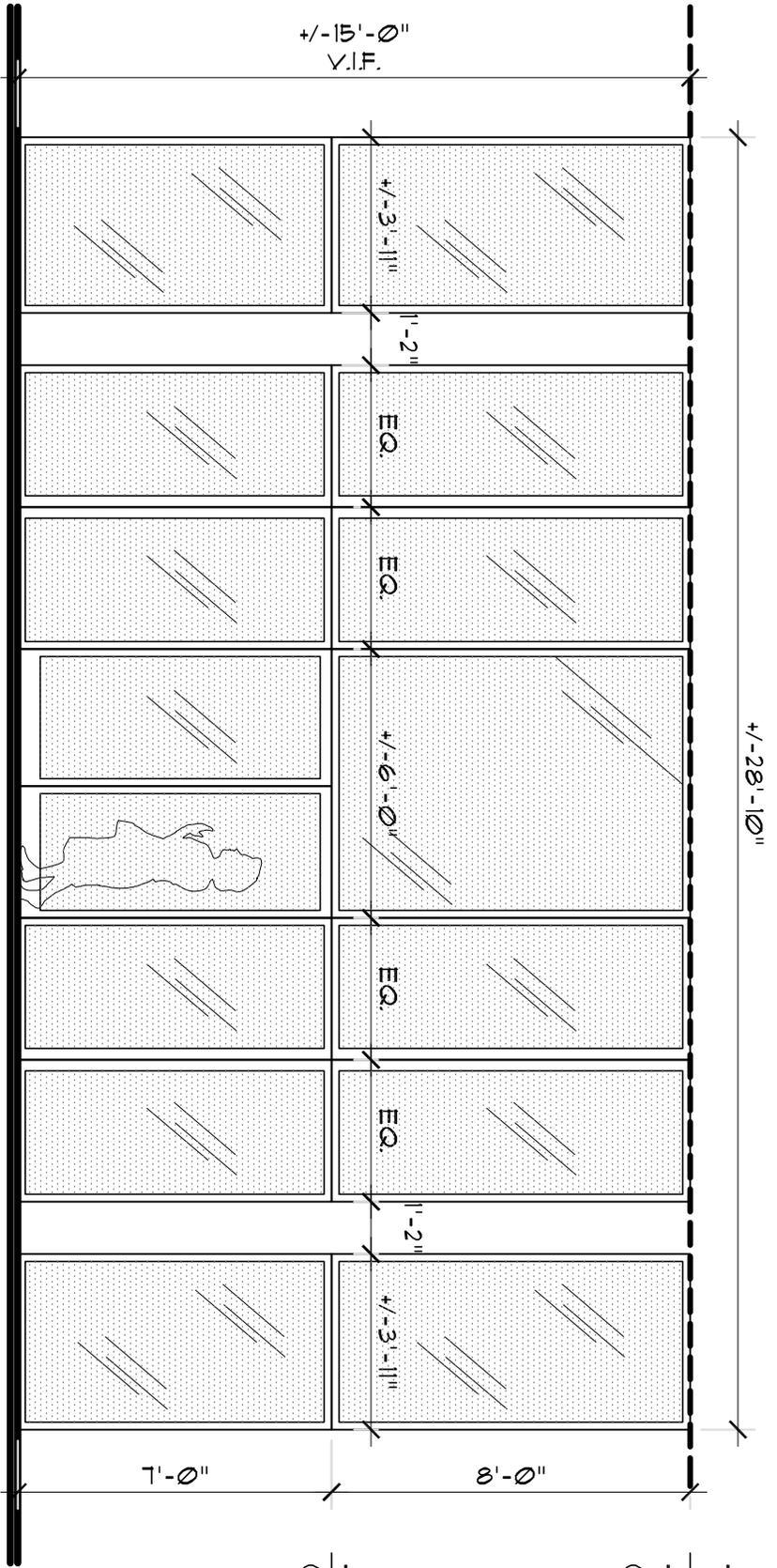
# EXISTING GLAZING SYSTEM

SCALE: N.T.S.



# PROPOSED GLAZING SYSTEM

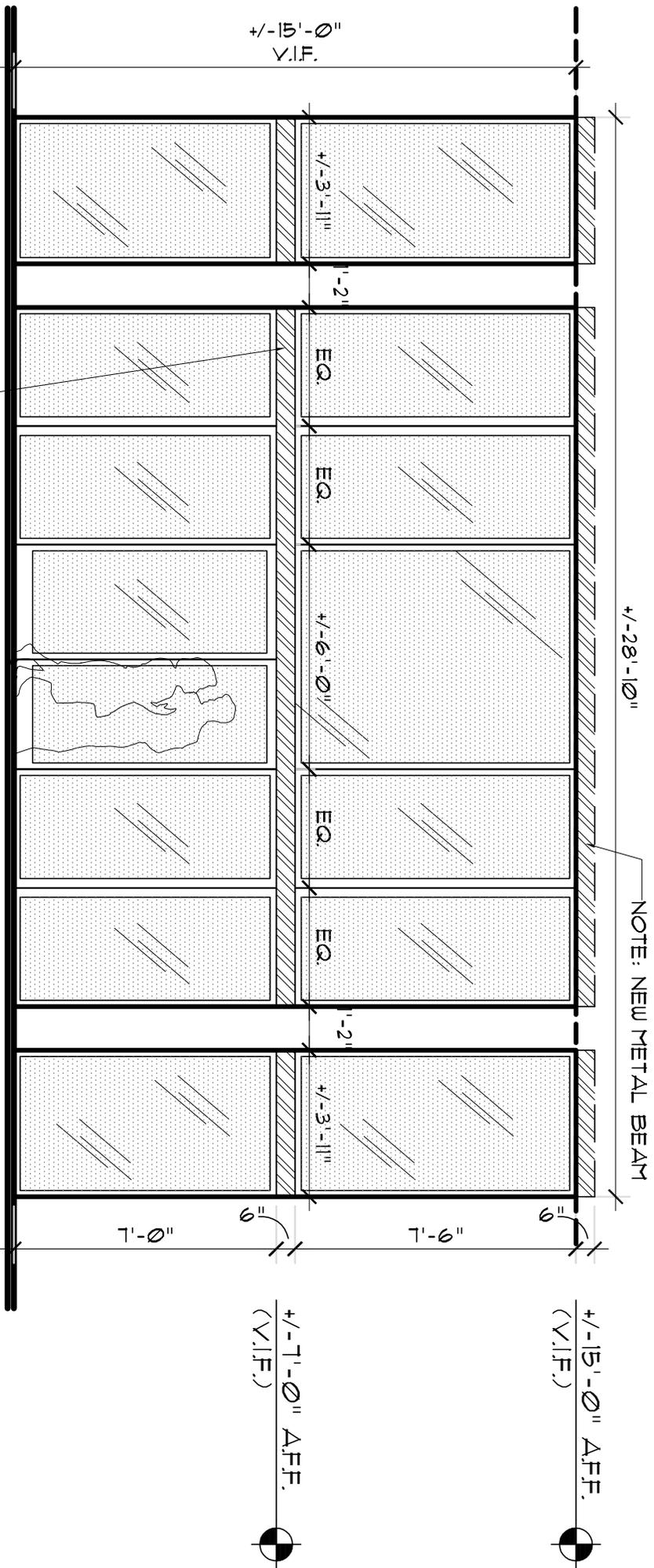
SCALE: N.T.S.



TO. GLAZING  
 $\pm 15' - 0''$  A.F.F.  
 (V.I.F.)

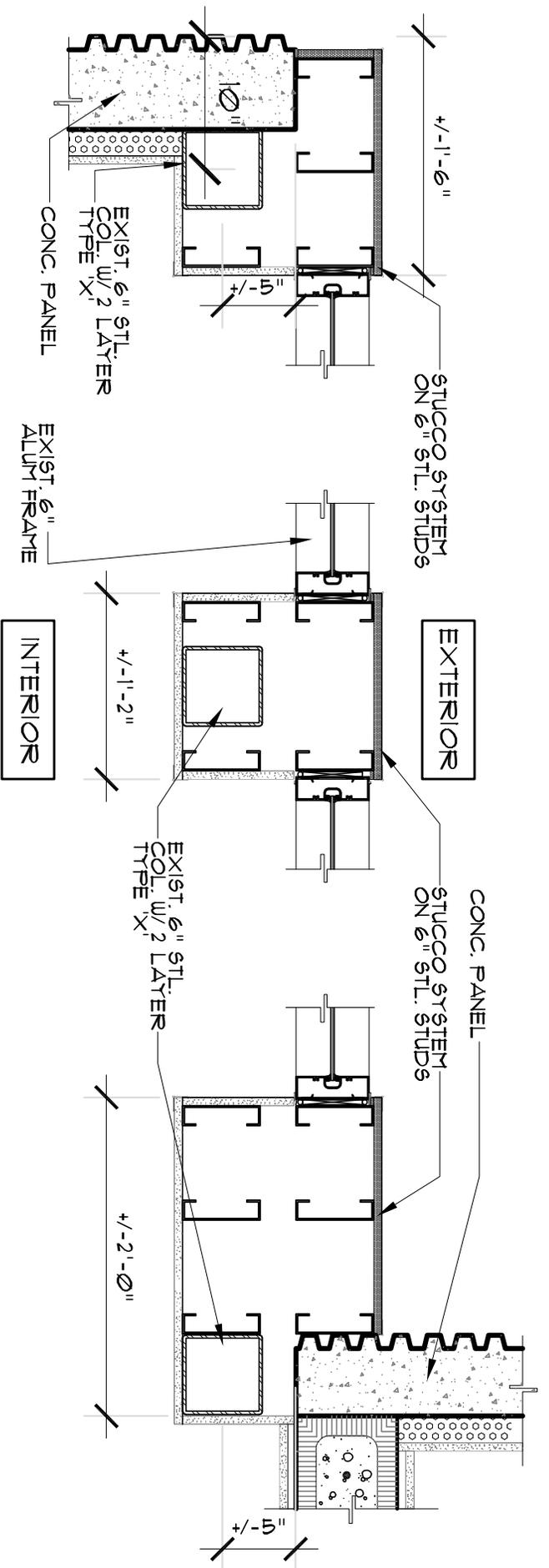
$\pm 7' - 0''$  A.F.F.  
 (V.I.F.)

EXISTING GLAZING SYSTEM  
 SCALE: N.T.S.

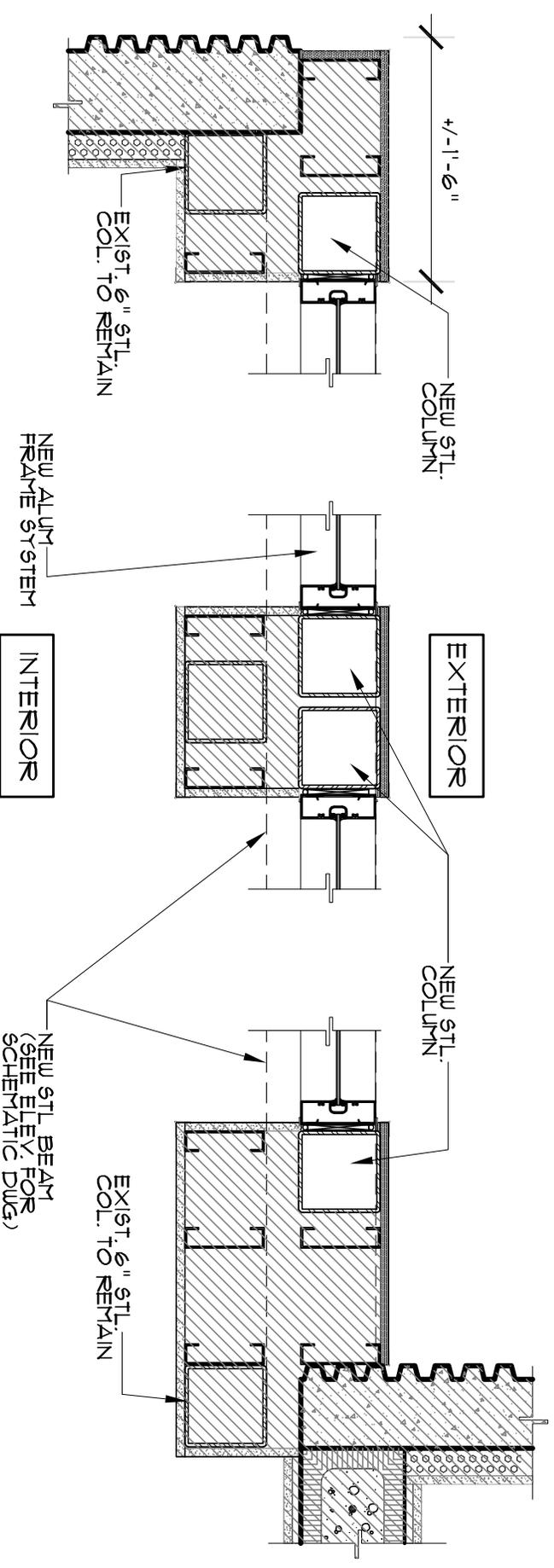


# PROPOSED GLAZING SYSTEM

SCALE: N.T.S.



1 EXIST. GLAZING SYSTEM PLAN  
SCALE : N.T.S.



2 PROPOSED GLAZING SYSTEM PLAN  
SCALE : N.T.S.



## GENERAL CONSTRUCTION NOTES:

1. ALL WORK UNDER THIS PERMIT SHALL BE PERFORMED IN STRICT COMPLIANCE WITH THE FLORIDA BUILDING CODE, 2014 5th EDITION, THE FLORIDA FIRE PREVENTION CODE AND ALL OTHER APPLICABLE GOVERNING CODES AND REGULATIONS HAVING JURISDICTION.
- 1.1 ALL WORK DONE UNDER THIS PERMIT SHALL BE PERFORMED IN STRICT COMPLIANCE WITH THE LATEST EDITION OF THE FLORIDA FIRE PREVENTION CODE
2. AS A PREREQUISITE FOR ELIGIBILITY TO BID UNDER THIS CONTRACT, ALL BIDDERS ARE REQUIRED TO CONDUCT AN ON SITE INVESTIGATION OF EXISTING CONDITIONS TO BECOME FAMILIAR WITH THE NATURE AND SCOPE OF WORK, THE BASE BID SHALL REFLECT ANY MODIFICATIONS TO SYSTEMS AND DEVICES REQUIRED BY STATE AND LOCAL CODES OR FDOT'S REQUIREMENTS. SUBMISSION OF A BID CONSTITUTES CERTIFICATION THAT SUCH SITE INVESTIGATION HAS BEEN CONDUCTED. FUTURE CLAIMS FOR ADDITIONAL LABOR, EQUIPMENT AND/OR MATERIALS TO ADDRESS ANY DIFFICULTIES WHICH SHOULD HAVE BEEN DETECTED DURING PRE-BID INVESTIGATION OF EXISTING CONDITIONS SHALL BE DENIED.
3. PRIOR TO STARTING CONSTRUCTION, CONTRACTOR SHALL MEET WITH FDOT'S DESIGNATED REPRESENTATIVE TO DISCUSS PROCEDURES AND REQUIREMENTS FOR ACCESS TO SITE, WORK HOURS, PARKING, DELIVERIES, REMOVAL OF CONSTRUCTION WASTE AND DEBRIS, TEMPORARY BARRICADES AND GENERAL OPERATIONS WHICH MAY NEED TO BE COORDINATED.
4. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE BEST PRACTICES OF THE CONSTRUCTION TRADES IN A PROFESSIONAL WORKMAN-LIKE MANNER. ANY WORK NOT CONFORMING WITH THESE STANDARDS SHALL BE REJECTED BY THE ARCHITECT AND CORRECTED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
5. THE CONTRACTOR SHALL WARRANT ALL LABOR AND MATERIALS FOR A PERIOD OF ONE YEAR FROM THE DATE OF COMPLETION.
6. ALL MATERIALS FURNISHED BY THE CONTRACTOR SHALL BE NEW AND SHALL BE STORED IN SUCH A MANNER AS TO PROTECT THEM FROM THE ELEMENTS AND FROM ANY DAMAGE.
7. ALL WOOD MEMBERS IN DIRECT CONTACT WITH CONCRETE OR MASONRY SHALL BE TREATED WITH APPROVED PRESERVATIVE.
8. ALL WOOD BLOCKING WITHIN FIRE RATED DEMISING WALLS, METAL FRAMED WALLS AND ABOVE FINISHED CEILING SHALL BE FIRE RETARDANT TREATED WOOD WITH A MAXIMUM FLAME SPREAD INDEX OF 25.
9. CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS AND SPECIFICATIONS PROVIDED BY EQUIPMENT MANUFACTURERS AND SUPPLIERS PRIOR TO INSTALLATION.
10. CONTRACTOR SHALL KEEP WORK AREAS CLEAN AND REMOVE ALL CONSTRUCTION DEBRIS FROM THE SITE. CONTRACTOR SHALL EMPLOY REASONABLE MEASURES TO PROTECT THE EXISTING PREMISES FROM DAMAGE AND SHALL BE LIABLE FOR ANY NEEDED REPAIRS.

**CODE COMPLIANCE**

FLORIDA BUILDING CODE 2014 5<sup>TH</sup> EDITION, LATEST EDITION  
AMERICAN WITH DISABILITIES ACT (FLORIDA)

**EXISTING BUILDING**

EXISTING ( 2 ) STORY BUILDING

GROUP OCCUPANCY

B- BUSINESS

EXISTING CONSTRUCTION TYPE:

TYPE III-A

TOTAL BUILDING AREA: **80,994** S.F.

**WITHOUT AUTOMATIC FIRE SPRINKLER SYSTEM**

**TENANT "SIXTH DISTRICT OFFICE BUILDING"**

GROUP OCCUPANCY B-BUSINESS

TOTAL EXISTING FIRST FLOOR AREA: 40,497 S.F.

TOTAL EXSITING SECOND FLOOR AREA: 40,497 S.F.

TOTAL AREA: 80,994 S.F.

**State of Florida  
Department of Transportation**



**EXHIBIT “B”, METHOD OF COMPENSATION**

**E- 6L49**

**DISTRICT SIX -ADAM LEIGH CANN BUILDING**

**ENVELOPE WATER PROOFING PROJECT - PHASE 4**

**PROJECT/PROPOSAL NUMBER: E-6L49  
FINANCIAL PROJECT NUMBER: 438874-1-52-01**

**EXHIBIT "B"**  
**METHOD OF COMPENSATION**

1.0 PURPOSE:

This Exhibit defines the limits and method of compensation to be made to the Vendor for the services set forth in Exhibit "A" and the method by which payments shall be made.

2.0 COMPENSATION:

For the satisfactory performance of services detailed in Exhibit "A", the Vendor shall be paid up to a Maximum Amount of \$\_\_\_\_\_.  
The Maximum Amount shall be made up of:

<u>Title</u>	<u>Section Total Amount</u>
Item 1 --- Section A	\$
Item 2 --- Section B	\$
Item 3 --- Section C	\$

The total Amount for each Item\_(course, task, project, etc.) includes all related costs as per described in Exhibit "C" Bid sheet.

\*\*\*\*\*. The Department, based on need and availability of budget, may increase or decrease the Contract Maximum amount. Execution of this Agreement does not guarantee that the work will be authorized.

3.0 **PROGRESS PAYMENTS**

The Vendor shall submit an invoice (3 copies) upon completion of each \_\_\_ (course, task, project, etc) in a format acceptable to the Department. Payment shall be made to the Vendor for the satisfactory completion of each (course, task, project, etc) as approved by the Department.

Invoices shall be submitted to: Florida Department of Transportation

Attention:

Facilities Services  
1000 NW 111<sup>th</sup> Ave.  
Miami, Fl. 33172

The Department's Project Manager or Designee will, at intervals, make progress payments to the Contractor as follows:

**PAYMENTS TO CONTRACTOR:**

Thirty (30) calendar days shall be allowed for the Department's Project Manager or Designee's inspection and approval of the goods and services for which any application for payment is made. Based upon application for payment submitted to the Department's Project Manager or Designee shall make progress payments to the Contractor against the account of the contract sum in accordance with the following:

- A. Within thirty (30) calendar days from the Department's Project Manager or Designee's receipt and acceptance of a certificate of payment, the Department's Project Manager or Designee shall pay, or cause to be paid to the Contractor, ninety percent (90%) of the portion of the contract sum properly allocable to labor, materials, and equipment incorporated into the work, and ninety percent (90%) of that portion of the contract sum properly allocable to materials and equipment suitably stored at the site or at some other locations agreed upon in writing by the parties, less the aggregate of previous payments.
- B. Neither the Department's Project Manager or Designee nor the Architect-Engineer shall have any obligation to pay or to see to the payment of any monies to any subcontractor except as may otherwise be required by law.

- C. The Contractor shall request such compensation by submitting:
1. A properly completed and notarized Certificate of Partial Payment,
  2. A Schedule of Contract Values, and
  3. Minority Business Enterprises (MBE) Payment Certification

The Contractor shall, within ten (10) calendar days from date of the contract, submit to the Project Manager or Designee for approval three (3) copies of a Schedule of Contract Values which will reflect the estimated cost of each subdivision of work of each specification section. The value of each item shall include a true proportionate amount of the Contractor's overhead and profit. The sum of all such scheduled values shall equal the contract sum.

The approved Schedule of Contract Values will accompany and support the Contractor's periodic Applications for Payment and shall indicate the value of suitably stored material as well as labor performed and materials incorporated into the work for each subdivision of the schedule during the period for which the requisition is prepared.

The Schedule of Contract Values will be utilized to present this and other pertinent information that will facilitate the checking and processing by the Department's Project Manager or Designee's representatives of the Contractor's application for payment.

#### **4.0 FINAL PAYMENT**

Within thirty (30) calendar days from the date of Contract Completion, the Department's Project Manager or Designee shall pay or cause to be paid to the Contractor the entire unpaid balance of the then Contract Sum, less the amount of any sums which continue to be retained to satisfy the cost of performing any change in the work which is the subject of any claim or dispute and which has not yet been satisfactorily performed by the Contractor, provided that the parties have not

otherwise stipulated in the Certificate of Substantial Completion, and provided further that the work has been satisfactorily completed, the Contractor's obligations under the contract have been fully performed, and a final Certificate for Payment has been issued by the Department's Project Manager or Designee.

The Contractor shall submit all required documents along with final invoice to the Department's Project Manager or Designee no later than 120 days after the project is completed and final acceptance of work is issued by the Department's Project Manager or Designee

The Contractor's application for FINAL PAYMENT shall be accompanied with the following:

- A. Department's Project Manager or Designee's Certificate of Partial Payment marked "Final Payment" - (4 copies with original signatures and original seals).
- B. Final Schedule of Contract Values.
- C. Contractor's Affidavit of Contract Completion.
  - 1. Page 1 completed by the General Contractor (Original + 3 copies).
- D. Notice of Release of Lien from each sub-contractor, worker or supplier, who has filed Notices to Department's Project Manager or Designee.
- E. Contractor's Guarantee of Construction for one (1) year from the date of Final Completion.
- F. Copy of the Approval by the Department's Project Manager or Designee and the Transmittal to the Department's Project Manager or Designee of Manuals, Shop Drawings, As-Built (1 set of Sepias, 2 sets of Prints), Brochures, Warranties, and List of Subcontractors, with telephone numbers and addresses.
- G. Other special warranties as required by specifications, in the name of the Department's Project Manager or Designee, and
- H. Fully executed Contractor's Certification of No Asbestos-Containing Materials.

The Vendor has certified that \_\_\_\_% MBE/DBE utilization would be achieved for this contract. If MBE utilization was certified by the Vendor, an MBE payment certification form shall be submitted with each invoice to verify the MBE utilization.

If DBE utilization was certified, DBE payments are to be input each month at the following link:

<https://www3.dot.state.fl.us/EqualOpportunityOffice/bizweb/>

New users reporting DBE payments will need to contact the FDOT Service Desk at [FDOT.ServiceDesk@dot.state.fl.us](mailto:FDOT.ServiceDesk@dot.state.fl.us) to get a BizWeb user ID and password to access the application.

#### 5.0 FINANCIAL CONSEQUENCES

Payment will not be made to the Vendor until the products have been delivered and/or the specified services have been satisfactorily performed and accepted by the Department.

#### 6.0 AUTHORIZATIONS:

The Department will provide written authorization for each course, task, project. The Vendor shall not provide services until receipt of the written authorization.

#### 7.0 TANGIBLE PERSONAL PROPERTY:

This contract does not involve the purchase of Tangible Personal Property, as defined in Chapter 273, F.S.

**State of Florida  
Department of Transportation**



**EXHIBIT “C”, BID PRICE PROPOSAL**

**E- 6L49**

**DISTRICT SIX -ADAM LEIGH CANN BUILDING**

**ENVELOPE WATER PROOFING PROJECT - PHASE 4**

**PROJECT/PROPOSAL NUMBER: E-6L49  
FINANCIAL PROJECT NUMBER: 438874-1-52-01**

**Exhibit "C" BID PRICE PORPOSAL**

**DISTRICT SIX ADAM LEIGH CANN BUILDING ENVELOPE WATER PROOFING PROJECT PHASE 4**

PROPOSERS NAME:	
FEID NUMBER:	

<b>BASE BID ITEMS</b>	<b>AMOUNT</b>
<b>ITEM 1. COST FOR DEMOLITION AND DISPOSAL OF EXISTING WINDOW WALL SYSTEM FOR SECTION A AND B</b> (SEE SECTION 6 OF EXHIBIT "A" SCOPE OF WORK FOR ACCURATE LOCATION) : INCLUDES ANY AND ALL INTERNAL AND EXTERNAL FEATURES AS NOTED IN THE SCOPE OF SERVICES AND ALL OTHER SERVICES INDICATED THROUGHOUT THE SCOPE OF WORK.	
COST TO PERFORM THE WORK INDICATED IN ITEM 1 FOR SECTION "A"	\$
COST TO PERFORM THE WORK INDICATED IN ITEM 1 FOR SECTION "B"	\$
<b>TOTAL COST OF ITEM 1 FOR SECTION A AND B</b>	\$
<b>ITEM 2. COST FOR THE RECONSTRUCTION OF NEW WINDOW WALL SYSTEM FOR SECTION A AND B</b> (SEE SECTION 6 OF EXHIBIT "A" SCOPE OF WORK FOR ACCURATE LOCATION): INCLUDES ANY AND ALL INTERNAL AND EXTERNAL ALTERATIONS, MODIFICATIONS, MOBILIZATION, MISCELLANEOUS SUPPLIES, MATERIALS AND OTHER SERVICES AS INDICATED THROUGHOUT THE SCOPE OF WORK	
COST TO PERFORM THE WORK INDICATED IN ITEM 2 FOR SECTION "A"	\$
COST TO PERFORM THE WORK INDICATED IN ITEM 2 FOR SECTION "B"	\$
<b>TOTAL COST OF ITEM 2 FOR SECTION A AND B</b>	\$
<b>ITEM 3. COST FOR PERMITTING:</b> INCLUDES ALL REQUIREMENTS NEEDED BY ALL PERMITTING AGENCIES HAVING JURISDICTION OVER THE SITE SUCH AS BUT NOT LIMITED TO ENGINEERING DRAWINGS, PERMITTING FEES AND INSPECTION/S REQUIREMENTS	
<b>TOTAL COST OF ITEM 3</b>	\$
<b>GRAND TOTAL BASE BID AMOUNT PROPOSED FOR ALL ITEMS 1 THRU 3.</b> (INSERT THIS NUMBER ON THE BID BLANK FORM).	\$

**BID PROPOSAL**

**NOTE TO BIDDER:**

*For all bids exceeding \$100,000, a satisfactory Bid Guaranty of 5% (of the total bid amount) must be submitted along with the proposal or the bid will be declared non-responsive. The bid guaranty may be in the form of certified, cashier's or treasurer's check, bank draft or bid bond. Failure to fully complete and execute the proposal may also result in the bid being declared non-responsive (see Non-Technical Specifications, Section B-1 – Execution of Bid Proposal, Contract Agreement and Bonds).*

BIDDER:

\_\_\_\_\_

AUTHORIZED SIGNATURE:

\_\_\_\_\_

PRINT NAME & TITLE:

\_\_\_\_\_

(If applicable, Affix Seal)

ATTEST:

\_\_\_\_\_

PRINT NAME & TITLE / OR NOTARY:

\_\_\_\_\_

**State of Florida  
Department of Transportation**



**ATTACHMENT "1", NON-TECHNICAL  
SPECIFICATIONS**

**E- 6L49**

**DISTRICT SIX -ADAM LEIGH CANN BUILDING**

**ENVELOPE WATER PROOFING PROJECT - PHASE 4**

**PROJECT/PROPOSAL NUMBER: E-6L49  
FINANCIAL PROJECT NUMBER: 438874-1-52-01**

**STATE OF FLORIDA  
DEPARTMENT OF TRANSPORTATION**

*(Facilities & Grounds)*

**FIXED CAPITAL OUTLAY**

\* \* \* \* \*

**NON-TECHNICAL  
SPECIFICATIONS**

**- FOR -**

**BUILDING CONSTRUCTION  
CONTRACTS**

\* \* \* \* \*

- LEVEL 1: \$35,000 or less**
- LEVEL 2: \$35,000.01; not exceeding \$65,000**
- LEVEL 3: \$65,000.01; not exceeding \$200,000**
- LEVEL 4: \$200,000.01; not exceeding \$500,000**
- LEVEL 5: Exceeding \$500,000**

Effective Date: August 31, 2016  
(All previous versions are obsolete)

**State of Florida**  
**DEPARTMENT OF TRANSPORTATION**

Financial Project Number: 438874-1-52-01

Project Name: DISTRICT SIX –ADAM LEIGH CANN BUILDING  
ENVELOPE WATER PROOFING PROJECT- PHASE 4

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Project Address: 1000 NW 111<sup>TH</sup> AVENUE MIAMI, FLORIDA  
33172

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County: Miami-Dade

**NON-TECHNICAL SPECIFICATION  
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**SECTION A  
INSTRUCTIONS TO BIDDERS**

**A-1 DEFINITIONS**

The following terms, when used in the Non-Technical Specifications, have the following meaning:

**ADDENDA:**

Any additions or revisions to the Non-Technical Specifications, Technical Specifications, or Bidding Documents issued prior to bid opening.

**ADVERTISEMENT:**

The public announcement, inviting bids for work to be performed or materials to be furnished, usually issued as an "Invitation to Bid".

**AGREEMENT:**

The written contract between OWNER and CONTRACTOR covering the work; other Contract Documents are attached to or referred in the Agreement. All such documents shall be deemed to be a part of the Agreement for all purposes.

**ARCHITECT-ENGINEER:**

The Design Professional registered in the State of Florida, who develops criteria and concept for the project, performs the analysis, and is responsible for the preparation of the contract plans and specifications. The Architect-Engineer may be an employee of the Owner or a consultant retained by the Owner.

**ASBESTOS:**

Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.

**AWARDS (SELECTION) COMMITTEE:**

The Awards Committee shall be appointed by the Assistant Secretary or designee for Central Office Projects, and by the District Secretary or designee for District Projects, and will consist of at least three voting members, of which at least two are equivalent to a Director's level.

**BID:**

The offer of a bidder, on the prescribed form, to perform the work and to furnish the labor and materials at the prices quoted.

**BID BLANK:**

The form attached to the front of an awarded contract which identifies the bidder, financial project number, calendar days, contract number, total contract sum, date of execution, etc.

**BIDDER:**

An individual, firm, partnership, or corporation submitting a bid proposal for proposed work.

**BID GUARANTY:**

The security furnished by the bidder as guaranty that the bidder will enter into the contract for the work if the Owner accepts the proposal.

**BID PROPOSAL:**

The offer of a bidder to perform work and furnish the labor and

materials at the prices quoted using the Owner's prescribed form.

**BONDS (Performance Bonds and Materials & Labor Bonds):**

The security furnished by the Contractor and the surety as a guaranty that the Contractor will fulfill the terms of the contract in accordance with the plans, specifications, and other contract documents, and pay all legal debts pertaining to the construction of the project.

**BUILDING OFFICIAL:**

Permitting Office Official from Local Building Authorities.

**CALENDAR DAY:**

Every day shown on the calendar, ending or beginning at midnight.

**CHANGE ORDER:**

The Contractor or Owner shall respectively be entitled to an increase or decrease in the contract sum when conditions of the work described in the contract are changed, resulting in greater or less cost or time.

**CONTRACT AGREEMENT:**

Contract Agreement is the document executed by both the Contractor and the Owner.

**CONTRACT DOCUMENTS:**

The written agreement between the Owner and Contractor setting forth the obligations of the parties thereto, including, but not limited to, the performance of the work, the furnishing of labor and materials, and the basis of payment. The Contract Documents shall include the advertisement, proposal, non-technical and technical specifications, plans, contract agreement, contract bond, Notice to Proceed to mobilize on site and to proceed with construction, incorporated portions of A1A Document A-201, addenda, any change orders required, and if necessary, technical and non-technical special provisions, to complete the project in an acceptable manner.

**CONTRACT LEVELS (Increments of contract dollar value based on estimated cost of the contract):**

- LEVEL 1-Contract Sum Agreement of \$35,000 or less
- LEVEL 2-Contract Sum Agreement of \$35,000.01-\$65,000
- LEVEL 3-Contract Sum Agreement of \$65,000.01-\$200,000
- LEVEL 4-Contract Sum Agreement of \$200,000.01-500,000
- LEVEL 5: Contract Sum Agreement exceeding \$500,000

**CONTRACT LETTING:**

The date the Owner opens the bid proposals.

**CONTRACT TIME:**

The number of calendar days allowed for completion of the contract work, including authorized time extensions. When a calendar date of completion is stipulated in lieu of a number calendar days, the contract shall be completed by such calendar date.

**CONTRACTOR:**

The bidder awarded and executed a contract to perform work or to furnish materials for the Owner.

**DESIGN PACKAGE:**

The drawings and specifications and/or other graphic or written materials, criteria and information concerning Owner's

requirements for the Project, such as design objectives and constraints, scope of services, specifications, space, capacity and performance requirements, flexibility and expandability, which show or describe the character and scope of, or relate to, the Work to be performed or furnished as which have been prepared by the Owner.

**HOLIDAYS:**

Days designated in Section 110.117, Florida Statutes, which include, but are not limited to: New Year's Day, Martin Luther King's Birthday, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day and the following Friday, and Christmas Day.

**LAWS and REGULATIONS:**

Any and all applicable laws, rules, regulations, ordinances, codes and orders of any and all governmental bodies, agencies, authorities and courts having jurisdiction.

**MAINTENANCE:**

The upkeep, preservation of condition, or the sustaining of operation of a facility, building, portion of building, utility, parking lot, structure, or real property.

**NON-TECHNICAL SPECIFICATIONS:**

Non-Technical Specifications is the document titled "Building Construction Contract, Non-Technical Specifications" complete with all exhibit attachments thereto, and incorporated Articles from the AIA Document A201 entitled "General Conditions of the Contract for Construction" -1997 Edition, as modified herein.

**NOTICE TO PROCEED:**

A written notice given by Owner's Project Manager to the Contractor authorizing the Work to begin and fixing the date on which the Contract Time will commence to run.

**OWNER:**

Florida Department of Transportation

**OWNER'S PROJECT MANAGER:**

The Owner's authorized representative identified as project manager throughout the Contract Document.

**PLANS:**

The approved plans, including reproduction thereof, showing the location, character, dimensions, and details of the work to be done.

**PROHIBITED HAZARDOUS MATERIALS:**

Prohibited hazardous materials include asbestos-containing materials, lead, cadmium, beryllium or other Federal or State prohibited hazardous materials.

**PROJECT:**

Any facility, building, portion of building, utility, parking lot, structure, or other improvement to real property requiring construction, renovation, repair, modification, or demolition.

**REPAIRS:**

Restoration to an acceptable original state of a decayed, broken, deteriorated, or demolished facility, building, portion of building, utility, parking lot, structure, or other real property.

**RESPONSIVE BIDDER:**

Contractor who has submitted a bid proposal conforming to all materials in respect to the invitation to bid or request for proposal.

**RESPONSIBLE BIDDER:**

Contractor with the capability in all respects to fully perform the contract requirements, and the integrity and reliability to assure good faith performance.

**SPECIAL INSPECTOR (Threshold Buildings)**

Inspectors registered and licensed by the Department of Business Professional Regulation to perform inspections on Threshold Buildings. These services are required by the Florida Building Code.

**SPECIAL PROVISIONS:**

Any additions or revisions setting forth additional or varying conditions from the Non-Technical / Technical Specifications for a specific project.

**STATE:**

State of Florida.

**SUBSTANTIAL COMPLETION:**

The term "Substantial Completion" shall mean the project under the contract is sufficiently completed in accordance with the Contract Documents, with all life safety and code items connected and operating correctly, so the Owner can occupy or utilize the work or designated portions thereof for the use for which it is intended, as expressed in the Contract Documents. The term "Substantial Completion" shall not mean the inclusion of such minor alterations and patching as the Final Inspection shall disclose.

**SURETY:**

The corporate body which is bound by the contract bond and for the Contractor and which agrees to be responsible for acceptable performance of the work for which the contract has been made and for payment of all debts pertaining thereto.

**TECHNICAL REVIEW COMMITTEE (TRC):**

TRC consists of the Contracts Administrator, FCO Coordinator, and Project Manager, who shall review the bids and determine the lowest responsive bidder. The TRC shall forward its recommendation to the Awards (Selection) Committee for making a determination in award or non-award of the FCO Project.

**TECHNICAL SPECIFICATIONS:**

Technical Specifications for a specific project are prepared, signed and sealed by the Architect-Engineer and then included in the contract documents.

**THRESHOLD BUILDING:**

Threshold Building means any building which is greater than three stories or 50 feet in height, or which has an assembly occupancy classification that exceeds 5,000 square feet in area and an occupant content of greater than 500 persons.

**VALID BID:**

A bid submitted by a qualified responsible bidder in response to the bid documents. Owner determines validity of the bid.

**WORK:**

All labor, materials, and incidentals required for the design and construction of the improvement for which the contract is made, including superintendence, use of equipment and tools, and all services and responsibilities prescribed or implied, which are necessary for the complete performance by the Contractor of its obligations under the contract. Unless otherwise specified herein or in the contract, all costs of

liability and performing the work shall be at the Contractor's expense.

**WORKING DAYS:**

All weekdays that state offices are open for business, unless specified otherwise in a non-technical special provision.

**A-2 BIDDER QUALIFICATION REQUIREMENTS**

***NOTE: Prequalification requirements for submitting a bid and contract award are identified below (see Section A-1 for definition of "Contract Level"). Failure of the Bidder to strictly meet and follow these qualification requirements may result in bid rejection or disqualification of contract award.***

There are two steps in qualifying to perform construction of State projects, one of which is prequalification for submitting a bid, and the second is prequalification for contract award:

**Prequalification for submitting a bid (all Contract Levels, regardless of dollar amount):**

- A. Current state contractor license certification or registration as required under Florida Statutes.
- B. Current corporate charter registration - if the potential Bidder is a domestic (Florida) corporation, or has authority to transact business in Florida, if the potential Bidder is a foreign (non-Florida) corporation, as may be required by Florida law.
- C. On projects requiring a Contractor with specific expertise and experience, the Owner may include additional prequalification requirements relative to demonstrated performance of similar work, similar size and complexity, and possession or availability of facilities or equipment needed to performance of the work identified for the project.
- D. For bids exceeding \$100,000, a bid proposal guarantee of 5% of the bid amount must accompany the bid proposal, or the bid shall be deemed non-responsive and rejected. Bid proposal guarantee may be in the form of a certified check, cashier's check, treasurer's check, bank draft, or bid bond. No bid proposal guarantee is required for bids less than \$100,000.

Bids are to be accepted only from potential Bidders who have prequalified in accordance with above items A, B, C, and D, as applicable, and as set forth in the Invitation to Bid. To participate in the bid process, each potential Bidder shall be prequalified by the Owner for the specific field or area of construction based on the Bidder's experience, financial resources and area of license or certification as identified in the Invitation to Bid.

Each potential Bidder will be notified by the Owner to which it applied for prequalification of its eligibility or ineligibility to submit bids. Any Bidder or potential Bidder that is determined to be ineligible because of failure to provide evidence of the minimum requirements will not be qualified to submit a bid. Each potential Bidder notified of its eligibility may submit a bid at the time and place designated in the bidding documents as long as the Bidder is qualified and eligible to perform the work required by the bidding documents.

**Prequalification for contract award:**

All Contract Levels, regardless of the dollar amount, require:

- A. Satisfactory compliance with bid prequalification criteria, as applicable (see above).
- B. Bidder shall provide prior to the Owner's execution of the construction contract, evidence of insurance in effect that is equal to or exceeds the limits and types of coverage required by the bidding document.
- C. If specific expertise and experience are required (as mentioned earlier in this section and also identified in the Invitation to Bid), the Bidder must provide documentation of the specific expertise and experience its staff possesses to perform a project requiring unique or specialized capabilities.

**Additional requirements for award of projects with bids exceeding \$100,000 are:**

- A. On projects where the bid exceeds \$100,000, unless such requirement has been waived by the Owner and identified in the Invitation to Bid, the Bidder must provide within two (2) working days of being notified it is the lowest responsive qualified Bidder, evidence of ability to provide the necessary performance and payment bonds for the project by providing a letter of intent to provide a 100 percent (100%) Performance Bond and a 100 percent (100%) Labor and Material Payment Bond from a surety company authorized to do business in the State of Florida by the Department of Insurance, and meeting the financial and performance rating required by the bid documents. For contract amounts not exceeding \$500,000, the provisions of Section 287.0935, Florida Statutes, shall govern.
- B. On projects exceeding \$200,000 the lowest responsive Bidder must provide within seven (7) working days of being notified it is the lowest responsive qualified bidder, a completed "Experience Questionnaire and Contractor's Financial Statement". The Contractor's financial condition must demonstrate that adequate liquid assets and equipment are available to properly perform this project as follows: The value of liquid assets must be no less than one-twentieth (1/20) of the amount of the base bid. Liquid assets shall include cash, stocks, bonds, pre-paid expenses, and receivables, but shall not include the value of equipment.
- C. Familiarity with local conditions - On projects exceeding \$200,000, unless waived by the Owner for good cause, the Contractor must agree to establish or have an active office, or an ongoing project located within 300 road miles of the project site.
- D. Work Force - On projects exceeding \$500,000, the Contractor must agree to perform not less than fifteen percent (15%) of the project management and construction work utilizing its own employees.
- E. Firm Experience - On projects exceeding \$500,000, the Contractor must have successfully completed not less than two projects of similar size and complexity within the last three years, unless otherwise identified

in the Invitation to Bid (ITB).

F. Supervisor - On projects exceeding \$500,000, the Contractor must agree to provide field (on-site) supervision (through a named superintendent for each of the general, concrete forming and placement, masonry, mechanical, plumbing, electrical, and roofing trades, either through the use of its employees, or in the instance of mechanical, plumbing, electrical, and roofing trades, through the use of employees of the subcontractor. In addition, the Contractor shall assign and name a qualified employee to provide scheduling direction to the entire project. Supervisory employees (including field superintendents, foremen, and schedulers at all levels) must have been employed in a supervisory (leadership) capacity of a substantially equivalent level on a similar project for at least two years within the last five years unless otherwise identified in the Invitation to Bid (ITB). The Contractor shall include a resume of experience for each of those employees identified to supervise each trade, and for scheduling, with its submittal of the "Experience Questionnaire and Contractor's Financial Statement".

The firm determined by the Owner to have submitted the lowest responsive bid must complete and submit the above required qualification data, as applicable. The Owner will evaluate all data submitted within fourteen (14) days of receipt and determine whether or not the firm is a qualified Bidder. Should the Bidder be judged unqualified, the bid will be rejected and the next lowest responsive bid will be given seven (7) working days to submit its qualification data.

**A-3 FAMILIARITY WITH LAWS**

The Contractor is required to be familiar with and shall comply with all federal, state, and local laws, ordinances, rules, and regulations that in any manner affect the work. Ignorance on the part of the Contractor will in no way relieve the Contractor of this responsibility.

**A-4 FLORIDA PRODUCTS AND LABOR**

The Contractor shall comply with Section 255.04, Florida Statutes, which requires that Florida products and labor shall be used on public building contracts where price & quality are equal.

**A-5 IN-STATE PREFERENCE**

The Contractor is required to give preference to the employment of state residents in the performance of the work on the project if state residents have substantially equal qualifications to those of nonresidents. The term "substantially equal qualifications" means the qualifications of two or more persons among whom the employer cannot make a reasonable determination that the qualifications held by one person are better suited for the position than the qualifications held by the other person or persons. The Contractor must contact the Agency for Workforce Innovation to post the Contractor's employment needs in the state's job bank system. No contract shall be let to any person refusing to execute an agreement containing the aforementioned provisions, in accordance with Chapter 2010-147, Florida Law. The Design/Build firm shall utilize their own employees for 15% of Management and Work.

**A-6 TAXES**

Although the Owner is not subject to the Florida Sales and

Use Tax, any Contractor who purchases materials or services to be used in the construction of state owned buildings will not be exempt from tax on these materials and services as required by Section 212.08(6), Florida Statutes:

*There are also exempt from the tax imposed by this chapter sales made to the United States Government, a state, or any county, municipality or political subdivision of a state when payment is made directly to the dealer by the governmental entity.....This exemption does not include sales of tangible personal property made to contractors employed either directly or as agents of any government or political subdivision thereof when such tangible personal property goes into or becomes a part of public works owned by such government or political subdivision.*

The Contractor is liable for all taxes assessed against it with regard to the work done or materials furnished pursuant to the Contract Documents. The Owner is not subject to:

- A. Federal Excise Taxes on materials or appliances that are incorporated into and become a part of the completed improvement.
- B. Federal Tax on transportation of property.

The Owner will furnish the Contractor the necessary Federal Excise Tax Exemption Certificate upon receipt of a copy of the supplier's invoice showing the item or items, the net price, and Federal Excise Tax separately for purchased materials that will be incorporated into the contracted work.

The Bidder shall take these factors into consideration in preparing its proposal, including therein the cost of the State Sales Tax and Use Tax on materials, but excluding the cost of those taxes not applicable.

**A-7 ALTERNATES**

If the Owner wishes to know the relative or additional construction cost of an alternative method of construction, an alternative use or type of material, or an increase or decrease in scope of the project, these items will be defined as alternates and will be specifically described by the Contract Documents. Alternates will be listed in the Proposal Form in such a manner that the Bidder shall be able to clearly indicate what sums the Bidder will add to, or deduct from its Base Bid.

**A-8 ADDENDA**

When the Owner and/or Architect-Engineer finds it necessary to supplement, modify, or interpret any portion of the Bid Documents during the bidding period, such procedure will be accomplished by the issuance of written Addenda to the Bid Documents which will then be mailed, transmit electronically or faxed to all prospective Bidders.

**A-9 INTERPRETATION OF BID DOCUMENTS**

No interpretation of the meaning of the Drawings, Specifications, or other Bid Documents and no correction of any apparent ambiguity, inconsistency, or error therein will be made to any Bidder orally. Every request for such interpretation or correction shall be submitted, in writing, and addressed to the Project Manager. All such interpretations and supplemental instructions will be in the form of written

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 Addenda to the Bid Documents.

Only the interpretation or correction so given by the Owner in writing shall be binding, and prospective Bidders are advised that no other source is authorized to give information concerning, or to explain or interpret, the Bid Documents.

#### **A-10 EXAMINATION OF BID DOCUMENTS AND WORKSITE**

Bidders are required, before submitting their proposals, to visit the proposed worksite during the period established by the owner and completely familiarize themselves with the nature and extent of the work and any local conditions that may in any manner affect the work to be performed and the equipment, materials, and labor required.

Bidders are also required to examine carefully any Drawings, Specifications, and other Bid Documents to inform regarding any and all conditions themselves thoroughly and requirements that may in any manner affect the work.

#### **A-11 BASIS FOR BIDDING - TRADE NAMES**

For clarity of description and as a standard of comparison, certain equipment, materials, etc., are specified by at least two trade names or manufacturers. To ensure a uniform basis for bidding, the Bidder shall base its Proposal on the particular system, equipment, or material specified. After the contract is let, other equipment, materials, etc., manufactured by other manufacturers may be accepted only if, in the opinion of the Owner, same is equivalent in quality and workmanship and will perform its intended purpose satisfactorily and approval is obtained in writing.

#### **A-12 PREPARATION / SUBMISSION OF BIDS**

Each Bidder shall complete the Proposal Form indicating the bid prices thereon in the appropriate spaces for the Base Bid and alternates on which bids are being made. Any erasure or other correction in the proposal may be explained or noted over the signature of the Bidder.

The Contractor's Proposal submittal shall identify with specificity any and all forms of intellectual property rights that either the Contractor or any officer, shareholder, employee, consultant, or affiliate, of the Contractor, or any other entity who contributed in any measure to the substance of the Contractor's Proposal development, have or may have that are in whole or in part implicated in the Proposal. Such required intellectual property rights notice includes, but is not limited to, disclosure of any: issued patents, copyrights, or licenses; pending patent, copyright or license applications; and any intellectual property rights that though not yet issued, applied for or intended to be pursued, could nevertheless otherwise be subsequently the subject of patent, copyright or license protection by the Contractor or others in the future. This notice requirement does not extend to intellectual property rights as to stand-alone or integral components of the Proposal that are already on the Department's Approved Product List (APL) or Design Standard Indexes, or are otherwise generally known in the industry as being subject to patent or copyright protection.

Proposals containing any conditions, omissions, unexplained erasures, alterations, items not called for, or irregularities of any kind may be rejected by the Owner.

Each bid must give the full business address of the Bidder and

state whether it is a sole proprietorship, corporation, partnership, or other specified business entity. The bid must be submitted in a sealed envelope, clearly marked on its face: "SEALED BID - FINANCIAL PROJECT # 438874-1-52-01."

The bid shall be submitted only prior to the time and the place specified in the Invitation to Bid or in accordance with any Addendum issued subsequently to the advertisement. Sealed bid envelopes submitted by mail or by delivery service must be delivered within a separate mail or delivery envelope, also marked "SEALED BID". Bids not delivered in sealed envelopes shall be returned to the Bidder.

#### **A-13 NOTICE OF INTELLECTUAL PROPERTY INTERESTS**

The Contractor's Proposal submittal shall identify with specificity any and all forms of intellectual property rights that either the Contractor or any officer, shareholder, employee, consultant, or affiliate, of the Contractor, or any other entity who contributed in any measure to the substance of the Contractor's Proposal development, have or may have that are in whole or in part implicated in the Proposal. Such required intellectual property rights notice includes, but is not limited to, disclosure of any: issued patents, copyrights, or licenses; pending patent, copyright or license applications; and any intellectual property rights that though not yet issued, applied for or intended to be pursued, could nevertheless otherwise be subsequently the subject of patent, copyright or license protection by the Contractor or others in the future. This notice requirement does not extend to intellectual property rights as to stand-alone or integral components of the Proposal that are already on the Department's Approved Product List (APL) or Design Standard Indexes, or are otherwise generally known in the industry as being subject to patent or copyright protection.

#### **A-14 LIST OF SUBCONTRACTORS**

**NOTE:** *For contracts exceeding \$200,000, the List of Subcontractors Form shall be required. However, the Owner's Project Manager shall also have the option to require the List of Subcontractor Form on projects below \$200,000, if deemed to be in the best interest of the State. (See Section A-1 for "Contract Level" definition.)*

In order that the Owner may be assured only qualified and competent subcontractors will be employed on the project, each Bidder shall submit with its bid proposal a complete list of subcontractors who will perform the work for each Division of the Specifications by utilizing the List of Subcontractors Form. On this form, the Contractor, is responsible for identifying, if applicable, whether the subcontractor is a certified or non-certified Minority Business Enterprise (MBE) contractor. However, whether or not the subcontractor is an MBE shall in no way influence the bid selection, order of acceptance, or cause rejection of a bid. The Bidder shall have determined to its complete satisfaction that a listed subcontractor has been successfully engaged in the particular type of business for a reasonable length of time, has successfully completed installations comparable to that which is required by this Contract Agreement and is qualified both technically and financially to perform that pertinent phase of this work for which he/she is listed. Only one subcontractor shall be listed for each phase of the work.

Any Bidder who lists a subcontractor not certified and/or registered by the State to perform the work of the required trade, if such certification or registration is required for the trade by Florida law, will be rejected as non-responsive. No change shall be made in the list of subcontractors, before or after the award of a contract, unless agreed to in writing by the Owner.

#### A-15 WITHDRAWAL OF BIDS

Any time prior to bid opening, bids may be withdrawn by the Bidder submitting a written or fax request to do so. However, negligence on the part of the Bidder in preparing the bid confers no right for withdrawal of the bid after it has been opened.

#### A-16 DISQUALIFICATION OF BIDDERS

More than one bid from an individual, firm, partnership, corporation, or association under the same or different names will not be considered. Reasonable grounds for believing that a Bidder is interested in more than one proposal for the same work will cause the rejection of all proposals in which such Bidders are believed to be interested.

#### A-17 RECEIPT AND OPENING OF BIDS

**NOTE:** *Level 1 contracts require verbal quotes from at least 2 business entities. Level 2 and 3 contracts require that at least 3 business entities are requested to submit a bid and the bids to be publicly opened and read aloud. There are no statutory requirements to advertise Contract Levels 1, 2, or 3. However, advertisement is authorized if the Owner's Project Manager determines it to be in the best interest of the State. Statutory requirements for advertising Contract Levels 4 and 5 contracts are as follows: Level 4 contracts require advertisement in the Florida Administrative Weekly at least 21 days before letting, and Level 5 contracts require advertisement in the Florida Administrative Weekly at least 30 days before letting, as well as, advertisement in a local newspaper at least 30 days once before letting and 5 days before, if applicable, the pre-bid meeting. Both Levels 4 and 5 require sealed proposals be requested, publicly opened, and the bids read aloud. (See Section A-1 for "Contract Level" definition.)*

Bids that require public bid opening shall be read aloud (see above note) at the time and place stated in the Bid Documents. The person whose duty it is to open bids will decide when the specified time has arrived and that no bids received thereafter will be considered. No responsibility will be attached to the Owner or any person for the premature opening of a bid not properly addressed and identified. No fax bids will be accepted. Each bid must carry the original signature of the individual authorized to sign the bid on behalf of the firm submitting the bid.

#### A-18 DISQUALIFICATION OF BIDS

Any or all proposals will be rejected if there is reason to believe that collusion exists among the Bidders and no participants in such collusion will be considered in future proposals for the same work. Falsification of any entry made on the Contractor's bid proposal will be deemed a material bid

deviation and will be grounds for rejection.

#### A-19 REJECTION OF BIDS

The Owner reserves the right to reject any and all bids under any of the circumstances prescribed in Rule 60D-5.0071, Florida Administrative Code, and to negotiate the contract in accordance with Rules 60D-5.008 and 60D-5.0091, Florida Administrative Code, if the lowest qualified bid exceeds the project construction budget.

#### A-20 NOTICE AND PROTEST PROCEDURES

##### NOTIFICATION:

- A. Bid Solicitation: The Owner shall provide notice of its decision or intended decision concerning a bid solicitation by advertising for bids and distribution of bid documents.
- B. Contract Award: The notice of a decision or intended decision on contract award or bid rejection shall be given by posting the Bid Tabulation at the location identified in the advertisement. In the event the Notice of Intent cannot be posted in this manner, all bidders will be notified.

##### PROTEST:

- A. Any person who is adversely affected by the Owner's decision or intended decision shall file with the Department of Transportation, Clerk of Agency Proceedings, Office of General Counsel, 605 Suwannee Street, MS 58, Tallahassee, Florida 32399-0450, a notice of protest in writing within 72 hours, excluding Saturday, Sunday, and State holidays, after receipt of the bid documents if the protest is directed toward the bid documents, or after the notice of the Owner's decision or intended decision on contract award or bid rejection if the protest is directed toward contract award or bid rejection.
- B. Thereafter, a formal written protest by petition in compliance with Sections 120.569 and 120.57, Florida Statutes, and Rule Chapter 28-110, Florida Administrative Code, must be filed with the Department of Transportation, Clerk of Agency Proceedings, Office of General Counsel, 605 Suwannee Street, MS 58, Tallahassee, Florida 32399-0450, within ten (10) days after the date the notice of protest was filed.
- C. Failure to file a timely notice of protest or failure to file a timely formal written protest petition shall constitute a waiver of protest proceedings. Any protest filed prior to posting of the bid tabulation or receipt of the notice of the Owner's decision or intended decision will be considered abandoned unless renewed within the time limit provided for protests.

##### OWNER ACTION

- A. Upon receipt of a notice of protest that has been timely filed, the Owner shall delay the contract award process until the subject of the protest is resolved by mutual agreement between the parties or by final Owner action, unless the Owner sets

forth in writing particular facts and circumstances which require the continuation of the bid solicitation process or the contract award process without delay to avoid an immediate and serious danger to public health, safety, or welfare. If the petition is not filed within the time stated above, the contract award process may continue as if the notice of protest had not been filed.

- B. Upon receipt of the formal written protest petition which has been timely filed, the Owner shall attempt to resolve the protest by mutual agreement between the parties within seven (7) days, excluding Saturday, Sunday, and State holidays.
- C. If the protest is not resolved by mutual agreement within said seven (7) days, and if no disputed issue of material fact is involved, the Owner shall schedule an informal proceeding pursuant to Section 120.57(2), Florida Statutes, and Rule Chapter 28-110, Florida Administrative Code.
- D. If there is a disputed issue of material fact, the protest shall be referred to the Division of Administrative Hearings of the Department of Administration, State of Florida, for a formal proceeding pursuant to Sections 120.57(1) and 120.569, Florida Statutes.

**A-21 DETERMINATION OF SUCCESSFUL BIDDER**

All projects except where competitive bidding is waived under the provisions of Rule 60D-5.008, Florida Administrative Code, will be publicly bid in accordance with the provisions herein. An award of contract will be made to the responsive Bidder, determined to be qualified in accordance with the provisions herein and meeting the requirements of the bidding documents, that submits the lowest valid bid for the work. The lowest responsive bid will be determined as follows:

- A. The lowest bid will be the bid from the responsive Bidder that has submitted the lowest price for the base bid, or if applicable, the base bid plus the additive alternates or less the deductive alternates selected by the Owner to be included in or excluded from the proposed contract, taken in numerical order listed in the bid documents. The Owner may select the order of alternates in any sequence so long as such acceptance out of order does not alter the designation of the low Bidder.
- B. On projects whose Bid Documents provide for evaluation of the bids based on first cost and life cycle cost and performance criteria, the lowest bid will be the bid by the firm whose bid products are determined to yield the lowest total cost in accordance with the criteria set forth in the Bid Documents.

**A-22 NOTICE TO PROCEED, SECURE AND PAY FOR UTILITY CONNECTIONS; AND TIME OF COMPLETION (SUBSTANTIAL AND FINAL)**

The contract will be issued to the Contractor after it is signed. At that time, the Contractor will be given a Notice to Proceed. The contract time will begin the day the Notice to Proceed is sent to contractor.

The Contractor is allowed thirty (30) calendar days from the time of this notice to secure and pay for those required permits and utility connections, if such connection fees are required before construction can start. Special permits such as tree removal, Water Management District, Dept. of Environmental Regulation, septic tank, demolition, etc., may be necessary before construction can start. These special permits may be obtained by the contractor prior to the issuance of the building permit. Work under specialty permits may begin when the specialty permit is obtained by the contractor. Work on the building cannot begin until the building permit has been obtained except as permitted under a specialty permit. If additional time is required, the Contractor will request approval of a time extension for good cause for the purpose of obtaining any permit required prior to commencing construction on the site.

The work to be performed under this contract shall be commenced within ten (10) calendar days after date of Notice to Proceed shall be substantially completed within 180 calendar days after the date of this Notice to Proceed, and shall be finally completed within 15 calendar days after the date of substantial completion. Time is of the essence as to each and every obligation under this contract.

**A-23 LIQUIDATED DAMAGES**

Inasmuch as failure to complete the project within the specified timeframe will result in substantial injury to the Owner, and as damages arising from such failure cannot be calculated with any degree of certainty, it is hereby agreed that if the project is not substantially completed within the specified time indicated in Section A-21, the Contractor shall pay to the Owner as liquidated damages for such delay, and not as a penalty, \$ 676 for each and every calendar day elapsing between the date fixed for substantial completion and the date such substantial completion shall have been fully accomplished. It is also hereby agreed that if this project is not finally completed, in accordance with the requirements of the Contract Documents, the Contractor shall pay to the Owner as liquidated damages for such delay, and not as a penalty, as indicated below. Said liquidated damages shall be payable in addition to any excess expenses or costs payable by the Contractor to the Owner, and shall not exclude the recovery of damages by the Owner under other provisions of the Contract Document. This provision of liquidated damages for delay shall in no manner affect the Owner's right to terminate the contract. The Owner's exercise of the right to terminate shall not release the Contractor from its obligation to pay said liquidated damages as follows:

<u>Original Contract Amount-Daily Charge Per Calendar Day</u>	
\$50,000 and under -----	\$554
<b>Over \$50,000, but less than \$250,000-----</b>	<b>\$676</b>
\$250,000, but less than \$500,000-----	\$994
\$500,000, but less than \$2,500,000-----	\$1216
\$2,500,000, but less than \$5,000,000-----	\$2106
\$5,000,000, but less than \$10,000,000-----	\$3218
\$10,000,000, but less than \$15,000,000-----	\$3182
\$15,000,000, but less than \$20,000,000-----	\$7614
\$20,000,000 and over - \$7614, plus 0.00027% for any amount over \$20 million	

The Owner is entitled to completion of the project within the time specified in Section A-21, or within such further time, if

any, as may be allowed in accordance with the provisions of the contract. In the event of termination of the contract by the Owner for cause prior to completion, the Contractor shall be liable to the Owner for the expenses for additional managerial and administrative services and also for the per diem liquidated damages agreed above: 1) for each day the Contractor is in arrears in its work at the time of said termination as determined by the Architect-Engineer, or Owner, and 2) for each day of thirty (30) additional calendar days hereby stipulated and agreed to be the time it will require the Owner to effect another contract for completion of the project and for resumption of work thereon. Provided, however, that the sum of 1 and 2 above shall not exceed the number of days beyond the original agreed completion date, or any extension thereof as herein provided, reasonably required for completion of the project.

It is further agreed that the Owner may deduct from the balance retained by the Owner, the liquidated damages stipulated therein for delay or termination, as the case may be, or such portions thereof as the said retained balance will cover.

**A-24 PERMITS**

The Contractor is obligated to obtain and pay for all required building permits including site and environmental from state and local authorities having jurisdiction for construction of this project including State Fire Marshal.

In the case of plumbing, electrical, other internal system permits and connection permits, the Contractor is obligated to obtain such permits and pay such fees. The Contractor shall determine the permits and fees required by any entity having jurisdiction over any part of the project and shall include the cost of all such permits in its bid proposal. Unless otherwise agreed to in writing by the Owner and Contractor, the Notice to Proceed will be issued to Mobilize and to proceed with Construction as provided in Section A-21.

**A-25 BID GUARANTY**

**NOTE:** *If the bid amount is less than \$100,000, no bid guaranty is required, however, if the bid amount exceeds \$100,000, a 5% bid guaranty of the bid amount must accompany the bid proposal, or the bid shall be deemed non-responsive and rejected.*

On projects where the base bid, and the sum of all additive alternates exceed \$100,000, a five percent (5%) bid guaranty shall accompany the bid proposal. The bid guaranty shall be in the form of a certified check, cashier's check, treasurer's check, bank draft, or bid bond made payable to the Owner. Such check or bid bond shall be submitted with the understanding that it shall guaranty the Bidder will not withdraw the bid for a period of forty (40) days after the scheduled closing time for the receipt of bids; and that if the bid is accepted, the bidder will enter into a written contract with the Owner in accordance with the form of agreement included as a part of the Contract Documents, and that the required performance bond and labor and material payment bond will be given; and that failure to execute the Contract Agreement and give said bonds within ten (10) calendar days after the Bidder received notice of acceptance of its bid, the Bidder shall be liable to the Owner for the full amount of the bid guaranty as representing the damage to the Owner on account of the default of the Bidder in any particular hereof.

Bid guaranties shall be returned to all except the two apparent lowest qualified Bidders after the formal opening of bids. The remaining bid guaranties will be returned to the two lowest Bidders after the Owner and the accepted Bidder have executed the Contract Agreement and the performance bond and labor and material payment bond have been approved by the Owner. If the required Contract Agreement and bonds have not been executed within forty (40) calendar days after the date of the bid opening, the bid guaranty of any Bidder will be returned upon request, provided the Bidder has not been notified of the acceptance of its bid prior to the date of such request.

**A-26 SURETY COMPANIES ACCEPTABLE TO STATE**

**NOTE:** *If the bid amount is less than \$100,000, no bid guaranty is required. If the bid amount exceeds \$100,000, a bid guaranty of 5% of the bid amount must accompany the bid proposal, or the bid shall be deemed non-responsive and rejected. If the total contract sum is \$100,000 or less, no Performance Bond or Materials and Labor Bond is required. If the contract sum exceeds \$100,000, a Performance Bond of 100% and Labor and Materials Bond of 100% shall be required. If increases are made to the original contract sum, the Contractor shall also furnish the Owner with additional bonding equivalent to the increases.*

To be acceptable to the State as Surety for Bid Bonds, Performance Bonds, and Labor and Material Payment Bonds, a Surety Company shall comply with the following provisions:

- A. The Surety Company shall have a currently valid Certificate of Authority, issued by the State of Florida, Department of Insurance, authorizing it to write surety bonds in the State of Florida.
- B. The Surety Company shall have currently valid Certificate of Authority issued by the United States Department of Treasury under Sections 9304 to 9308 of Title 31 of the United States Code.
- C. The Surety Company shall be in full compliance with the provisions of the Florida Insurance Code.
- D. The Surety Company shall have at least twice the minimum surplus and capital required by the Florida Insurance Code at the time the invitation to bid is issued.
- E. If the contract sum exceeds \$500,000, the Surety Company shall also comply with the following provisions:
  - 1. The Surety Company shall have at least the following minimum ratings in the latest issue of Best's Key Rating Guide.

Contract Amount	Policy Holder's Rating	Required Financial Rating
Up to 1,000,000	A-	CLASS I
1,000,000-2,000,000	A-	CLASS II
2,000,000-5,000,000	A-	CLASS III

5,000,000-10,000,000	A-	CLASS IV
10,000,000-25,000,000	A-	CLASS V
25,000,000-50,000,000	A-	CLASS VI
50,000,000-100,000,000	A-	CLASS VII

for each invoice submitted, even if there is no MBE participation during the invoice period. For each invoice submitted, the Owner's Project Manager is responsible for forwarding a copy of the MBE Payment Certification to the Central Procurement Office.

2. The Surety Company shall not expose itself to any loss on any one risk in an amount exceeding 10 percent (10%) of its surplus to policyholders, provided:

Additionally, the Contractor is also responsible for identifying on the List of Subcontractors Form, if applicable, whether or not the subcontractor is a certified or non-certified MBE.

a. Any risk or portion of any risk being reinsured shall be deducted in determining the limitation of the risk as prescribed in this section. These minimum requirements shall apply to the reinsuring carrier providing authorization or approval by the State of Florida, Department of Insurance to do business in this state has been met.

b. In the case of the surety insurance company, in addition to the deduction for reinsurance, the amount assumed by any co-surety, the value of any security deposited, pledged, or held subject to the consent of the surety and for the protection of the surety shall be deducted.

**A-29 SCRUTINIZED COMPANIES / E-VERIFY**

The Contractor shall utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the Contractor during the term of the Contract and shall expressly require all subcontractors performing work or providing services pursuant to the contract to likewise utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the Contract period.

**A-27 SUBCONTRACTOR DATA**

**NOTE:** The List of Subcontractors Form shall be required on all Contract Levels 4 and 5. However, the Owner's Project Manager may also require this form on Contract Levels 1, 2, or 3, if deemed in the best interest of the State. (See Section A-1 for "Contract Level" definition).

Within two (2) working days after bid opening, the apparent low Bidder shall submit to the Owner's Project Manager the following for each subcontractor.

- A. Corporate Charter Number, (If applicable),
- B. License Number,
- C. Name of record license holder, and
- D. Complete name, address, and phone number for listed subcontractors.

**A-28 MINORITY BUSINESS ENTERPRISES (MBE) UTILIZATION**

The Owner encourages the recruitment and utilization of certified and non-certified minority businesses. The Owner, its contractors, suppliers, and consultants should take all necessary and reasonable steps to ensure that minority businesses have an opportunity to compete for and perform contract work for the Owner in a nondiscriminatory environment. Each invoice for contracts with a MBE subcontractor, supplier, or sub-consultant must be accompanied by a MBE Payment Certification, Form No. 375-030-31. The Owner's Project Manager will reject any invoice for agreements with MBE subcontractor, supplier, or sub-consultant participation if the MBE Payment Certification (Form No. 375-030-31) is not included. This form is required

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**SECTION B  
CONDITIONS OF THE CONTRACT**

**B-1 ORDER OF DOCUMENTS**

All exhibits attached hereto are made a part of the Contract Documents. In cases of conflict in the Contract Documents, the governing order shall be as follows:

- A. Non-Technical Special Provisions (addenda to the Non-Technical Specifications)
- B. Non-Technical Specifications
- C. AIA Document A-201
- D. Technical Special Provisions (modifying the Technical Specifications)
- E. Technical Specifications and addenda
- F. Plans and addenda

The Owner delegates authority to the Architect-Engineer where Contract Documents reference Architect-Engineer approval. However, the Owner reserves the right of final approval on all issues contained in the Contract Documents.

**B-2 EXECUTION OF BID PROPOSAL, CONTRACT AGREEMENT AND BONDS****SOLE PROPRIETOR:**

If the Contractor is a firm or company owned by an individual, the Contract Agreement shall be executed in the name of the firm or company by the manual signature of the Owner or sole proprietor.

**PARTNERSHIP:**

If the Contractor is a partnership, the Contract Agreement shall be executed in the name of the partnership by the manual signature of one or more general partner(s), as provided in the partnership agreement.

**CORPORATION:**

If the Contractor is a corporation, the Contract Agreement shall be executed in the name of the corporation and shall bear the corporate seal, if applicable, and is to be signed by the President or the Chief Executive Officer. Other signors need to attach written proof of authority from the corporation.

**LIMITED LIABILITY COMPANY:**

If the Contractor is a limited liability company, the Contract Agreement shall be executed by an individual with apparent authority, such as manager, managing member, or if the manager or managing member is another business entity, the president or general partner of the identified entity.

**JOINT VENTURE:**

If the Contractor is a joint venture, the Contract Agreement shall be executed by the designated individual or all individuals required by the joint venture agreement with proof of authority attached.

**CONTRACT AGREEMENT BETWEEN OWNER AND CONTRACTOR:**

The Contractor shall execute all required forms of the Contract Agreement duly attested or notarized and return within ten (10) calendar days of their receipt. Failure to return all forms correctly executed within ten (10) calendar days of receipt,

without written extension by the Owner, shall constitute an irregularity and deemed grounds, at the Owner's option, for rejection and forfeiture of the Bid Guaranty or at the Owner's option, for the deduction on a day-for-day basis from the time allotted for completion of the work.

**PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND:**

These bonds shall be executed on behalf of the Contractor in the same manner and by the same person who executed the Contract Agreement.

**B-3 CONTRACTOR'S INSURANCE**

The Contractor shall not commence any work in connection with this Contract until the Contractor has obtained all of the following types of insurance and such insurance has been approved by the Owner, nor shall the Contractor allow any subcontractor to commence work on the subcontract until all similar insurance required of the subcontractor has been obtained and approved by the Contractor. All insurance policies shall be with insurers qualified and doing business in Florida through an authorized Florida Licensed Agent.

**WORKERS COMPENSATION INSURANCE:**

The Contractor shall obtain and maintain during the life of this Contract Agreement, Workers Compensation Insurance for all employees connected with the work of this project and in any work sublet, the Contractor shall require the subcontractor similarly to provide Workers Compensation Insurance for all of the latter's employees unless such employees are covered by the protection afforded by the Contractor. Such insurance shall comply fully with the Florida Workers compensation law. In case any class of employees engaged in hazardous work under this contract at the site of the project is not protected under the Workers Compensation statute, the Contractor shall provide, and cause each subcontractor to provide, adequate insurance, satisfactory to the Owner, for the protection of employees not otherwise protected.

**CONTRACTOR'S PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE:**

The Contractor shall obtain and maintain during the life of this contract COMPREHENSIVE GENERAL LIABILITY AND COMPREHENSIVE AUTOMOBILE LIABILITY INSURANCE sufficient to protect it from claims for damage for personal injury, including accidental death, as well as claims for property damages which may arise from operating under this contract whether such operations are by the Contractor or by anyone directly or indirectly employed by the Contractor, and the amount of such insurance shall be the minimum limits as follows:

- A. Contractors Comprehensive General Liability Coverage - Bodily Injury & Property Damage = \$300,000.00 Each Occurrence, Combined Single Limit
- B. Automobile Liability Coverage - Bodily Injury & Property Damage = \$100,000.00 Each Occurrence, Combined Single Limit

Insuring clause for both BODILY INJURY AND PROPERTY DAMAGE shall be amended to provide coverage on an OCCURRENCE BASIS.

**SUBCONTRACTOR'S PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE:**

The Contractor shall require each subcontractor to procure and maintain during the life of this subcontract, the above type of specified insurance or insure the subcontractors activities in the Contractor's policy, as specified above.

**OWNER'S AND CONTRACTOR'S PROTECTIVE LIABILITY INSURANCE:**

The Contractor shall procure and furnish an Owner's and Contractor's Protective Liability Insurance Policy with the following minimum limits:

- A. Bodily Injury & Property Damage Liability = \$300,000.00 Each Occurrence, Combined Single Limit

**"XCU" (EXPLOSION, COLLAPSE, UNDERGROUND DAMAGE):**

The Contractor's Liability Policy shall provide "XCU" coverage for those classifications in which they are applicable.

**BROAD FORM PROPERTY DAMAGE COVERAGE, PRODUCTS, AND COMPLETED OPERATIONS COVERAGE:**

The Contractors Liability Policy shall include Broad Form Property Damage Coverage, Products, and Completed Operations Coverage.

**CONTRACTUAL LIABILITY-WORK CONTRACTS:**

The Contractor's Liability Policy shall include Contractual Liability Coverage designed to protect the Contractor for contractual liabilities assumed by the Contractor in the performance of this contract.

**INDEMNIFICATION:**

The Contractor's Liability Policy shall provide a "Hold Harmless" rider as noted on the Owner's Certificate of Insurance Form.

**BUILDER'S RISK COVERAGE:**

The Contractor shall secure and maintain during the life of this contract, a "Builder's Risk Policy", all Risks Form, and issued on a completed valued basis. Installation Floaters and other inland Marine Forms may be utilized where applicable and are in the best interest of the State.

**ASBESTOS-ABATEMENT CONTRACTORS LIABILITY INSURANCE POLLUTION ENFORCEMENT:**

The asbestos-abatement Contractor shall procure a pollution endorsement to its public liability insurance, against claim or claims expenses arising from the abatement project, as required by Section 255.56, Florida Statutes. The coverage by the endorsement may be of the claims-made type.

**LOSS DEDUCTIBLE CLAUSE:**

The State shall be exempt from and in no way be liable for, any sums of money which may represent a deductible in any insurance policy. The payment of such deductible shall be the sole responsibility of the Contractor and/or subcontractor providing such insurance.

**CERTIFICATE OF INSURANCE:**

The Contractor shall provide the Owner with proof of insurance coverage as specified on the Certificate of Insurance. The Owner's Certificate of Insurance form shall be completed, signed by the authorized Florida Licensed Agent and returned to the Owner. These certificates shall be dated and show:

- A. The name of the insured Contractor, the specific project by name and job number, the name of the insurer, the number of its effective date, and termination date of the policy, and

- B. A statement that the insured will mail notice to the Owner's Project Manager, and a copy to the Architect-Engineer, at least thirty (30) calendar days prior to any material changes in provisions or cancellation of the policy.

The Contractor is responsible for maintaining the insurance coverage specified on the Certificate of Insurance during the life of the project.

**B-4 VERIFICATION OF OWNER'S SURVEY DATA**

Prior to commencing any excavation or grading, the Contractor shall satisfy itself as to the accuracy of all survey data as indicated in the plans and specifications and/or as provided by the Owner. Should the Contractor discover any inaccuracies, errors, or omissions in the survey data, the Contractor shall immediately notify the Architect-Engineer in order that proper adjustments can be anticipated and ordered. Commencement by the Contractor of any excavation or grading shall be held as an acceptance of the survey data by the Contractor after which time the Contractor has no claim against the Owner resulting from alleged errors, omissions, or inaccuracies of the said survey data.

**B-5 CONSTRUCTION FACILITIES**

**SANITARY PROVISIONS:**

The Contractor shall provide and maintain in a neat and sanitary condition such accommodations for the use of its employees, subcontractors, and agents as may be necessary to comply with regulations of the County or the Department of Health and Rehabilitative Services. No nuisance will be permitted.

**TEMPORARY WIRING:**

The Contractor shall meet all safety requirements of the National Electric Code, Florida Department of Commerce, Bureau of Workers Compensation, or local requirements. In addition, all wire shall be so sized that it is not over loaded according to the National Electric Code, and any wire used shall be fused to adequately protect that wire according to the National Electric Code.

The Contractor shall have available an adequate number of outlets and each outlet shall be properly and clearly labeled with the maximum voltage and fuse protection. Where temporary lighting is used, outlets shall consist of weatherproof sockets insulated and provided with a locking type wire guard. All devices shall be properly grounded.

**STORAGE AND WORK AREAS:**

At the start of the operations the Contractor shall make arrangements with the Architect-Engineer's field representative and the Owner's representative for the assignment of storage and work areas. During construction the Contractor shall maintain the areas in a neat condition.

**CONTRACTOR FIELD OFFICES:**

Trailers may be used for field offices, but their use as living quarters for personnel shall be limited to one staff member such as a night watchman or a superintendent.

**UNDERGROUND UTILITIES:**

The Contractor shall meet all requirements of the United States Department of Labor Occupational Safety and Health Administration (OSHA) in the performance of work related to excavations for underground utilities, foundations and other subsurface work. The Contractor shall conduct thorough training on OSHA standards and requirements on a continuing and regular basis throughout the execution of such work.

Additional instructions regarding Construction Facilities are set forth in Section C entitled "Special Conditions."

**B-6 PROJECT DRAWINGS - COPIES FURNISHED TO CONTRACTOR**

The Owner will provide the Contractor with four (4) set of signed and sealed drawings (11"x17" format) and specifications in electronic format or printed as needed for permitting and one set of signed and sealed plans and specifications in electronic format upon contract award.

**B-7 PROJECT DRAWING – CHANGES**

The Contractor shall immediately indicate plainly and conspicuously on the field set of drawings and at appropriate paragraphs in the specifications, all changes or corrections made by Addenda and Change Orders as they are issued.

**B-8 INSPECTIONS - ALL PROJECTS**

In addition to any special structural inspections of threshold buildings, all projects will require detailed code compliance inspections by the local authorities with jurisdiction over the area in which the project is located. The disciplines normally include, but are not necessarily limited to, structural, mechanical, electrical, plumbing and general building. The Contractor shall make all permits, drawings, specifications, previous inspection reports, and change documents available to code inspectors.

The contractor shall provide a copy of each inspection report to the Architect-Engineer in a timely fashion.

**OTHER INSPECTIONS:**

- A. Department of Business and Professional Regulation has responsibility for elevator inspections.
- B. State Fire Marshal has responsibility for inspecting facilities in accordance with the Uniform Fire Safety Standards.
- C. Architect-Engineer may have responsibilities, relative to inspections.
- D. Owner representatives may also perform inspections.
- E. There may be other inspections required as specified elsewhere.

The Contractor has responsibilities relative to all types of inspections and is responsible for contacting all of the inspecting entities to determine its responsibilities. All of these inspecting entities have unique and separate responsibilities. One inspection from an entity will not substitute for an inspection from another entity.

**B-9 SHOP DRAWINGS**

Shop drawings shall be submitted for manufactured or fabricated materials as called for in the separate specification sections. Drawings shall be fully identified by project name,

location, suppliers' name, date, drawing number, specifications section reference, etc. The Contractor shall submit electronically, with such promptness as to cause no delay in the work, or in the work of any other Contractor, One (1) copy of all shop drawings, and schedules, required for the work of the various trades, to the Owner for distribution and approval. The Contractor shall make no deviation from the approved drawings, and the changes made thereto by the Architect-Engineer, if any.

It is the responsibility of the Contractor to properly schedule the submission of shop drawings for approval to allow adequate time for checking drawings, manufacture, and shipment of items to job site in sufficient time to prevent delay in Progress Schedule.

It is also the responsibility of the Contractor to coordinate the preparation of shop drawings of items which will be furnished by more than one manufacturer but are designed to interface when installed.

Shop drawings submitted to the Owner for approval shall first be checked and approved by the Contractor, the prima facie evidence of which shall be a "checked" stamp marked "Approved" or "Approved as Noted" on each copy of each shop drawing, placed thereon by the Contractor. Shop drawings received without the Contractor's "checked" stamp will be cause for immediate return without further action. Each drawing correctly submitted will be checked and marked by the Architect-Engineer in one of the following ways:

- A. Approved as drawn.
- B. Approved as noted.
- C. Returned for correction.
- D. Not approved.

**SUBMISSION / APPROVAL OF SHOP DRAWING AND SAMPLE SCHEDULE:**

If and when required by the Architect-Engineer, the Contractor shall prepare and submit in triplicate to the Architect-Engineer a complete itemized Schedule of Shop Drawings, brochures, and other descriptive literature, listing each and all such items as required under these specifications, which schedule shall indicate for each required item:

- A. Identification as to pertinent Specification Division.
- B. Item(s) involved.
- C. Name of pertinent subcontractor or supplier and the name of pertinent manufacturer.
- D. Schedule delivery dates of pertinent items to the project.

The subcontractors for all phases of the Contract shall submit through the Contractor complete brochures covering all materials and/or equipment proposed for use in the execution of the work as required by their respective Divisions of the Specifications. These brochures shall be indexed and properly cross referenced to the plans and specifications for easy identification.

All shop drawings, setting drawings, material brochures, samples, and/or color selection materials which are required

and are not included in the foregoing shall be submitted via the Contractor. Insofar as is possible or practical, all shop drawings or descriptive literature of equipment for the mechanical or electrical trades shall be submitted in a complete brochure for each trade as soon as possible after Notice to Proceed is executed.

The Owner will not grant a time extension based on delays due to improper scheduling of work, and the Owner at its discretion, may withhold progress payments until such time as these requirements are fully satisfied.

#### **B-10 REFERENCE TO A.S.T.M. OR FEDERAL SPECIFICATIONS**

Where reference is made to the Standard Specifications of the American Society for Testing and Materials (A.S.T.M.): "United States Government Federal Specifications, or to other standard specifications of Associated Manufacturer's Organizations, or trades, in connection with the required quality of materials, methods, etc., then the applicable specifications shall be of the latest revised edition effective as of the date bids are opened by the Owner, unless otherwise expressly provided in the Contract Documents".

#### **B-11 MANUFACTURER'S SPECIFICATIONS**

Where the name of a concern or manufacturer is mentioned on drawings or in specifications in reference to this required service or product, and no qualifications or specification of such is included, then the material gauges, details of manufacture, finish, etc., shall be in accordance with the standard practice, direction, or specifications. The Contractor shall be responsible for any infringement of patents, royalties, or copyrights, which may be incurred thereby.

#### **B-12 APPROVAL OF MATERIALS**

A list of all materials, equipment, etc., together with manufacturers' drawings and catalog information shall be submitted to the Architect-Engineer for approval prior to ordering material or equipment but not later than forty-five (45) calendar days after receipt of Notice to Proceed. Information submitted shall show the capacity, operating conditions, and all engineering data and descriptive information necessary for comparison and to enable the Architect-Engineer to determine whether same meets specifications. The Architect-Engineer's approval will not relieve the Contractor of the responsibility for performance of any terms of the Contract Documents.

If the submittals reflect any changes from the plans or specifications, these changes should be clearly indicated by the Contractor. If no such indication is given, then the submittal is assumed to correspond with the Contract Documents.

#### **B-13 SUBSTITUTIONS**

Substitutions for a specified system, product, or material may be requested of the Architect-Engineer and the Architect-Engineer's written approval must be obtained before substitutions will be allowed. All requests for substitutions should be submitted within forty-five (45) days after award of the contract. Substitutions requested after this date may receive no consideration.

In making requests for substitutions the Contractor shall list the particular system, product, or material it wishes to substitute, the justification for such a request, and the amount to be added or deducted from the contract sum if the

substitution is authorized by the Owner and approved by the Architect-Engineer.

If no addition or deduction to the contract sum is allowed by the Contractor for such substitution, it shall be so stated on the request. All requests submitted shall include any and all adjustments and any other work affected thereby.

#### **B-14 CONSTRUCTION CLIMATE CONTROL**

It shall be the responsibility of the Contractor to provide at its own expense, the power, fuel, and equipment necessary to maintain climatic conditions and humidity when specified, required for work in progress, or required to protect materials, finishes, equipment, or systems installed until the final acceptance of the project by the Owner.

#### **B-15 AS-BUILT DRAWINGS**

During the progress of the work, the Contractor shall require the plumbing, air conditioning, heating, ventilating, elevator, and electrical subcontractors to record on their field sets of drawings the exact locations, as installed, of all conduits, pipe, and duct lines whether concealed or exposed which were not installed exactly as shown on the contract drawings. The Contractor shall also record all drawing revisions that have been authorized by change order that effect wall or partition locations, door and window locations, and other template changes. The exact routing of conduit runs shall be shown on these drawings.

Upon completion of the work, this data shall be recorded to scale, utilizing a computer-aided design and drafting application (CADD). Two (2) sets of disk files, and two (2) prints of the Contract Documents will be furnished to the Contractor by the Architect-Engineer, but cost shall be borne by Contractor. Each drawing shall be noted "As-Built" and shall bear the date and name of the subcontractors that performed the work. Where the work was installed exactly as shown on the contract drawings the sheets shall not be disturbed except as noted above. The CADD record set of drawings shall be prepared and delivered to the Owner in the Department's current adopted standard of AutoCAD Software format for compatibility statewide to allow updates as future changes/renovations occur.

In showing the changes the same legend shall be used to identify piping etc., as used on the contract drawings. A separate set of drawings shall be prepared for electrical, plumbing, heating, air conditioning, elevator, and ventilating work unless two or more divisions are shown on the same sheets of the contract drawings, in which case the various subcontractors shall also show their changes on the same sheets. Each sheet shall bear the date and the name of the subcontractors submitting the drawings.

The Contractor shall review the completed as-built drawings and ascertain that all data furnished on the drawings are accurate and truly represent the work as actually installed. When manholes, boxes, underground conduits, plumbing, hot or chilled water lines, inverts, etc., are involved as part of the work, the Contractor shall furnish true elevations and locations, all properly referenced by using the original benchmark used for the institution or for this project. The disks including those unchanged and changed shall be submitted to the Owner when completed, together with two sets of 11"X17" black-line prints for certification, and submitted to the Owner, at the time of final completion.

## B-16 GUARANTEES & OPERATING INSTRUCTIONS

The Contractor shall provide full cooperation to the Owner in the production of videotape instructions for the operation and maintenance of all HVAC, fire alarm and sprinkler, irrigation, computer, and other systems essential to efficient utilization of the building grounds. Owner personnel or its agents shall perform the actual taping, editing, and production of such instructional tapes. Cooperation of the on-site representative of the Contractor shall be the responsibility of the Contractor, whose representatives are to coordinate instructional activities with the Owner and its personnel or agents.

All work performed by the Contractor in completing the subject project shall be guaranteed by the Contractor against all defects resulting from the use of materials, equipment, and workmanship for a period of one year from the date of Final Completion of the project.

If, within any guarantee period, repairs, or changes are required in connection with the guarantee work, which in the opinion of the Architect-Engineer is rendered necessary as a result of the use of materials, equipment, or workmanship which are defective or inferior or not in accordance with the terms of the contract, the Contractor shall, promptly upon receipt of notice from the Owner and without expense to the Owner, proceed to:

- A. Place in satisfactory condition in every particular all of such guaranteed work, correct all defects therein; and
- B. Make good all damages to the structure or site or equipment or contents thereof, which, in the opinion of the Architect-Engineer, is the result of the use of materials, equipment, or workmanship which is inferior, defective, or not in accordance with the terms of the contract; and
- C. Make good any work or materials or the equipment and contents of structures or site disturbed in fulfilling any such guarantee.

If the Contractor, after receipt of any such written notice, fails within seventy-two (72) hours to commence at the job site with performance of the work necessary to remedy all defects in the work described in such notice so as to provide the Owner with the subject project completed in accordance with all requirements of the Contract Documents, or fails to complete the performance of such remedial work within a reasonable time after commencing same, the Owner shall be entitled to have such defective work remedied on the account of the Contractor and the Surety, in which event, the Contractor and the Surety shall be fully liable for all costs and expenses reasonably incurred by the Owner in having such defective work remedied.

The Contractor shall be responsible for collecting, identifying, indexing, and collating the following materials from the subcontractor, and will deliver four copies of the finished document to the Architect-Engineer for checking of correctness.

Complete equipment diagrams, operating instructions, maintenance manuals, parts list, wiring diagrams, pneumatic and/or electrical control diagrams, test and balance reports, inspection reports, guarantees, and warranties addressed to

the Owner, as applicable, for each and every piece of fixed equipment furnished under this contract to be supplied in a ring binder, hardcover book, properly indexed for ready reference. Specific information regarding manufacturers' names and addresses, nearest distributor and service representatives' name, address, office and home phone numbers, make and model numbers, operating design and characteristics, etc., are also required. All information submitted shall be updated to reflect existing conditions.

Subsequent to the time of Substantial Completion and receipt of As-Builts, Operations and Maintenance Books but prior to the date of Final Acceptance, the Contractor and/or subcontractor shall provide a competent and experienced person (or persons) thoroughly familiar with the work to instruct the Owner's personnel in operation and maintenance of the equipment and control systems for a reasonable period of time.

This instruction will include normal start-up, run, stop, and emergency operations, location, and operation of all controls, alarms, and alarm systems, etc. The instruction will include tracing the system in the field and on the diagrams in the instruction booklets so that operating personnel will be thoroughly familiar with both the system and the data supplied.

## B-17 CLEANING

The Contractor shall provide Final Cleaning of the Work, immediately prior to Final Acceptance, consisting of cleaning each surface or unit of work to normal "clean" condition expected for a first-class building cleaning and maintenance program. All cleaning must comply with manufacturer instructions for cleaning operations.

The following are examples, but not by way of limitation, of cleaning levels required:

- A. Remove labels which are not required as permanent labels, including all gum residue.
- B. Clean transparent materials, including mirrors, window and door glass, to a polished condition, removing substances, which are noticeable as vision-obscuring materials. Replace broken glass and damaged transparent materials.
- C. Clean exposed exterior and interior hard-surface finishes, to a dirt-free condition, free of dust, stains, films, and similar noticeable distracting substances. Except as otherwise indicated, avoid disturbance of natural weathering of exterior surfaces. Restore reflective surfaces to original reflective condition. Buff out scratches and marks on exposed metal surfaces.
- D. Wipe surfaces of mechanical and electrical equipment clean, including elevator equipment and similar equipment; remove excess lubrication and other substances.
- E. Remove debris and surface dust from limited-access spaces including roofs, plenums, shafts, trenches, manholes, and similar spaces. Clean tops of ductwork and horizontal surfaces of structural members in exposed areas.

- F. Clean concrete floors in unoccupied spaces broom clean. Remove noticeable paint marks and construction stains.
- G. Vacuum carpeted surfaces and similar soft surfaces. Inspect for stains and clean.
- H. Clean plumbing fixtures to a sanitary condition, free of stains including those resulting from water exposure. Clean excess sealant from toilet fixtures and accessories.
- I. Clean light fixtures and lamps so as to function at full efficiency. Replace any damaged lens.
- J. Clean Project Site, including landscape development areas, of litter and foreign substances. Sweep paved areas to a broom-clean condition; remove stains, petrochemical spills, and other foreign deposits. Rake grounds which are neither planted nor paved, to a smooth, even-textured surface, breaking up or removing clumps of material.

**B-18 PUBLIC NOTICE**

Immediately following receipt of Notice to Proceed, the Contractor shall post a notice in the following form in a conspicuous place on the project site:

- A. "Notice is hereby made to all those concerned and affected that (Contractor's Name) is performing (Project Number, Name, and Location)".
- B. "All parties furnishing labor, materials and/or equipment to said project are to provide notice of such in writing by certified mail to the Owner at the (Owner's Address) within twenty (20) calendar days of first providing such labor, materials and/or equipment."

**B-19 MODIFICATIONS TO AIA DOCUMENT A-201, 1997 EDITION**

The General Conditions of the Contract for Construction, American Institute of Architects Document A-201, 1997 Edition, as modified below, hereinafter referred to as "General Conditions", to the extent not inconsistent with other provisions in the Contract Document, is made a part of the Contract Documents:

**ARTICLE 1, GENERAL PROVISIONS**

Article 1.1.1 - Delete in its entirety.

**ARTICLE 2, OWNER**

Article 2.1.2 - Delete in its entirety.

Article 2.2.1 - Delete in its entirety.

**ARTICLE 3, CONTRACTOR**

Article 3.3.2 - Add the following: "Should the Architect-Engineer find any person(s) employed on the project incompetent, unfit or otherwise objectionable for his duties and so certify the facts to the Contractor, the Contractor shall immediately cause the employee to be dismissed and said employee shall not be re-employed on this project without

written consent of the Architect-Engineer."

Article 3.8.1 - Add the following: "If directed by the Architect-Engineer the Contractor shall solicit not less than three bids for the item(s), the cost of which is provided for by a specified allowance sum. The Contractor shall purchase the item(s) from one of the three Bidders as directed by the Architect-Engineer."

Article 3.10.1 - Delete in its entirety and substitute: See construction scheduling section of these Non-Technical Specifications.

Article 3.14.1 - Add the following: "All cutting and patching work shall blend in and be plumb and square. The quality of materials used shall be the same or surpass those used in the adjacent existing construction."

**ARTICLE 4, ADMINISTRATION OF THE CONTRACT**

Article 4.1.1 - Delete in its entirety and add the following: "The Architect-Engineer is the design professional identified in the Contract Documents. The term Architect and Architect-Engineer mean the Architect-Engineer or their authorized representative."

Article 4.2.5 - Add the following: "The authorized representatives and agents of the Architect-Engineer, Owner, and the United States Federal Agencies providing monies in the form of grant-funds or loans and such other persons as the Owner may designate shall have access to and be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials, and other relevant data and records wherever they are in preparation and progress. The Contractor shall provide proper facilities for such access, inspections and, when required, exact duplicate copies of the aforementioned data shall be furnished."

Article 4.2.10 - Delete last sentence and add the following: "The duties, responsibilities, and limitations of authority of any such Project Representative shall be as set forth in the Contract Documents."

Article 4.2.12 - Delete end of last sentence: "and will not be liable for the result of any interpretation or decision rendered in good faith."

Articles 4.3 through 4.6.6 - Delete in their entirety.

**ARTICLE 5, SUBCONTRACTORS**

Article 5.2.1 - Add the following: "The Contractor shall not remove or replace subcontractors listed in the bid, subsequent to the lists being made public at the bid opening, except upon good cause shown and only when approved in writing by the Owner."

**ARTICLE 7, CHANGES IN THE WORK**

Article 7.1.1 - Delete "Construction Change Directive"

Article 7.1.2 - Delete "a Construction Change Directive Requires agreement by the Owner and Architect and may or may not be agreed to by the Contractor;"

Article 7.1.3 - Delete "Construction Change Directive"

Article 7.3 - Delete in its entirety.

ARTICLE 8, TIME

Article 8.1.2 - Change the first sentence of the paragraph to read "The date of commencement of the work, and on which the Contract Time begins to run is the start date established by the Notice to Proceed to Mobilize on Site and to Proceed with Construction, which shall be the same date".

Article 8.1.3 - Delete ". . . in accordance with Paragraph 9.8." and the add ". . . as expressed in the Contract Documents."

Article 8.3.1 - Delete the words "or by delay authorized by the Owner pending arbitration."

Article 8.3.2 - Change the paragraph to read "Claims relating to time shall be made in accordance with applicable provisions of the Changes in the Work, Delays, Extensions of Time and Claims Section of the Non-Technical Specifications."

Article 8.3.3 - Delete in its entirety.

ARTICLE 9, PAYMENTS AND COMPLETION

Article 9.3.1.1 - Delete in its entirety.

Article 9.7.1 - Fourth line, delete the following: "...or awarded by arbitration." Delete the last sentence in its entirety.

ARTICLE 11, INSURANCE

Articles 11.2 through 11.4 - Delete in their entirety and insert in their place:

Article 11.2.1 - Owner's Liability Insurance - The Contractor shall be responsible for purchasing and maintaining an Owner's Protective Liability Insurance Policy with minimum limits as described in the "Instructions to Contractors."

Article 11.3.1 - Property Insurance - The Contractor shall purchase and maintain property insurance upon the entire work at the site of the full insurable value thereof.

Article 11.3.2 - Any insured loss is to be adjusted with the Owner and made payable to the Owner as trustee for the Insured, as their interests may appear.

Article 11.3.3 - If the Contractor requests in writing that insurance for special hazards be included in the property insurance policy, the Owner shall permit the Contractor to purchase such insurance, but the cost thereof shall be paid for by the Contractor.

Article 11.3.4 - The Owner and Contractor waive all rights against each other for damages caused by fire or other perils to the extent covered by insurance provided under Article 11.3.1, except such rights as they may have to the proceeds of such insurance held by the Contractor as trustee. The Contractor shall require similar waivers by subcontractors and sub-subcontractors.

Article 11.3.5 - If required in writing by any party in interest, the Contractor, as trustee shall, upon the occurrence of an insured loss, give bond for the proper performance of its duties. The Contractor shall deposit in a separate account any money so received, and shall distribute it in accordance with such agreement as the parties in interest may reach. If after such loss no special agreement is made, replacement of

damaged work shall be covered by an appropriate change order.

Article 11.3.6 - The Owner as trustee shall have power to adjust and settle any loss with the insurers.

Article 11.3.7 - If the Owner finds it necessary to occupy or use a portion or portions of the work prior to Substantial Completion thereof, such occupancy shall not commence prior to a time mutually agreed to by the Owner and Contractor and to which the insurance company or companies providing the property insurance once have consented by endorsement to the policy or policies. This insurance shall not be canceled or lapse on account of such partial occupancy. Consent of the Contractor and the insurance company or companies to such occupancy or use shall not be unreasonably withheld.

Article 11.4.1 - Loss of Use Insurance - The Owner, at its option, may purchase and maintain such insurance against loss of use of its property due to fire or other hazards, however caused.

ARTICLE 13, MISCELLANEOUS PROVISION

Article 13.5.1 - Delete last sentence: "The Owner shall bear cost of tests, inspections, or approvals which do not become requirements until after bids are received or negotiations concluded," and add: "The Architect-Engineer shall designate the tests which shall be made, and the Contractor shall not obligate the Owner for tests without the Architect-Engineer approval."

Testing Costs paid for by the Contractor: Certain tests of materials, equipment, and systems are required as part of the contract and shall be paid for by the Contractor. These are specifically named in the technical specifications and the types of tests are as follows:

- A. Where tests are required by the technical specifications for materials, equipment, or systems the Contractor shall pay the cost of initial tests to prove qualities and determine conformance with specification requirements, e.g., mill tests on cement and steel; load testing of piling; sieve analysis and calorimetric tests on sand; strength tests for determining proportions of materials or concrete, moisture content and sound transmission tests of concrete blocks; etc.;
- B. If substitute materials or equipment are proposed by the Contractor, they shall pay the cost of all tests which may be necessary to satisfy the Architect-Engineer that specification requirements are satisfied;
- C. If materials or workmanship are used which fail to meet specification requirements the Contractor shall pay the costs of all coring or other tests deemed necessary by the Architect-Engineer to determine the safety or suitability of the material or element;
- D. The Contractor shall pay for all testing costs, including, but not limited to: power, fuel, equipment, and systems for proper operation such as plumbing, heating ventilation, air conditioning, electrical, elevator, dumbwaiters, and conveyors, etc.

Testing Costs Paid by the Owner:

All other tests performed at the direction of the Architect-Engineer or the Owner shall be paid for by the Owner, except to the extent the cost of performing such tests are otherwise chargeable to the Contractor under provisions of the Contract Documents.

Article 13.6.1 - Delete in its entirety. (See Interest Provisions Section of the Non-Technical Specifications).

Article 13.7.1 - Delete in its entirety.

**B-20 CHANGES IN THE WORK, DELAYS, TIME EXTENSIONS, AND CLAIMS**

During the course of the Contractor's performance of the work, certain events may occur which have the effect of changing the conditions under which the work is to be performed as specified and described in the Contract Documents, and/or the nature and extent of the work as specified and described in the Contract Documents. The occurrence of such events may cause the Contractor to incur greater or less cost and expense to perform the work than planned to be incurred in the Contractor's successful bid, in which event the Contractor or the Owner shall respectively be entitled to either an increase or decrease in the contract sum, whichever is the case, to the extent such greater or less cost and expense results, and in which event the party entitled to the benefit of any such adjustment to the contract sum shall, within twenty-one (21) calendar days from the first occurrence of such event(s), present written request on the other party by using the Construction Contract Change Order Form.

When the Contractor deems that extra compensation is due for work or materials not clearly covered in the contract or not ordered by the Owner, the Contractor shall notify the Owner in writing of the intention to make claim for the extra compensation, before beginning the claimed work. If the Contractor does not give such notification and does not afford the Owner proper opportunity for keeping strict account of actual costs, then the Contractor shall be deemed to have waived the claim for such extra compensation, and shall be estopped from asserting said claim in any and all judicial and administrative proceedings arising out of said project. The Contractor's notice and the Owner's account of the cost does not establish the validity of the claim or the method for computing any compensation of such claim. If the Owner determines that the claim is valid, the Department will pay for it as an extra as provided herein.

The Owner's failure to resolve a claim within ninety (90) days after submission of the claim constitutes a denial of the claim.

However, no court proceedings on such claim may be filed until the Owner accepts the project.

If the Owner, upon considering any such claim, determines the contract sum should be increased or decreased, the determination of the amount of any such increase or decrease in the contract sum shall be governed and controlled by strict adherence to the following described guidelines and limitations, and neither the Contractor nor the Owner shall be entitled to receive any monetary consideration, beyond that which is authorized herein below.

All adjustments to the contract sum resulting from a change in the work shall be determined by the measure of actual or

estimated, as the case may be, out-of-pocket costs and expenses incurred or spared by the Contractor for labor, materials, equipment, and equipment rental, plus overhead and profit thereon, for performing the changed work.

A. Labor costs shall include of all direct job site cost for estimation, laying out, mechanics' wages and laborers' wages, together with all payroll taxes, payroll assessments, and insurance premiums paid for such labor.

B. All material costs, equipment costs, and equipment rental costs shall be at trade discount rates, plus State Sales Tax, where applicable.

C. Overhead and profit shall be inclusive of all project management, project administration, superintendence, project coordination, project scheduling, and other administrative support functions and services, whether performed on the job site or off the job site and general support equipment. Overhead and profit shall be determined as follows:

1. Overhead and profit shall be calculated at the rate of 15 percent (15%) of the Contractor's labor, material, equipment, and equipment rental costs, incurred or spared, as measured under the preceding paragraphs for changes in the work performed by the officers, employees or subsidiaries of the Contractor.

2. Overhead and profit shall be calculated at the rate of 7.5 percent (7.5%) of the Contractor's subcontractors actual labor, material, equipment, and equipment rental costs, incurred or spared, as measured under the preceding paragraphs, plus 15 percent (15%) of all such costs, as overhead and profit to the Contractor's subcontractors, for all changes in the work performed by the officers, employees, or subsidiaries of the Contractor's subcontractor.

D. In addition to the foregoing, all adjustments to the contract sum resulting from a change in the work shall include all out-of-pocket expenses, incurred or spared, in performing the changes in the work for:

1. Paying the required premiums to obtain Performance Bonds and Labor and Material Payment Bonds called for by the Contract Documents;

2. Paying the fee(s) required for licenses or permits called for by changes in the work;

3. Paying for delivery of materials or equipment to the job site;

4. Paying for storage of materials or equipment before use thereof in performing changes in the work, and

5. Paying for testing required by the changes in the work.

E. In the event the Contractor demands an adjustment in the contract sum, such demand shall be accompanied by paid receipts or other such written evidence satisfactory to the Owner itemizing the costs and expenses incurred as a result of the event(s) constituting the changes in the work.

**DELAYS:**

The Contractor's remedies for delays in the progress of the work, or for changes in the work, shall be limited to those provided in the Contract Documents. The Contractor's exclusive remedy for delays in performance of the contract caused by events beyond its control shall be a claim for equitable adjustment in the contract time; provided, however, inasmuch as the parties expressly agree that overhead costs incurred by Contractor for delays in performing the work cannot be determined with any degree of certainty, it is hereby agreed that in the event the Contractor is delayed in the progress of the work after Notice to Proceed for causes beyond its control and attributable only to acts or omissions of Owner, Contractor shall be entitled to compensation for overhead and profit costs either (a) as a fixed percentage of the actual cost of the change in the work, if the delay results from a change in the work, as calculated in this section, or (b) if the delay results from other than a change in the work, at an amount for each day of delay calculated by dividing an amount equal to a percentage of the original contract sum determined by the number of calendar days of the original contract time.

In the event of a change in the work, the Contractor's claim for adjustments in contract sum are limited exclusively to its actual costs for such changes plus fixed percentages for overhead, additional profit, and bond costs, as specified herein.

The foregoing remedies for delays and changes in the work are to the exclusion of, and thus eliminate, the total cost concept (that is, computing Contractor's additional costs for changes in work or the costs of a delay in the progress of the work by comparing Contractor's total actual costs with its original estimate, see *McDevitt & Street Co. v. Department of General Services*, 377 So. 2d 191 (Fla. 1<sup>st</sup> DCA 1979), as the method of determining Contractor's costs associated with a change in the work or with delay in the progress of the work.

No provision of this contract shall be construed as a waiver of sovereign immunity by the Owner.

**CLAIMS AND DISPUTES:**

A claim is a demand or assertion by one of the parties seeking, as a matter of right, an adjustment or interpretation of contract terms, payment of money, extension of time, or other relief with respect to the terms of the contract. The term "claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the contract. Claims must be made by written notice. The responsibility to substantiate claims shall rest with the party making the claim.

No provision of the Contract Documents makes or is intended to make provision for recovery by the Contractor of damages for delay or for breach of contract. All claims, disputes, or controversies with the exception of a claim for breach of contract shall be determined and settled in accordance with the Claims and Dispute Resolutions of these Non-Technical Specifications.

**TIME LIMITS ON CLAIMS:**

Claims by either party must be made within twenty-one (21) days after occurrence of the event giving rise to such claim or within twenty-one (21) days after the claimant first recognizes the condition giving rise to the claim, whichever is later. Claims must be made in writing. An additional claim made after the initial claim has been implemented by a Construction Contract Change Order will not be considered unless submitted in a timely manner.

**CONTINUING CONTRACT PERFORMANCE:**

Pending final resolution of a claim unless otherwise agreed in writing, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.

**B-21 PROGRESS PAYMENTS**

The Owner will, at intervals, make progress payments to the Contractor as follows:

**PAYMENTS TO CONTRACTOR:**

Thirty (30) calendar days shall be allowed for the Owner's inspection and approval of the goods and services for which any application for payment is made. Based upon application for payment submitted to the Architect-Engineer by the Contractor and certificates of payment issued by the Architect-Engineer and accepted by the Owner, the Owner shall make progress payments to the Contractor against the account of the contract sum in accordance with the following:

A. Within thirty (30) calendar days from the Owner's receipt and acceptance of a certificate of payment, the Owner shall pay, or cause to be paid to the Contractor, ninety percent (90%) of the portion of the contract sum properly allocable to labor, materials, and equipment incorporated into the work, and ninety percent (90%) of that portion of the contract sum properly allocable to materials and equipment suitably stored at the site or at some other locations agreed upon in writing by the parties, less the aggregate of previous payments.

NOTE: For projects with contract sums exceeding, \$65,000 (see Section A-1 for definition of "Contract Level"), at the time work is fifty percent (50%) complete or thereafter, if the manner of completion of the work and its progress are and remain satisfactory to the Architect-Engineer and the Owner, the Owner may authorize a five percent (5%) retainage on future progress payments. The full ten percent (10%) retainage may be reinstated if the manner of completion of the work and its progress do not remain satisfactory to the Architect-Engineer and the Owner or for other good and sufficient reasons.

B. The Contractor shall promptly pay each subcontractor in accordance with Section 287.0585, Florida Statutes, upon receipt of payment from the Owner out of the amount paid to the Contractor on account of such subcontractor's work, the amount to which said subcontractor is entitled, reflecting the percentage actually retained, if any, from payments to the Contractor on account of such subcontractor's work.

C. The Architect-Engineer may, on request, at its

discretion, furnish to a subcontractor, if practical, information regarding the percentages of completion of the amount applied for by the Contractor and the action taken thereon by the Architect-Engineer on account of work done by such subcontractor.

- D. Neither the Owner nor the Architect-Engineer shall have any obligation to pay or to see to the payment of any monies to any subcontractor except as may otherwise be required by law.
- E. No Certificate for a progress payment, nor any progress payment, nor any partial or entire use of occupancy of the project by the Owner, shall constitute an acceptance of any work not in accordance with the Contract Documents.
- F. The Contractor shall request such compensation by submitting:
1. A properly completed and signed Contractor's Invoice.
  2. A properly completed and signed AIA Document G702 1992 Application and Certificate of Payment.
  3. A properly completed and signed AIA Document G703 – 1992 Continuation Sheet (Schedule of Values), and
  4. A properly completed and signed Minority Business Enterprises (MBE) Payment Certification, Form 375-030-31.

The Contractor shall, within ten (10) calendar days from date of the contract, submit to the Architect-Engineer for approval one (1) copy of an AIA Document G703 – 1992 Continuation Sheet (Schedule of Values) which will reflect the estimated cost of each subdivision of work of each specification section, further detailed by subcontractor item, and utilizing the Construction Specification's Institute "Masterformat Broadscope Section Numbers." The value of each item shall include a true proportionate amount of the Contractor's overhead and profit. The sum of all such scheduled values shall equal the contract sum.

The approved AIA Document G703 – 1992 Continuation Sheet (Schedule of Values) will accompany and support the Contractor's periodic Applications for Payment and shall indicate the value of suitably stored material as well as labor performed and materials incorporated into the work for each subdivision of the schedule during the period for which the requisition is prepared.

The AIA Document G703 – 1992 Continuation Sheet (Schedule of Values) will be utilized to present this and other pertinent information that will facilitate the checking and processing by the Owner's representatives of the Contractor's application for payment.

## B-22 FINAL PAYMENT

Within thirty (30) calendar days from the date of Contract Completion, the Owner shall pay or cause to be paid to the Contractor the entire unpaid balance of the then Contract Sum, less the amount of any sums which continue to be

retained to satisfy the cost of performing any change in the work which is the subject of any claim or dispute and which has not yet been satisfactorily performed by the Contractor, provided that the parties have not otherwise stipulated in the Certificate of Substantial Completion, and provided further that the work has been satisfactorily completed, the Contractor's obligations under the contract have been fully performed, and a final Certificate for Payment has been issued by the Architect-Engineer.

The Contractor shall submit all required documents along with final invoice to the Owner no later than 120 days after the project is completed and final acceptance of work is issued by the Owner. Invoices submitted after the 120-day time period will not be paid.

The Contractor's application for FINAL PAYMENT shall be accompanied with the following:

- A. Owner's Certificate of Partial Payment marked "Final Payment.
- B. Final Contractor's Invoice
- C. Final AIA Document G702 – 1992 Application and Certificate of Payment.
- D. Final AIA Document G703 – 1992 Continuation Sheet (Schedule of Values).
- E. Final Minority Business Enterprise (MBE) Payment Certification, Form 375-030-31.
- F. For Contracts exceeding \$100,000, the Consent of Surety to make Final Payment – Signed and Sealed.
- G. For Contracts exceeding \$100,000, the Power of Attorney from Surety for Release of Final Payment - Signed, Sealed, and dated the same as Consent of Surety.
- H. Contractor's Affidavit of Contract Completion.
  1. Page 1 completed by the General Contractor.
  2. Page 2 completed by Architect/Engineer.
- I. Certificate of Occupancy from the authority having jurisdiction.
- J. Notice of Release of Lien from each sub-contractor, worker or supplier, who has filed Notices to Owner.
- K. Contractor's Guarantee of Construction for one (1) year from the date of Final Completion.
- L. Copy of the Approval by the Architect-Engineer and the Transmittal to the Owner of Manuals, Shop Drawings, As-Builts (2 sets in the Department's current adopted standard of AutoCAD and 2 sets of Prints), Brochures, Warranties, and List of Subcontractors, with telephone numbers and addresses.
- M. Verification that Owner's personnel have been trained in the operation of the new installed equipment for each System, i.e., HVAC, Controls, Fire Alarm, etc. and submit to the Owner a list of personnel that attended such training.

- N. Fully executed Roof Warranty, if applicable, in the name of the Owner.
- O. Other special warranties as required by specifications, in the name of the Owner, and
- P. Fully Executed Contractor's Certification of No Hazardous Materials.

**B-23 EXCLUSION OF OWNER FROM LIABILITY - INDEMNITY**

**INDEMNITY:**

The Contractor shall indemnify and hold harmless the Owner, its officers and employees from liabilities, damages, losses, and costs, including, but not limited to, reasonable attorney's fees, to the extent caused by the negligence, recklessness, or intentional wrongful misconduct of the Contractor and persons employed or utilized by the Contractor in the performance of this contract.

It is specifically agreed between the parties executing this contract that it is not intended by any of the provisions of any part of the contract to create in the public or any member thereof, a third party beneficiary hereunder, or to authorize anyone not a party to this contract to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of this contract.

**PAYMENT FOR CLAIMS:**

The Contractor guarantees the payment for all just claims for materials, supplies, tools, or labor and other just claims against the Contractor or any subcontractor, in connection with this Contract. The Department's final acceptance and payment does not release the Contractor's bond until all such claims are paid or released.

**B-24 PROHIBITED MATERIALS**

Per Section 255.40, Florida Statutes, the use of asbestos or asbestos-based fiber materials is prohibited in any buildings, construction of which commenced after September 30, 1983, which is financed with public funds or is constructed for the express purpose of being leased to any governmental entity. As part of construction or renovation projects, architect/engineers and contractors will certify asbestos-containing materials, lead, cadmium, beryllium or other Federal or State prohibited hazardous materials were not specified or installed as part of the projects (See Contractor's Certification of No Prohibited Hazardous Materials Exhibit).

**B-25 USE OF MATERIALS AND COMMODITIES PRODUCED BY PRISON INDUSTRIES – PRIDE**

Per Section 945.515(2), Florida Statutes, no similar article of comparable price and quality found necessary for use by any state agency may be purchased from any other source when the Prison Rehabilitative Industries and Diversified Enterprises (PRIDE) certifies that the same is available and can be furnished by PRIDE. The purchasing authority of any such state agency shall have the power to make reasonable determinations of need, price, and quality with reference to articles available for sale by such correctional work programs. The Contractor, or its subcontractor, shall procure materials and commodities, where available from PRIDE, in the same manner and under the same procedures as required for the Owner under Section 946.515(2), Florida Statutes.

**B-26 CLAIMS AND DISPUTES**

Under the terms of this contract, the Contractor shall not have any right to compensation other than, or in addition to, that provided by this contract, to satisfy any claim for costs, liabilities, or debts of any kind whatever resulting from any act or omission attributable to the Owner unless the Contractor has provided notice and unless a timely claim is delivered to the Owner. All such claims shall be set forth in a petition stating:

- A. Name and business address of the claimant,
- B. A concise statement of the ultimate facts, including the statement of all disputed issues of material fact, upon which the claim is based,
- C. A concise statement of the provisions of the contract together with any federal, state, local laws, ordinances, or code requirements, or customary practices and usages in the industry asserted to be applicable to the questions presented by the claim and a demand for the specific relief believed to be due the claimant, and
- D. The date of occurrence of the event giving rise to the claim and date and manner of the Contractor's compliance with notice requirements. Within thirty (30) calendar days from the date any such claim is received, the Owner shall deliver to the Contractor its written determination on the claim.

Should the Contractor and Owner be unable to settle and dispose of such demand within thirty (30) days from the date any such claim is presented, upon terms and conditions mutually agreeable to the Contractor and the Owner, then such demand shall be referred to the Owner (Secretary of the Florida Department Transportation or designee) for determination, which shall be final and binding upon the Contractor unless appealed in accordance with applicable provisions of the Contract Documents.

**B-27 HARMONY**

Contractor is advised and hereby agrees to exert every reasonable and diligent effort to assure that all labor employed by Contractor and subcontractors on the project shall work in harmony with and be compatible with all other labor being used by building and construction contractors now or hereafter on the site of the project.

Contractor further agrees that this provision will be included in all subcontracts of the subcontractor as well as in the Contractor's own contract; provided, however, that this provision shall not be interpreted or enforced so as to deny or abridge, on account of membership or non-membership in any labor union or labor organization, the right of any person to work as guaranteed by Article 1, Section 6 of the Florida Constitution.

**B-28 TERMINATION FOR CAUSE OR MUTUAL AGREEMENT**

This contract may be terminated by either party upon seven (7) days written notice, if such termination is by mutual agreement, or should one party fail substantially to perform in accordance with its terms through no fault of the other. Also, this contract may be unilaterally terminated by the Owner for refusal by the Contractor to allow public access to all documents, papers, letters, or other material subject to the

provisions of Chapter 119, Florida Statutes, and made or received by the Contractor in conjunction with this contract. In the event of termination for cause, the Contractor shall pay the Owner liquidated damages and costs as described in Section A-22 above. If termination is due to the fault of others than the Contractor, the Contractor shall be paid for services performed to termination date, including reimbursements then due plus terminal expense.

### **B-29 TERMINATION FOR CONVENIENCE**

The performance of work under this contract may be terminated by the Owner in accordance with this clause in whole, or from time to time in part, whenever the Owner shall determine that such termination is in the best interest of the State. If Contract is terminated prior to completion, all work to-date will be delivered to the Department. Upon termination, the Contractor shall be entitled to payment and profit for work completed to the time of termination, only. The percentage of completion shall be determined by the Architect/Engineer, based upon the approved AIA Document G703 – 1992 Continuation Sheet (Schedule of Values).

If the contractor fails to provide the services or is no longer providing services, then all tracings, plans, specifications, maps, computer files, and reports prepared or obtained under this Agreement, as well as all data collected, together with summaries and charts derived therefrom, shall be the exclusive property of the Department without restriction or limitation on their use and shall be made available, upon request, to the Department at any time during the performance of such services and/or upon completion or termination of this Agreement. Upon delivery to the Department of said document(s), the Department shall become the custodian thereof in accordance with Chapter 119, Florida Statutes. The Contractor shall not copyright any material and products or patent any invention developed under this Agreement. The Department shall have the right to visit the site for inspection of the work products of the Contractor at any time.

### **B-30 CONTRACTOR'S PAYMENT RIGHTS**

Contractors providing goods and services to the Owner should be aware of the following time frames. Upon invoice receipt, the Owner has thirty (30) days to inspect and approve the goods and services. The Owner has twenty (20) days to deliver a request for payment (voucher) to the Department of Banking and Finance. The twenty (20) days are measured from the latter of the date the pay request is received or the goods or services are received, inspected, and approved. If payment is not available to the Owner for transmittal to the Contractor within forty (40) days, a separate interest penalty will be due and payable in addition to the invoice amount, pursuant to Section 215.422(3)(b), Florida Statutes. The forty (40) day period is measured from the date the invoice is received, or the date the goods or services are received, inspected, and approved whichever is the latter. Interest penalties of less than one (\$1.00) dollar will not be enforced unless the Contractor requests payment. Invoices returned to the Contractor because of preparation errors will result in a payment delay. Invoice payment requirements do not start until a properly completed Invoice is provided to the Owner.

Bills for fees or other compensation for services or expenses will be submitted to the Department in detail sufficient to conduct a proper preaudit and postaudit thereof.

A Vendor Ombudsman, has been established within the Department of Banking and Finance and the duties include acting as an advocate for vendors who may be experiencing problems in obtaining timely payment(s) from a state agency. They may be contacted at (850) 413-5516 or by calling the Division of Consumer Services at 1-877-693-5236.

Per Section 339.135(6)(a), Florida Statutes, the Owner, during any fiscal year, shall not expend money, incur any liability, or enter into any contract which, by its terms, involves the expenditure of money in excess of the amounts budgeted as available for expenditure, during such fiscal year. Any contract, verbal or written, made in violation of this subsection is null and void, and no money may be paid on such contract. The Project Manager shall obtain a written statement (approved encumbrance) from the Office of Comptroller that funds are available prior to the Owner entering into any such contract or other binding commitment of funds. Nothing herein contained shall prevent the making of contracts for periods exceeding 1 year, but any contract so made shall be executory only for the value of the services to be rendered or agreed to be paid for in succeeding fiscal years; and this paragraph shall be incorporated verbatim in all contracts of the Owner which are for an amount in excess of \$65,000 and which have a term for a period of more than 1 year.

Per Section 255.2502, Florida Statutes, the State of Florida's performance and obligation to pay under this contract is contingent upon an annual appropriation by the Legislature.

### **B-31 PUBLIC ENTITY CRIME INFORMATION STATEMENT**

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

### **B-32 ASSIGNMENT**

The Contractor shall not sublet, sell, transfer, assign, or otherwise dispose of the Contract or any portion thereof, or of its right, title, or interest therein without written approval by the Owner.

### **B-33 DISCRIMINATION CLAUSE**

An entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair or a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity, per Section 287.134(3)(a), Florida Statutes.

### **B-34 UNAUTHORIZED ALIENS**

The Owner shall consider the employment by any Contractor of unauthorized aliens a violation of Section 274(e) of the Immigration and Nationality Act. Such violation shall be cause for unilateral cancellation of this contract.

### **B-35 PERFORMANCE BOND AND LABOR AND MATERIALS PAYMENT BOND**

**NOTE:** *If the contract sum is less than \$100,000, no Performance Bond or Labor and Materials Payment Bond is required. If the contract sum exceeds \$100,000, the Contractor must furnish a Performance Bond of 100% and Labor and Materials Payment Bond of 100%. If increases are made to the original contract sum, the Contractor shall also furnish the Owner with additional bonding equivalent to the increases.*

On projects where the contract sum exceeds \$100,000, the Contractor shall furnish the Owner with a 100 percent (100%) Performance Bond and a 100 percent (100%) Labor and Materials Payment Bond written by a Surety Company acceptable to the Owner and authorized to do business in the State of Florida and signed by a Florida Licensed Agent. Contractor is required to furnish replacement bonds in the event of cancellation of the original Performance Bond and Labor and Materials Payment Bond.

The cost of all Performance Bonds and Labor and Materials Payment Bonds shall be borne by the Contractor. Each bond shall be accompanied by a duly authenticated or certified document such as a Power of Attorney, evidencing that the person executing the bonds on behalf of the Surety had the authority to do so on the date the bonds were executed on behalf of the Surety Company. The date on the document, submitted in duplicate, will be the same date in which the bonds were executed for the Surety.

The Contractor shall furnish the Owner with additional bonding equivalent to any increases in the original contract sum. It is a specific requirement that the surety bond shall continue to be acceptable to the Owner throughout the life of the contract and, in the event that the surety executing the bond, although acceptable to the Owner at the time of execution of the contract, subsequently becomes insolvent or bankrupt, or becomes unreliable or otherwise unsatisfactory due to any cause which becomes apparent after the Owner's initial approval of the company, then the Owner may require that the Contractor immediately replace the surety bond with a similar bond drawn on a surety company authorized to do business in the State of Florida. In such event, all costs of the premium for the new bond, after deducting any amounts which might be returned to the Contractor from his payment of the premium on the defaulting bond, will be borne by the Contractor.

### **B-36 CONSTRUCTION SCHEDULE**

**NOTE:** *All projects exceeding \$200,000 (Contract Levels 4 & 5) require a construction schedule as described below. Should the Owner's Project Manager determine it to be in the best interest of the State, a schedule may also be required on other Contract Levels. (See Section A-1 for definition of "Contract Level".)*

FOR A CONTRACT OF \$2M OR LESS – The Contractor shall prepare and submit a construction schedule within twenty (20)

days after the Owner has issued the Notice to Proceed.

FOR A CONTRACT SUM EXCEEDING \$2M – The Contractor shall prepare and submit a construction schedule within thirty (30) days after the Owner has issued the Notice to Proceed

The construction schedule shall be submitted to the Architect-Engineer in quadruplicate graphically depicting the various activities necessary to complete the project. The schedule shall reflect the sequence of work in which the Contractor proposes each activity to occur, as well as, the duration (beginning and ending dates) of each activity. Since there are various scheduling systems available, it must be one that the Contractor, Architect-Engineer and the Owner all agree to. Examples of such systems include, but are not limited to: Timeline, Primavera, Project Workbench, Superproject, etc. The Architect-Engineer is responsible for determining whether or not the schedule submitted by the Contractor meets project requirements and such determination shall be binding on the Contractor.

The Architect-Engineer shall on a regular basis review the construction schedule to determine whether or not it continues to meet all requirements, as well as, if the progress of work complies with the schedule. The Contractor is responsible for providing, in duplicate, an updated schedule with each pay request (partial and final), as well as, upon request from the Architect-Engineer and/or Owner.

Failure of the Contractor to develop and submit a construction schedule(s) as aforesaid shall be sufficient grounds for the Architect-Engineer to find the Contractor in substantial default, and certify to the Owner that sufficient cause exists to terminate the contract or withhold any payment.

### **B-37 DUTIES OF THE ARCHITECT-ENGINEER'S REPRESENTATIVE**

A. If an Architect-Engineer's Representative is authorized by the Owner, his/her duties shall include, but are not limited to, the following:

1. Assist the Contractor in obtaining interpretation of the Contract Documents from the Architect-Engineer.
2. Conduct daily on-site observations for determining conformance to the Contract Documents in regard to work, materials, equipment, etc.
3. Request additional details and/or information from the Architect-Engineer when needed by the Contractor.
4. Evaluate suggestions and/or modifications submitted by the Contractor and transmit the Architect-Engineer with recommendations.
5. Anticipate problems that could create delays and problems in construction and report them to the Contractor and Architect-Engineer for solution.
6. Maintain official relationship only with the General Contractor Job

- 7. Superintendent(s) and communicate problems to him/her regardless of which subcontractor(s) work is involved.
  - 7. Attend all required construction conferences and participate actively in discussions of the project.
  - 8. When authorized by the Architect-Engineer, conduct tests and inspections as required by the Contract Documents and record results of such tests and inspections.
  - 9. Maintain a daily log of project activity including, but not limited to: hours on the job site, weather conditions, daily construction activity, number of men in each trade on the site, general observations, written and verbal directives to Contractor, and visits of governmental officials.
  - 10. If, upon inspections or observations, work is found not to be in accordance with Contract Documents, advise the Architect-Engineer verbally and in writing. Consult with the Architect-Engineer for further directions if the Contractor does not correct work as directed by the Architect-Engineer.
  - 11. Check that tests and inspections to be performed by others, other than those performed by Architect-Engineer's Representatives and/or the Architect-Engineer, are actually performed in accordance with the Contract Documents.
  - 12. When requested, accompany all state and federal officials on inspections of construction and record the inspection in the log.
  - 13. Cooperate with the Owner's Project Manager or Inspectors and provide them with all requested information about the project.
  - 14. Maintain in an orderly manner, files of correspondence, reports of job conferences, shop drawings and samples, copies of contract documents, change orders, addenda, supplementary drawings, and job log.
  - 15. Review requisitions for payment submitted by Contractor and transmit to the Architect-Engineer with recommendations.
  - 16. Participate in the inspections of construction with the Architect-Engineer and Owner's Project Manager at regular intervals and at Substantial Completion and provide Architect-Engineer with information as to work which is not complete, defective, or not in accordance with Contract Documents.
  - 17. Refer all communications from other agencies, authorities, etc. to the Owner's Project Manager and Architect-Engineer.
  - 18. Copy the Owner's Project Manager on all correspondence related to the project.
  - 19. Review plans, specifications, and shop drawings on a regular basis. Be alert to errors and omissions on the Contract Documents and construction problems before they occur and advise the Architect-Engineer when discovered.
  - 20. Advise Contractor and Architect-Engineer of work being performed with unapproved shop drawings or without shop drawings when such shop drawings are required by specifications.
  - 21. Check materials and equipment delivered to the job site against specifications, approved samples, shop drawings, and related correspondence. If in conflict, advise Contractor and Architect-Engineer.
  - 22. Check that the Contractor is maintaining record notable drawings of As-Built conditions, when As-Built drawings are specified to be provided.
- B. The Architect-Engineer's Representative is not authorized to do the following:
- 1. Authorize minor deviations from the Contract Documents (unless preapproved in writing by Architect-Engineer).
  - 2. Expedite the work for the Contractor(s).
  - 3. Advise the Contractor on building techniques or scheduling.
  - 4. Approve shop drawings.
  - 5. Issue certificates for payment.
  - 6. Approve substitutions.
  - 7. Interpret Contract Documents for others.
- C. The Architect-Engineer's Representative shall not:
- 1. Get involved in disputes or problems between the Contractor and subcontractors.
  - 3. Offer gratuitous advice to the Contractor or subcontractors on how to perform the work whether solicited or not.
  - 4. Make vague and unclear log entries as to the acceptability of the Contractor's work.

If unacceptable and not corrected properly and in a timely manner, the condition should be entered into the job log clearly as a statement made with follow-up written communication to the Architect-Engineer.

5. Order a work stoppage except in extreme emergencies and except under conditions authorized only by the Architect-Engineer.

### **B-38 CONTRACTOR'S REPRESENTATION (EXPERIENCE QUESTIONNAIRE & FINANCIAL STATEMENT)**

**NOTE:** *For all Contract sums exceeding \$200,000, the Contractor shall submit a Contractor's Experience Questionnaire and Financial Statement (see Section A-1 for definition of "Contract Level").*

The Contractor represents and warrants the information provided on the "Experience Questionnaire and Contractor's Financial Statement" which was submitted by the Contractor to qualify for award of this contract, and is hereby made a part of this Contract by reference, is true, accurate, and correct. The Contractor understands and agrees that materially inaccurate information may result in termination of this contract at the Owner's option.

### **B-39 CONTRACTOR'S WORK FORCE**

**NOTE:** *For contract sums exceeding \$200,000, the Contractor shall agree to perform no less than 15% of project instruction work utilizing its own employees (see Section A-1 for definition of "Contract Level").*

The Contractor agrees to perform no less than fifteen percent (15%) of the project construction work utilizing its own employees. The percentage shall be calculated on the basis of the cost of materials and labor utilized by the prime Contractor's own forces in relation to the original contract sum.

### **B-40 CONTRACTOR'S PROJECT SUPERVISION**

**NOTE:** *For contract sums exceeding \$200,000, the Contractor must provide field supervision as described below (see Section A-1 for definition of "Contract Level").*

The Contractor must provide, as a minimum, field (on site) supervision (through a named superintendent) of each of the general, concrete forming and placement, masonry, mechanical, plumbing, electrical, and roofing trades, either through the use of their employees, or in the instance of mechanical, plumbing, and electrical trades through the use of employees of the subcontractor as shown on the Contractor's Experience Questionnaire and Financial Statement. The Contractor shall not change or deviate from these principal and supervisory personnel without written consent of the Owner.

### **B-41 DRUG-FREE WORKPLACE**

Each construction contractor regulated under Part I of Chapter 489, and electrical contractor or alarm system contractor regulated under Part II of Chapter 489, who contracts to perform construction work under a state contract for public property or publicly owned buildings governed by Chapter 255 must implement a drug-free workplace program as required by Section 440.102(15), Florida Statutes. The Contractor represents, covenants, and warrants that it has implemented a drug-free workplace program in accordance with the standards and procedures established in Section 440.102, Florida Statutes. This requirement applies to contracts entered into on or after October 1, 2002.

### **B-42 COMPLIANCE WITH LAWS**

Upon execution of the Contract, the Department reserves the right to conduct an audit of the Contractor's Records pertaining to this project. The Department or its representatives may conduct an audit, or audits, at any time prior to final payment or thereafter. The Department may also require submittal of the records from either the prime contractor, the subcontractor, or both. As the Department deems necessary, records include all books of accounting, supporting documents, and papers pertaining to the cost of performance of the project work.

The Contractor shall allow public access to all documents, papers, letters, or other material subject to the provisions of Chapter 119, Florida Statutes, and made or received by the Contractor in conjunction with this Agreement. Specifically, if the Contractor is acting on behalf of a public agency the Contractor shall:

- (1) Keep and maintain public records that ordinarily and necessarily would be required by the Department in order to perform the services being performed by the Contractor.

- (2) Provide the public with access to public records on the same terms and conditions that the Department would provide the records and at a cost that does not exceed the cost provided in chapter 119, Florida Statutes, or as otherwise provided by law.

- (3) Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law.

- (4) Meet all requirements for retaining public records and transfer, at no cost, to the Department all public records in possession of the Contractor upon termination of the Agreement and destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. All records stored electronically must be provided to the Department in a format that is compatible with the information technology systems of the Department.

Failure by the Contractor to grant such public access shall be grounds for immediate unilateral cancellation of this Agreement by the Department. The Contractor shall promptly provide the Department with a copy of any request to inspect or copy public records in possession of the Contractor and shall promptly provide the Department a copy of the Contractor's response to each such request.

### **B-43 Scrutinized Companies.**

For Contracts \$1,000,000 and greater, if the Department determines the Contractor submitted a false certification

under Section 287.135(5) of the Florida Statutes, or if the Contractor has been placed on the Scrutinized Companies with Activities in the Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, the Department shall either terminate the Contract after it has given the Contractor notice and an opportunity to demonstrate the Department's determination of false certification was in error pursuant to Section 287.135(5)(a) of the Florida Statutes, or maintain the Contract if the conditions of Section 287.135(4) of the Florida Statutes are met.

## SECTION C SPECIAL CONDITIONS

### C-1 WATER

The Contractor shall furnish and pay for all water necessary for construction of the building and testing its plumbing and mechanical systems. The Contractor shall make all connections, install a meter, take out and pay for all permits necessary, do all piping, and clear away all evidence of the same after the job is completed.

### C-2 ELECTRICITY

The Contractor shall provide and pay for electricity for light and power necessary for the construction of the building and testing of its electrical and mechanical systems. The Contractor shall make all necessary arrangements for this service and perform the work required.

### C-3 INITIAL CONSTRUCTION CONFERENCE

Immediately prior to starting construction, the Owner's Project Manager will arrange a meeting with the Architect-Engineer, Contractor, subcontractors, and other interested parties. The purpose of this meeting shall be to discuss requirements and responsibilities of the various parties involved with the objective of expeditious handling of the contract. The Owner's Project Manager will chair this meeting.

### C-4 SITE SECURITY

The Contractor shall pay for and be responsible for securing the site and the project against theft, vandalism, and fire, and to ensure public safety at all times (twenty-four (24) hours per day) from the issuance of the Notice to Proceed until Substantial Completion.

### C-5 ARCHITECT-ENGINEER'S FIELD OFFICE

**NOTE: For contract sums exceeding \$200,000, the Contractor shall provide a field office (see Section A-1 for definition of "Contract Level").**

The Contractor shall provide and maintain a watertight office at the project for the exclusive use of the Architect Engineer and representatives, not less than 12'x12' in size, one room with at least one window in each exterior wall and an independent outside entrance door fitted with hardware and lock, artificial light, a bench with one drawer, a blueprint rack, a heater, and a window air conditioner. Upon completion of the contract, this office and equipment shall become the property of the Contractor, who shall be responsible for removal and disposal of the office and equipment.

### C-6 TELEPHONE

**NOTE: For contract sums exceeding \$200,000 (see Section A-1 for definition of "Contract Level"), the Contractor shall furnish a phone in the field office.**

A telephone shall be installed and remain activated in the Architect-Engineer's office until project is fully completed. Charges for long distance calls shall be paid by the person making the calls, and all other charges in connection with the telephone shall be paid by the Contractor.

### C-7 PROJECT SIGN

**NOTE: For contract sums exceeding \$200,000 (see Section A-1 for definition of "Contract Level"), the Contractor shall erect a project sign.**

