

ADDENDUM 1

ADDENDUM DATE: October 7th, 2024

PROJECT: Orange County Architectural Renovations
Orange County, NC

OWNER: Orange County Asset Management
306 Revere Rd. Suite A102.
Hillsborough, NC 27278

ARCHITECT: Smith Sinnett Architecture, P.A.
4600 Lake Boone Trail, Suite 205
Raleigh, North Carolina 27607

BIDS DUE: **October 15th, 2024 at 3:00 p.m.**
Orange County Finance, Administrative Services,
131 W. Margaret Lane Suite 300, Conference Room 302
Hillsborough, North Carolina 27278



Please note, Project Addenda and Bidders List are available at www.smithsinnett.com under the 'Documents' Tab on the navigation bar.

This Addendum shall be included in the contract for the above-referenced project. All General, Supplementary and Special Conditions, etc., as originally specified or as modified below shall apply to these items.

General

1. Refer to list of attachments on page 3 including addenda from other disciplines.
2. Reminder: The Pre-Bid Meeting held on September 30th was mandatory. Meeting agenda is attached along with comments and questions from the meeting. The sign in sheet has been posted to the web address listed above.
3. Record Electrical Drawings are scarce for the elevator projects but what is available has been posted to project bid page listed above. These are supplemental documents for reference and not part of the construction documents.

Drawings

4. **Revised:** Cedar Grove Flooring Replacement – Sheet A1-01 –
 - Floor Finish Legend “SFL” topical moisture mitigation system shall include slip sheets per manufacturer- refer to item 7 of this addendum and specifications.

- Floor Finish Legend “PC” Janitor Closet 117 floor shall be prepped and repainted with epoxy paint in the base bid. Delete “Refer to schedule of alternates”
5. **Revised:** Animal Services Flooring Replacement - A1-02 – Keynotes 3, 4, and 5. Change reference to A1-04 to A5-01.
 6. **Clarification:** Animal Services Flooring Replacement – The existing flooring shall be removed down to bare floor slab to provide and brand new warranted floor installation.
 7. **Revised:** Whitted Window Details (A6-12) has been revised to show panning in keeping with existing windows. Sheet attached.

Specifications

8. **Clarification:** Section 01 21 00 Allowances – 3.3 - Allowance Up/A-1: Moisture remediation primer – Allowance applies to all projects. It is to be used toward any portion of flooring that does not specifically call for moisture mitigation in the drawings. Refer to drawing finish notes and legend.
9. **Revised:** Section 01 21 00 Allowances – 3.3 - Allowances Up/A-2A and Up/A-2B have been added for any necessary repair of walls or ceiling that are attached to windows. This shall not be used for repairing portions of the building damaged as a result of general construction activities.
10. **Revised :** 01 23 00 Alternates –
 - Whitted Building – Alternate 13 added for preferred manufacturer, Fire Alarm System.
 - Gateway Center - Alternate 2 added for preferred manufacturer, Fire Alarm System.
 - OC Courthouse - Alternate 2 added for preferred manufacturer, Fire Alarm System.
11. **Revised:** 09 65 00 Resilient Flooring and Accessories – Specification added
12. **Revised:** 09 65 66 Resilient Athletic Flooring – 2.2 Change Drawing Symbol to read “SFL” to correspond with schedule in drawings. 2.3 Add Tarkolay moisture mitigation slip sheet as basis of design.
13. **Clarification:** 09 65 66 Resilient Athletic Flooring – 2.3 – Note slip sheet required for moisture mitigation.
14. **Revised:** 09 67 23 Resinous Flooring – Specification section added
15. **Revised:** 09 91 00 Painting – 2.3 Trench Drain Pits are to be painted with Polysiloxane XLE 80 or equal.
16. **Clarification:** Division 14 Specifications:
 - For any direct conflicting information between the specification and exhibit reports, the report shall govern unless otherwise clarified in subsequent addenda.

- Elevator modernizations will require all necessary hardware and integration for video monitoring in accordance with DOL requirements.

Requests for Substitutions

17. **Revised:** 142400_Hydraulic Elevators – Section 2.1 - The owner will now accept non-proprietary elevator manufacturers in the base bid.
Elevated Facility Services
Charter Elevator Piedmont

End of Addendum 1

Attached:

PreBid Meeting Notes

Drawings:

Whitted Building A6-12

Specifications:

00 42 00

01 21 00

01 23 00

09 65 00

09 67 23

09 91 00

Owner: Orange County Asset Management
306 Revere Road A102
Hillsborough, North Carolina 27278

Location: Cedar Grove Community Center - 5800 NC Hwy-NC 86, Hillsborough, NC
Whitted Building: 300 W. Tryon St., Hillsborough, NC
Gateway Center – 228 S. Churton Street, Hillsborough NC
Orange County Courthouse – 106 E. Margaret Lane, Hillsborough NC
Piedmont Food Processing Center - 500 Valley Forge Rd., Hillsborough NC
Orange County Animal Services – 1601 Eubanks Rd., Chapel Hill, NC

Architect: Smith Sinnett Architecture, P.A.
4600 Lake Boone Trail, Suite 205
Raleigh, NC 27607
Phone: (919) 781-8582
Fax: (919) 781-3979

Drew Wilgus dwilgus@smithsinnett.com

On behalf of the Owner and Smith Sinnett Architecture, we would like to thank you for your interest and attendance at this Pre-Bid Conference. As this is a mandatory Pre-Bid, any GC's not present and signed in will not be eligible to bid.

I Bid:

Bids will be received until **3:00 pm on Tuesday October 15th, 2024** for a Single Prime Contract at:

Orange County Finance, Administrative Services,
131 W. Margaret Lane Suite 300, **Conference Room 302**,
Hillsborough, North Carolina 27278

As this is an formal bid process, all bids will be opened publicly at 3:00 p.m. on the date listed above. ~~The owner may decide to broadcast this virtually to bidders. Bid opening will be in person.~~

II Bid Day Documents: Refer to Specifications

1. Proposal Form Pages 1 through 6 - Signed, Sealed and Attested (or witnessed)
2. Bid Bond (5%) or Certified Check (5%)
3. Minority Business Guidelines (10% Goal)
4. Supplemental Vendor Information: Historically Underutilized Businesses
5. Affidavit A or Affidavit B
6. E-Verify Affidavit
7. Living Wage Contractor Policy
8. Orange County Nondiscrimination Certification
9. Safety Questionnaire
10. Bid envelope should be sealed with the following information listed on the outside of the envelope.
 - a. Bidder's Name and Address
 - b. North Carolina Contractor's License Number
 - c. Name of Project
11. If awarded the Contract, the Bidder must provide an executed Performance Bond and Payment Bond for 100% of the Contract by a company licensed in North Carolina. Certificates of Insurance meeting the requirements indicated in the Specifications will also be required.
12. Any bids that have qualifying notes or comments will be rejected.

13. For mailed bids, it is the contractor's responsibility to ensure the bid arrives prior to the bid opening time. Place the bid in a double envelope with "Sealed Bid Do Not Open" written on the envelope.

III Alternates / Allowances:

ALTERNATES:

Cedar Grove Community Center – Flooring Replacement

A. **Alternate 1; Owner Preferred Manufacturer – Tarkett Sports Indoor**

The owner has found the following brand/product(s) to be superior in application and durability. Per GS133-3, the flooring are required to be bid as an alternate to the base specification. State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing the Owner Preferred Manufacturers Listed Below:

List of Preferred Manufacturers- **Tarkett Sports Indoor.** - Refer to Section 09 65 66

Whitted Building Improvements

- A. **Alternate 1; Scope – Building A South Elevation, Level 1:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing window replacement in the above listed portion of the building.
- B. **Alternate 2; Scope – Building A East Elevation, Level 1 and Level 2:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing window replacement in the above listed portion of the building.
- C. **Alternate 3; Scope – Building A West Elevation, Level 1:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing window replacement in the above listed portion of the building.
- D. **Alternate 4; Scope – Building A West Elevation, Level 1, Level 2 and Level 3:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing window replacement in the above listed portion of the building.
- E. **Alternate 5; Scope – Building A North Elevation, Level 1, Level 2 and Level 3:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing window replacement in the above listed portion of the building.
- F. **Alternate 6; Scope – Building B North Elevation, Level 2:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing window replacement in the above listed portion of the building.
- G. **Alternate 7; Scope – Building B South Elevation, Level 2 and Level 3:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing window replacement in the above listed portion of the building.
- H. **Alternate 8; Scope – Building B East Elevation, Level 1:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing window replacement in the above listed portion of the building.
- I. **Alternate 9; Scope – Building B West Elevation, Level 3:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing window replacement in the above listed portion of the building.

- J. **Alternate 10; Scope – Building B West Elevation, Level 2:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing window replacement in the above listed portion of the building.
- K. **Alternate 11; Scope – Building B West Elevation, Level 1:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing window replacement in the above listed portion of the building.
- L. **Alternate 12; Owner Preferred Manufacturer – Otis Elevators:**
The owner has found the following brand/product(s) to be superior in application and durability. Per GS133-3, the following are required to be bid as an alternate to the base specification. State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing the Owner Preferred Manufacturers Listed Below:
List of Preferred Manufacturers- **Otis Elevator Co.** - Refer to Section 14 24 00

Gateway Center Elevator Modernization

- A. **Alternate 1; Owner Preferred Manufacturer – Otis Elevators**
The owner has found the following brand/product(s) to be superior in application and durability. Per GS133-3, the following are required to be bid as an alternate to the base specification. State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing the Owner Preferred Manufacturers Listed Below:
List of Preferred Manufacturers- **Otis Elevator Co.** - Refer to Section 14 24 00

Orange County Courthouse Elevator Modernization

- A. **Alternate 1; Owner Preferred Manufacturer – Otis Elevators**
The owner has found the following brand/product(s) to be superior in application and durability. Per GS133-3, the following are required to be bid as an alternate to the base specification. State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing the Owner Preferred Manufacturers Listed Below:
List of Preferred Manufacturers- **Otis Elevator Co.** - Refer to Section 14 24 00

Orange County Animal Services

- A. **Alternate 1; Scope – Food Prep 121 Flooring:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing flooring replacement in the above listed portion of the building.
- B. **Alternate 2; Scope – Stray Cat 138 Flooring:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing flooring replacement in the above listed portion of the building.
- C. **Alternate 3; Scope – Kitten 139 Flooring:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing flooring replacement in the above listed portion of the building.

- D. **Alternate 4; Scope – Food Prep 140 Flooring:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing flooring replacement in the above listed portion of the building.
- E. **Alternate 5; Scope – Court Hold Cat 141 Flooring:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing flooring replacement in the above listed portion of the building.

ALLOWANCES

(Refer to Division 01 Section 01 21 00 – Allowances for amounts to be included in bid) *** **Follow the below numbering when filling out the proposal form.**

Allowance No. Up/A-1; Moisture Remediation Primer:

Allow an amount per square foot for addition moisture mitigation primer for flooring that is not otherwise specified to receive such in the design documents.

Quantity: 750 SF

Allowance No. Up/A-2; Flashing Repair/Repointing Above Cornice:

Allow an amount per linear foot to repair flashing and or repoint brick above the metal cornice of the Whitted Building.

Quantity: 100 LF

Allowance No. A-3; General Contingency – Cedar Grove Community Center:

Contingency allowance shall be provided as follows and the price shall be adjusted based on the actual cost of subcontracts, materials, and labor, excluding overhead and profit. Allowances for overhead and profit shall be provided within the contract price. If there is unused allowance at the conclusion of the project, the allowance plus 15% will be deducted from the contract.

Contingency: \$25,000 Lump Sum

Allowance No. A-4; General Contingency – Whitted Building Window Replacement:

Contingency allowance shall be provided as follows and the price shall be adjusted based on the actual cost of subcontracts, materials, and labor, excluding overhead and profit. Allowances for overhead and profit shall be provided within the contract price. If there is unused allowance at the conclusion of the project, the allowance plus 15% will be deducted from the contract.

Contingency: \$60,000 Lump Sum

Allowance No. A-5; General Contingency – Gateway Center Elevator Modernization:

Contingency allowance shall be provided as follows and the price shall be adjusted based on the actual cost of subcontracts, materials, and labor, excluding overhead and profit. Allowances for overhead and profit shall be provided within the contract price. If there is unused allowance at the conclusion of the project, the allowance plus 15% will be deducted from the contract.

Contingency: \$25,000 Lump Sum

Allowance No. A-6; General Contingency – Orange County Courthouse Elevator Modernization:

Contingency allowance shall be provided as follows and the price shall be adjusted based on the actual cost of subcontracts, materials, and labor, excluding overhead and profit. Allowances for overhead and profit shall be provided within the contract price. If there is unused allowance at the conclusion of the project, the allowance plus 15% will be deducted from the contract.

Contingency: \$25,000 Lump Sum

Allowance No. A-7; General Contingency – Piedmont Food Processing Center:

Contingency allowance shall be provided as follows and the price shall be adjusted based on the actual cost of subcontracts, materials, and labor, excluding overhead and profit. Allowances for overhead and profit shall be provided within the contract price. If there is unused allowance at the conclusion of the project, the allowance plus 15% will be deducted from the contract.

Contingency: \$3,000 Lump Sum

Allowance No. A-8; General Contingency – Orange County Animal Services:

Contingency allowance shall be provided as follows and the price shall be adjusted based on the actual cost of subcontracts, materials, and labor, excluding overhead and profit. Allowances for overhead and profit shall be provided within the contract price. If there is unused allowance at the conclusion of the project, the allowance plus 15% will be deducted from the contract.

Contingency: \$25,000 Lump Sum

IV E-Procurement Vendors

E-Procurement rules WILL apply for Registered E-Procurement Vendors only. If the low bidder is an E-Procurement Vendor, the owner will not be responsible for any fees associated with the E-Procurement process incurred by the low bidder or any subcontractor. Refer to 009010 Special Conditions Article 8

V Schedule:

Notice to Proceed: anticipated **November 15th, 2024.**
Substantial Completion: **May 14th, 2023 (approx. 180 days)**
Final Completion: shall occur 30 days after Substantial Completion

VI Liquidated Damages:

See Supplementary General Conditions: **\$500.00 each calendar day** in excess of the stated completion time.

VII Examination of Bid Documents:

All Bidders are expected to fully examine and familiarize themselves with the Drawings, Specifications and Existing Conditions. All Bidders should read the scopes of the bid package. Any questions or clarifications should be directed to the Architect. No allowances will be made after the bids are received for any oversight due to failure to examine the documents.

VIII Substitutions:

Substitutions or approvals of "Equals" will only be accepted if approved by the Architect in writing at least 7 days prior to the receipt of bids: October 8th, 2024.

IX Technical Questions:

Technical questions should be submitted to Architect as soon as possible by phone or preferably email.

Drew Wilgus
dwilgus@smithsinnett.com
(919) 455-4227

X Construction Documents:

This is a formal bid and construction documents and specifications are available in PDF format upon ShareFile link request. All addenda as well as the plan holders list will also be posted to the Smith Sinnett Architecture website under the "Documents" tab. If you have any issues or cannot download any of the documents, please let us know and we will work to make sure you can get them.

XI Addenda:

Addenda will be posted to the website @ <http://smithsinnett.com/documents/> and a notification will be sent to everyone on the Architect's plan holders list.

XII Plan Holders and Bidders List:

Plan Holders and Bidders List will be posted on our website. @ <http://smithsinnett.com/documents/>

XIII Architect's brief description of the project:

The project includes improvements at six separate sites in Hillsborough and northern Chapel Hill.

Cedar Grove Community Center: Floor replacement- approximately 9,500sf.

Whitted Building: Window replacement, architectural metal cornice restoration, elevator modernization.

Gateway Center: Elevator modernization

Orange County Courthouse: Elevator modernization

Piedmont Food Processing Center: Replacement of six windows.

Orange County Animal Services: Floor replacement- approximately 11,700sf

Bids will be received from general contractors for Single Prime. All proposals shall be lump sum.

Comments:

Will Otis be the accepted manufacturer? No, Otis is the basis of design and, per state statute, the owner may choose to select Otis at whatever premium cost there may be. However, any approved equal manufacturer shall apply for the base bid.

Will temporary storage be provided or can Conex trailers be accommodated? Temporary storage at all work locations should be considered the responsibility of the contractor to furnish. Location of trailers will be coordinated with owner and users.

On the Whitted project, how will walls terminating mid-window series be addressed? Each window/wall junction has not been documented. A unit price is to be provided for the linear ft. of wall end (measured vertically that terminates at a window).

What are the fire alarm companies for the elevator Projects?

1. Whitted Human Services
First Fire Protection Inc. 919.233.6997 Anthony Stanley

2. Justice Facility
Siemens Industry Inc. Nelson Ciuffardi nelson.ciuffardi@siemens.com 984.389.5833

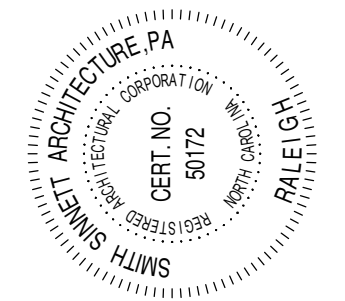
3. Gateway Building
Pinnacle Fire Systems Inc. Bart Arthurs bart@pinnaclefire.com 919.367.0240

Angel will reach out to the asbestos testing agent to perform testing throughout Whitted and Justice.

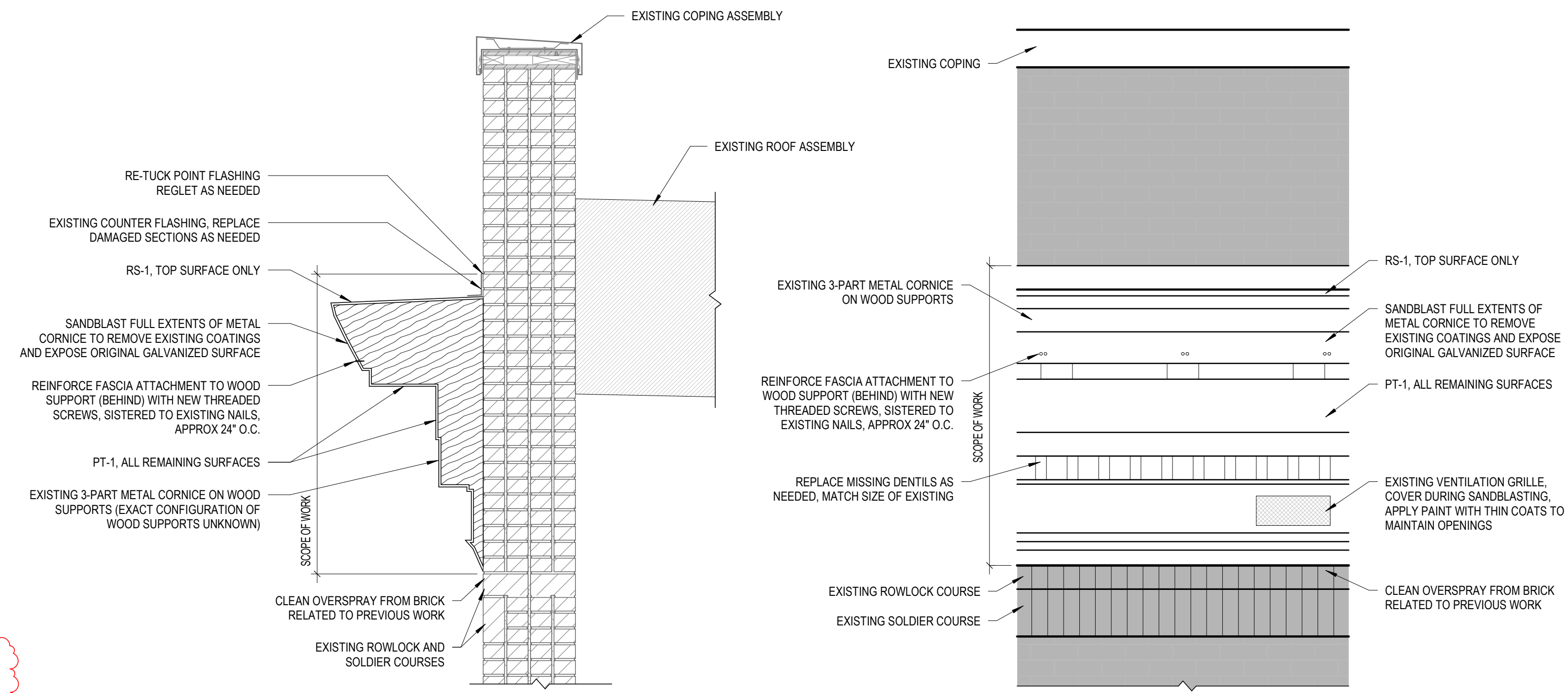
Gateway and OC Courthouse Elevators –Both of these elevators have card readers that will need to be removed and replaced by Orange County’s Security contractor ProNet Systems, Richard McClenny RichardM@pronetsystemsnc.com 919.255.0915

Gateway Center Elevator – One card reader on the exterior in the lobby, allows staff to use the elevator outside the hours of 8 am to 5 pm Monday – Friday, otherwise this card reader is not used. There is a card reader on the inside of this elevator that allows the county the ability to block access to specific floors during hours of 8 am to 5 pm Monday – Friday.
OC Courthouse Elevator – One card reader on the interior of the elevator allows access to the 2nd floor of the Courthouse.

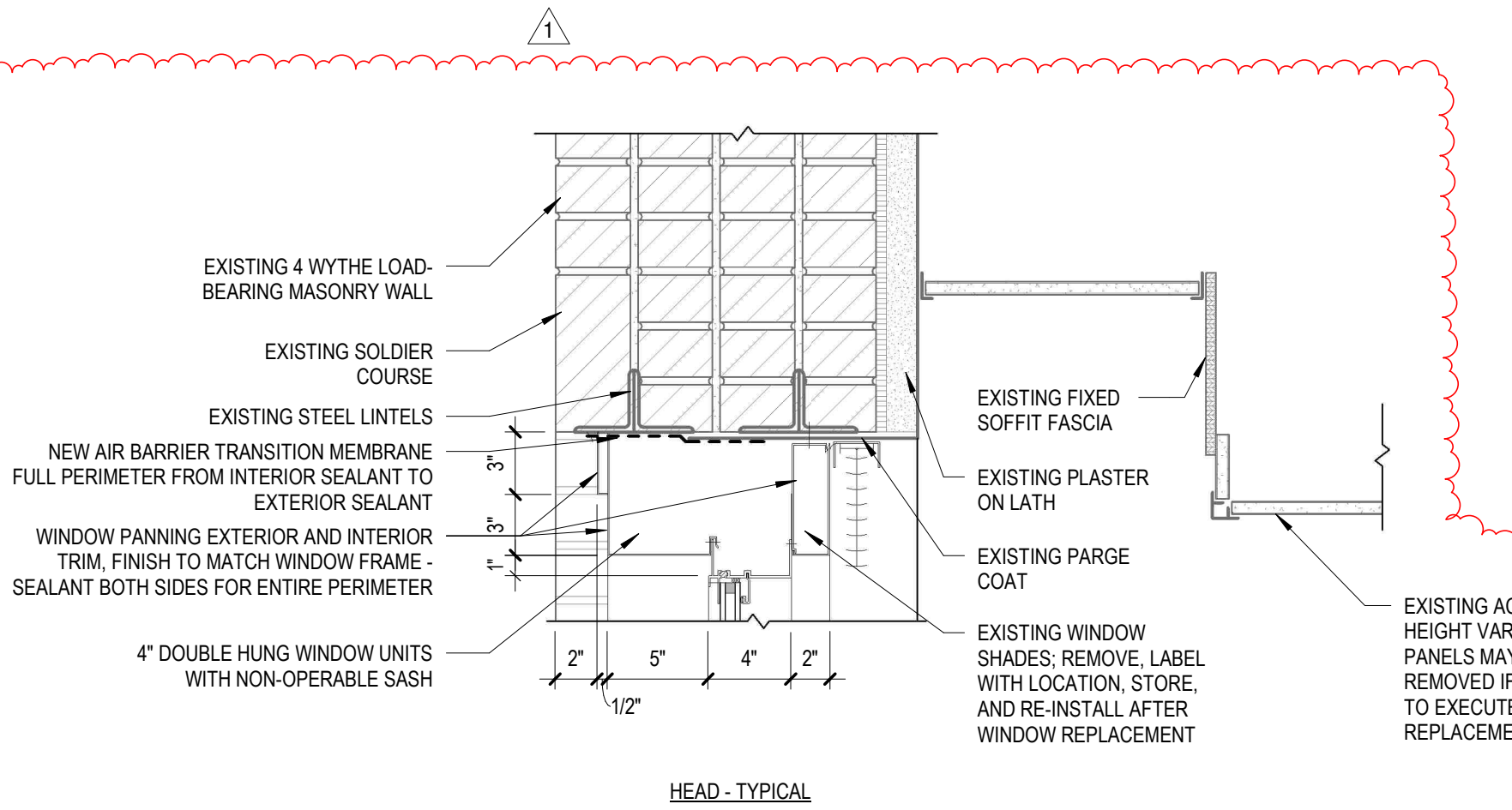
Gateway Center Elevator - The Tax office cannot have the elevator down from December 10, 2024 to January 10, 2024, this is their busiest time and they must have the elevator during these dates.



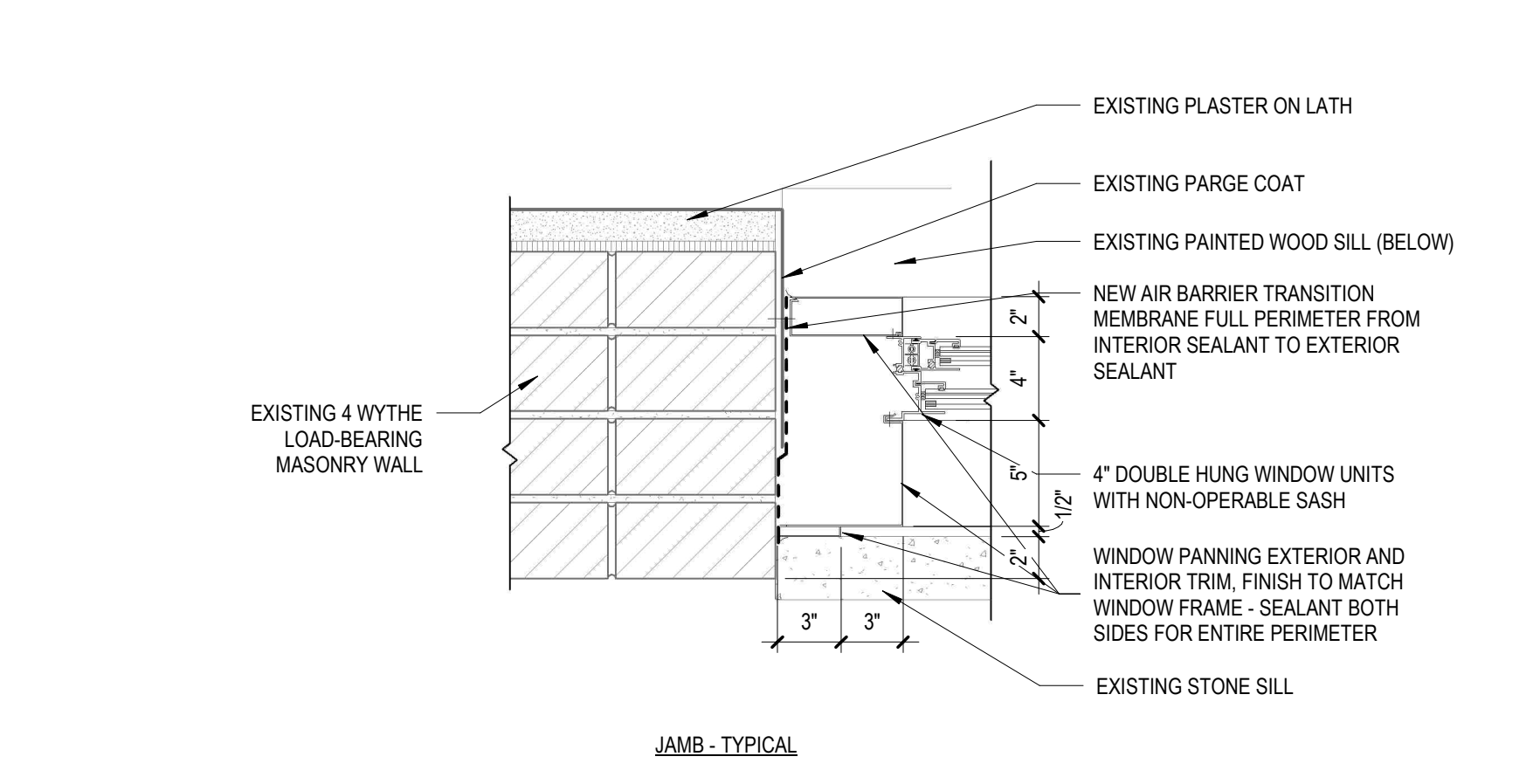
- GENERAL CONDITIONS NOTES:**
- EXISTING CONDITIONS DEPICTED HEREIN ARE BASED ON FIELD OBSERVATIONS, FIELD MEASUREMENTS, AND LIMITED EXISTING DRAWINGS. REFER TO "ADDENDUM 1 - EXISTING DRAWINGS" FOR MORE INFORMATION.
 - GC SHALL MAKE REASONABLE EFFORTS TO MINIMIZE DAMAGE TO EXISTING CONDITIONS, AND SHALL PATCH AND REPAIR ANYTHING DAMAGED DURING DEMOLITION AND CONSTRUCTION.
 - GC SHALL ALERT THE OWNER TO EXISTING CONDITIONS WHICH MAY HINDER WORK, I.E. TREES AT BUILDING PERIMETER, BEFORE PROCEEDING WITH WORK.
 - THE BUILDING WILL BE OCCUPIED AS WORK IS COMPLETED. GC IS RESPONSIBLE FOR SCHEDULING WORK WITH THE OWNER TO MINIMIZE DISTURBANCE AND OBSERVE SAFETY PRECAUTIONS. THE GC IS RESPONSIBLE FOR PROVIDING ITS OWN POWER AND FACILITIES. REFER TO PROJECT SPECIFICATIONS.
 - REMOVE EXISTING WINDOW, GLAZING, BLINDS, FRAME, AND ITS ASSOCIATED PARTS IN ITS ENTIRETY. BLINDS ARE TO BE CAREFULLY REMOVED, LABELED, STORED, AND REINSTALLED FOLLOWING WINDOW REPLACEMENT. OPENING SHALL BE SECURED WITH EITHER A WEATHER-PROOF TEMPORARY PARTITION OR THE PERMANENT FRAME AND GLAZING. PREPARE EXISTING WALL TO RECEIVE A NEW FRAME AND PREPARE SURROUNDING AREA TO RECEIVE NEW FINISH SPECIFIED OR MATCH EXISTING IF NO FINISH IS SPECIFIED.
 - OCCUPANT FURNITURE IMPEDING INTERIOR ACCESS TO WINDOWS SHALL BE MOVED OUT OF THE WAY BY GC, TARPED FOR DUST PROTECTION, AND REPLACED AFTER WORK IS COMPLETE.
 - THERE ARE NO NEW OPENINGS IN THE SCOPE OF WORK. ALL WINDOWS INCLUDED IN THE WORK ARE REPLACING EXISTING. SEE DETAILS FOR PREPARING EXISTING WINDOW OPENINGS TO RECEIVE NEW WINDOWS.
- CORNICE NOTES:**
- REFER TO ELEVATIONS FOR EXTENTS AND DETAILS FOR RESTORATION INFORMATION.
 - ALL NEW CORNICE MATERIALS SHALL BE ATTACHED WITH POP RIVETS, THREADED SCREWS, OR OTHER MECHANICAL FASTENERS. WELDING AND OTHER HEAT-BASED ATTACHMENT METHODS SHALL NOT BE ALLOWED DUE TO FIRE HAZARD.
 - SANDBLASTING AND REPAINTING SHALL BE DONE IN SMALL SECTIONS. RAW METAL SURFACES SHALL NOT BE EXPOSED TO MOISTURE FOR MORE THAN 48 HOURS.
 - VISUAL INSPECTIONS INDICATE THAT THE UNDERLYING METAL CORNICE IS IN SOUND CONDITION AND FREE FROM RUST. G.C. SHALL NOTIFY ARCHITECT IMMEDIATELY IF SANDBLASTING REVEALS ANY AREAS THAT HAVE BEEN COMPROMISED BY RUST OR OTHER DAMAGE.
- CORNICE LEGEND:**
- PT-1 WHITE EXTERIOR LATEX PAINT OVER RUST-INHIBITING PRIMER
RS-1 WHITE SILICONE-BASED ROOFING SEALANT OVER RUST-INHIBITING PRIMER



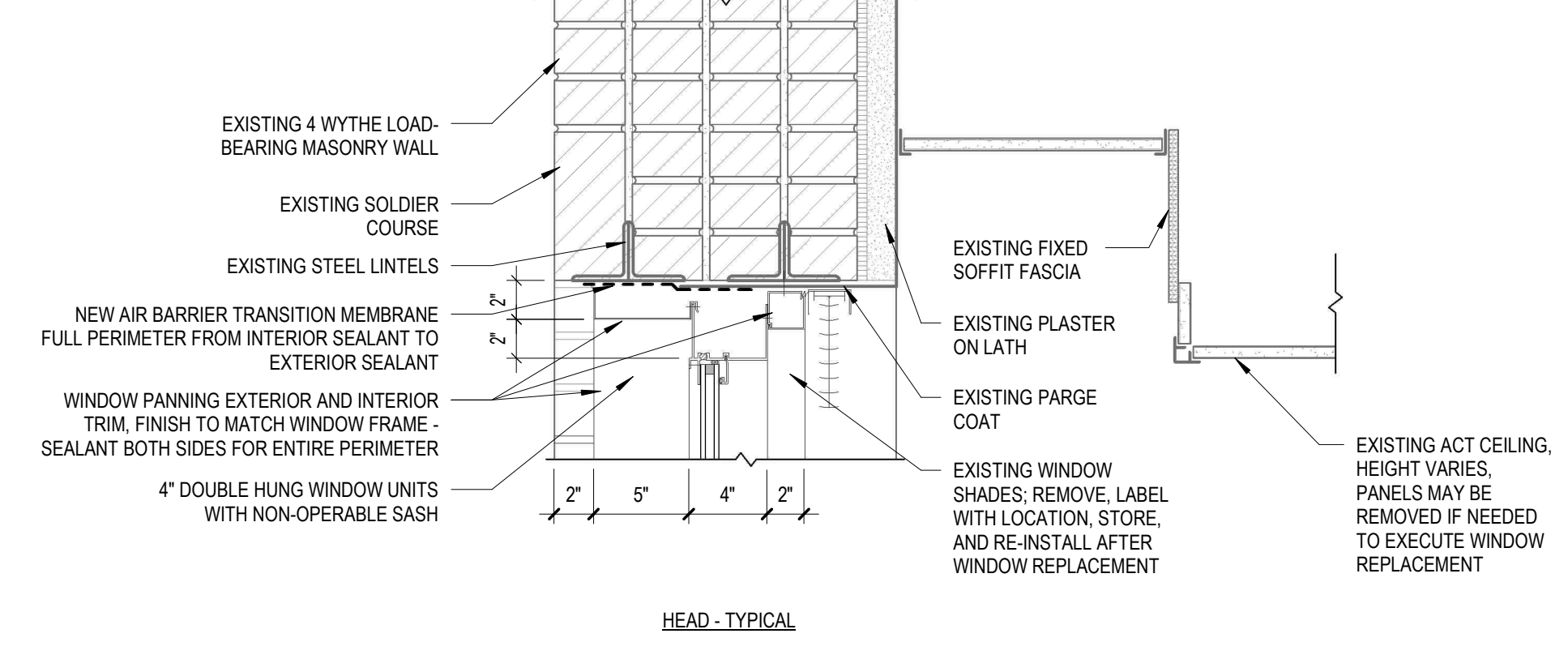
2 CORNICE DETAILS
A6-12 3/4" = 1'-0"



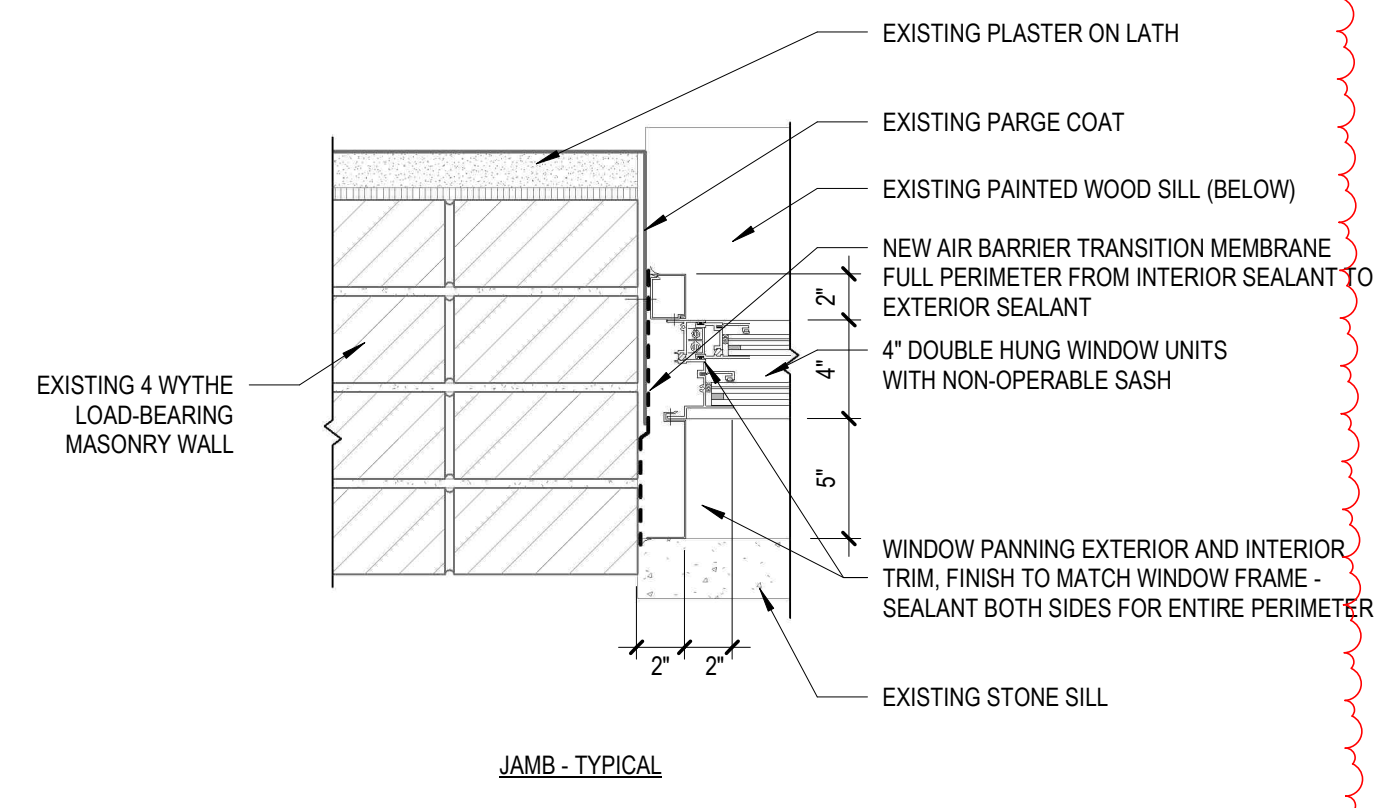
HEAD - TYPICAL



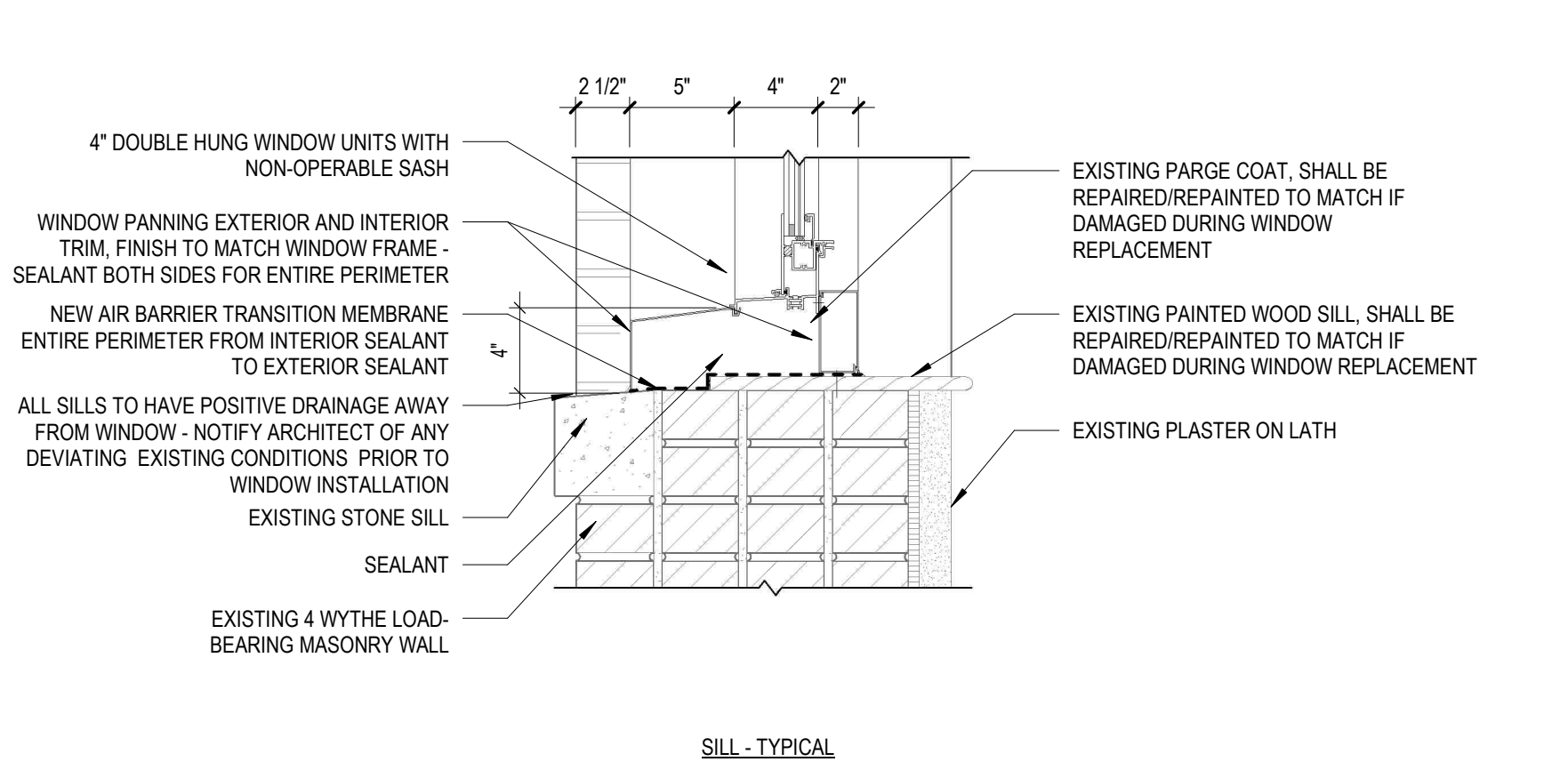
JAMB - TYPICAL



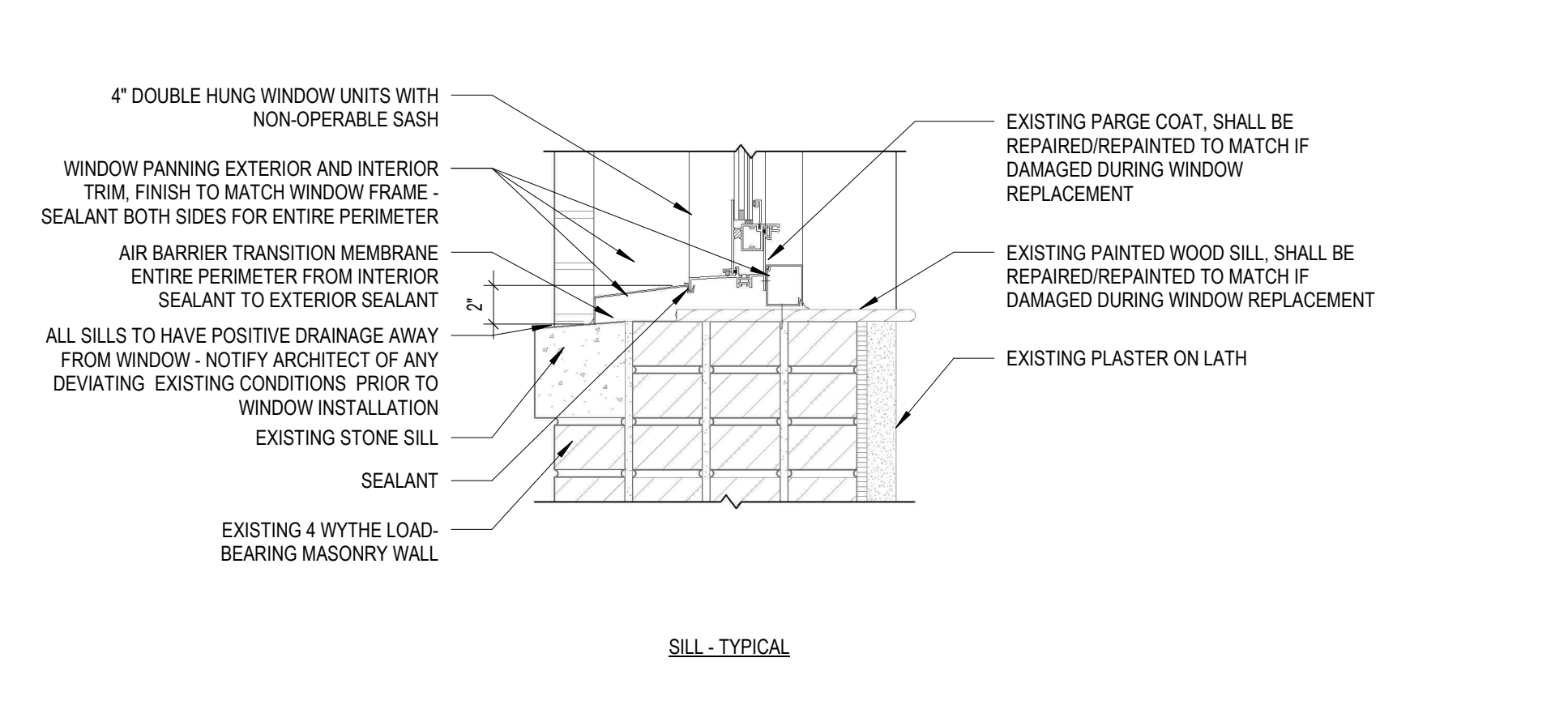
HEAD - TYPICAL



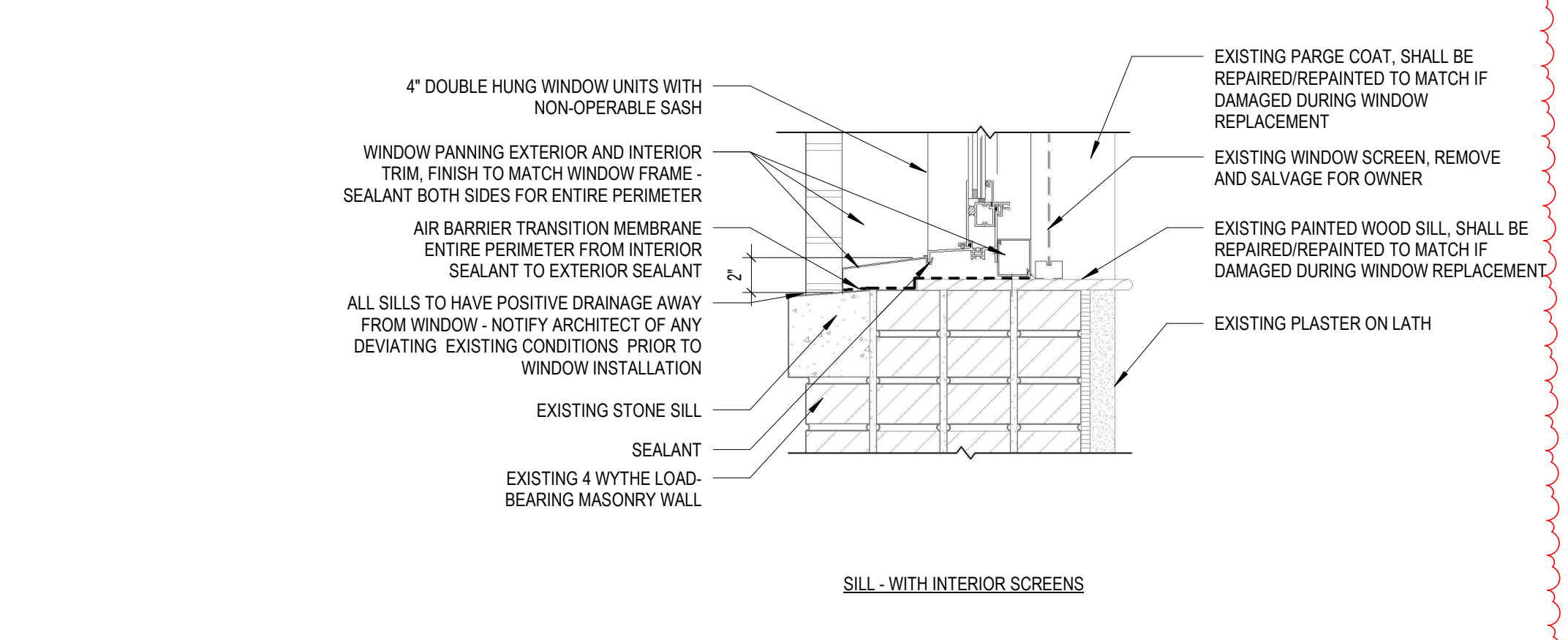
JAMB - TYPICAL



SILL - TYPICAL



SILL - TYPICAL



SILL - WITH INTERIOR SCREENS

4 BUILDING A WINDOW DETAILS - HEAD, JAMB, AND SILL
A6-12 1 1/2" = 1'-0"

1 BUILDING B WINDOW DETAILS - HEAD, JAMB, AND SILL
A6-12 1 1/2" = 1'-0"

ID	DATE	DESCRIPTION
1	10-7-2024	ADDENDUM 1

DRAWN BY: AH
CHECKED BY: DW

WINDOW & CORNICE DETAILS

SECTION 00 42 00 - PROPOSAL FORM

PROJECT: Orange County Architectural Renovations

OWNER: Orange County
306 Revere Rd.
Hillsborough, North Carolina 27278

ARCHITECT: Smith Sinnett Architecture
4600 Lake Boone Trail, Suite 205
Raleigh, North Carolina 27607

The undersigned, as bidder, hereby declares that the only person or persons interested in this proposal as principal or principals is or are named herein and that no other person than herein mentioned has any interest in this proposal or in the contract to be entered into; that this proposal is made without connection with any other person, company or parties making a bid or proposal; and that it is in all respects fair and in good faith without collusion or fraud. The bidder further declares that he has examined the site of the work and the contract documents relative thereto and has read all special provisions furnished prior to the opening of bids; that he has satisfied himself relative to the work to be performed.

The Bidder proposes and agrees if this proposal is accepted to contract with Orange County in the form of contract specified below, to furnish all necessary materials, equipment, machinery, tools, apparatus, means of transportation and labor necessary to complete the construction of

Orange County Architectural Renovations

in full in complete accordance with the plans, specifications and contract documents, to the full and entire satisfaction of the Orange County, and Smith Sinnett Architecture with a definite understanding that no money will be allowed for extra work except as set forth in the General Conditions and the contract documents.

The low Bidder will be determined by the total cost of the Contract with the lump sum prices of the alternates accepted being added to or deducted from the Base Bid to give the total cost of the Contract. Bidders are required to give a price for Base Bid, all Alternates, and all Unit Prices as applicable to their Contract. All Bidders are required to be licensed and in good standing with their respective North Carolina Licensing Board.

SINGLE PRIME CONTRACT:

Cedar Grove Community Center – Flooring Replacement

BASE BID:

Amount: _____ Dollars (\$ _____)

ALTERNATE 1 – Owner Preferred Manufacturer: Tarkett Sports Indoor:

Amount: _____ Dollars (\$ _____)

Whitted Building Improvements

BASE BID:

Amount: _____ Dollars (\$ _____)

ALTERNATE 1:

Amount: _____ Dollars (\$ _____)

ALTERNATE 2:

Amount: _____ Dollars (\$ _____)

ALTERNATE 3:

Amount: _____ Dollars (\$ _____)

ALTERNATE 4:

Amount: _____ Dollars (\$ _____)

ALTERNATE 5:

Amount: _____ Dollars (\$ _____)

ALTERNATE 6:

Amount: _____ Dollars (\$ _____)

ALTERNATE 7:

Amount: _____ Dollars (\$ _____)

ALTERNATE 8:

Amount: _____ Dollars (\$ _____)

ALTERNATE 9:

Amount: _____ Dollars (\$ _____)

ALTERNATE 10:

Amount: _____ Dollars (\$ _____)

ALTERNATE 11:

Amount: _____ Dollars (\$ _____)

ALTERNATE 12: Owner Preferred Manufacturer – Otis Elevator Co.

Amount: _____ Dollars (\$ _____)

ALTERNATE 13: Owner Preferred Manufacturer – First Fire Protection Inc.

Amount: _____ Dollars (\$ _____)

Gateway Center Elevator Modernization

BASE BID:

Amount: _____ Dollars (\$ _____)

ALTERNATE 1: Owner Preferred Manufacturer – Otis Elevator Co.

Amount: _____ Dollars (\$ _____)

ALTERNATE 2: Owner Preferred Manufacturer – Siemens Industry Inc.

Amount: _____ Dollars (\$ _____)

Orange County Courthouse Elevator Modernization

BASE BID:

Amount: _____ Dollars (\$ _____)

ALTERNATE 1: Owner Preferred Manufacturer – Otis Elevator Co.

Amount: _____ Dollars (\$ _____)

ALTERNATE 2: Owner Preferred Manufacturer – Pinnacle Fire Systems Inc.

Amount: _____ Dollars (\$ _____)

Piedmont Food Processing Center

BASE BID:

Amount: _____ Dollars (\$ _____)

Orange County Animal Services

BASE BID:

Amount: _____ Dollars (\$ _____)

ALTERNATE 1:

Amount: _____ Dollars (\$ _____)

ALTERNATE 2:

Amount: _____ Dollars (\$ _____)

ALTERNATE 3:

Amount: _____ Dollars (\$ _____)

ALTERNATE 4:

Amount: _____ Dollars (\$ _____)

ALTERNATE 5:

Amount: _____ Dollars (\$ _____)

MAJOR SUBCONTRACTORS if any (Name, City & State)

General Subcontractor:

Roofing Subcontractor:

_____ Lic _____

_____ Lic _____

Mechanical Subcontractor:

Electrical Subcontractor:

_____ Lic _____

_____ Lic _____

GS143-128(d) requires all single prime bidders to identify their subcontractors for the above subdivisions of work. A contractor whose bid is accepted shall not substitute any person as subcontractor in the place of the subcontractor listed in the original bid, except (i) if the listed subcontractor's bid is later determined by the contractor to be non-responsible or non-responsive or the listed subcontractor refuses to enter into a contract for the complete performance of the bid work, or (ii) with the approval of the awarding authority for good cause shown by the contractor.

ALLOWANCES - (Refer to Division 01 Section 01 21 00 – Allowances for amounts to be included in bid shall be based on the Unit Prices provided as part of Section 01 22 00) Acknowledge Allowances have been included with in the Base Bid.

UP/A-1 _____ UP/A-2 _____ UP/A-2A _____ UP/A-2B _____

A-3 _____ A-4 _____ A-5 _____ A-6 _____

A-7 _____ A-8 _____

UNIT PRICES - (Refer to Division 01 Section 01 22 00 - Unit Prices for Quantities)

Unit prices quoted and accepted shall apply throughout the life of the contract, except as otherwise specifically noted. Unit prices shall be applied, as appropriate, to compute the total value of changes in the base bid quantity of the work and in the given Allowances all in accordance with the contract documents.

Unit Price No. UP/A-1; Moisture Remediation Primer. – 750 sf Unit Price (\$)_____

Unit Price No. UP/A-2; Flashing repair/repainting above cornice - 100lf Unit Price (\$)_____

Unit Price No. UP/A-2A; Flashing repair wall terminations at windows - 100lf Unit Price (\$)_____

Unit Price No. UP/A-2A; Flashing repair ceiling edge at windows - 300lf Unit Price (\$)_____

The bidder further proposes and agrees hereby to commence work under this contract on a date to be specified in a written order of the designer and shall fully complete all work thereunder within the time specified in the Supplementary General Conditions Article 9. Applicable liquidated damages amount is also stated in the Supplementary General Conditions Article 9.

ADDENDUM

(Addendum received and used in computing bid)

Addendum No. 1 _____ Addendum No. 3 _____ Addendum No. 5 _____

Addendum No. 2 _____ Addendum No. 4 _____ Addendum No. 6 _____

Proposal Signature Page

The undersigned further agrees that in the case of failure on his part to execute the said contract and the bonds within ten (10) consecutive calendar days after being given written notice of the award of contract, the certified check, cash or bid bond accompanying this bid shall be paid into the funds of the owner's account set aside for the project, as liquidated damages for such failure; otherwise the certified check, cash or bid bond accompanying this proposal shall be returned to the undersigned. No proposal may be withdrawn after the scheduled closing time for the receipt of Bids for a period of ninety (90) days.

Respectfully submitted this day of _____

(Name of firm or corporation making bid)

WITNESS:

By: _____

Signature

(Proprietorship or Partnership)

Name: _____

Print or type

Title: _____

(Owner/Partner/Pres./V.Pres)

Address: _____

ATTEST: _____

By: _____

License No. _____

Title: _____

Federal I.D. No. _____

(Corp. Sec. or Asst. Sec. only)

(CORPORATE SEAL)

MINORITY BUSINESS PARTICIPATION REQUIREMENTS

Provide with the bid - Under GS 143-128.2(c) the undersigned bidder shall identify **on its bid** (Identification of Minority Business Participation Form) the minority businesses that it will use on the project with the total dollar value of the bids that will be performed by the minority businesses. **Also** list the good faith efforts (Affidavit A) made to solicit minority participation in the bid effort.

NOTE: A contractor that performs all of the work with its own workforce may submit an Affidavit (B) to that effect in lieu of Affidavit (A) required above. The MB Participation Form must still be submitted even if there is zero participation.

After the bid opening - The Owner will consider all bids and alternates and determine the lowest responsible, responsive bidder. Upon notification of being the apparent low bidder, the bidder shall then file within 72 hours of the notification of being the apparent lowest bidder, the following:

An Affidavit (C) that includes a description of the portion of work to be executed by minority businesses, expressed as a percentage of the total contract price, which is equal to or more than the 10% goal established. This affidavit shall give rise to the presumption that the bidder has made the required good faith effort and Affidavit D is not necessary;

*** OR ***

If less than the 10% goal, Affidavit (D) of its good faith effort to meet the goal shall be provided. The document must include evidence of all good faith efforts that were implemented, including any advertisements, solicitations and other specific actions demonstrating recruitment and selection of minority businesses for participation in the contract.

Note: Bidders must always submit **with their bid** the Identification of Minority Business Participation Form listing all MB contractors, vendors and suppliers that will be used. If there is no MB participation, then enter none or zero on the form. Affidavit A **or** Affidavit B, as applicable, also must be submitted with the bid. Failure to file a

required affidavit or documentation with the bid or after being notified apparent low bidder is grounds for rejection of the bid.

END OF SECTION 00 42 00

SECTION 01 21 00 - ALLOWANCES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements governing allowances.
 - 1. Certain items are specified in the Contract Documents by allowances. Allowances have been established in lieu of additional requirements and to defer selection of actual materials and equipment to a later date when additional information is available for evaluation. If necessary, additional requirements will be issued by Change Order.
 - 2. The Contractor shall include in the Contract Sum all allowances states in the Contract Documents. The Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit and other expenses contemplated for the original allowance shall be included in the Contract Sum and not in the allowance. Coordinate allowance work with related work to ensure that each selection is completely integrated and interfaced with related work. Include all allowance amounts as a separate line item amount on each application for payment.
- B. Types of allowances include the following:
 - 1. Unit-cost allowances.
 - 2. Quantity allowances.
 - 3. Lump Sum Allowances
- C. Related Sections include the following:
 - 1. Division 01 Section "Contract Modification Procedures" for procedures for submitting and handling Change Orders for allowances.
 - 2. Division 01 Section "Unit Prices" for procedures for using unit prices.
 - 3. Division 01 Section "Quality Requirements" for procedures governing the use of allowances for testing and inspecting.
 - 4. Divisions 02 through 49 Sections for items of Work covered by allowances.

1.3 SELECTION AND PURCHASE

- A. At the earliest practical date after award of the Contract, advise the Architect of the date when final selection and purchase of each product or system described by an allowance must be completed to avoid delaying the Work.
- B. At Architect's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work. **Provide a minimum of three (3) proposals for each allowance** for use in making final selections, unless instructed otherwise by the Architect. Furnish proposals in time so as not to delay the project. Include recommendations that are relevant to performing the Work.
- C. Purchase products and systems selected by Architect from the designated supplier.

1.4 SUBMITTALS

- A. Submit proposals for purchase of products or systems included in allowances, in the form specified for Change Orders.
- B. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.
- C. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

1.5 COORDINATION

- A. Coordinate allowance items with other portions of the Work. Furnish templates as required to coordinate installation.

1.6 ALLOWANCES

- A. Refer to Schedule of Allowances for Amounts and Quantities
- B. Quantity & Lump Sum Allowances
 - 1. Allowance shall include cost to Contractor of specific products and materials ordered by Owner under allowance and shall include taxes, freight, and delivery to Project site.
 - 2. Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by Owner under allowance shall be included as part of the Contract Sum and not part of the allowance.
- C. Unit-Cost Allowances
 - 1. Each change order amount for unit-cost type allowances shall be based solely on the difference between the actual unit purchase amount and the unit allowance, multiplied by the final measure or count of work-in-place, with reasonable allowances, where applicable, for cutting losses, tolerances, mixing wastes, normal product imperfections and similar margins.
 - 2. Include installation costs in the purchase amount only where indicated as a part of the allowance. When requested, prepare explanations and documentation to substantiate the margins as claimed. Prepare and submit substantiation of a change in the scope of work (if any) claimed in the change orders related to unit-cost type allowances. The Owner reserves the right to establish the actual quantity of work- in-place by an independent quantity survey, measure or count.
- D. Contingency Allowances
 - 1. Use the contingency allowance only as directed by Architect for Owner's purposes and only by Change Orders that indicate amounts to be charged to the allowance.
 - 2. Contractor's related costs for products and equipment ordered by Owner under the contingency allowance are included in the allowance and are not part of the Contract Sum. These costs include delivery, installation, taxes, insurance, equipment rental, and similar costs.
 - 3. Allowances for overhead and profit shall be provided within the contract price and not included as part of any change order till the allowance amount has been spent.

1.7 CHANGE ORDER MARK-UP

- A. Except as otherwise indicated, comply with provisions of General Conditions and other requirements stated in this section. For each allowance, Contractor's claims for increased costs (for either purchase order amount or Contractor's handling, labor, installation, overhead, and profit), because of a change in scope or nature of the allowance work as described in contract documents, must be submitted within 60

days of initial change order authorizing work to proceed on that allowance; otherwise, such claims will be rejected.

- B. As a procedural restriction no mark-up (increase or decrease) shall be included in the change order amount for Contractor's increase or decrease in handling, labor, installation, overhead or profit unless purchase order amount varies from allowance.
- C. Change orders prepared to return unused allowance amounts to the Owner shall be subject to the same requirements for the return of appropriate profit and overhead as other change orders in accordance with the Conditions of the Contract. Where the Contractor has been directed not to include his related costs (profit and overhead) in the Contract Sum for contingency allowances, the return of profit and overhead shall not be excepted.

1.8 UNUSED MATERIALS

- A. Return unused materials purchased under an allowance to manufacturer or supplier for credit to Owner, after installation has been completed and accepted.
 - 1. If requested by Architect, prepare unused material for storage by Owner when it is not economically practical to return the material for credit. If directed by Architect, deliver unused material to Owner's storage space. Otherwise, disposal of unused material is Contractor's responsibility.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.2 PREPARATION

- A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES

Allowance No. Up/A-1; Moisture Remediation Primer:

Allow an amount per square foot for addition moisture mitigation primer for flooring that is not otherwise specified to receive such in the design documents.

Quantity: 750 SF

Allowance No. Up/A-2; Flashing Repair/Repointing Above Cornice:

Allow an amount per linear foot to repair flashing and or repoint brick above the metal cornice of the Whitted Building.

Quantity: 100 LF

Allowance No. Up/A-2A; Walls Terminating at Windows

Allow an amount per linear foot (measured vertically) to repair wall terminations at windows as they are replaced. Whitted Building.

Quantity: 100 LF

Allowance No. Up/A-2B; Ceilings Terminating at Windows

Allow an amount per linear foot (measured horizontally) to repair suspended ceiling edge at windows as they are replaced. Whitted Building.

Quantity: 300 LF

Allowance No. A-3; General Contingency – Cedar Grove Community Center:

Contingency allowance shall be provided as follows and the price shall be adjusted based on the actual cost of subcontracts, materials, and labor, excluding overhead and profit. Allowances for overhead and profit shall be provided within the contract price. If there is unused allowance at the conclusion of the project, the allowance plus 15% will be deducted from the contract.

Contingency: \$25,000 Lump Sum

Allowance No. A-4; General Contingency – Whitted Building Window Replacement:

Contingency allowance shall be provided as follows and the price shall be adjusted based on the actual cost of subcontracts, materials, and labor, excluding overhead and profit. Allowances for overhead and profit shall be provided within the contract price. If there is unused allowance at the conclusion of the project, the allowance plus 15% will be deducted from the contract.

Contingency: \$60,000 Lump Sum

Allowance No. A-5; General Contingency – Gateway Center Elevator Modernization:

Contingency allowance shall be provided as follows and the price shall be adjusted based on the actual cost of subcontracts, materials, and labor, excluding overhead and profit. Allowances for overhead and profit shall be provided within the contract price. If there is unused allowance at the conclusion of the project, the allowance plus 15% will be deducted from the contract.

Contingency: \$25,000 Lump Sum

Allowance No. A-6; General Contingency – Orange County Courthouse Elevator Modernization:

Contingency allowance shall be provided as follows and the price shall be adjusted based on the actual cost of subcontracts, materials, and labor, excluding overhead and profit. Allowances for overhead and profit shall be provided within the contract price. If there is unused allowance at the conclusion of the project, the allowance plus 15% will be deducted from the contract.

Contingency: \$25,000 Lump Sum

Allowance No. A-7; General Contingency – Piedmont Food Processing Center:

Contingency allowance shall be provided as follows and the price shall be adjusted based on the actual cost of subcontracts, materials, and labor, excluding overhead and profit. Allowances for overhead and profit shall be provided within the contract price. If there is unused allowance at the conclusion of the project, the allowance plus 15% will be deducted from the contract.

Contingency: \$3,000 Lump Sum

Allowance No. A-8; General Contingency – Orange County Animal Services:

Contingency allowance shall be provided as follows and the price shall be adjusted based on the actual cost of subcontracts, materials, and labor, excluding overhead and profit. Allowances for overhead and profit shall be provided within the contract price. If there is unused allowance at the conclusion of the project, the allowance plus 15% will be deducted from the contract.

Contingency: \$25,000 Lump Sum

END OF SECTION 01 21 00

SECTION 01 23 00 - ALTERNATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for alternates.

1.3 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the Bidding Requirements that may be added to the Base Bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 - 1. The cost or credit for each alternate is the net addition to the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

1.4 PROCEDURES

- A. Coordination: Modify or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
- B. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- C. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to alternates.
- D. Execute accepted alternates under the same conditions as other work of the Contract.
- E. Schedule: A Schedule of Alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

Cedar Grove Community Center – Flooring Replacement

- A. **Alternate 1; Owner Preferred Manufacturer – Tarkett Sports Indoor**
The owner has found the following brand/product(s) to be superior in application and durability. Per GS133-3, the flooring are required to be bid as an alternate to the base specification. State the amount to

be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing the Owner Preferred Manufacturers Listed Below:

1. List of Preferred Manufacturers- **Tarkett Sports Indoor.** - Refer to Section 09 65 66

Whitted Building Improvements

- A. **Alternate 1; Scope – Building A South Elevation, Level 1:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing window replacement in the above listed portion of the building.
- B. **Alternate 2; Scope – Building A East Elevation, Level 1 and Level 2:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing window replacement in the above listed portion of the building.
- C. **Alternate 3; Scope – Building A West Elevation, Level 1:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing window replacement in the above listed portion of the building.
- D. **Alternate 4; Scope – Building A West Elevation, Level 1, Level 2 and Level 3:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing window replacement in the above listed portion of the building.
- E. **Alternate 5; Scope – Building A North Elevation, Level 1, Level 2 and Level 3:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing window replacement in the above listed portion of the building.
- F. **Alternate 6; Scope – Building B North Elevation, Level 2:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing window replacement in the above listed portion of the building.
- G. **Alternate 7; Scope – Building B South Elevation, Level 2 and Level 3:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing window replacement in the above listed portion of the building.
- H. **Alternate 8; Scope – Building B East Elevation, Level 1:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing window replacement in the above listed portion of the building.
- I. **Alternate 9; Scope – Building B West Elevation, Level 3:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing window replacement in the above listed portion of the building.
- J. **Alternate 10; Scope – Building B West Elevation, Level 2:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing window replacement in the above listed portion of the building.
- K. **Alternate 11; Scope – Building B West Elevation, Level 1:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing window replacement in the above listed portion of the building.
- L. **Alternate 12; Owner Preferred Manufacturer – Otis Elevators**

The owner has found the following brand/product(s) to be superior in application and durability. Per GS133-3, the following are required to be bid as an alternate to the base specification. State the amount to

be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing the Owner Preferred Manufacturers Listed Below:

1. List of Preferred Manufacturers- **Otis Elevator Co.** - Refer to Section 14 24 00

M. **Alternate 13; Owner Preferred Manufacturer – First Fire Protection Inc. 919.233.6997 Anthony Stanley**

The owner has found the following brand/product(s) to be superior in application and durability. Per GS133-3, the following are required to be bid as an alternate to the base specification. State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing the Owner Preferred Manufacturers Listed Below:

1. List of Preferred Manufacturers- **First Fire Protection Inc**

Gateway Center Elevator Modernization

A. **Alternate 1; Owner Preferred Manufacturer – Otis Elevators**

The owner has found the following brand/product(s) to be superior in application and durability. Per GS133-3, the following are required to be bid as an alternate to the base specification. State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing the Owner Preferred Manufacturers Listed Below:

1. List of Preferred Manufacturers- **Otis Elevator Co.** - Refer to Section 14 24 00

B. **Alternate 2; Owner Preferred Manufacturer – Pinnacle Fire Systems Inc. Bart Arthurs bart@pinnaclefire.com 919.367.0240**

The owner has found the following brand/product(s) to be superior in application and durability. Per GS133-3, the following are required to be bid as an alternate to the base specification. State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing the Owner Preferred Manufacturers Listed Below:

1. List of Preferred Manufacturers- **Pinnacle Fire Systems.**

Orange County Courthouse Elevator Modernization

A. **Alternate 1; Owner Preferred Manufacturer – Otis Elevators**

The owner has found the following brand/product(s) to be superior in application and durability. Per GS133-3, the following are required to be bid as an alternate to the base specification. State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing the Owner Preferred Manufacturers Listed Below:

1. List of Preferred Manufacturers- **Otis Elevator Co.** - Refer to Section 14 24 00

B. **Alternate 2; Owner Preferred Manufacturer –Siemens Industry Inc. Nelson Ciuffardi nelson.ciuffardi@siemens.com 984.389.5833**

The owner has found the following brand/product(s) to be superior in application and durability. Per GS133-3, the following are required to be bid as an alternate to the base specification. State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing the Owner Preferred Manufacturers Listed Below:

1. List of Preferred Manufacturers- **Siemens Industry Inc.**

Orange County Animal Services

A. **Alternate 1; Scope – Food Prep 121 Flooring:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing flooring replacement in the above listed portion of the building.

B. **Alternate 2; Scope – Stray Cat 138 Flooring:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing flooring replacement in the above listed portion of the building.

- C. **Alternate 3; Scope – Kitten 139 Flooring:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing flooring replacement in the above listed portion of the building.
- D. **Alternate 4; Scope – Food Prep 140 Flooring:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing flooring replacement in the above listed portion of the building.
- E. **Alternate 5; Scope – Court Hold Cat 141 Flooring:** State the amount to be added to the Base Bid for providing all labor and materials indicated and required to accomplish Work involved in providing flooring replacement in the above listed portion of the building.

END OF SECTION 01 23 00

SECTION 09 65 00 - RESILIENT FLOORING AND ACCESSORIES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Thermoset-rubber base.
 - 2. Luxury Vinyl Tile/Planks

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For each exposed product and for each color and texture specified.

1.3 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match and are from same production runs as products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Furnish quantity of full-size units equal to 3 percent of amount installed for each type, composition, color, pattern, and size indicated.

PART 2 - PRODUCTS

2.1 THERMOSET-RUBBER BASE

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Burke Mercer Flooring Products; a division of Burke Industries Inc.
 - 2. Flexco.
 - 3. Johnsonite; a Tarkett company.
 - 4. Roppe Corporation, USA.
- B. Product Standard: ASTM F1861, Type TS (rubber, vulcanized thermoset), Group I (solid, homogeneous).
 - 1. Style and Location:
 - a. Style A, Straight: Provide in areas with carpet.
 - b. Style B, Cove: Provide in areas with resilient floor coverings.
- C. Thickness: 0.125 inch.
- D. Height: 4 inches.
- E. Lengths: Coils in manufacturer's standard length.
- F. Outside Corners: Job formed.
- G. Inside Corners: Job formed.
- H. Colors: As selected by Architect from manufacturer's full range.

2.2 LUXURY VINYL FLOOR TILE

- A. Manufacturers
 - 1. Armstrong World Industries, Inc.
 - 2. Burke Mercer Flooring Products
 - 3. Mannington Mills, Inc.

4. Nora Systems
5. Tarkett, Inc.

- B. Tile Standard: ASTM F1700.
1. Class: Class II, Type B
 2. Wear Layer: 20 mil
 3. Size: as Selected by Architect
 4. Color and Patterns: As selected by Architect.

2.3 INSTALLATION MATERIALS

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

PART 3 - EXECUTION

3.1 PREPARATION

- A. Prepare substrates according to manufacturer's written instructions to ensure adhesion of resilient products.
- B. Concrete Substrates: Prepare horizontal surfaces according to ASTM F710.
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 substrate alkalinity falls within range on pH scale recommended by manufacturer in writing, but not less than 5 or more than 9 pH.
 4. Moisture Testing: Perform tests so that each test area does not exceed 1000 sq. ft., and perform no fewer than three tests in each installation area and with test areas evenly spaced in installation areas.
 - a. Anhydrous Calcium Chloride Test: ASTM F1869. Proceed with installation only after substrates have maximum moisture-vapor-emission rate of 3 lb of water/1000 sq. ft. in 24 hours.
 - b. Relative Humidity Test: Using in-situ probes, ASTM F2170. Proceed with installation only after substrates have a maximum 75 percent relative humidity level measurement.
- C. Fill cracks, holes, and depressions in substrates with trowelable leveling and patching compound; remove bumps and ridges to produce a uniform and smooth substrate.
- D. Do not install resilient products until materials are the same temperature as space where they are to be installed.
- E. Immediately before installation, sweep and vacuum clean substrates to be covered by resilient products.

3.2 RESILIENT BASE INSTALLATION

- A. Comply with manufacturer's written instructions for installing resilient base.
- B. 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.

- C. Install resilient base in lengths as long as practical without gaps at seams and with tops of adjacent pieces aligned.
- D. Tightly adhere resilient base to substrate throughout length of each piece, with base in continuous contact with horizontal and vertical substrates.
- E. Do not stretch resilient base during installation.
- F. Job-Formed Corners:
 - 1. Outside Corners: Use straight pieces of maximum lengths possible and form with returns not less than 3 inches in length.
 - a. Form without producing discoloration (whitening) at bends.
 - 2. Inside Corners: Use straight pieces of maximum lengths possible and form with returns not less than 3 inches in length.
 - a. Miter corners to minimize open joints.

3.3 FLOOR TILE/PLANK INSTALLATION

- A. Comply with manufacturer's written instructions for installing floor tile.
- B. Lay out floor tiles from center marks established with principal walls, discounting minor offsets, so tiles at opposite edges of room are of equal width. Adjust as necessary to avoid using cut widths that equal less than one-half tile at perimeter.
- C. Match floor tiles for color and pattern by selecting tiles from cartons in the same sequence as manufactured and packaged, if so numbered. Discard broken, cracked, chipped, or deformed tiles.
- D. 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.
- E. Extend floor tiles into toe spaces, door reveals, closets, and similar openings. Extend floor tiles to center of door openings.
- F. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on floor tiles as marked on substrates. Use chalk or other nonpermanent marking device.
- G. Install floor tiles on covers for telephone and electrical ducts, building expansion-joint covers, and similar items in installation areas. Maintain overall continuity of color and pattern between pieces of tile installed on covers and adjoining tiles. Tightly adhere tile edges to substrates that abut covers and to cover perimeters.
- H. Adhere floor tiles to 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.

3.4 CLEANING AND PROTECTION

- A. Comply with manufacturer's written instructions for cleaning and protecting resilient products.
- B. Cover resilient products subject to wear and foot traffic until Substantial Completion.

3.5 CLEANING AND PROTECTION

- A. Comply with manufacturer's written instructions for cleaning and protecting resilient products.
- B. Cover resilient products subject to wear and foot traffic until Substantial Completion.

END OF SECTION

SECTION 09 67 23 – RESINOUS FLOORING

PART 1 – GENERAL

1.1 SUMMARY

- A. This section includes the following:
 - 1. Urethane-based resinous flooring system.
- B. Related sections include the following:
 - 1. Section 03 30 00 “Cast-in-Place Concrete.”

1.2 SYSTEM DESCRIPTION

- A. The work shall consist of preparation of the substrate, the furnishing and application of a cementitious urethane and a squeegee-applied resinous flooring system with decorative chip broadcasts and topcoat. The system shall have the color and texture as specified by the Owner with a nominal thickness of 3/16 inch. It shall be applied to the prepared area(s) as defined in the plans strictly in accordance with the Manufacturer's recommendations.
- B. Cove base (if required) to be applied where noted on plans and per Manufacturer’s standard details unless otherwise noted.

1.3 ACTION SUBMITTALS

- A. Product Data: Latest edition of Manufacturer's literature including performance data and application procedures.
- B. Submit Manufacturer’s certificate of compliance that materials meet specification requirements.
- C. Manufacturer’s letter or certificate verifying that Applicator meets the requirements of Paragraph 1.4.B.
- D. Color selection samples. Four 3-inch square samples demonstrating a range of orange peel textures for selection by Owner and Architect.
- E. Manufacturer’s Material Safety Data Sheet (MSDS) for each product being used.

1.4 CLOSEOUT SUBMITTALS

- A. Maintenance Data and Instructions

1.5 QUALITY ASSURANCE

- A. The Manufacturer shall have a minimum of 10 years experience in the production, sales, and technical support of urethane industrial flooring and related materials.
- B. The Applicator shall have experience in installation of the flooring system as confirmed by the Manufacturer in all phases of surface preparation and application of the product specified. The specified contractor will be formally accredited by the Manufacturer under Manufacturer’s most stringent standard. The Applicator shall furnish a letter stating these credentials.
- C. Substitution requests will be considered only with approval of the Architect.
- D. Acceptance Sample
 - 1. A minimum one-foot square representative sample of the specified flooring system shall be prepared by the Manufacturer's representative and submitted to the Owner at the time of the bid award. Contractor shall inspect the "acceptance sample" before signing contract.
 - 2. The installed flooring system shall be like the acceptance sample in thicknesses of respective film layers, color, texture, overall appearance and finish.
- E. Mock-up. A 25 square foot minimum *in situ* mock-up of resinous flooring application for each texture and color is required to be approved by the Architect and Manufacturer’s Representative before proceeding with flooring application. Mock-up location(s) to be chosen by Architect. Mock-up will be evaluated for durability, adhesion, texture, color, cove base with inside and outside corner, and key-ins. Accepted mock-ups may be incorporated into the finished Work.

- F. A pre-installation meeting is required with representatives of Owner, Architect, General Contractor, Applicator, and Manufacturer's Representative in attendance. The agenda shall include a review and clarification of this specification, application procedures, quality control, inspection and acceptance criteria, and production schedules. Applicator is not authorized to proceed until this meeting is held.
- H. Manufacturer's Representative
 - 1. Manufacturer's Representative to approve slab condition and preparation before beginning of resinous flooring application.
 - 2. Manufacturer's Representative to be present for application of mock-up, and to approve application before beginning of resinous flooring application.
 - 3. Manufacturer's Representative to be present for beginning of resinous flooring application.

1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Material shall be delivered to project site in Manufacturer's original unopened containers bearing Manufacturer's name, product, color, batch number, and storage instructions.
- B. Materials shall be stored indoors, protected from damage, moisture, direct sunlight and temperatures below 60 degrees F or above 90 degrees F, and in accordance with Manufacturer's storage instructions.
- C. Copies of Material Safety Data Sheets (MSDS) for all components shall be kept on site for review by the Engineer or other personnel.
- D. The Applicator shall be provided with adequate disposal facilities for non-hazardous waste generated during installation of the system.

1.7 PROJECT CONDITIONS

- A. Evaluate the substrate condition, including moisture and soluble ion content and extent of substrate leveling and repairs required, if any.
- B. Coordinate flooring work with other trades to ensure adequate illumination, ventilation, and dust free environment during application and curing of flooring.
- C. Comply with material Manufacturer's recommended temperature, moisture, and ventilation requirements for flooring application.
 - 1. Application may proceed while air, material and substrate temperatures are between 60 F and 85 F providing the substrate temperature is above the dew point. Outside of this range, the Manufacturer shall be consulted.
 - 2. The relative humidity in the specific location of the application shall be less than 85 % and the surface temperature shall be at least 5 F above the dew point.
- D. Close spaces to traffic during resinous flooring application and for 24 hours minimum after application or longer if recommended by Manufacturer.
- E. Provide permanent lighting or simulate permanent lighting conditions prior to resinous flooring application.
- F. Safety Requirements
 - 1. All open flames and spark-producing equipment shall be removed from the work area prior to commencement of application.
 - 2. "No Smoking" signs shall be posted at the entrances to the work area.
 - 3. The Owner shall be responsible for the removal of foodstuffs from the work area.
 - 4. Non-related personnel in the work area shall be kept to a minimum.

1.8 CONCRETE SLAB CONDITION

- A. Concrete must have a curing period to reach 4000 psi compressive strength and 0.45 maximum water/cement ratio. The surface must be clean and dry, physically sound and free of contamination. Surfaces must be free of holes, voids or defects. Cracks and abrupt changes in surface profile must be corrected. Fins and projections must be removed. All curing compounds and sealers must be removed.
- B. Testing by Manufacturer:
 - 1. Moisture testing: Verify that concrete substrates are dry and moisture-vapor emissions are within acceptable levels according to Manufacturer's written instructions. Proceed with application only after substrates pass testing.

2. Alkalinity and adhesion testing: Verify that concrete substrates have pH within acceptable range. Perform tests recommended by Manufacturer. Proceed with application only after substrates pass testing.
3. Core analysis testing: Perform core testing for presence of soluble ion levels as recommended by Manufacturer on slabs older than one year old or on newer slabs containing curing compounds, hardeners and/or densifiers. Proceed with application only after substrates pass testing.
4. Contractor must report, in writing, surfaces in improper condition. Application will constitute acceptance of surfaces by the Applicator.

1.9 WARRANTY

- A. Manufacturer's standard warranty.

PART 2 – PRODUCTS

2.1 FLOORING

- A. Self-leveling, decorative chip broadcast, cementitious urethane/blended polymer or polyaspartic seamless flooring system, 3/16" nominal thickness.
- B. System Materials
 - a. Topping coat (may be first broadcast coat): 100% solids cementitious urethane
 - b. Broadcast aggregate: Micro- or macro-sized chip aggregate or vinyl flakes.
 - c. Broadcast coat (may be second broadcast coat): UV-resistant epoxy
 - d. Groutcoat: Urethane resin and hardener, polyaspartic resin and hardener, or UV-resistant epoxy
 - e. Final topcoat: Urethane resin and hardener or polyaspartic resin and hardener.
 2. Patch Materials
 - a. Shallow Fill and Patching: Per Manufacturer's recommendations.
 - b. Deep fill and sloping material (over 1/4-inch): Per Manufacturer's recommendations.
 3. Cove base
 - a. Cove radius: Per Manufacturer's recommendations
 - b. Topping: UV-resistant epoxy per Manufacturer's recommendations.
 - c. Broadcast aggregate: To match floor.
 - d. Broadcast coat: UV-resistant epoxy per Manufacturer's recommendations.
 - e. Groutcoat: UV-resistant epoxy per Manufacturer's recommendations.
 - f. Final topcoat: Urethane resin and hardener or polyaspartic resin and hardener to match floor.
 - g. Termination trim: Manufacturer's standard 1/8-inch thick plastic cove strip as indicated on the Drawings.

2.2 MANUFACTURER

- A. Manufacturer of approved system shall be single source.
- B. Approved systems. Substitution requests will be considered for similar systems of equal quality under the requirements of Section 01 25 00 "Substitution Procedures."
 1. Dur-A-Flex Accelera HC(Basis of Design)
 2. Tnemec Series 241 Ultra-Tread MVT Flake system
 3. Stonehard
 4. Tennant
 5. Key Resin Company
 6. Or equal

2.3 PRODUCT REQUIREMENTS

- A. Topping
 1. Percent Reactive: 100 %
 2. VOC: 0 g/L

3. Bond Strength to Concrete (ASTM D4541): 400 psi (substrate fails at 400 psi).
4. Compressive Strength (ASTM C579): 9,000 psi
5. Tensile Strength, (ASTM D638): 2,175 psi
6. Flexural Strength (ASTM D790): 5,076 psi
7. Impact Resistance @ 125 mils (MIL D-3134): 160 inch-lbs

B. Broadcast coat

1. Percent Reactive: 100 %
2. VOC: 0 g/L
3. Viscosity at 70 degrees F: 700cps
4. Compressive Strength (ASTM D695): 11,200 psi
5. Tensile Strength, (ASTM D638): 2,100 psi
6. Flexural Strength (ASTM D790): 5,100 psi
7. Hardness, Shore D (ASTM D2240): 80-85
8. Bond strength to concrete (ACI-40): 400 psi (substrate fails at 400 psi).
9. Abrasion Resistance (ASTM D-4060): 35 mg loss (C-17 Wheel, 1,000 gm load, 1,000 cycles)
10. Pot life at 70 degrees F: 35 minutes.

C. Groutcoat

1. Percent Solids: 100 %
2. VOC: 33 g/L
3. Bond Strength to Concrete (ASTM D4541): 400 psi (substrates fails at 400 psi).
4. Hardness (Shore D ASTM D2240): 70
5. Compressive Strength (ASTM D695): 11,200 psi
6. Tensile Strength (ASTM D638): 2,100 psi
7. Abrasion Resistance (ASTM D4060, C-17 Wheel, 1,000 gm load, 1,000 cycles): 27 mg loss
8. Pot life at 70 degrees F: 7 – 10 minutes

D. Final topcoat

1. Percent Solids: 100 %
2. VOC: 33 g/L
3. Bond Strength to Concrete (ASTM D4541): 400 psi (substrates fails at 400 psi).
4. Hardness (Shore D ASTM D2240): 70
5. Compressive Strength (ASTM C579): 18,000 psi
6. Tensile Strength (ASTM D638): 2,600 psi
7. Abrasion Resistance (ASTM D4060, C-17 Wheel, 1,000 gm load, 1,000 cycles): 27 mg loss
8. Pot life at 70 degrees F: 7 – 10 minutes
9. Gloss (ASTM D523) 60°: 90
10. Texture: As selected by Owner and Architect. Additional topcoat and texture additives as needed.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas and conditions, with Applicator present, for compliance with requirements for maximum moisture and soluble ion content, installation tolerances and other conditions affecting flooring performance. Verify that substrates and conditions are satisfactory for flooring application and comply with requirements specified.
- B. Contractor must report, in writing, surfaces left in improper condition by other trades. Application will constitute acceptance of surfaces by the Applicator.
- C. Do not proceed with application until the surface is accepted by the Manufacturer and authorization to proceed is given by the Architect.

3.2 PREPARATION

- A. General

1. New and existing concrete surfaces shall be free of oil, grease, curing compounds, loose particles, moss, algae growth, laitance, friable matter, dirt, and bituminous products.
2. Moisture Testing: Perform tests recommended by Manufacturer and as follows.
 - a. Perform anhydrous calcium chloride test ASTM F1869-98. Application will proceed only when the vapor/moisture emission rates from the slab is less than and not higher than 20 lbs/1,000 sf/24 hrs.
 - b. Perform relative humidity test using in situ probes, ASTM F2170. Proceed with application only after substrates have a maximum 99% relative humidity level measurement.
 - c. If the vapor drive exceeds 99% relative humidity or 20 lbs/1,000 sf/24 hours then the Architect shall be notified and advised of additional cost for the possible installation of a vapor mitigation system that has been approved by the Manufacturer or other means to lower the value to the acceptable limit.
3. Cracks greater than 1/8-inch wide are to be chiseled or chipped-out and repaired per Manufacturer's recommendations.
4. All control joints shall pre-filled with Manufacturer's recommended product.
5. All expansion joints shall be pre-filled with sand and their location marked. Cut open after completion of floor and filled with Manufacturer's recommended joint filler.
6. There shall be no visible moisture present on the surface at the time of application of the system.
7. Mechanical surface preparation
 - a. Shot blast all surfaces to receive flooring system with a mobile steel shot, dust recycling machine (Blastrac or equal). All surface and embedded accumulations of paint, toppings hardened concrete layers, laitance, power trowel finishes and other similar surface characteristics shall be completely removed leaving a bare concrete surface having a profile of CSP greater than or equal to 3.0 and less than or equal to 4.0, as described by the International Concrete Repair Institute.
 - b. Floor areas inaccessible to the mobile blast machines shall be mechanically abraded to the same degree of cleanliness, soundness and profile using diamond grinders, needle guns, bush hammers, or other suitable equipment.
 - c. Cracks and joints (non-moving) greater than 1/8-inch wide are to be chiseled or chipped out and repaired per Manufacturer's recommendations.
8. At spalled or worn areas, mechanically remove loose or delaminated concrete to a sound concrete and patch per Manufacturer's recommendations.
9. Slab mitigation for excessive soluble ion levels: Shot blast all surfaces to receive flooring to level determined by Manufacturer to have acceptable levels of soluble ions.

3.3 APPLICATION

A. General

1. The system shall be applied in five distinct steps as listed below:
 - a. Substrate preparation
 - d. Topping application
 - e. Resin application with decorative chip broadcast
 - f. Groutcoat application
 - g. Final topcoat application
2. Immediately prior to the application of any component of the system, the surface shall be dry, and any remaining dust or loose particles shall be removed using a vacuum or clean, dry, oil-free compressed air.
3. The handling, mixing and addition of components shall be performed in a safe manner to achieve the desired results in accordance with the Manufacturer's recommendations.
4. The system shall follow the contour of the substrate unless pitching or other leveling work has been specified by the Architect.
5. A neat finish with clean boundaries and straight edges shall be provided by the Applicator.
6. Provide minimum 1/4-inch termination keyways as required by Manufacturer at the following locations, and as indicated on the Drawings:
 - a. At floor drains.

- b. At locations where resinous flooring terminates and abuts another flooring.
 - c. Into masonry wall mortar joints at the top of cove bases.
 - d. At other locations indicated on the Drawings.
- B. Topping
1. The topping shall be applied as a self-leveling system as specified by the Architect. The topping shall be applied in one lift with a nominal thickness of 1/8 inch.
 2. The topping shall be comprised of the product described above and includes three components: a resin, hardener, and aggregate as supplied by the Manufacturer.
 3. The topping shall be mixed and applied per Application Instructions (AI).
- C. Broadcast coat
1. The broadcast coat shall be comprised of the product described above.
 2. The broadcast coat shall be mixed and applied per AI.
 3. The broadcast coat shall be applied over horizontal surfaces using a squeegee and cross rolled with a 3/8-inch nap roller at the rate recommended by Manufacturer.
 4. Chip aggregate or vinyl flake shall be broadcast to excess into the wet resin at the rate recommended by the Manufacturer.
 5. Allow material to fully cure. Scrape floor to remove excess flake and “shave” flake that sits vertically. Vacuum, sweep and/or blow to remove all loose aggregate.
- D. Groutcoat
1. The groutcoat shall be comprised of the product described mixed per the Manufacturer’s instructions.
 2. The groutcoat shall be applied using a squeegee and cross rolled with a 3/8-inch nap roller at the rate recommended by the Manufacturer.
- E. Final topcoat
1. The topcoat shall be comprised of the product described mixed per the Manufacturer’s instructions.
 2. The topcoat shall be applied using a squeegee and cross rolled with a 3/8-inch nap roller at the rate recommended by Manufacturer.
- F. Cove base
1. Apply cove base between flooring broadcast layers or after single broadcast layer.
 2. Apply layers at the rate recommended by Manufacturer.
 3. Apply topcoat simultaneously with floor topcoat at the rate recommended by Manufacturer.
 4. Height: As indicated on the Drawings.
- G. Expansion joints
1. Sawcut resinous flooring at expansion joints.
 2. Fill with sand to 1/4-inch below level of finished floor.
 3. Install backer rod and sealant in accordance with Section 07 90 00 “Joint Sealants.”

3.4 FIELD QUALITY CONTROL

A. Tests, Inspection

1. The following tests shall be conducted by the Applicator:
 - a. Temperature: Air and substrate temperatures and, if applicable, dew point.
 - b. Coverage Rates: Rates for all layers shall be monitored by checking quantity of material used against the area covered.

3.5 CLEANING AND PROTECTION

- A. Cure flooring material in compliance with Manufacturer’s directions, taking care to prevent their contamination during stages of application and prior to completion of the curing process.
- B. Remove masking. Perform detail cleaning at floor termination, to leave cleanable surface for subsequent work of other sections.

END OF SECTION 09 67 23

SECTION 09 91 00 - PAINTING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes surface preparation, painting, and finishing of exposed interior and exterior items and surfaces.
 - 1. Surface preparation, priming, and finish coats specified in this Section are in addition to shop-priming and surface treatment specified under other Sections.
 - 2. Paint exposed surfaces whether or not colors are designated in schedules, except where a surface or material is specifically indicated not to be painted or is to remain natural. Where an item or surface is not specifically mentioned, paint the same as similar adjacent materials or surfaces. If color or finish is not designated, the Architect will select from standard colors or finishes available.
 - a. Painting includes field-painting exposed bare and covered pipes and ducts (including color coding), hangers, exposed steel and iron work, and primed metal surfaces of mechanical and electrical equipment.
 - b. Painting includes all exposed metal excepted as noted by this specification as metal surfaces not to be painted.
 - c. In the event of a conflict between this Section and painting requirements in the Mechanical and Electrical Sections of these specifications, the requirements of this Section shall govern. It is the intention of this specification to ensure that one painting subcontractor will accomplish all exposed painting work in occupied areas of this project. This does not relieve contractors of responsibility for corrective work required by damages to completed or existing work.
 - 3. Painting is not required on prefinished items, finished metal surfaces, concealed surfaces, operating parts, and labels.
 - a. Prefinished items not to be painted include the following factory-finished components:
 - 1) Acoustical Ceiling Tile
 - 2) Plastic toilet enclosures.
 - 3) Pre-finished wood doors
 - 4) Pre-finished interior architectural woodwork.
 - 5) Architectural laminate-clad casework.
 - 6) Metal lockers
 - 7) Finished mechanical and electrical equipment.
 - 8) Light fixtures.
 - 9) Switchgear.
 - 10) Distribution cabinets.
 - 4. Concealed surfaces include walls or ceilings in the following generally inaccessible spaces:
 - a. Foundation spaces.
 - b. Furred areas.
 - c. Ceiling plenums.
 - 5. Finished metal surfaces not to be painted include:
 - a. Anodized aluminum.
 - b. Stainless steel.

- c. Copper.
 6. Operating parts not to be painted include moving parts of operating equipment, such as the following:
 - a. Valve and damper operators.
 - b. Linkages.
 - c. Sensing devices.
 - d. Motor and fan shafts.
 7. Labels: Do not paint over Underwriters Laboratories, Factory Mutual or other code-required labels or equipment name, identification, performance rating, or nomenclature plates.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
 1. Division 05 Section "Structural Steel" for shop-priming structural steel.
 2. Division 05 Section "Metal Fabrications" for shop-priming ferrous metal.
 3. Division 08 Section "Hollow Metal Doors and Frames" for shop-priming steel doors and frames.
 4. Division 09 Section "Special Coatings" for epoxy coating systems.
- C. Definitions:
 1. General: Standard coating terms defined in ASTM D 16 apply to this Section.
 2. Flat refers to a lusterless or matte finish with a gloss range below 15 when measured at an 85-degree meter.
 3. Eggshell refers to low-sheen finish with a gloss range between 20 and 35 when measured at a 60-degree meter.
 4. Semigloss refers to medium-sheen finish with a gloss range between 35 and 70 when measured at a 60-degree meter.
 5. Full gloss refers to high-sheen finish with a gloss range more than 70 when measured at a 60-degree meter.

1.3 SUBMITTALS

- A. General: Submit the following according to Conditions of the Contract and Division 01 Specification Sections.
- B. Product data for each paint system specified, including block fillers and primers.
 1. Provide the manufacturer's technical information including label analysis and instructions for handling, storage, and application of each material proposed for use.
 2. List each material and cross-reference the specific coating, finish system, and application. Identify each material by the manufacturer's catalog number and general classification.
 3. Certification by the manufacturer that products supplied comply with local regulations controlling use of volatile organic compounds (VOCs).
- C. Samples for initial color selection in the form of manufacturer's color charts.
 1. After color selection, the Architect will furnish color chips for surfaces to be coated.
- D. Samples for Verification Purposes: Provide samples of each color and material to be applied, with texture to simulate actual conditions, on representative samples of the actual substrate.
 1. Provide stepped samples, defining each separate coat, including block fillers and primers. Use representative colors when preparing samples for review. Resubmit until required sheen, color, and texture are achieved.
 2. Provide a list of material and application for each coat of each sample. Label each sample as to location and application.
 3. Submit samples on the following substrates for the Architect's review of color and texture only:
 - a. Painted Wood: Provide two 12-inch-square samples of each color and material on hardboard.
 - b. Stained or Natural Wood: Provide two 4-by-8-inch samples of natural and stained wood finish on actual wood surfaces.
 - c. Ferrous Metal: Provide two 4-inch-square samples of flat metal and two 8-inch-long samples of solid metal for each color and finish.

1.4 QUALITY ASSURANCE

- A. **Applicator Qualifications:** Engage an experienced applicator who has completed painting system applications similar in material and extent to those indicated for the Project that have resulted in a construction record of successful in-service performance.
- B. **Single-Source Responsibility:** Provide primers and undercoat paint produced by the same manufacturer as the finish coats.
- C. **Field Samples:** On wall surfaces and other exterior and interior components, duplicate finishes of prepared samples. Provide full-coat finish samples on at least 100 sq. ft. of surface until required sheen, color, and texture are obtained; simulate finished lighting conditions for review of in-place work.
 - 1. Final acceptance of colors will be from job-applied samples.
 - 2. The Architect will select one room or surface to represent surfaces and conditions for each type of coating and substrate to be painted. Apply coatings in this room or surface according to the schedule or as specified.
 - 3. After finishes are accepted, this room or surface will be used to evaluate coating systems of a similar nature.

1.5 DELIVERY, STORAGE, AND HANDLING

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

1.6 PROJECT CONDITIONS

- A. Apply water-based paints only when the temperature of surfaces to be painted and surrounding air temperatures are between 50 deg F (10 deg C) and 90 deg F (32 deg C).
- B. Apply solvent-thinned paints only when the temperature of surfaces to be painted and surrounding air temperatures are between 45 deg F (7 deg C) and 95 deg F (35 deg C).
- C. Do not apply paint in snow, rain, fog, or mist; or when the relative humidity exceeds 85 percent; or at temperatures less than 5 deg F (3 deg C) above the dew point; or to damp or wet surfaces.
 - 1. Painting may continue during inclement weather if surfaces and areas to be painted are enclosed and heated within temperature limits specified by the manufacturer during application and drying periods.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturer: Subject to compliance with requirements, provide products of one of the following:
1. Benjamin Moore & Co. (BM).
 2. Glidden-"ICI" Paint Stores, Inc. (ICI).
 3. M. A. Bruder & Sons, Inc. (MAB).
 4. PPG Industries, Inc. (PPG).
 5. Sherwin-Williams Company (SW).

2.2 PAINT, GENERAL

- A. Material Compatibility: Provide block fillers, primers, finish coat materials, and related materials that are compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by the manufacturer based on testing and field experience.
- B. Material Quality: Provide the manufacturer's best-quality trade sale paint material of the various coating types specified. Paint material containers not displaying manufacturer's product identification will not be acceptable.
1. Proprietary Names: Use of manufacturer's proprietary product names to designate colors or materials is not intended to imply that products named are required to be used to the exclusion of equivalent products of other manufacturers. Furnish the manufacturer's material data and certificates of performance for proposed substitutions.
- C. Colors: Provide color selections made by the Architect from the manufacturer's full range of standard colors.
1. No cost increase will be considered due to the final color selected. This includes but not limited to dark or intense hue and/or saturation colors.

2.3 INTERIOR CONCRETE FLOOR SEALER

- A. Sealer: Provide the manufacturer's recommended factory-formulated, water-based clear penetrating silane sealer that are compatible with the concrete floor indicated.
1. Concrete Trench Drain Pit Coating (P1):
 - a. "Polysiloxane XLE 80" Safety Yellow by Sherwin Williams or approved equal by Sonneborne Tremco or Pecora.

2.4 PRIMERS

- A. Primers: Provide the manufacturer's recommended factory-formulated primers that are compatible with the substrate and finish coats indicated.
- B. Products: Subject to compliance with requirements, provide one of the following:
1. Gypsum Drywall Primer: White, interior, latex-based primer.
 - a. Glidden - "ICI" 1030-1200 Ultra-hide PVA Primer Sealer.
 - b. Sherwin-Williams - ProMar 200 Latex Wall Primer, B28W8200.
 - c. Approved equal by BM, MAB, PPG.
 2. Ferrous Metal Primers: Alkyd-type primers.
 - a. Glidden - "ICI" 4160-XXXX Devguard Multi-purpose Primer not less than 2 mil thickness.
 - b. Sherwin-Williams- Pro industrial Pro-Cryl Acrylic Metal Primer, B66-310.
 - c. Approved equal by BM, MAB, PPG.
 3. Galvanized Metal Primers:
 - a. Glidden - "ICI" 4160-XXXX Devguard Multi-purpose Primer not less than 2 mil thickness.

- b. Sherwin-Williams- Pro industrial Pro-Cryl Acrylic Metal Primer, B66-310.
- c. Approved equal by BM, MAB, PPG.

2.5 UNDERCOAT MATERIALS

- A. Undercoat Materials: Provide the manufacturer's recommended factory-formulated undercoat materials that are compatible with the substrate and finish coats indicated.
- B. Products: Subject to compliance with requirements, provide one of the following:
 - 1. Glidden - "ICI" 1120-1200 Ultra-Hide undercoater.
 - 2. Sherwin-Williams- Premium Wall & Wood Primer B28W8111.
 - 3. Approved equal by BM, MAB, PPG.

2.6 EXTERIOR FINISH PAINT MATERIAL

- A. Finish Paint: Provide the manufacturer's recommended factory-formulated finish-coat materials that are compatible with the substrate and undercoats indicated.
- B. Products: Subject to compliance with requirements, provide one of the following:
 - 1. Gloss Enamel: Weather-resistant, high-gloss enamel:
 - a. Glidden - "ICI" 4216-XXXX Devlex Acrylic Enamel.
 - b. Sherwin-Williams- DTM Acrylic Gloss B66 Series.
 - c. Approved equal by BM, MAB, PPG.
- C. Products: Subject to compliance with requirements, provide one of the following:
 - 1. Latex Systems: Low Sheen Finish for Existing Exterior Metal Building Panels:
 - a. Sherwin-Williams- Pro Industrial Pro-Cryl Primer B66-310 Series & Bond-Plex Waterbased Acrylic B71-200 Series.
 - b. Approved equal by Glidden, BM, MAB, PPG.

2.7 INTERIOR FINISH PAINT MATERIAL

- A. Finish Paint: Provide the manufacturer's recommended factory-formulated finish-coat materials that are compatible with the substrate and undercoats indicated.
- B. Products: Subject to compliance with requirements, provide one of the following:
 - 1. Interior, Semigloss and Satin acrylic latex
 - a. Glidden - "ICI" Ultrahide-1412XXXX Dulux Professional Eggshell interior wall and trim enamel.
 - b. Sherwin-Williams- ProGreen 200 Egg-Shell, B20-600 Series.
 - c. Sherwin-Williams- ProGreen 200 Semi-Gloss, B31-600 Series.
 - d. Approved equal by BM, MAB, PPG.

2.8 MISCELLANEOUS WOOD-FINISHING MATERIALS

- A. Wood-Finishing Materials: Provide the manufacturer's recommended factory-formulated, wood-finishing materials that are compatible with the substrate and undercoats indicated.
- B. Products: Subject to compliance with requirements, provide one of the following:
 - 1. Oil-Type Interior Wood Stain: Slow-penetrating, oil-type wood stain.
 - a. Glidden - "ICI" 1700-XXX Woodpride interior solventborne wood finishing stain.
 - b. Sherwin-Williams- WoodClassics 250 VOC Oil Stain, A49-200.
 - c. Approved equal by BM, MAB, PPG.
 - 2. Interior Polyurethane clear satin varnish.
 - a. Glidden - "ICI" 1902-0000 Woodpride interior satin polyurethane varnish
 - b. Sherwin-Williams- WoodClassics Waterborne Polyurethane, A68 Series.

- c. Approved Equal BM, MAB, PPG.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions under which painting will be performed for compliance with paint application requirements. Surfaces receiving paint must be thoroughly dry before paint is applied.
1. Do not begin to apply paint until unsatisfactory conditions have been corrected.
 2. Start of painting will be construed as the Applicator's acceptance of surfaces and conditions within a particular area.
- B. Coordination of Work: Review other Sections in which primers are provided to ensure compatibility of the total system for various substrates. On request, furnish information on characteristics of finish materials to ensure use of compatible primers.
1. Notify the Architect about anticipated problems using the materials specified over substrates primed by others.

3.2 PREPARATION

- A. General: Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures, and similar items already installed that are not to be painted or provide surface-applied protection prior to surface preparation and painting. Remove these items, if necessary, to completely paint the items and adjacent surfaces. Following completion of painting operations in each space or area, have items reinstalled by workers skilled in the trades involved.
- B. Cleaning: Before applying paint or other surface treatments, clean the substrates of substances that could impair the bond of the various coatings. Remove oil and grease prior to cleaning. Schedule cleaning and painting so dust and other contaminants from the cleaning process will not fall on wet, newly painted surfaces.
- C. Surface Preparation: Clean and prepare surfaces to be painted according to the manufacturer's instructions for each particular substrate condition and as specified.
1. Provide barrier coats over incompatible primers or remove and reprime. Notify Architect in writing about anticipated problems using the specified finish-coat material with substrates primed by others.
 2. Cementitious Materials: Prepare concrete, concrete masonry block, cement plaster, and mineral-fiber-reinforced cement panel surfaces to be painted. Remove efflorescence, chalk, dust, dirt, grease, oils, and release agents. Roughen, as required, to remove glaze. If hardeners or sealers have been used to improve curing, use mechanical methods of surface preparation.
 3. Use abrasive blast-cleaning methods if recommended by the paint manufacturer.
 4. Determine alkalinity and moisture content of surfaces by performing appropriate tests. If surfaces are sufficiently alkaline to cause the finish paint to blister and burn, correct this condition before application. Do not paint surfaces where moisture content exceeds that permitted in manufacturer's printed directions.
 5. Wood: Clean surfaces of dirt, oil, and other foreign substances with scrapers, mineral spirits, and sandpaper, as required. Sand surfaces exposed to view smooth and dust off.
 - a. Scrape and clean small, dry, seasoned knots, and apply a thin coat of white shellac or other recommended knot sealer before applying primer. After priming, fill holes and imperfections in finish surfaces with putty or plastic wood filler. Sand smooth when dried.
 - b. Prime, stain, or seal wood to be painted immediately upon delivery. Prime edges, ends, faces, undersides, and backsides of wood, including cabinets, counters, cases, and paneling.
 - c. When transparent finish is required, backprime with spar varnish.
 - d. Backprime paneling on interior partitions where masonry, plaster, or other wet wall construction occurs on backside.

- e. Seal tops, bottoms, and cutouts of unprimed wood doors with a heavy coat of varnish or sealer immediately upon delivery.
6. Ferrous Metals: Clean ungalvanized ferrous metal surfaces that have not been shop-coated; remove oil, grease, dirt, loose mill scale, and other foreign substances. Use solvent or mechanical cleaning methods that comply with recommendations of the Steel Structures Painting Council (SSPC).
 - a. Blast steel surfaces clean as recommended by the paint system manufacturer and according to requirements of SSPC specification SSPC-SP 10.
 - b. Treat bare and sandblasted or pickled clean metal with a metal treatment wash coat before priming.
 - c. Touch up bare areas and shop-applied prime coats that have been damaged. Wire-brush, clean with solvents recommended by the paint manufacturer, and touch up with the same primer as the shop coat.
7. Galvanized Surfaces: Clean galvanized surfaces with nonpetroleum-based solvents so that the surface is free of oil and surface contaminants. Remove pretreatment from galvanized sheet metal fabricated from coil stock by mechanical methods.

3.3 PREPARATION OF EXISTING SURFACES

- A. Existing Painted Gypsum Board: Touch up all holes, dents, etc with drywall patching components approved by the paint manufacturer for the intended purpose. Scrape all loose paint off. Sand and taper smooth all rough spots and blemishes. Provide same number of finish c
- B. Existing Ferrous Metals to Remain: Grind and sand all loose and peeling paint. Sand and feather all edges smooth. Prime bare metal before painting
- C. Materials Preparation: Carefully mix and prepare paint materials according to manufacturer's directions.
 1. Maintain containers used in mixing and applying paint in a clean condition, free of foreign materials and residue.
 2. Stir material before application to produce a mixture of uniform density; stir as required during application. Do not stir surface film into material. Remove film and, if necessary, strain material before using.
 3. Use only thinners approved by the paint manufacturer and only within recommended limits.
- D. Tinting: Tint each undercoat a lighter shade to facilitate identification of each coat where multiple coats of the same material are applied. Tint undercoats to match the color of the finish coat but provide sufficient differences in shade of undercoats to distinguish each separate coat.

3.4 APPLICATION

- A. General: Apply paint according to manufacturer's directions. Use applicators and techniques best suited for substrate and type of material being applied.
 1. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film.
 2. Paint colors, surface treatments, and finishes are indicated in the schedules.
 3. Provide finish coats that are compatible with primers used.
 4. The number of coats and the film thickness required are the same regardless of the application method. Do not apply succeeding coats until the previous coat has cured as recommended by the manufacturer. Sand between applications where sanding is required to produce a smooth even surface according to the manufacturer's directions.
 5. Apply additional coats if undercoats, stains, or other conditions show through final coat of paint until paint film is of uniform finish, color, and appearance. Give special attention to ensure that surfaces, including edges, corners, crevices, welds, and exposed fasteners, receive a dry film thickness equivalent to that of flat surfaces.
 6. The term exposed surfaces includes areas visible when permanent or built-in fixtures, convector covers, covers for finned tube radiation, grilles, and similar components are in place. Extend

- coatings in these areas, as required, to maintain the system integrity and provide desired protection.
7. Paint surfaces behind movable equipment and furniture the same as similar exposed surfaces. Before the final installation of equipment, paint surfaces behind permanently fixed equipment or furniture with prime coat only.
 8. Paint interior surfaces of ducts, where visible through registers or grilles, with a flat, non-specular black paint.
 9. Paint back sides of access panels and removable or hinged covers to match exposed surfaces.
 10. Finish exterior doors on tops, bottoms, and side edges same as exterior faces. Sand lightly between each succeeding enamel or varnish coat. Omit primer on metal surfaces that have been shop-primed and touch-up painted.
- B. Scheduling Painting: Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.
1. Allow sufficient time between successive coats to permit proper drying. Do not recoat until paint has dried to where it feels firm, does not deform or feel sticky under moderate thumb pressure, and where application of another coat of paint does not cause the undercoat to lift or lose adhesion.

3.5 PROCEDURES

- A. Apply paints and coatings by brush, roller, spray, or other applicators according to the manufacturer's directions.
1. Brushes: Use brushes best suited for the material applied.
 2. Rollers: Use rollers of carpet, velvet back, or high-pile sheep's wool as recommended by the manufacturer for the material and texture required.
 3. Spray Equipment: Use airless spray equipment with orifice size as recommended by the manufacturer for the material and texture required.
- B. Minimum Coating Thickness: Apply materials no thinner than the manufacturer's recommended spreading rate. Provide the total dry film thickness of the entire system as recommended by the manufacturer.
- C. Mechanical and Electrical Work: Painting mechanical and electrical work is limited to items exposed in occupied spaces.
1. Mechanical items to be painted include, but are not limited to, the following:
 - a. Piping, pipe hangers, and supports.
 - b. Heat exchangers.
 - c. Tanks.
 - d. Ductwork.
 - e. Insulation.
 - f. Supports.
 - g. Accessory items.
 2. Electrical items to be painted include, but are not limited to, the following:
 - a. Conduit and fittings, including hangers.
 - b. Switchgear.
- D. Block Fillers: Apply block fillers to concrete masonry block at a rate to ensure complete coverage with pores filled.
- E. Prime Coats: Before applying finish coats, apply a prime coat of material, as recommended by the manufacturer, to material that is required to be painted or finished and that has not been prime-coated by others. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to ensure a finish coat with no burn-through or other defects due to insufficient sealing.
- F. Pigmented (Opaque) Finishes: Completely cover to provide a smooth, opaque surface of uniform finish, color, appearance, and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections will not be acceptable.
- G. Transparent (Clear) Finishes: Use multiple coats to produce a glass-smooth surface film of even luster. Provide a finish free of laps, cloudiness, color irregularity, runs, brush marks, orange peel, nail holes, or other surface imperfections.
1. Provide satin finish for final coats.

- H. Completed Work: Match approved samples for color, texture, and coverage. Remove, refinish, or repaint work not complying with specified requirements.

3.6 FIELD QUALITY CONTROL

- A. The Owner reserves the right to invoke the following test procedure at any time and as often as the Owner deems necessary during the period when paint is being applied:
- B. The Owner will engage the services of an independent testing agency to sample the paint material being used. Samples of material delivered to the Project will be taken, identified, sealed, and certified in the presence of the Contractor.
- C. Testing agency will perform appropriate tests for the following characteristics as required by the Owner:
 - 1. Quantitative materials analysis.
 - 2. Abrasion resistance.
 - 3. Apparent reflectivity.
 - 4. Flexibility.
 - 5. Washability.
 - 6. Absorption.
 - 7. Accelerated weathering.
 - 8. Dry opacity.
 - 9. Accelerated yellowness.
 - 10. Recoating.
 - 11. Skinning.
 - 12. Color retention.
 - 13. Alkali and mildew resistance.
 - 14. If test results show material being used does not comply with specified requirements, the Contractor may be directed to stop painting, remove noncomplying paint, pay for testing, repaint surfaces coated with rejected paint, and remove rejected paint from previously painted surfaces if, upon repainting with specified paint, the two coatings are incompatible.

3.7 CLEANING AND PROTECTION

- A. Cleanup: At the end of each work day, remove empty cans, rags, rubbish, and other discarded paint materials from the site.
 - 1. After completing painting, clean glass and paint-spattered surfaces. Remove spattered paint by washing and scraping. Be careful not to scratch or damage adjacent finished surfaces.
- B. Protection:
 - 1. Protect work of other trades, whether being painted or not, against damage by painting. Correct damage by cleaning, repairing or replacing, and repainting, as acceptable to Architect.
 - 2. Provide "Wet Paint" signs to protect newly painted finishes. Remove temporary protective wrappings provided by others to protect their work after completing painting operations.
 - a. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.8 PAINT SCHEDULE

- A. Exterior Paint Schedule:
 - 1. General: Provide the following paint systems for the various substrates indicated.
 - 2. All new exterior exposed metals are to be painted which include but are not limited to steel lintels, shelf angles and column and beam steel.
 - 3. Ferrous Metal: Primer is not required on shop-primed items.
 - a. Full-Gloss Enamel: Two finish coats over primer.
 - 1) Primer: Synthetic rust-inhibiting primer.

- 2) First and Second Coats: Gloss acrylic enamel.
 4. Zinc-Coated Metal:
 - a. High-Gloss Enamel: Two finish coats over primer.
 - 1) Primer: Galvanized metal primer.
 - 2) First and Second Coats: Gloss acrylic enamel.
 - B. Interior Paint Schedule: PT-1
 1. General: Provide the following paint systems for the various substrates, as indicated. Refer to Division 09 Section "Special Coatings" for epoxy coating systems scheduled.
 2. Concrete Masonry Units:
 - a. Semigloss Enamel Finish: 2 coats over filled surface with total dry film thickness not less than 3.5 mils, excluding filler coat.
 - 1) Block Filler: High-performance latex block filler.
 - 2) Undercoat: Interior enamel undercoat.
 - 3) Finish Coat: Interior, semigloss enamel.
 3. Gypsum Drywall Systems:
 - a. Odorless Eggshell Enamel Finish: 3 coats with total dry film thickness not less than 2.5 mils.
 - 1) Primer: White, interior, latex-based primer.
 - 2) First and Second Coats: Interior, semigloss, odorless enamel.
 4. Ferrous Metal:
 - a. Semigloss Enamel Finish: 2 coats over primer with total dry film thickness not less than 2.5 mils.
 - 1) Primer: Synthetic, quick-drying, rust-inhibiting primer.
 - 2) Undercoat: Interior enamel undercoat.
 - 3) Finish Coat: Interior, semigloss, odorless, enamel.
 5. Zinc-Coated Metal:
 - a. Semigloss Finish: 2 coats over primer, with total dry film thickness not less than 2.5 mils.
 - 1) Primer: Galvanized metal primer.
 - 2) Undercoat: Interior enamel undercoat.
 - 3) Finish Coat: Interior, semigloss, odorless, enamel.
 - C. Exposed Structural Ceilings:
 1. "Dry Fog" method. Prime galvanized decks and paint as follows
 - a. Glidden-"ICI" 5207 primer and use Glidden-"ICI" Alkyd Eggshell 1180.
 - b. SW ProIndustrial Pro-Cryl Acrylic Metal Primer, B66-310 and use Sherwin-Williams Waterborne Acrylic Dry Fall Eg-Shel, B42W2.
 - c. Approved equal all in strict accordance with manufacturer's installation instructions by BM, MAB, PPG.
 - D. Special Note: General
 1. Use satin (eggshell) finish in lieu of semigloss in locations approved in the field by the Architect.

END OF SECTION 09 91 00