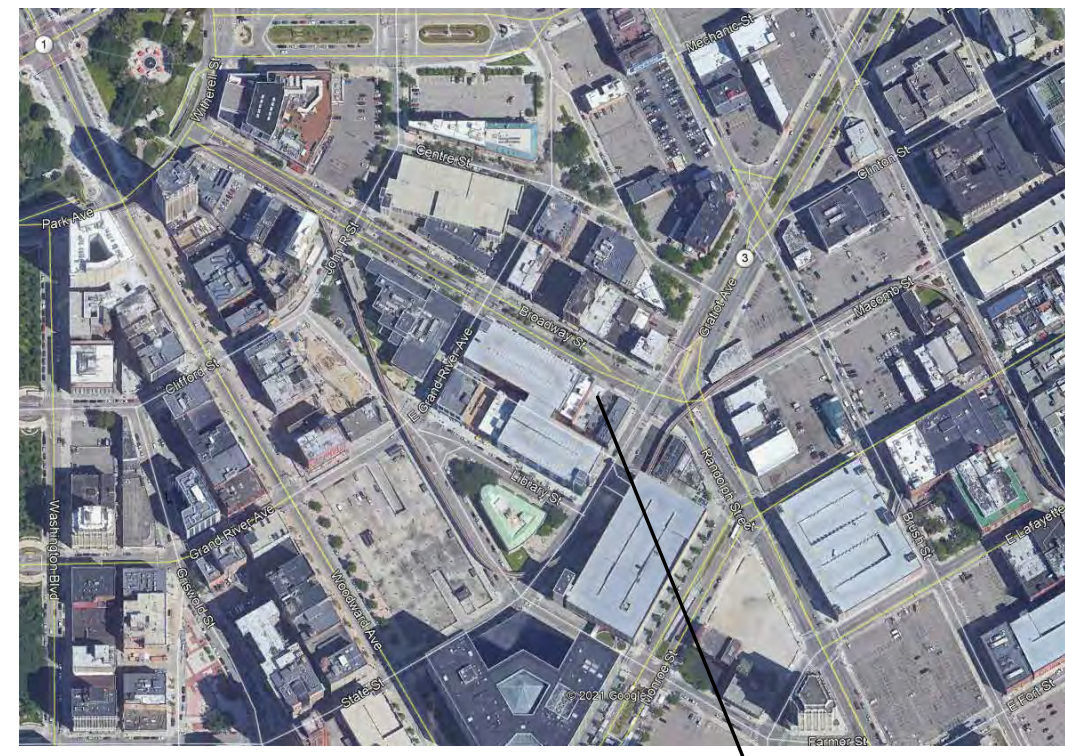


LOCATION MAP



PROJECT LOCATION

PROJECT  
**1315 Broadway**  
 1315 Broadway  
 Detroit, Michigan 48226  
**PHASE 01 - EXTERIOR RESTORATION**



AMY BAKER  
 ARCHITECT  
 1012 OWANA AVENUE  
 ROYAL OAK, MI 48067  
 (248) 931-3055  
 amy@amybakerarchitect.com

SEAL

NOT FOR CONSTRUCTION

SYMBOL LEGEND

**1 DRAWING**  
 AX-XX SCALE: X = X DRAWING TITLE

**FIN FLOOR ELEV**  
 0'-0" AFF ELEVATION DATUM LINE

**1**  
 A COLUMN LINE DESIGNATION

**XX**  
 XX-XX BUILDING SECTION CUT INDICATOR

**XX**  
 XX-XX PARTIAL SECTION CUT INDICATOR

**XX**  
 XX-XX ELEVATION INDICATOR

**XX**  
 XX-XX INTERIOR ELEVATION INDICATOR

**XX**  
 XX-XX DETAIL INDICATOR

**XX**  
 XX-XX DETAIL NUMBER SHEET WHERE DETAIL IS CUT

**#** WALL TYPE IDENTIFIER

**XX** KEY NOTE IDENTIFIER

**XXX** DOOR IDENTIFIER

**XXX** WINDOW IDENTIFIER

**X** MATERIAL FINISH IDENTIFIER

**XX** REVISION CLOUD

**XX** REVISION INDICATOR

ABBREVIATIONS

ACT	ACOUSTICAL CEILING TILE	FOS	FACE OF STUDS	PTN	PARTITION
ADJ	ADJACENT	FR	FRAME	PVC	POLYVINYL CHLORIDE
AFF	ABOVE FINISHED FLOOR	FRR	FIRE RESISTANCE RATING	PWD	PLYWOOD
AHU	AIR HANDLING UNIT	FT	FEET	PWR	POWER
ALUM	ALUMINUM	FUT	FUTURE	QT	QUARRY TILE
APPROX	APPROXIMATE	GA	GAGE (GAUGE)	R	RADIUS OR RISER
ARCH	ARCHITECTURAL	GALV	GALVANIZED	RA	RETURN AIR
BD	BOARD	GC	GENERAL CONTRACTOR	RAG	RETURN AIR GRILLE
BLDG	BUILDING	GL	GLASS	RD	ROOF DRAIN
BLK	BLOCK	GWB	GYP/SUM WALL BOARD	REF	REFRIGERATOR
BLKG	BLOCKING	GYP	GYP/SUM	REG	REGISTER
B/O	BOTTOM OF	H	HIGH	RH	RIGHT HAND
CPT	CARPET	HB	HOSE BIBB	R/H	RANGE /HOOD FAN
CJ	CONTROL JOINT	HD	HEAD OR HEAVY DUTY	REQD	REQUIRED
C	CENTERLINE	HM	HOLLOW METAL	REV	REVERSE
CL	CLOSET	HORIZ	HORIZONTAL	RI	RIGID INSULATION
CLG	CEILING	HP	HIGH POINT	RM	ROOM
CO	CLEANOUT	HT	HEIGHT	RO	ROUGH OPENING
COL	COLUMN	ID	INSIDE DIAMETER	ROW	RIGHT OF WAY
CONC	CONCRETE	IE	INVERT ELEVATION	S	SINK
CONT	CONTINUOUS	IN	INCHES	SAN	SANITARY
CONST	CONSTRUCTION	INSUL	INSULATION	SC	SOLID CORE
COORD	COORDINATE	JB	JUNCTION BOX	SCH	SCHEDULE
CORR	CORRIDOR	JC	JANITOR'S CLOSET	SEP	SEPARATE
CPT	CARPET	JT	JOINT	SF	SUPPLY FAN
C/W	COMPLETE WITH	KIT	KITCHEN	SM	SIMILAR
D	DEPTH/ DEEP	L	LONG	SM	SPECIFICATIONS
DF	DRINKING FOUNTAIN	LH	LEFT HAND	SPKR	SPEAKER
DIA	DIAMETER	LP	LOW POINT	SQ	SQUARE
DIM	DIMENSION	LTG	LIGHTING	SS	STAINLESS STEEL
DISP	DISPENSER	MAS	MASONRY	ST	STEEL
DN	DOWN	MAU	MAKE-UP AIR UNIT	STD	STANDARD
DS	DOWNSPOUT	MAX	MAXIMUM	STL	STEEL
D/W	DISHWASHER	MC	MEDICINE CABINET	STRUCT	STRUCTURAL
DWG	DRAWING	MECH	MECHANICAL	T&B	TOP AND BOTTOM
EA	EACH	MIN	MINIMUM	T&B	TO BE DETERMINED
EF	EXHAUST FAN	MIR	MIRROR	T&G	TONGUE AND GROOVE
EJ	EXPANSION JOINT	MISC	MISCELLANEOUS	T/O	TOP OF
EL	ELEVATION	MO	MASONRY OPENING	TP	TOILET PARTITION
ELEC	ELECTRICAL	MTD	MOUNTED	TPD	TOILET PAPER DISPENSER
ELEV	ELEVATION	MTG	MOUNTING	TYP	TYPICAL
EQ	EQUAL	N/A	NOT APPLICABLE	U/S	UNDERSIDE
EW	ELECTRIC WATER COOLER	NIC	NOT IN CONTRACT	UH	UNIT HEATER
EXIST	EXISTING	NO	NUMBER	VB	VAPOR BARRIER
EXT	EXTERIOR	NTS	NOT TO SCALE	VEST	VESTIBULE
F	FRIDGE	OC	ON CENTER	VERT	VERTICAL
FD	FLOOR DRAIN	OD	OUTSIDE DIAMETER	W	WIDTH
FDN	FOUNDATION	OH	OVERHEAD	WD	WOOD OR WIDE
FE	FIRE EXTINGUISHER	OH	OPPOSITE HAND	WC	WALK IN CLOSET
FG	FIRE/REGGLASS	OPNG	OPENING	W/ OR /W	WITH
FL	FLOOR	OPP	OPPOSITE	W/D	WASHER AND DRYER
FLR	FLOOR	P	PROPERTY LINE	W/O	WALL OVEN OR WITHOUT
FIN	FINISH	PT	PAINT OR POINT	WRB	WEATHER RESISTIVE BARRIER
FIXT	FIXTURE	PTD	PAINTED		
F/O	FACE OF	PTD	PAPER TOWEL DISPENSER		

GENERAL NOTES

CONTRACTORS SHALL NOT SCALE THESE DRAWINGS FOR CONSTRUCTION PURPOSES. IN THE EVENT OF OMISSION OF NECESSARY DIMENSIONS OR INFORMATION, CONTRACTOR SHALL NOTIFY ARCHITECT. FIGURED AND CALCULATED DIMENSION TAKES PRECEDENCE OVER SCALED MEASUREMENTS. DETAILED DRAWINGS AND LARGER SCALE DRAWINGS TAKE PRECEDENCE OVER SMALLER SCALE DRAWINGS. ALL PLAN DETAILS AND WALL SECTIONS ARE ASSUMED TO BE TYPICAL CONDITIONS UNLESS DETAILED OR NOTED OTHERWISE.

VERIFY ALL DIMENSIONS, CONDITIONS, AND GRADES AT JOB SITE. ALL CONTRACTORS SHALL COORDINATE THEIR WORK WITH OTHER TRADES AND REPORT DISCREPANCIES, PRIOR TO THEIR CONSTRUCTION, TO THE ARCHITECT FOR REVIEW AND CLARIFICATION OR ACTION.

VERIFY SIZE, LOCATIONS AND CHARACTERISTICS OF ALL EQUIPMENT TO BE FURNISHED WITH MANUFACTURERS OR SUPPLIERS BEFORE BEGINNING CONSTRUCTION.

VERIFY SIZE AND LOCATION OF ALL OPENINGS FOR MECHANICAL AND ELECTRICAL EQUIPMENT AND RELATED WORK WITH CONTRACTORS INVOLVED AND EQUIPMENT TO BE FURNISHED. FOR CONSTRUCTION DETAILS NOT SHOWN, USE THE MANUFACTURERS STANDARD DETAILS OR APPROVED SHOP DRAWINGS / DATA SHEETS IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

VERIFY ALL ELEVATIONS AND DIMENSIONS OF STRUCTURAL ELEMENTS WITH ARCHITECTURAL DRAWINGS. IN CASE OF CONFLICT, NOTIFY ARCHITECT. THE CONTRACTORS SHALL VERIFY ALL DIMENSIONS AND BE RESPONSIBLE FOR THEM. ALL DIMENSIONAL DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT.

ALL PRODUCTS UTILIZED IN THIS CONSTRUCTION SHALL BE ASBESTOS FREE.

ALL WORK TO CONFORM TO ALL LOCAL, STATE, AND NATIONAL BUILDING CODES, INCLUDING ACCESSIBILITY REQUIREMENTS.

CONTRACTOR TO CONTACT ANY AND ALL LOCAL UTILITIES TO SUBMIT ALL APPLICABLE PERMIT DOCUMENTS, QUALIFICATIONS, ETC. AND BE RESPONSIBLE FOR ALL FEES ASSOCIATED WITH PERMITS, UTILITY EXTENSIONS, TAP-INS, ETC. ARCHITECT SHALL PROVIDE DOCUMENTS FOR PERMIT PLAN REVIEW AND OWNER REVIEW. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE PERMITS AND ALL PERMIT AND INSPECTION COSTS.

EACH SUBCONTRACTOR IS RESPONSIBLE TO COORDINATE AND SCHEDULE WORK WITH THE GENERAL CONTRACTOR AND ALL OTHER CONTRACTORS WHOSE WORK SHALL BE AFFECTED.

PARKING AT THE SITE BY ALL CONSTRUCTION STAFF SHALL BE LIMITED TO ONLY THE AREAS DESIGNATED BY THE OWNER.

ALL WOOD IN CONTACT WITH CONCRETE OR WITHIN CONTACT OF THE SURROUNDING SOIL SHALL BE PRESERVATIVE TREATED. ALL WOOD WITHIN 8 INCHES OF FINISHED GRADE SHALL BE PRESERVATIVE TREATED.

SHEET INDEX

Sheet Number	Sheet Name
X G0-01	COVER
X G4-01	SPECIFICATIONS
X G4-02	SPECIFICATIONS
X G4-03	SPECIFICATIONS
X G4-04	SPECIFICATIONS
X G4-05	SPECIFICATIONS
X G4-06	SPECIFICATIONS
X G4-07	SPECIFICATIONS
X A1-01	DEMOLITION PLANS
X A1-02	DEMOLITION PLANS
X A1-10	DEMO NORTH AND SOUTH ELEVATIONS
X A2-01	FLOOR PLANS
X A2-02	FLOOR PLANS
X A2-10	ENLARGED REFLECTED CEILING PLAN
X A3-01	NORTH AND SOUTH ELEVATIONS
X A3-50	PHOTOS
X A4-00	FRAMING PLAN AND DETAILS
X A4-10	ENLARGED STOREFRONT PLAN AND SECTIONS
X A4-20	STOREFRONT DETAILS
X A7-00	SCHEDULES
X A7-01	WINDOW SECTIONS AND DETAILS

CODE INFORMATION

SCOPE OF WORK	EXTERIOR RENOVATION AND REHABILITATION OF EXISTING HISTORIC FACADE INCLUDING: RESTORED HISTORIC WINDOWS WITH NEW FIRE RATED GLAZING, RESTORATION OF EXISTING LIMESTONE / MASONRY, REPLACEMENT OF ALLEY EGRESS WINDOWS WITH FIXED DOUBLE HUNG WINDOWS AND INTERIOR FIXED WINDOW, NEW EGRESS DOORS, NEW FIRE ESCAPE, NEW CANOPY, NEW EXTERIOR LIGHTING, NEW STOREFRONT AND NEW ACCESSIBLE ENTRANCE.
CODES	2015 MICHIGAN REHABILITATION CODE FOR EXISTING BUILDINGS - WORK AREA METHOD - ALTERATION - LEVEL 1
CONSTRUCTION TYPE	IIIB
FIRE RATINGS	EXISTING - UNCHANGED
OCCUPANCY	EXISTING - UNCHANGED (CURRENTLY AND TO REMAIN UNOCCUPIED UNTIL PHASE 02 - INTERIOR RENOVATION)
FIRE PROTECTION	EXISTING - UNCHANGED (UNPROTECTED) PHASE 02 OF THE PROJECT WILL HAVE A COMPLETE NFPA 13 SPRINKLER, INCLUSIVE OF SPRINKLER PROTECTED GLAZING (NFPA 9.3.15) ALONG THE INTERIOR SIDE OF THE ALLEY GLAZING.

THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL THE SEAL AND SIGNATURE OF THE RESPONSIBLE REGISTRANT APPEARS ON THE DRAWING, AND PROPER PERMIT FORMS AND RELATED FEES ARE TRANSMITTED BY THE OWNER, OWNER'S AGENT OR CONTRACTOR TO THE AUTHORITY HAVING JURISDICTION.

CONSULTANT

CLIENT

PROJECT  
 2021.A03  
**1315 Broadway**

1315 Broadway  
 Detroit, Michigan 48226

ISSUANCE  
 2023-08-21 HDC SUBMISSION

REVISIONS

TITLE  
**COVER**

SHEET  
**G0-01**

**DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS**  
**SECTION 00 31 00 - AVAILABLE PROJECT INFORMATION**

**PART 1 GENERAL**

- 1.1 EXISTING CONDITIONS
  - A. Certain information relating to existing conditions and structures is available to Contractor, but are not part of the Contract Documents.
    1. Copies are available from Owner.
    2. Contractor is urged to examine data.
    3. Contractor should visit the site and become acquainted with existing conditions.
    4. Interpretation: The documents listed below are provided only for information and convenience. Owner and Architect disclaim responsibility for accuracy, true location and extent of existing conditions that have been documented by others. Owner and Architect further disclaim responsibility for interpretation of the data by the Contractor.
  - 5. Available Documents:
    - a. Historic Window Repair/Restoration Assessment.
    - b. Fire Escape Condition Assessment.
    - c. Phase 1 Environmental Assessment.
    - d. Property Condition Assessment.

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION (NOT USED)**

**END OF SECTION**

**DIVISION 01 - GENERAL REQUIREMENTS**  
**SECTION 01 10 00 - SUMMARY**

**PART 1 GENERAL**

- 1.1 PROJECT
  - A. The Project consists of the alteration of a historic building as more completely described in the Contract Documents.
- 1.2 CONTRACT DESCRIPTION
  - A. Contract Type: A single prime contract based on a stipulated price as described in the contract for construction.
- 1.3 DIVISION 01 SPECIFICATIONS
  - A. Division 01 General Requirements expand on the broad provisions of the Conditions of the Contract, and govern the execution of the work of all Sections of the specifications. Division 01 General Requirements specify administrative and procedural requirements relating to execution of the Work, and temporary facilities for use during the construction period.
- 1.4 WORK BY OWNER
  - A. Items noted NIC (Not in Contract) will be supplied and installed by Owner before Substantial Completion.
    1. Furnishings.
    2. Other items noted on Drawings.
- 1.5 WORK BY CONTRACTOR
  - A. Construction Operations: Limited to areas approved by Owner.
  - B. Provide access to and from site as required by law and by Owner:
    1. Emergency Building Exits During Construction: Keep all exits required by code open during construction period; provide temporary exit signs if exit routes are temporarily altered.
    2. Do not obstruct roadways, sidewalks, or other public ways without permit.
  - C. Time Restrictions:
    1. Limit conduct of especially noisy exterior work to the hours of 8 am and 5 pm.
  - D. Visit site, check facilities and conditions, verify all utility connections, and take all items into consideration in bid.
  - E. The Contractor shall be solely responsible for construction means, methods, sequence of construction and the safety of workers.
  - F. Systems are to be complete and workable in all respects, placed in operation and properly adjusted.
  - G. Conform to all applicable codes and government regulations
  - H. Obtain permits and pay all fees. Arrange for all required inspections and approvals.

**END OF SECTION**

**SECTION 01 20 00 - PRICE AND PAYMENT PROCEDURES**

**PART 1 GENERAL**

- 1.1 SCHEDULE OF VALUES
  - A. Use Schedule of Values Form: AIA G703, edition stipulated in the Agreement.
- 1.2 APPLICATIONS FOR PROGRESS PAYMENTS
  - A. Payment Period: Submit at intervals stipulated in the Agreement.
  - B. Use Form AIA G702 and Form AIA G703, edition stipulated in the Agreement.
  - C. Execute certification by signature of authorized officer.
  - D. Use data from approved Schedule of Values. Provide dollar value in each column for each line item for portion of work performed and for stored products.
  - E. List each authorized Change Order as a separate line item, listing Change Order number and dollar amount as for an original item of work.
  - F. Include the following with the application:
    1. Construction progress schedule, revised and current as specified in Section 01 30 00.
    2. Current construction photographs specified in Section 01 30 00.
    3. Conditional release of liens from each Subcontractor and vendor for the current month's payment application, and unconditional release of liens from each Subcontractor and vendor for the previous month's payment application.
    4. Affidavits attesting to off-site stored products.
- 1.3 MODIFICATION PROCEDURES
  - A. Establish and maintain a construction cost log, including the status of all pending and executed Change Orders (accepted, declined, pending, etc.), status of requests for information, supplemental instructions, other modification documents, and the status of allowances, including Owner's contingency allowance.
  - B. Supplemental Instructions: For minor modifications not involving an adjustment to the Contract Sum or Contract Time; Architect will issue instructions directly to Contractor.
  - C. Construction Change Directive: For other required modifications, Architect will issue a document signed by Architect and Owner instructing Contractor to proceed with the modification, for subsequent inclusion in a Change Order.
  - D. Proposal Request: For modifications for which advance pricing is desired, Architect will issue a document which includes a detailed description of a proposed modification with supplementary or revised drawings and specifications. Contractor shall prepare and submit a fixed price quotation within 10 days, estimating any changes to Contract Sum and Contract Time for executing the modification. Contractor's quotation shall stipulate any overtime work required and the period of time during which the requested price will be considered valid.
  - E. Change Order: Contractor may propose a change by submitting a request for change order or modification to Architect, describing the proposed change and its full effect on the Work, with a statement describing the reason for the change, and the effect on the Contract Sum and Contract Time with full documentation and a statement describing the effect on Work by separate or other contractors.
  - F. Substantiation of Costs: Provide full information required for evaluation.
  - G. Execution of Change Orders: Contractor will issue Change Orders for signatures of parties as provided in the Conditions of the Contract.
  - H. After execution of Change Order, promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjust the Contract Sum.
  - I. Promptly revise progress schedules to reflect any change in Contract Time, revise sub-schedules to adjust times for other items of work affected by the change, and resubmit.

- 1.4 APPLICATION FOR FINAL PAYMENT
  - A. Prepare Application for Final Payment as specified for progress payments, identifying total adjusted Contract Sum, previous payments, and sum remaining due.
  - B. Application for Final Payment will not be considered until the following have been accomplished:
    1. All closeout procedures specified in Section 01 70 00.
    2. Receipt of unconditional release of liens from Contractor and each Subcontractor and vendor for the previous month's payment application.
    3. Receipt of final Certificate of Occupancy from jurisdictional authority.
    4. Acceptance of Work by Owner and Architect.

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

**END OF SECTION**

**SECTION 01 25 00 - SUBSTITUTION PROCEDURES**

**PART 1 GENERAL - NOT USED**

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION**

- 3.1 GENERAL REQUIREMENTS
  - A. Base equipment manufacturer, model, and capacity of equipment are listed on the drawings or in this specification. Any other manufacturer is considered a substitution.
  - B. A Substitution Request for products, assemblies, materials, and equipment constitutes a representation that the submitter:
    1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product, equipment, assembly, or system.
    2. Agrees to provide the same warranty for the substitution as for the specified product.
    3. Agrees to provide same or equivalent maintenance service and source of replacement parts, as applicable.
    4. Agrees to coordinate installation and make changes to other work that may be required for the work to be complete, with no additional cost to Owner.
    5. Waives claims for additional costs or time extension that may subsequently become apparent.
    6. Agrees to reimburse Owner and Architect for review or redesign services associated with re-approval by authorities.
  - C. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents. Burden of proof is on proposer.
    1. Note explicitly any non-compliant characteristics.
  - D. Substitution Request Content: Include information necessary for tracking the status of each Substitution Request, and information necessary to provide an actionable response.
    1. Form: Use CSI Form 13.1A.
- 3.2 SUBSTITUTION PROCEDURES DURING PROCUREMENT
  - A. Owner will consider requests for substitutions only if submitted at least 7 days prior to the date for receipt of bids.
- 3.3 SUBSTITUTION PROCEDURES DURING CONSTRUCTION
  - A. Submit request for Substitution for Cause within 14 days of discovery of need for substitution, but not later than 14 days prior to time required for review and approval by Architect, in order to stay on approved project schedule.
  - B. Submit request for Substitution for Convenience immediately upon discovery of its potential advantage to the project, but not later than 14 days prior to time required for review and approval by Architect, in order to stay on approved project schedule.
    1. In addition to meeting general documentation requirements, document how the requested substitution benefits the Owner through cost savings, time savings, greater energy conservation, or in other specific ways.
  - C. Substitutions will not be considered under one or more of the following circumstances:
    1. When they are indicated or implied on shop drawing or product data submittals, without having received prior approval.
    2. Without a separate written request.
    3. When acceptance will require revisions to Contract Documents.
- 3.4 ACCEPTANCE
  - A. Accepted substitutions modify the Contract, and thereby change the Work of the Project. They will be documented and incorporated into Work of the project by Change Order, or similar instrument provided for in the Conditions of the Contract.

**END OF SECTION**

**SECTION 01 30 00 - ADMINISTRATIVE REQUIREMENTS**

**PART 1 GENERAL - NOT USED**

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION**

- 3.1 SITE MOBILIZATION MEETING
  - A. Schedule meeting at the Project site prior to Contractor occupancy.
- 3.2 PROGRESS MEETINGS
  - A. Schedule and administer meetings throughout progress of the work at monthly intervals, unless otherwise agreed upon and approved by Owner.
  - B. Make arrangements for meetings, prepare agenda with copies for participants, preside at meetings.
  - C. Within 10 days after date of the Agreement, submit preliminary schedule defining planned operations for the first 60 days of work, with a general outline for remainder of work.
  - D. Within 10 days after joint review, submit complete schedule.
  - E. Submit updated schedule with each Application for Payment.
- 3.3 PROGRESS PHOTOGRAPHS AND DOCUMENTATION
  - A. Document existing conditions in the work area prior to start of demolition. Take initial photographs in quantity and at locations required to fully document existing conditions which may become concealed as the result of new Work.
  - B. Take additional photographs as Work progresses, at same locations and from same viewing angles as initial photographs.
  - C. Submit additional photographs with each application for payment, taken not more than 3 days prior to submission of application for payment.
- 3.4 REQUESTS FOR INTERPRETATION (RFI)
  - A. Preparation: Prepare an RFI immediately upon discovery of a need for interpretation of Contract Documents. Failure to submit a RFI in a timely manner is not a legitimate cause for claiming additional costs or delays in execution of the work.
  - B. Content: Include identifiers necessary for tracking the status of each RFI, and information necessary to provide an actionable response.
    1. Form: Use CSI Form 13.2A or other form approved by Architect.
    2. Numbering: Number each RFI sequentially. Include designations for revisions and follow-ups (R1, R2, R3, etc.).
  - C. Attachments: Include sketches, coordination drawings, descriptions, photos, submittals, and other information necessary to substantiate the reason for the request.
  - D. RFI Log: Prepare and maintain a tabular log of RFIs for the duration of the project.
  - E. Review Time: Architect will respond and return RFIs to Contractor within seven calendar days of receipt. For the purpose of establishing the start of the mandated response period, RFIs received after 12:00 noon will be considered as having been received on the following regular working day.
- 3.5 TESTING AND INSPECTION
  - A. Contractor Responsibilities:
    1. Deliver to agency at designated location, adequate samples of materials proposed to be used that require testing, along with proposed mix designs.
    2. Cooperate with laboratory personnel, and provide access to the Work.
    3. Re-testing: Performed by same agency if required because of non-conformance to specified requirements, on instructions from Architect.
      - a. Paid for by Contractor if required because of non-conformance with specified requirements.

- 1. Product data.
  - 2. Shop drawings.
  - 3. Samples for selection.
  - 4. Samples for verification.
  - 5. Delegated engineering design documentation and calculations.
  - 6. Any other documents indicated.
- B. General Requirements:**
- 1. Use a separate transmittal for each item.
  - 2. Submit separate packages of submittals for review and submittals for information, when included in the same specification section.
  - 3. Sequentially identify each item. For revised submittals use original number and a sequential numerical suffix.
  - 4. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of products required, field dimensions, adjacent construction work, and coordination of information is in accordance with the requirements of the work and Contract Documents.
  - 5. Schedule submittals to expedite the Project, and coordinate submission of related items.
  - 6. For each submittal for review, allow 14 days excluding delivery time to and from the Contractor.
    - a. For sequential reviews involving Architect's consultants, Owner, or another affected party, allow an additional 7 days.
  - 7. Incomplete submittals will not be reviewed, unless they are partial submittals for distinct portion(s) of the work, and have received prior approval for their use.
  - 8. Submittals not requested will be recognized, and will be returned "Not Reviewed".

**END OF SECTION**

**SECTION 01 32 16 - CONSTRUCTION PROGRESS SCHEDULE**

**PART 1 GENERAL**

- 1.1 SUBMITTALS
  - A. Within 10 days after date of Agreement, submit preliminary schedule.
  - B. Within 10 days after review of preliminary schedule, submit draft of proposed complete schedule for review.
  - C. Within 5 days after joint review, submit complete schedule.
  - D. Submit updated schedule with each Application for Payment.
- PART 2 PRODUCTS - NOT USED
- PART 3 EXECUTION
  - 3.1 UPDATING SCHEDULE
    - A. Maintain schedules to record actual start and finish dates of completed activities.
    - B. Indicate progress of each activity to date of revision, with projected completion date of each activity.
  - 3.2 DISTRIBUTION OF SCHEDULE
    - A. Distribute copies of updated schedules to Contractor's project site file, to subcontractors, suppliers, Architect, Owner, and other concerned parties.
    - B. Instruct recipients to promptly report, in writing, problems anticipated by projections indicated in schedules.

**END OF SECTION**

**SECTION 01 40 00 - QUALITY REQUIREMENTS**

**PART 1 GENERAL**

- 1.1 CONTRACTOR'S CONSTRUCTION-RELATED PROFESSIONAL DESIGN SERVICES
  - A. Coordination: Contractor's professional design services are subject to requirements of project's Conditions for Construction Contract.
  - B. Provide such engineering design services as may be necessary to plan and safely conduct certain construction operations, pertaining to, but not limited to the following:
    1. Temporary shoring, shoring, or supports.
    2. Temporary scaffolding.
    3. Temporary bracing.
    4. Temporary falsework for support of spanning or arched structures.
    5. Temporary foundation underpinning.
    6. Temporary stairs or steps required for construction access only.
    7. Temporary hoist(s) and rigging.
    8. Investigation of soil conditions to support construction equipment.
- 1.2 QUALITY ASSURANCE
  - A. Designer Qualifications: Where professional engineering design services and design data submittals are specifically required of Contractor by Contract Documents, provide services of a Professional Engineer experienced in design of this type of work and licensed in Michigan.
- 1.3 TESTING AND INSPECTION AGENCIES AND SERVICES
  - A. Owner will employ and pay for services of an independent testing agency to perform specified testing.
  - B. Contractor shall employ and pay for services of an independent testing agency to perform other specified testing.

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION**

- 3.1 CONTROL OF INSTALLATION
  - A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.
  - B. Comply with manufacturers' instructions, including each step in sequence.
    1. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding.
  - C. Comply with specified standards as minimum quality for the work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
  - D. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
  - E. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.
  - F. It is the contractor's responsibility to check and conform to field conditions and manufacturer's requirements prior to starting work.
- 3.2 MOCK-UPS
  - A. Before installing portions of the Work where mock-ups are required, construct mock-ups in location and size indicated for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work. The purpose of mock-up is to demonstrate the proposed range of aesthetic effects and workmanship.
    1. Accepted mock-ups establish the standard of quality the Architect will use to judge the Work.
    2. Obtain Architect's approval of mock-ups before starting work, fabrication, or construction.
    3. Where mock-up has been accepted by Architect and is specified in product specification Sections to be removed, protect mock-up throughout construction, remove mock-up and clear area when directed to do so by Architect.
- 3.3 TESTING AND INSPECTION
  - A. Contractor Responsibilities:
    1. Deliver to agency at designated location, adequate samples of materials proposed to be used that require testing, along with proposed mix designs.
    2. Cooperate with laboratory personnel, and provide access to the Work.
    3. Re-testing: Performed by same agency if required because of non-conformance to specified requirements, on instructions from Architect.
      - a. Paid for by Contractor if required because of non-conformance with specified requirements.

- 3.4 DEFECT ASSESSMENT
    - A. Replace Work or portions of the Work not complying with specified requirements.
- END OF SECTION**

**SECTION 01 50 00 - TEMPORARY FACILITIES AND CONTROLS**

**PART 1 GENERAL**

- 1.1 ELECTRICAL DISTRIBUTION
    - A. Provide receptacle outlets adequate for connection of power tools and equipment.
    - B. Provide waterproof connectors to connect separate lengths of electrical power cords if single lengths will not reach areas where construction activities are in progress.
    - C. Do not exceed safe length-voltage ratio.
  - 1.2 LIGHTING
    - A. Provide temporary lighting with local switching that provides adequate illumination for construction operations and traffic conditions.
  - 1.3 TESTS AND INSPECTIONS
    - A. Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.
  - 1.4 FIRE EXTINGUISHERS
    - A. Provide hand-carried, portable and UL rated fire extinguishers.
    - B. Provide class and extinguishing agent as indicated or a combination of extinguishers of NFPA-recommended classes for exposures.
    - C. Comply with NFPA 10 and NFPA 241 for classification, extinguishing agent and size required by location and class of fire exposure.
  - 1.5 SEWERS AND DRAINAGE
    - A. If sewers are available, provide temporary connection to remove effluent that can be discharged lawfully.
    - B. In neither sewer nor drainage facilities can be lawfully used for discharge of effluent, provide containers to remove and dispose of effluent off-site in a lawful manner.
    - C. After heavy use, restore normal conditions promptly
  - 1.6 TEMPORARY SANITARY FACILITIES
    - A. Provide and maintain required facilities and enclosures. Provide at time of project mobilization.
    - B. Maintain daily in clean and sanitary condition.
  - 1.7 SAFETY FACILITIES
    - A. Provide safety showers, eyewash fountains, and similar facilities for convenience, safety and sanitation of personnel.
  - 1.8 EXTERIOR ENCLOSURES
    - A. Provide temporary weather tight closure of exterior openings to accommodate acceptable working conditions and protection for Products, to allow for temporary heating and maintenance of required ambient temperatures identified in individual specification sections, and to prevent entry of unauthorized persons. Provide access doors with self-closing hardware and locks.
  - 1.9 SECURITY
    - A. Install substantial and secure temporary enclosure around partially completed areas of construction. Provide lockable entrances to protect Work, and Owner's operations from unauthorized entry, vandalism, theft and similar violations of security.
  - 1.10 VEHICULAR ACCESS AND PARKING
    - A. Comply with regulations relating to use of streets and sidewalks, access to emergency facilities, and access for emergency vehicles.
    - B. Coordinate access and haul routes with governing authorities and Owner.
    - C. Provide and maintain access to fire hydrants, free of obstructions.
  - 1.11 WASTE REMOVAL
    - A. Provide waste removal facilities and services as required to maintain the site in clean and orderly condition.
    - B. Provide containers with lids. Remove trash from site periodically.
  - 1.12 PROJECT IDENTIFICATION
    - A. Provide project identification sign of design, construction, and location approved by Owner. Install signs where indicated to inform public and persons seeking entrance to project.
    - B. No other signs are allowed without Owner permission except those required by law. Do not permit installation of unauthorized signs.
  - 1.13 BARRICADES, WARNINGS SIGNS AND LIGHTS
    - A. Comply with standards and code requirements for erecting structurally adequate barricades. Paint with appropriate colors, graphics and warning signs or lights, as needed, to inform personnel and public of possible hazard.
  - 1.14 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS
    - A. Remove temporary utilities, equipment, facilities, materials, prior to Date of Substantial Completion inspection.
    - B. Clean and repair damage caused by installation or use of temporary work.
- PART 2 PRODUCTS - NOT USED**
- PART 3 EXECUTION - NOT USED**
- END OF SECTION**

**SECTION 01 60 00 - PRODUCT REQUIREMENTS**

**PART 1 GENERAL - NOT USED**

**PART 2 PRODUCTS**

- 2.1 NEW PRODUCTS
  - A. Provide new products unless specifically required or permitted by Contract Documents.
  - B. Provide full warranty on all materials, equipment and workmanship for one (1) year from date of acceptance, unless noted otherwise. Repair or replace without charge to the owner all items found defective during the warranty period.

**PART 3 EXECUTION**

- 3.1 TRANSPORTATION AND HANDLING
  - A. Package products for shipment in manner to prevent damage; for equipment, package to avoid loss of factory calibration.
  - B. If special precautions are required, attach instructions prominently and legibly on outside of packaging.
  - C. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.
  - D. Transport and handle products in accordance with manufacturer's instructions.
  - E. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.
  - F. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
  - G. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage, and to minimize handling.
  - H. Arrange for the return of packing materials, such as wood pallets, where economically feasible.
- 3.2 STORAGE AND PROTECTION
  - A. Store and protect products in accordance with manufacturers' instructions.
  - B. Store with seals and labels intact and legible.
  - C. Store sensitive products in weatheright, climate-controlled enclosures in an environment favorable to product.
  - D. Provide off-site storage and protection when site does not permit on-site storage or protection.
  - E. Protect products from damage or deterioration due to construction operations, weather, precipitation, humidity, temperature, sunlight and ultraviolet light, dirt, dust, and other contaminants.
  - F. Do not store products directly on the ground.

- G. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- H. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
- I. Prevent contact with material that may cause corrosion, discoloration, or staining.
- J. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- K. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

**END OF SECTION**

**SECTION 01 70 00 - EXECUTION AND CLOSEOUT REQUIREMENTS**

**PART 1 GENERAL**

- 1.1 PROJECT CONDITIONS
  - A. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
  - B. Dust Control: Execute work by methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into atmosphere and over adjacent property.
  - C. Noise Control: Provide methods, means, and facilities to minimize noise produced by construction operations.
  - D. Pest Control: Provide methods, means, and facilities to prevent pests and insects from damaging the work.
  - E. Pollution Control: Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations. Comply with federal, state, and local regulations.
- 1.2 COORDINATION
  - A. Coordinate scheduling, submittals, and work of the various Sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
  - B. Notify affected utility companies and comply with their requirements.
  - C. Arrange for and obtain owner's permission for any service shutdowns required under this contract.
  - D. Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various Sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
  - E. Coordinate space requirements, supports, and installation of mechanical and electrical work that are indicated diagrammatically on Drawings. Follow routing indicated for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
  - F. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finishing elements.
  - G. After Owner occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION**

- 3.1 EXAMINATION
  - A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
  - B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
  - C. Examine and verify specific conditions described in individual specification Sections.
  - D. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.
  - E. Verify that utility services are available, of the correct characteristics, and in the correct locations.
  - F. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.
- 3.2 PREPARATION
  - A. Clean substrate surfaces prior to applying next material or substance.
  - B. Seal cracks or openings of substrate prior to applying next material or substance.
  - C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.
- 3.3 CUTTING AND PATCHING
  - A. Whenever possible, execute the work by methods that avoid cutting or patching.
  - B. All cutting and patching of the building construction as required shall be in a neat and professional manner.
  - C. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material, to full thickness of the penetrated element.
  - D. Neatly saw cut all rectangular openings, set sleeve through opening, and finish patch or provide trim flange around opening.
  - E. Core drill and sleeve all round openings
  - F. Do not cut any structural components without Architect's approval.
  - G. Patching:
    1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
    2. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.
- 3.4 PROGRESS CLEANING
  - A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
  - B. Remove debris and rubbish from wall cavities, pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
  - C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
  - D. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.
- 3.5 PROTECTION OF INSTALLED WORK
  - A. Protect installed work from damage by construction operations.
  - B. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
  - C. Remove protective coverings when no longer needed; reuse or recycle coverings if possible.
- 3.6 SYSTEM STARTUP
  - A. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, and for conditions that may cause damage.
  - B. Verify tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
  - C. Verify that wiring and support components for equipment are complete and tested.
  - D. Execute start-up under supervision of applicable Contractor personnel and manufacturer's representative in accordance with manufacturers' instructions.
  - E. Adjust operating products and equipment to ensure smooth and unhindered operation.
- 3.7 DEMONSTRATION AND INSTRUCTION
  - A. Demonstrate operation and maintenance of products to Owner's personnel two weeks prior to date of Substantial Completion.



**AMY BAKER  
ARCHITECT**

1012 OWANA AVENUE  
ROYAL OAK, MI 48067  
(248) 931-3055  
amy@amybakearchitect.com

**SEAL**

THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL THE SEAL AND SIGNATURE OF THE RESPONSIBLE REGISTRANT APPEARS ON THE DRAWING, AND PROPER PERMIT FORMS AND RELATED FEES ARE TRANSMITTED BY THE OWNER, OWNER'S AGENT OR CONTRACTOR TO THE AUTHORITY HAVING JURISDICTION.

**CONSULTANT**

**CLIENT**

**PROJECT**

2021.A03

**1315 Broadway**

1315 Broadway  
Detroit, Michigan 48226

**ISSUANCE**

2023-08-21 HDC SUBMISSION

**REVISIONS**

**TITLE**

**SPECIFICATIONS**

**SHEET**

**G4-01**

- 3.8 FINAL CLEANING
  - A. Execute final cleaning prior to final project assessment.
  - B. Use cleaning materials that are nonhazardous.
  - C. Remove all labels that are not permanent. Do not paint or otherwise cover fire test labels or nameplates on mechanical and electrical equipment.
  - D. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.
  - E. Clean filters of operating equipment.
  - F. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.
- 3.9 CLOSEOUT PROCEDURES
  - A. Make submittals that are required by governing or other authorities.
  - B. Notify Architect in writing when work is considered ready for Architect's Substantial Completion inspection.
  - C. Submit written certification containing Contractor's Correction Punch List, that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for Architect's Substantial Completion inspection.
  - D. Conduct Substantial Completion Inspection and create Final Correction Punch List containing Architect's and Contractor's comprehensive list of items identified to be completed or corrected and submit to Architect.
  - E. Correct items of work listed in Final Correction Punch List and comply with requirements for access to Owner-occupied areas.
  - F. Notify Architect when work is considered finally complete and ready for Architect's Substantial Completion final inspection.
  - G. Complete items of work determined by Architect listed in executed Certificate of Substantial Completion.

END OF SECTION  
**SECTION 01 78 00 - CLOSEOUT SUBMITTALS**

- PART 1 GENERAL
  - 1.1 SUBMITTALS
    - A. Provide administrative and procedural requirements for contract closeout, including, but not limited to, the following:
      1. As-built drawings: Submit documents to Architect with claim for final Application for Payment.
      2. Operation and Maintenance Manuals
      3. Warranties and Bonds
      4. Unconditional release of liens from Contractor and each Subcontractor and vendor for the previous month's payment application
      5. Spare parts / maintenance materials
      6. Receipt of final Certificate of Occupancy from jurisdictional authority
      7. Certificate of Substantial Completion
      8. Keys

END OF SECTION  
**SECTION 01 79 00 - DEMONSTRATION AND TRAINING**

- PART 1 GENERAL
  - 1.1 SUBMITTALS
    - A. Training Plan: Owner will designate personnel to be trained; tailor training to needs and skill-level of attendees.
    - B. Training Manuals: Provide training manual for each attendee; allow for minimum of two attendees per training session.
    - C. Training Reports:
    - D. Video Recordings: Submit digital video recording of each demonstration and training session for Owner's subsequent use.
- PART 2 PRODUCTS - NOT USED
- PART 3 EXECUTION
  - 3.1 DEMONSTRATION - GENERAL
    - A. Demonstrations conducted during system start-up do not qualify as demonstrations for the purposes of this Section, unless approved in advance by Owner.
    - B. Demonstration may be combined with Owner personnel training if applicable.
    - C. Operating Equipment and Systems: Demonstrate operation in all modes, including start-up, shut-down, seasonal changeover, emergency conditions, and troubleshooting, and maintenance procedures, including scheduled and preventive maintenance.
    - D. Non-Operating Products: Demonstrate cleaning, scheduled and preventive maintenance, and repair procedures.
  - 3.2 TRAINING - GENERAL
    - A. Conduct training on-site unless otherwise indicated.
    - B. Owner will provide classroom and seating at no cost to Contractor.
    - C. Provide training in minimum two hour segments.
    - D. Training schedule will be subject to availability of Owner's personnel to be trained; re-schedule training sessions as required by Owner, once schedule has been approved by Owner failure to conduct sessions according to schedule will be cause for Owner to charge Contractor for personnel "show-up" time.

END OF SECTION  
**DIVISION 02 - EXISTING CONDITIONS**  
**SECTION 02 41 19 - SELECTIVE DEMOLITION**

- PART 1 GENERAL
  - 1.1 ADMINISTRATIVE REQUIREMENTS
    - A. Coordination: Coordinate work with utility companies; notify before starting work and comply with their requirements; obtain required permits.
  - 1.2 QUALITY ASSURANCE
    - A. Demolition Firm Qualifications: Company specializing in the type of work required.
- PART 2 PRODUCTS -- NOT USED
- PART 3 EXECUTION
  - 3.1 GENERAL PROCEDURES AND PROJECT CONDITIONS
    - A. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public.
      1. Obtain required permits.
      2. Comply with applicable requirements of NFPA 241.
      3. Use of explosives is not permitted.
      4. Take precautions to prevent catastrophic or uncontrolled collapse of structures to be removed; do not allow worker or public access within range of potential collapse of unstable structures.
      5. Provide, erect, and maintain temporary barriers and security devices.
      6. Use physical barriers to prevent access to areas that could be hazardous to workers or the public.
      7. Conduct operations to minimize effects on and interference with adjacent structures and occupants.
      8. Do not close or obstruct roadways or sidewalks without permit.
      9. Conduct operations to minimize obstruction of public and private entrances and exits; do not obstruct required exits at any time; protect persons using entrances and exits from removal operations.
      10. Obtain written permission from owners of adjacent properties when demolition equipment will traverse, infringe upon or limit access to their property.
    - B. Do not begin removal until existing elements to be salvaged or relocated have been removed.
    - C. Protect existing structures and other elements that are not to be removed.
      1. Provide bracing and shoring.
      2. Prevent movement or settlement of adjacent structures.

- 3. Stop work immediately if adjacent structures appear to be in danger.
  - D. Minimize production of dust due to demolition operations; do not use water if that will result in ice, flooding, sedimentation of public waterways or storm sewers, or other pollution.
  - E. If hazardous materials are discovered during removal operations, stop work and notify Architect and Owner; hazardous materials include regulated asbestos containing materials, lead, PCB's, and mercury.
- 3.2 EXISTING UTILITIES
    - A. Protect existing utilities to remain from damage.
    - B. Do not disrupt public utilities without permit from authority having jurisdiction.
    - C. Do not close, shut off, or disrupt existing life safety systems that are in use without at least 7 days prior written notification to Owner.
    - D. Do not close, shut off, or disrupt existing utility branches or take-offs that are in use without at least 3 days prior written notification to Owner.
    - E. Locate and mark utilities to remain; mark using highly visible tags or flags, with identification of utility type; protect from damage due to subsequent construction, using substantial barricades if necessary.
    - F. Remove exposed piping, valves, meters, equipment, supports, and foundations of disconnected and abandoned utilities.
    - G. Prepare building demolition areas by disconnecting and capping utilities outside the demolition zone; identify and mark utilities to be subsequently reconnected, in same manner as other utilities to remain.
  - 3.3 SELECTIVE DEMOLITION FOR ALTERATIONS
    - A. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only.
      1. Report discrepancies to Architect before disturbing existing installation.
    - B. Maintain weatherproof exterior building enclosure except for interruptions required for replacement or modifications; take care to prevent water and humidity damage.
    - C. Maintain building security; take care to prevent unauthorized entry.
    - D. Remove existing work as indicated and as required to accomplish new work.
      1. Remove rotted wood, corroded metals, and deteriorated masonry and concrete; replace with new construction specified.
      2. Remove items indicated on Drawings.
    - E. Services (including but not limited to HVAC, Plumbing, Fire Protection, Electrical, and Telecommunications): Remove existing systems and equipment as indicated.
      1. Verify that abandoned services serve only abandoned facilities before removal.
      2. Remove abandoned pipe, ducts, conduits, and equipment, including those above accessible ceilings; remove back to source of supply where possible, otherwise cap stub and tag with identification.
    - F. Protect existing work to remain.

- 3.4 DEBRIS AND WASTE REMOVAL
    - A. Remove debris and trash from site.
- END OF SECTION
- DIVISION 04 - MASONRY**  
**SECTION 04 01 00 - MASONRY RESTORATION AND CLEANING**

- PART 1 GENERAL
  - 1.1 ADMINISTRATIVE REQUIREMENTS
    - A. Preinstallation Meeting: Convene one week prior to commencing work of this Section.
  - 1.2 SUBMITTALS
    - A. Product Data: Provide data on cleaning compounds and cleaning solutions.
    - B. Selection Samples: For each type of masonry and mortar, submit four samples of to illustrate matching color, texture, and extremes of color range.
  - 1.3 QUALITY ASSURANCE
    - A. Work shall be done by qualified skilled masons experienced in preservation masonry and methods having a minimum of three years of documented experience.
  - 1.4 MOCK-UP
    - A. Masonry and Stone Repair: Prepare sample areas for each type of masonry material indicated to have repair work performed. If not otherwise indicated, size each mock-up area 4 feet by 4 feet.
      1. Acceptable panel and procedures employed will become the standard for work of this Section.
    - B. Repointing Mock-up: Rake out joints in two separate masonry wall areas, each two joints high by 2 feet wide, for each type of repointing required.
      1. Repointing shall match existing mortar in color, texture, and tooling, and meeting the properties required in the mortar analysis for each type of historic masonry repair on the project.
    - C. Masonry Cleaning Mock-up: Clean a 5 ft by 5 ft panel of wall to determine extent of cleaning. Mock-up shall include examples of each type of masonry on the project.
      1. Acceptable panel and procedures employed will become the standard for work of this Section.
  - 1.5 FIELD CONDITIONS
    - A. Cold and Hot Weather Requirements: Comply with requirements of TMS 402/602 or applicable building code, whichever is more stringent.

- PART 2 PRODUCTS
  - 2.1 MASONRY MATERIALS
    - A. Salvaged Brick: Where possible, use Face brick obtained from this building, resulting from cutting of new openings, and other selective demolition
    - B. Replacement and Restoration Masonry Units: Match existing as closely as possible; materials subject to approval of Architect.
  - 2.2 MORTAR MIXES
    - A. Mortar for Unit Masonry: ASTM C270, using the Proportion Specification.
      1. Pointing Mortar: Type N unless otherwise indicated; with cementitious material limited to Portland cement and lime. Add mortar pigments to produce mortar colors required.
      2. Match existing as closely as possible; materials subject to approval of Architect.
  - 2.3 MANUFACTURED REPAIR MATERIALS
    - A. Patching Compound: Factory-mixed cementitious product that is custom manufactured for patching masonry.
      1. Use formulation that is equal to vapor and water permeability of masonry, exhibits low shrinkage, has lower modulus of elasticity than the masonry being repaired, and develops high bond strength to all surfaces.
      2. Match colors and textures to masonry being patched. Provide sufficient number of samples to enable matching the color, texture, and variation of each type of unit.
  - 2.4 SEALANT AND TAR REMOVERS
    - A. Manufacturer's standard heavy duty solvent Asphalt & Tar Remover for removal of deposits of roofing asphalt, tar and caulking stains.
      1. Products:
        - a. American Building Restoration Products, Inc; TR-7 Tar & Mastic Remover
        - b. PROSOCO, Inc.; Sure Klean® Asphalt & Tar Remover; Dicone NC9
        - c. Dumond Chemicals, Inc; Smart Strip.
        - d. Cathedral Stone Products, Inc.; S-301.
        - e. American Sealants Inc., ASI 0240 Adhesive Cleaner and Remover
  - 2.5 CLEANING MATERIALS
    - A. Water: Potable.
    - B. Select cleaning materials from among the following, to be determined by testing. Select the mildest product in each group that produces the desired cleaning effect.
      - Mild Cleaning Treatments:
        1. Detergent Solution, Job Mixed: Solution prepared by mixing 2 cups of tetrasodium pyrophosphate (TSPP), 1/2 cup of laundry detergent, and 20 quarts of hot water for every 5 gal. of solution required.
          - a. Products:
            - 1) Cathedral Stone Products, Inc.; MasonRE B.
            - 2) Price Research, Ltd.; Price Marble Cleaner-Gel.
            - 3) PROSOCO, Inc; ReKalm Cleaner.

- 2. Nonacidic Gel Cleaner: Manufacturer's standard gel formulation, with pH between 6 and 9, that contains detergents with chelating agents and is specifically formulated for cleaning masonry surfaces.
  - a. Products:
    - 1) Cathedral Stone Products, Inc.; MasonRE B.
    - 2) Price Research, Ltd.; Price Marble Cleaner-Gel.
    - 3) PROSOCO, Inc; Sure Klean 942 Limestone and Marble Cleaner.
- 3. Nonacidic Liquid Cleaner: Manufacturer's standard mildly alkaline liquid cleaner formulated for removing mold, mildew, and other organic soiling from ordinary building materials, including polished stone, brick, aluminum, plastics, and wood.
  - a. Products:
    - 1) Cathedral Stone Products, Inc.; D/2 Biological Solution.
    - 2) Diedrich Technologies, Inc.; a Hohmann & Barnard company; 910 PM Polished Marble/Granite Cleaner.
    - 3) Dumond Chemicals, Inc; Safe 'n' Easy Architectural Cleaner/Restorer; Safe 'n' Easy Limestone Cleaner.
    - 4) Price Research, Ltd.; Price Non-Acid Masonry Cleaner.
    - 5) PROSOCO, Inc; Enviro Klean 2010 AllSurface Cleaner; Enviro Klean ReVive.
  - D. Rust Stain Remover:
    1. Products:
      - a. American Building Restoration Products, Inc.; ABR 50 Rust Remover.
      - b. Dumond Chemicals, Inc.; Safe 'n' Easy Masonry Rust Remover.
      - c. Cathedral Stone Products, Inc.; Light Duty Rust Remover; Heavy Duty Rust Remover.
    - E. Mold, Mildew, and Algae Remover:
      1. Job Mixed: Solution prepared by mixing 2 cups of tetrasodium pyrophosphate (TSPP), 5 quarts of 5 percent sodium hypochlorite (bleach), and 15 quarts of hot water for every 5 gal. of solution required.

PART 3 EXECUTION

- 3.1 EXAMINATION
  - A. Prior to commencing work, inspect conditions, installations, and verify that the surfaces to receive the work are sound, proper and complete to the point that the work may be properly commenced.
- 3.2 PREPARATION
  - A. Protect surrounding elements from damage due to restoration procedures.
  - B. When using cleaning methods that involve water or other liquids, install drainage devices to prevent runoff over adjacent surfaces unless those surfaces are impervious to damage from runoff.
- 3.3 REBUILDING
  - A. Cut out damaged and deteriorated masonry with care in a manner to prevent damage to any adjacent remaining materials.
  - B. Support structure as necessary in advance of cutting out units.
  - C. Cut away loose or unsound adjoining masonry to provide firm and solid bearing for new work.
  - D. Notify Architect of unforeseen detrimental conditions, including voids, cracks, bulges, loose masonry units in existing backup, rotted wood, rusted metal, and other deteriorated items.
  - E. Where bricks can be salvaged and reused, remove in an undamaged condition as many whole bricks as possible. Remove mortar and sealant from surfaces of removed units.
  - F. Clean masonry surrounding removal areas by removing mortar, dust, and loose particles in preparation for brick replacement.
  - G. Replace removed damaged brick with other removed brick in good condition, where possible, matching existing brick. Do not use broken units unless they can be cut to usable size.
  - H. Install replacement brick into bonding and coursing pattern of existing brick. If cutting is required, use a motor-driven saw designed to cut masonry with clean, sharp, unchipped edges. Maintain joint width for replacement units to match existing joints.
  - I. Tool exposed mortar joints in repaired areas to match joints of surrounding existing brickwork.
  - J. Curing: Cure mortar by maintaining in thoroughly damp condition for at least 72 consecutive hours.
- 3.4 MASONRY PATCHING
  - A. Patch the following bricks unless another type of repair or replacement is indicated:
    1. Units indicated to be patched.
    2. Units with holes.
    3. Units with chipped edges or corners. Patch chipped edges or corners measuring more than 3/4 inch in least dimension.
  - B. Remove all loose mortar and masonry prior to installation of the repair materials. "Sound" masonry with a hammer to verify its integrity. If necessary, cut away an additional 1/2" of the substrate to ensure the surface to be repaired is solid and stable. Remove any sealant residue.
  - C. Cut the edges of the repair area to provide a minimum depth of 1/4". The edges of the repair should be square cut. Do not allow any feathered edges in the repair area.
  - D. Clean all dust from surface and pores of the substrate, using clean water and a scrub brush.
  - E. Apply the mortar mix using a trowel to place and compress the mortar into the repair ensuring not to leave any voids. Follow manufacturer's written instructions.
  - F. Finish to match existing masonry finish.
  - G. Follow manufacturer's curing procedures.
- 3.5 REPOINTING
  - A. Cut out loose or disintegrated mortar in joints to minimum of 2-1/2 times the joint width or 1/2 inch, whichever is greater, until sound mortar is reached.
  - B. Use power tools only after test cuts determine no damage to masonry units will result. Power tools are only allowed when testing is complete, and used only in the presence and under supervision of a qualified preservation architect.
  - C. Do not damage masonry units.
  - D. When cutting is complete, remove dust and loose material by brushing.
  - E. Premoisten joint and apply mortar. Pack tightly in maximum 1/4 inch layers. Form a smooth, compact concave or flush joint to match existing. Mortar shall be pre-hydrated before use, and shall be installed before lapsed time of 1 hour of initial mixing. If temperatures are above 80 degrees, ½ hour is the limit. Discard all dry stiff mortar not used within the limit. Do not re-temper. Dampen the raked joint to a SSD condition to avoid reduction of bond strength of the mortar. Do not allow excessive water in the joint. Install the mortar in 2 or 3 states, compacting mortar of approximately ¼-inch thickness thoroughly into the joint. Allow each compacted layer to thumbprint hardness before adding succeeding layers. Match the existing mortar joint profile. Strike joint to profile when final layer is thumbprint hard.
  - F. Moist cure for 72 hours.
- 3.6 CLEANING - GENERAL
  - A. Proceed with cleaning in an orderly manner; work from bottom to top of each scaffold width and from one end of each elevation to the other. Ensure that dirty residues and rinse water do not wash over dry, cleaned surfaces.
  - B. Water-Spray Application Method: Unless otherwise indicated, hold spray nozzle at least 6 inches from masonry surface, and apply water in horizontal back-and-forth sweeping motion, overlapping previous strokes to produce uniform coverage.
  - C. Chemical-Cleaner Application Methods: Apply chemical cleaners to masonry surfaces according to chemical-cleaner manufacturer's written instructions; use brush or spray application. Do not spray apply at pressures exceeding 50 psi. Do not allow chemicals to remain on surface for periods longer than those indicated or recommended in writing by manufacturer.
  - D. Rinse off chemical residue and soil by working upward from bottom to top of each treated area at each stage or scaffold setting. Periodically during each rinse, test pH of rinse water running off of cleaned area to determine that chemical cleaner is completely removed.
- 3.7 CLEANING
  - A. Provide enclosures, barricades, and other temporary construction as required to protect adjacent work from damage.

- B. Clean surfaces of dirt or other contamination using the gentlest method that is effective.
  1. Try the gentlest method first, then, if not clean enough, use a less gentle method taking care to watch for impending damage.
  2. Clean out cracks and voids using same methods.
- C. The following are acceptable cleaning methods, in order from gentlest to less gentle:
  1. Vegetation Removal: Remove plant, moss, and vegetation, and, if necessary, scrub surfaces with mild detergents to dissolve and remove roots.
  2. Preliminary Cleaning: Before beginning general cleaning, remove extraneous substances that are resistant to planned cleaning methods. Extraneous substances include paint, caulking, asphalt, and tar.
  3. Water washing using low-pressure, maximum of 100 psi, and, if necessary, brushes with natural or synthetic bristles.
  4. Increasing the water washing pressure to maximum of 400 psi.
  5. Adding detergent to washing water; with final water rinse to remove residual detergent.
  6. Steam-generated low-pressure hot-water washing.
  7. Nonacidic gel or liquid cleaning agent applied for the least amount of time that is effective, followed by low pressure hot water rinse.
- D. Do not use any of the following cleaning methods, unless otherwise indicated:
  1. Brushes with wire bristles, grinding with abrasives, solvents, hydrochloric or muriatic acid, sodium hydroxide, caustic soda, or lye.
  2. Soap or detergent that is not non-ionic.
  3. Water washing pressure to over 400 psi.
  4. Acidic cleaning agents.
  5. Abrasive blasting.

END OF SECTION  
**SECTION 04 01 10 - TERRA COTTA RESTORATION**

- PART 1 GENERAL
  - 1.1 ADMINISTRATIVE REQUIREMENTS
    - A. Preinstallation Meeting: Convene one week prior to commencing work of this Section.
      1. Require attendance of parties directly affecting work of this Section. At a minimum, require attendance by Contractor, Architect, Masonry Subcontractor, and Owner's Representative.
      2. Review conditions of installation, installation procedures, and coordination with related work.
      3. Review methods and procedures related to cleaning masonry.
  - 1.2 SUBMITTALS
    - A. Product Data: Provide data on cleaning compounds, cleaning solutions, and mortar mixes.
    - B. Shop Drawings: Indicate locations, sizes, and shapes; attachment; and relationship to adjacent construction.
    - C. Samples: For each profile, finish, and type of mortar, submit full size samples of to illustrate matching color, texture, and extremes of color range.
  - 1.3 MORTAR ANALYSIS
    - A. Mortar sampling and analysis shall be performed by an approved testing company with at least five years of documented experience in testing of historic mortar.
    - B. Take at least three samples from each exposure (north, south, east, and west) of every type of masonry that will be re-pointed. Samples shall be taken, to the extent possible, from clean mortar. Samples shall be taken from areas that do not appear, visually, to have been repointed.
    - C. Provide a written report identifying at a minimum; sample numbers, location, type of joint, hardness, color, aggregate shape, aggregate gradation, color of fines, color of sands, and percentages of lime, fines, sands, cements, and any other materials.
  - 1.4 QUALITY ASSURANCE
    - A. Manufacturer: Company with 10 years minimum successful experience manufacturing architectural terra cotta.
    - B. Work shall be done by qualified skilled masons experienced in preservation masonry and methods having a minimum of three years of documented experience.
  - 1.5 MOCK-UP
    - A. Replacement Mock-Up: Prepare replacement mock-up for each type of unit being replaced.
    - B. Patching and Repointing Mock-up: Prepare mock-ups for surface repair of existing holes, chipped surfaces, and mortar repointing.
    - C. Cleaning Mock-up: Clean a 5 ft by 5 ft panel of wall to determine extent of cleaning.
  - 1.6 FIELD CONDITIONS
    - A. Cold and Hot Weather Requirements: Comply with requirements of TMS 402/602 or applicable building code, whichever is more stringent.

- PART 2 PRODUCTS
  - 2.1 MATERIALS
    - A. Backing and Glazing Material: Match existing terra cotta.
    - B. Formwork: Metal, wood with resin coating, or glass fiber reinforced plastic.
    - C. Replacement and Restoration Units and Mortar: Match existing as closely as possible; materials subject to approval of Architect.
  - 2.2 ACCESSORIES
    - A. Tie Wire: Copper, ASTM B 250, minimum 8 gauge (4.0 mm).
    - B. Anchors: Stainless steel, ASTM A 167, Type 302 or 304; copper; yellow brass; or commercial bronze.
  - 2.3 FABRICATION OF NEW TERRA COTTA UNITS
    - A. Fabricate molds from existing terra cotta units.
    - B. Use rigid forms, constructed to maintain required sizes and shapes without deformation.
    - C. Tape or gasket joints to prevent leakage.
    - D. Cast in reinforcement and anchorage devices.
    - E. Finish trim and edges.
    - F. Apply fired glaze coating to exposed surfaces to match existing terra cotta units.
    - G. Surface texture: Smooth, to match existing.
      1. Finish smooth and free of defects.
    - H. Cure units prior to shipment.
    - I. Fabrication Tolerances:
      1. Dimensional: Plus or minus 1/8 inch.
      2. Warp and bow: Plus or minus 3/8 inch in 10 feet, noncumulative.
  - 2.4 MANUFACTURED REPAIR MATERIALS
    - A. Patching Compound: Factory-mixed cementitious product that is custom manufactured for patching terra cotta.
      1. Use formulation that is equal to vapor and water permeability of terra cotta, exhibits low shrinkage, has lower modulus of elasticity than the materials being repaired, and develops high bond strength to all surfaces.
      2. Match colors and textures to materials being patched. Provide sufficient number of colors to enable matching the color, texture, and variation of each type of unit.
    - B. Paint for repaired terra cotta surfaces:
      1. Primer: Waterborne, epoxy resin type, masonry and concrete primer and sealer.
      2. Finish: Exterior, acrylic, waterborne enamel, color and sheen to match existing terra cotta glaze.
  - 2.5 CLEANING MATERIALS
    - A. Water: Potable.
    - B. Select cleaning materials from among the following, to be determined by testing. Select the mildest product in each group that produces the desired cleaning effect.
      - Mild Cleaning Treatments:
        1. Detergent Solution, Job Mixed: Solution prepared by mixing 2 cups of tetrasodium pyrophosphate (TSPP), 1/2 cup of laundry detergent, and 20 quarts of hot water for every 5 gal. of solution required.

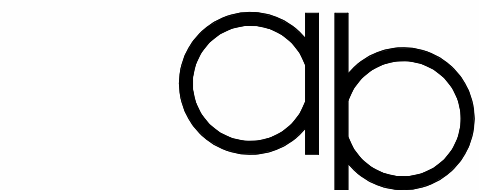
PART 3 EXECUTION

- 3.1 EXAMINATION

- A. Prior to commencing work, inspect conditions, installations, and verify that the surfaces to receive the work are sound, proper and complete to the point that the work may be properly commenced.
- 3.2 PREPARATION
    - A. Protect surrounding elements from damage due to restoration procedures.
    - B. When using cleaning methods that involve water or other liquids, install drainage devices to prevent runoff over adjacent surfaces unless those surfaces are impervious to damage from runoff.
  - 3.3 REBUILDING
    - A. Cut out damaged and deteriorated terra cotta with care in a manner to prevent damage to any adjacent remaining materials.
    - B. Support structure as necessary in advance of cutting out units.
    - C. Cut away loose or unsound adjoining terra cotta and mortar to provide firm and solid bearing for new work.
    - D. Notify Architect of unforeseen detrimental conditions, including voids, cracks, bulges, loose units in existing backup, rotted wood, rusted metal, and other deteriorated items.
    - E. Set new units plumb and level. Align adjacent pieces in same plane. Bed each piece in full mortar bed.
    - F. Tool exposed mortar joints in repaired areas to match joints of surrounding existing work.
    - G. Cure mortar by maintaining in thoroughly damp condition for at least 72 consecutive hours.
  - 3.4 PATCHING AND REPOINTING
    - A. Patch the following units unless another type of repair or replacement is indicated:
      1. Units indicated to be patched.
      2. Units with holes.
      3. Units with chipped surfaces, edges or corners.
    - B. Remove all loose materials prior to installation of the repair materials back to a point at which sound material is reached.
    - C. Clean all dust from surface and pores of the substrate, using clean water and a scrub brush.
    - D. Apply patching compound in accordance with manufacturer's instructions. Sculpt material to match existing profiles and ornamental designs. Provide smooth transition between new and existing surfaces.
    - E. Moisten joints prior to repointing. Tightly pack new mortar in 1/4 inch layers. Form smooth, compact joints tooled to match existing profiles.
    - F. Follow manufacturer's curing procedures.
    - G. Finish to match existing finishes.
  - 3.5 CLEANING - GENERAL
    - A. Proceed with cleaning in an orderly manner; work from bottom to top of each scaffold width and from one end of each elevation to the other. Ensure that dirty residues and rinse water do not wash over dry, cleaned surfaces.
    - B. Water-Spray Application Method: Unless otherwise indicated, hold spray nozzle at least 6 inches from masonry surface, and apply water in horizontal back-and-forth sweeping motion, overlapping previous strokes to produce uniform coverage.
  - 3.6 CLEANING
    - A. Provide enclosures, barricades, and other temporary construction as required to protect adjacent work from damage.
    - B. Clean surfaces of dirt or other contamination using the gentlest method that is effective.
      1. Try the gentlest method first, then, if not clean enough, use a less gentle method taking care to watch for impending damage.
      2. Clean out cracks and voids using same methods.
    - C. The following are acceptable cleaning methods, in order from gentlest to less gentle:
      1. Vegetation Removal: Remove plant, moss, and vegetation, and, if necessary, scrub surfaces with mild detergents to dissolve and remove roots.
      2. Preliminary Cleaning: Before beginning general cleaning, remove extraneous substances that are resistant to planned cleaning methods. Extraneous substances include paint, caulking, asphalt, and tar.
      3. Water washing using low-pressure, maximum of 100 psi, and, if necessary, brushes with natural or synthetic bristles.
      4. Increasing the water washing pressure to maximum of 400 psi.
      5. Adding pH neutral detergent to washing water; with final water rinse to remove residual detergent.
      6. Steam-generated low-pressure hot-water washing.
      7. Nonacidic gel or liquid cleaning agent applied for the least amount of time that is effective, followed by low pressure hot water rinse.
    - D. Do not use any of the following cleaning methods, unless otherwise indicated:
      1. Brushes with wire bristles, grinding with abrasives, solvents, hydrochloric or muriatic acid, sodium hydroxide, caustic soda, or lye.
      2. Soap or detergent that is not non-ionic.
      3. Water washing pressure to over 400 psi.
      4. Acidic cleaning agents.
      5. Abrasive blasting.

- END OF SECTION  
**SECTION 04 42 00 - EXTERIOR STONE CLADDING**
- PART 1 GENERAL
  - 1.1 SUBMITTALS
    - A. Product Data: Provide data on stone and sealant products.
    - B. Shop Drawings: Indicate layout, pertinent dimensions, anchorages, and jointing methods.
    - C. Samples: Submit two stone samples 4 x 4 inch in size, illustrating color range and texture, markings, and surface finish.
  - 1.2 QUALITY ASSURANCE
    - A. Perform work in accordance with NBGQA (SPEC).
- PART 2 PRODUCTS
  - 2.1 STONE
    - A. Granite; complying with ASTM C615.
      1. Color: Match existing.
      2. Surface Finish: Match existing.
      3. Nominal Thickness: Match existing.
  - 2.2 ANCHORS AND ACCESSORIES
    - A. Anchors and Other Components in Contact with Stone: Stainless steel ASTM A666 Type 304.
    - B. Setting Buttons and Shims: Plastic type.
    - C. Joint Sealant: ASTM C920 silicone sealant with movement capability of at least plumb/minus 25 percent and non-staining to stone when tested in accordance with ASTM C1248.
    - D. Joint Backer Rod: ASTM C1330 open cell polyurethane of size 40 to 50 percent larger in diameter than joint width.
    - E. Stone Fabrication: Non-acidic, not harmful to masonry work or adjacent materials.
  - 2.3 STONE FABRICATION
    - A. Panel Size(s): As indicated on Drawings.
    - B. Fabrication Tolerances: In accordance with NBGQA (SPEC).
    - C. Fabricate units for uniform coloration between adjacent units and over the full area of the installation.
- PART 3 EXECUTION
  - 3.1 INSTALLATION
    - A. Set stone with a consistent joint width of 3/8 inch.
    - B. Joints in Exterior Work: Seal joints with joint sealant over backer rod, following sealant manufacturer's instructions; tool sealant surface to concave profile.

- END OF SECTION  
**DIVISION 05 - METALS**  
**SECTION 05 03 00 - CONSERVATION TREATMENT FOR PERIOD METALS**



AMY BAKER  
ARCHITECT  
1012 OWANA AVENUE  
ROYAL OAK, MI 48067  
(248) 931-3055  
amy@amybakeraarchitect.com

SEAL

THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL THE SEAL AND SIGNATURE OF THE RESPONSIBLE REGISTRANT APPEARS ON THE DRAWING, AND PROPER PERMIT FORMS AND RELATED FEES ARE TRANSMITTED BY THE OWNER, OWNER'S AGENT OR CONTRACTOR TO THE AUTHORITY HAVING JURISDICTION.

CONSULTANT

CLIENT

PROJECT  
2021.A03  
1315 Broadway

1315 Broadway  
Detroit, Michigan 48226

ISSUANCE

2023-08-21 HDC SUBMISSION

REVISIONS

TITLE

SPECIFICATIONS

SHEET

G4-02

## PART 1 GENERAL

- 1.1 ADMINISTRATIVE REQUIREMENTS
  - A. Preinstallation Meeting: Convene one week prior to commencing work of this section.
    1. Require attendance of parties directly affecting work of this section.
- 1.2 SUBMITTALS
  - A. Restoration Schedule: Detailed description of areas to be restored including assessment of problem areas proposed procedures. Include the following:
    1. Description of existing metal element failures contributing to deterioration of other portions of the project that require repair prior to refinishing of surfaces.
    2. Photographic documentation of areas to be restored, prior to restoration work.
  - B. Product data
  - C. Shop Drawings: Indicate details of connections and anchors for metal elements. Detail shoring, bracing, and temporary or permanent support as needed.
  - D. Conservation treatment quality control plan.
  - E. Restorer's qualification statement.
- 1.3 QUALITY ASSURANCE
  - A. Conservation Treatment Quality Control Plan: Prior to commencing work of this section, receive written approval of plan of proposed metal restoration and cleaning work. Include the following:
    1. Description of methods of dust containment.
    2. Description of methods of protecting surrounding construction and landscape features.
    3. Description of sequencing, work procedures, materials, and tools proposed for each type of conservation treatment.
      - a. Effects of weather variations on treatment sequencing, construction schedule, and protection of completed work.
    4. Description of methods for deconstruction of individual metal items and tools and methods for cleaning for reuse.
    5. Description of methods and approach to removal of corrosion from iron and steel.
    6. Description of methods and approach for assuring repair materials match and are compatible with historic materials.
    7. Description of methods and approach to periodic and final cleaning of metal surfaces.
  - B. Restorer Qualifications: Company specializing in period metal restoration with minimum five years of documented experience.

## 1.4 DELIVERY, STORAGE, AND HANDLING

- A. Deliver cleaning, restoration, and new materials and products neatly stacked and tied on pallets or in other appropriate packaging for transportation. Store clear of ground with adequate waterproof covering.

## 1.5 FIELD CONDITIONS

- A. Maintain materials and surrounding air temperature above 40 degrees F prior to, during, and 48 hours after completion of metal work.
- B. Maintain materials and surrounding air temperature below 90 degrees F prior to, during, and 48 hours after completion of metal work.

## PART 2 PRODUCTS

### 2.1 CLEANING MATERIALS

- A. Statuary Bronze Cleaning and Oiling: Use combination of materials to remove dirt, and, if indicated, dissolve existing lacquer. Apply protective coating of oil.
- B. Cleaning Agent: Detergent type.
- C. Soap: Mild soap with approximately 8.0 pH.
- D. Corrosion Inhibitor/Cleaner for Copper Alloys: Solution of 1.41 ounces benzotriazole per one gallon of warm water.
- E. Oil: Solution of 5 ounces of lemongrass essential oil mixed with one gallon of mineral oil.
- F. Abrasive: Silicon carbide abrasive pads, standard commercially available pumice stone, or stainless steel wool.
  1. Do not use plain steel wool on bronze or other copper alloy materials.
- G. Oxidizing Agent: Aluminum chloride or liquid sulfur.
- H. Cloth: Clean cotton waste.

### 2.2 PAINT REMOVERS

- A. Water-Based: Formulated without methylene chloride or methanol, to remove multiple coats of oil-based, water-based, acrylic-based, epoxy-based, urethane-based, elastomeric, and lead-based paints.
- B. Solvent Based: Formulated without chlorinated solvents, acids, and caustics; to remove multiple coats of oil-based, water-based, acrylic-based, epoxy-based, urethane-based, elastomeric, and lead-based paints, and lacquers and enamels.
- C. Methylene Chloride Based: To remove multiple coats of oil-based, water-based, acrylic-based, epoxy-based, urethane-based, elastomeric, and lead-based paints.

### 2.3 RUST REMOVERS

- A. Removal Agent: Proprietary formulation, nonacidic gel.
- B. Removal Agent: Proprietary formulation water-based acid gel.

### 2.4 ACCESSORY MATERIALS

- A. Fasteners, General: Same basic metal and alloy as metal items being joined, unless indicated otherwise. Do not use incompatible metals that promote galvanic action.
    1. Nonferrous Metals Fasteners to Carbon Steel or Iron Supports: Use Type 304 stainless steel fasteners.
  - B. Galvanic Separator for Dissimilar Metal Contact: Primer or with sealant or tape recommended by manufacturer for the purpose.
  - C. Bituminous Coating: Cold-applied asphalt mastic, noncorrosive compound free of asbestos, sulfur, and other deleterious impurities; 15 mil dry film thickness per coat.
- 2.5 FINISHING MATERIALS
- A. See Section 09 91 13 for exterior painting.
  - B. See Section 09 91 23 for interior painting.

## PART 3 EXECUTION

- 3.1 EXAMINATION
  - A. Verify that surfaces to be cleaned and restored are ready for work of this section.
  - B. Consult paint analysis report of existing finishes to determine appropriate materials and methods for new, matching finishes.
- 3.2 PREPARATION
  - A. Protect surrounding elements from damage from restoration procedures.
  - B. Mask or cover adjacent surfaces and permanent equipment. Secure coverings without tapes that leave residue, or nails. Do not use impervious sheeting which produces condensation.
  - C. When using liquid cleaning methods, install drainage devices to prevent runoff over adjacent surfaces, unless those surfaces are impervious to damage from runoff.
- 3.3 REPAIR
  - A. General: Perform repairs in properly equipped fabrication facility or in situ, in accordance with Conservation Treatment Quality Control Plan and mock-up.
    1. Match repair method to condition of the element and applicability to the element's metal composition.
    2. Exercise care during dismantling of brittle elements, especially during cold weather.
    3. Complete the repair procedures by preparing surfaces for application of specified finishes.
- 3.4 REMOVAL OF EXISTING COATINGS
  - A. Remove existing coatings. Observe remover manufacturer's instructions. Leave metal in a clean, chemical-free, pH neutral condition free of residue.
  - B. Removal of Coatings: Use techniques least likely to damage cast iron elements. Test effectiveness of proposed techniques on a small area prior to determining appropriateness of their use.
  - C. Finishing: Prepare elements for finishing in accordance with coating system manufacturer's written requirements.

## END OF SECTION

## SECTION 05 50 00 - METAL FABRICATIONS

## PART 1 GENERAL

- 1.1 SUBMITTALS
    - A. Shop Drawings: Indicate profiles, sizes, connection attachments, reinforcing, anchorage, size and type of fasteners, and accessories. Include erection drawings, elevations, and details where applicable.
      1. Provide Shop Drawings For: All miscellaneous steel applications.
  - 1.2 QUALITY ASSURANCE
    - A. Designer Qualifications: Design metal fabrications under direct supervision of a Professional Structural Engineer experienced in design of this work and licensed in Michigan.
- PART 2 PRODUCTS
- 2.1 MATERIALS - STEEL
    - A. Steel Sections: ASTM A36/A36M.
    - B. Steel Tubing: ASTM A501/A501M hot-formed structural tubing.
    - C. Plates: ASTM A283/A283M.
    - D. Pipe: ASTM A53/A53M, Grade B Schedule 40, black finish.
    - E. Fasteners: Unless otherwise indicated, provide Type 304 stainless-steel fasteners for exterior use and zinc-plated fasteners with coating complying with ASTM B 633 or ASTM F 1941, Class Fe/Zn 5, at exterior walls. Select for type, grade, and class required.
      1. Provide stainless-steel fasteners for fastening stainless steel.
      2. Dissimilar Metals: Type 304 stainless-steel fasteners.
      3. Uncoated Steel Components: Plated-steel fasteners complying with ASTM B 633, Class Fe/Zn 25 for electrodeposit zinc coating where concealed; Type 304 stainless-steel fasteners where exposed.
    - F. Bolts, Nuts, and Washers: ASTM A307, Grade A, plain.
    - G. Shop and Touch-Up Primer: SSPC-Paint 15, complying with VOC limitations of authorities having jurisdiction.
    - H. Touch-Up Primer for Galvanized Surfaces: SSPC-Paint 20 Type II - Organic, complying with VOC limitations of authorities having jurisdiction.
    - I. Epoxy Zinc-Rich Primer: Compatible with topcoat.
  - 2.2 FABRICATION
    - A. Fit and shop assemble items in largest practical sections, for delivery to site.
    - B. Fabricate items with joints tightly fitted and secured.
    - C. Grind exposed joints flush and smooth with adjacent finish surface. Make exposed joints butt tight, flush, and hairline. Ease exposed edges to small uniform radius.
    - D. Exposed Mechanical Fastenings: Flush countersunk screws or bolts; unobtrusively located; consistent with design of component, except where specifically noted otherwise.
  - 2.3 FABRICATED ITEMS
    - A. Provide and install items shown on Drawings with anchorage and attachments necessary for installation. The following is a list of principal items only. Refer to Drawing details for items not specifically scheduled.
      - B. Miscellaneous Framing and Supports: As detailed; steel, primed finish.
      - C. Miscellaneous steel for canopy framing; prime paint finish.
      - D. Steel profiles for overhead door opening; prime paint finish.
      - E. Steel tubes and posts at exterior storefront framing; prime paint finish.
      - F. Steel for fire escape attachment; powder coated finish, black. Replicate profiles, grating types, and design of existing fire escape as recommended in engineering report.
      - G. Cast metal fabrications for exterior decorative grille.
        1. Replicate historic cast floral/leaf profiles and weld to historic decorative transom grille. Shop finish in accordance with Section 099600. Reinstall after finishing.
  - 2.4 FINISHES - STEEL
    - A. Unless otherwise recommended by finish coating manufacturer, prepare surfaces to be shop primed in accordance with SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning" for exterior items and items indicated to receive zinc-rich primer. For other items, prepare to SSPC-SP 3, "Power Tool Cleaning."
      1. Exceptions: Galvanize items to be embedded in concrete, items to be embedded in masonry, and miscellaneous framing and supports on exterior of building.
      2. Exceptions: Do not prime surfaces in direct contact with concrete, where field welding is required, and items to be covered with sprayed fireproofing.
    - B. Clean surfaces of rust, scale, grease, and foreign matter prior to finishing.
    - C. Prime paint all steel items, unless otherwise specified.
      1. Exceptions: Galvanize items to be embedded in concrete, items to be embedded in masonry, and miscellaneous framing and supports on exterior of building.
      2. Exceptions: Do not prime surfaces in direct contact with concrete, where field welding is required, and items to be covered with sprayed fireproofing.
  - D. Prime Painting: One coat.
    1. Shop prime with universal shop primer unless zinc-rich primer is indicated.
    2. Shop Priming: Apply shop primer to comply with SSPC-PA 1, "Paint Application Specification No. 1: Shop, Field, and Maintenance Painting of Steel," for shop painting.
  - E. Powder-Coat Finish: Manufacturer's standard thermosetting polyester or acrylic urethane powder coating; minimum cured-film thickness of 1.5 mils.
    1. Color: As selected from manufacturer's full or custom range.
  - F. Galvanizing of Non-structural Items: Galvanize after fabrication to ASTM A123/A123M requirements. Provide minimum 1.7 oz/sq ft galvanized coating.

## PART 2 PRODUCTS

- 2.1 ADMINISTRATIVE REQUIREMENTS
  - A. Preinstallation Meeting: Convene one week prior to commencing work of this section.
    1. Review installation conditions, procedures, and coordination with related work.
- 2.2 SUBMITTALS
  - A. Product Data: Provide data on cleaning solutions and repair products.
  - B. Samples: Submit four samples of replacement units to show matching color, texture, and finish.
- 2.3 QUALITY ASSURANCE
  - A. Conservation Treatment Quality Control Plan: Prior to commencing work of this section, receive written approval of plan of proposed wood restoration work. Include the following:
    1. Description of methods of dust containment.
    2. Description of methods of protecting surrounding construction and landscape features.
    3. Description of sequencing, work procedures, materials, and tools proposed for each type of conservation treatment.
    4. Description of methods for select deconstruction of individual wood components and methods for cleaning these for reuse.
    5. Description of methods and approach for assuring repair material matching and compatibility with original materials.
    6. Description of deteriorated wood framing removal including equipment, approach, and methodology for reconstruction using replacement framing.
  - B. Restorer Qualifications: Company specializing in period wood restoration with minimum five years of documented experience.

## PART 3 EXECUTION

- 3.1 EXAMINATION
  - A. Verify that field conditions are acceptable and are ready to receive work.
- 3.2 INSTALLATION
  - A. Install items plumb and level, accurately fitted, free from distortion or defects.
  - B. Field weld components indicated on Drawings.
  - C. Perform field welding in accordance with AWS D.1.1/D.1M.
  - D. After erection, prime welds, abrasions, and surfaces not shop primed, except surfaces to be in contact with concrete.

## END OF SECTION

## DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

### SECTION 06 03 00 - CONSERVATION TREATMENT FOR PERIOD WOOD

## PART 1 GENERAL

- 1.1 ADMINISTRATIVE REQUIREMENTS
  - A. Preinstallation Meeting: Convene one week prior to commencing work of this section.
    1. Review installation conditions, procedures, and coordination with related work.
- 1.2 SUBMITTALS
  - A. Product Data: Provide data on cleaning solutions and repair products.
  - B. Samples: Submit four samples of replacement units to show matching color, texture, and finish.
- 1.3 QUALITY ASSURANCE
  - A. Conservation Treatment Quality Control Plan: Prior to commencing work of this section, receive written approval of plan of proposed wood restoration work. Include the following:
    1. Description of methods of dust containment.
    2. Description of methods of protecting surrounding construction and landscape features.
    3. Description of sequencing, work procedures, materials, and tools proposed for each type of conservation treatment.
    4. Description of methods for select deconstruction of individual wood components and methods for cleaning these for reuse.
    5. Description of methods and approach for assuring repair material matching and compatibility with original materials.
    6. Description of deteriorated wood framing removal including equipment, approach, and methodology for reconstruction using replacement framing.
  - B. Restorer Qualifications: Company specializing in period wood restoration with minimum five years of documented experience.

## 1.4 DELIVERY, STORAGE, AND HANDLING

- A. General: Cover wood products to protect against moisture. Support stacked products to prevent deformation and to allow air circulation.

## PART 2 PRODUCTS

- 2.1 REPLACEMENT FINISH CARPENTRY MATERIALS
  - A. Exterior Finish Carpentry Items: Matching existing elements.
    1. Window Casings and Moldings: Prepare for opaque finish.
    2. Exterior Trim: Prepare for opaque finish.
    3. Soffits: Prepare for opaque finish.
  - B. Interior Finish Carpentry Items: Matching existing elements.
    1. Moldings, Bases, Casings, and Miscellaneous Trim: Prepare for opaque finish.
    2. Window Sills: Prepare for opaque finish.
- 2.2 CLEANING MATERIALS
  - A. Cleaning Agent: Detergent type.
  - B. Cleaning Agent: 0.5 lb of sodium hydrosulfite mixture to one gallon of water.
- 2.3 PAINT REMOVERS
  - A. Water-Based: Formulated without methylene chloride or methanol and intended for removal of multiple coats of oil-based, water-based, acrylic-based, epoxy-based, urethane-based, elastomeric, and lead-based paints.
  - B. Solvent Based: Formulated without chlorinated solvents, acids, and caustics for removal of multiple coats of oil-based, water-based, acrylic-based, epoxy-based, urethane-based, elastomeric, and lead-based paints and lacquers and enamels.
  - C. Methylene Chloride Based: For removal of multiple coats of oil-based, water-based, acrylic-based, epoxy-based, urethane-based, elastomeric, and lead-based paints.
- 2.4 WOOD REPAIR MATERIALS
  - A. Consolidants:
    1. Water Based: Single-component, low-viscosity adhesive to penetrate and restore deteriorated wood.
    2. Epoxy Based: Two-component clear epoxy liquid system to penetrate and restore deteriorated wood.
  - B. Patching and Filling Compounds:
    1. Epoxy Based: Two-part, adhesive system designed to fill voids in wood and be painted, stained, sawed, nailed, planed, sanded carved, and machined like wood.
- 2.5 BONDING ADHESIVES
  - A. Epoxy Adhesive: Two-part; clear resin and amber hardener, tintable adhesive with medium viscosity.
- 2.6 FINISHING MATERIALS
  - A. See Section 09 91 13 for exterior painting.
  - B. See Section 09 91 23 for interior painting.

## PART 3 EXECUTION

- 3.1 PREPARATION
  - A. Protect surrounding elements from damage that may result due to performance of restoration procedures.
  - B. Mask or cover adjacent surfaces and permanent equipment. Secure coverings without nails or tapes that leave residue. Do not use impervious sheeting which produces condensation.
  - C. When using liquid cleaning methods, install drainage devices to prevent runoff over adjacent surfaces unless those surfaces are impervious to damage from runoff.
- 3.2 PAINT REMOVAL
  - A. Remove existing coatings to bare substrate or first sound paint layer as indicated.
  - B. Removal with Chemical Products: Use products in accordance with manufacturer's instructions.
    1. Allow product to dwell on existing surface for time period recommended by manufacturer or until existing coating dissolves. Periodically agitate remover paste with a stiff bristle brush to improve penetration into coating.
  - 2. Exterior Elements: Unless otherwise indicated or recommended by paint remover manufacturer, comply with the following:
    - a. Follow chemical manufacturer's instructions.
    - b. From the bottom up, rinse off remover and existing coating residue using pressure washer with pressure, water flow rate, and spray tip recommended by remover manufacturer.
  - 3. Interior Elements:
    - a. Follow chemical manufacturer's instructions.
  - C. Leave surfaces in a clean, residue-free condition, ready for subsequent restoration procedures.
  - D. Dispose of waste products and residue in accordance with applicable laws and regulations.
- 3.3 REPLACEMENT ELEMENT INSTALLATION
  - A. Match existing elements unless otherwise required for protection of wood materials from the weather and approved by Architect.
  - B. Maintain continuity of historic architectural fabric.
  - C. Finish Carpentry:
    1. Exterior Elements: Coordinate sequence of reinstallation with period treatment sequences of other exterior elements.
      - a. General: Use corrosion-resistant fasteners.
      - b. Set and secure materials and components in place, plumb, and level.
      - c. Scribe to abutting components, with gaps of 1/32 inch, maximum. Do not use overlay trim to conceal larger gaps.
    - d. Exterior Trim: Install with gap widths between pieces matching adjacent, original construction.
      - 1) Nails: Stainless steel, high tensile strength aluminum, or hot-dipped galvanized nails with ring or spiral-threaded shanks.
      - e. Soffits: Fit replacement pieces to remaining elements, with gap widths between pieces matching adjacent, original construction.
    2. Interior Elements:
      - a. Do not begin installation until wood materials have been acclimated to interior conditions.
      - b. Standing and Running Trim: Attach using finishing nails. Set finish nail heads just below the surface of trim.
        - 1) Carefully scribe work abutting other components, with maximum gaps of 1/32 inch. Do not use overlay trim to conceal larger gaps.
        - 2) Attach using finishing nails. Set finish nail heads just below the surface of trim.
      3. Finishing: Prepare elements for finishing in accordance with coating system manufacturer's written requirements.

## PART 3 EXECUTION

- A. Match existing elements unless otherwise required for protection of wood materials from the weather and approved by Architect.
- B. Maintain continuity of historic architectural fabric.
- C. Finish Carpentry:
  1. Exterior Elements: Coordinate sequence of reinstallation with period treatment sequences of other exterior elements.
    - a. General: Use corrosion-resistant fasteners.
    - b. Set and secure materials and components in place, plumb, and level.
    - c. Scribe to abutting components, with gaps of 1/32 inch, maximum. Do not use overlay trim to conceal larger gaps.
  - d. Exterior Trim: Install with gap widths between pieces matching adjacent, original construction.
    - 1) Nails: Stainless steel, high tensile strength aluminum, or hot-dipped galvanized nails with ring or spiral-threaded shanks.
    - e. Soffits: Fit replacement pieces to remaining elements, with gap widths between pieces matching adjacent, original construction.
  2. Interior Elements:
    - a. Do not begin installation until wood materials have been acclimated to interior conditions.
    - b. Standing and Running Trim: Attach using finishing nails. Set finish nail heads just below the surface of trim.
      - 1) Carefully scribe work abutting other components, with maximum gaps of 1/32 inch. Do not use overlay trim to conceal larger gaps.
      - 2) Attach using finishing nails. Set finish nail heads just below the surface of trim.
    3. Finishing: Prepare elements for finishing in accordance with coating system manufacturer's written requirements.

## PART 3 EXECUTION

- 3.1 EXAMINATION
  - A. Verify that field conditions are acceptable and are ready to receive work.
- 3.2 INSTALLATION
  - A. Install items plumb and level, accurately fitted, free from distortion or defects.
  - B. Field weld components indicated on Drawings.
  - C. Perform field welding in accordance with AWS D.1.1/D.1M.
  - D. After erection, prime welds, abrasions, and surfaces not shop primed, except surfaces to be in contact with concrete.

## END OF SECTION

## SECTION 06 10 00 - ROUGH CARPENTRY

## PART 1 GENERAL

- 1.1 DELIVERY, STORAGE, AND HANDLING
  - A. General: Cover wood products to protect against moisture. Support stacked products to prevent deformation and to allow air circulation.
  - B. Fire Retardant Treated Wood: Prevent exposure to precipitation during shipping, storage, or installation.

## PART 2 PRODUCTS

- 2.1 GENERAL REQUIREMENTS
  - A. Dimension Lumber: Comply with PS 20 and requirements of specified grading agencies.
    1. If no species is specified, provide species graded by the agency specified; if no grading agency is specified, provide lumber graded by grading agency meeting the specified requirements.
    2. Grading Agency: Grading agency whose rules are approved by the Board of Review, American Lumber Standard Committee at www.alsc.org, and who provides grading service for the species and grade specified; provide lumber stamped with grade mark unless otherwise indicated.
    3. Lumber of other species or grades is acceptable provided structural and appearance characteristics are equivalent to or better than products specified.
  - B. Grade Stamps: Provide each piece of lumber and each panel product stamped showing grade and trademark of grading agency under which it is produced.
    1. Additional Stamps: Stamped showing specified requirements for fire-retardant and preservative treatments as specified.
    - C. Provide sustainably harvested wood; see Section 01 60 00 - Product Requirements for requirements.
    - D. Except where Western Red Cedar is specified, provide wood harvested within a 500 mile radius of the project site.
- 2.2 DIMENSION LUMBER
  - A. Acceptable Species:
    1. Hem-fir (north); NLGA
    2. Southern pine or mixed southern pine; SPIB
    3. Spruce-pine-fir; NLGA
    4. Hem-fir; WCLIB, or WWPA
    5. Western woods; WCLIB or WWPA
  - B. Sizes: Nominal sizes as indicated on Drawings, S4S.
  - C. Moisture Content: Kiln-dry or MC15.
  - D. Wood Stud Framing (2 by 2 through 2 by 6):
    1. Grade: No. 2.
  - E. Wood Joist, Rafter, and Small Beam Framing (2 by 6 through 4 by 16):
    1. Grade: No. 2.
  - F. Wood Blocking, Nailers, Grounds, and Furring:
    1. Lumber: S4S, No. 2 or Standard Grade.
    2. Boards: Standard or No. 3.
- 2.3 CONSTRUCTION PANELS
  - A. General: Provide APA rated construction panels as specified.
  - B. Additional Sheathing Requirements: See Structural Drawings.
  - C. Blocking Applications:
    1. Plywood Blocking/Nailers - Concealed From View But Located Within Exterior Enclosure: PS 1, C-C Plugged or better, Exterior grade.
    2. Plywood Blocking/Nailers - Other Locations: PS 1, C-D Plugged or better.
- 2.4 FASTENERS
  - A. General: Provide fasteners of size and type indicated that comply with requirements specified in this article for material and manufacture.
    1. Provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M unless otherwise indicated.
- 2.5 METAL FRAMING ANCHORS
  - A. Framing anchors shall be provided as shown on drawings or as required by code. Manufactured anchors are to be installed per manufacturer requirements. Substitutions between manufacturer products is acceptable when the substituted anchor is rated by the manufacturer for the same or greater allowable loads in the same application.
  - B. Metal framing anchors to be fabricated from stamped steel shall be as follows:
    1. Galvanized-Steel Sheet: Hot-dip, zinc-coated steel sheet complying with ASTM A 653/A 653M, G60 coating designation for interior locations or unless otherwise indicated.
    2. Hot-Dip, Heavy-Galvanized Steel Sheet: ASTM A 653/A 653M; structural steel (SS), high-strength low-alloy steel Type A (HSLAS Type A), or high-strength low-alloy steel Type B (HSLAS Type B); G185 coating designation; and not less than 0.036 inch thick for use in contact wood-preserved-treated lumber and where indicated.
    3. Stainless-Steel Sheet: ASTM A 666, type 304, where indicated.
- 2.6 ACCESSORIES
  - A. Connectors: Hot dipped galvanized steel, sized to suit framing conditions.
    1. For contact with preservative treated wood in exposed locations, provide minimum G185 galvanizing complying with ASTM A653/A653M.
  - B. Construction Adhesives: Adhesives complying with ASTM C557 or ASTM D3498.
- 2.7 FACTORY WOOD TREATMENT - GENERAL
  - A. Treated Lumber and Plywood: Comply with requirements of AWPA U1 - Use Category System for wood treatments determined by use categories, expected service conditions, and specific applications.
    1. Fire-Retardant Treated Wood: Mark each piece of wood with producer's stamp indicating compliance with specified requirements, and also stamped "Kiln Dried After Treatment" ("KDAT").
    2. Preservative-Treated Wood: Provide lumber and plywood marked or stamped by an AISC-accredited testing agency, certifying level and type of treatment in accordance with AWPA standards, and also stamped "Kiln Dried After Treatment" ("KDAT").
- 2.8 FIRE RETARDANT TREATMENT (FRT)
  - A. Exterior Treat: AWPA U1, Category UCFB, Commodity Specification H, chemically treated and pressure impregnated, capable of providing a maximum flame spread index of 25 when tested in accordance with ASTM E84, with no evidence of significant combustion when test is extended for an additional 20 minutes both before and after accelerated weathering test performed in accordance with ASTM D2898.
    1. Kiln dry wood after treatment to a maximum moisture content of 19 percent for lumber and 15 percent for plywood.
  - 2. Applications:
    - a. Treat exterior rough carpentry items.
    - b. Do not use treated wood in direct contact with the ground.
- 2.9 PRESERVATIVE TREATMENT (PT)
  - A. Preservative Pressure Treatment of Lumber Above Grade (for non-rot resistant lumber): AWPA U1, using waterborne preservative to 0.25 lb/cu ft retention.
    1. Preservative Chemicals: Acceptable to authorities having jurisdiction and containing no arsenic or chromium
  - 2. For exposed items indicated to receive a stained or natural finish, chemical formulations shall not require incising, contain colorants, bleed through, or otherwise adversely affect finishes.
  - 3. Kiln dry lumber after treatment to maximum moisture content of 19 percent.
  - 4. Categories:
    - a. Use Category UC2 for interior construction not in contact with ground.
    - b. Use Category UC3b for exterior construction not in contact with ground.
    - c. Use Category UC4a for items in contact with ground.
  - 5. Applications:
    - a. Treat lumber exposed to weather.
    - b. Treat lumber in contact with roofing, flashing, or waterproofing.
    - c. Treat lumber in contact with masonry or concrete.
    - d. Treat lumber in other locations as indicated.

## 2.2 DIMENSION LUMBER

- A. Acceptable Species:
  1. Hem-fir (north); NLGA
  2. Southern pine or mixed southern pine; SPIB
  3. Spruce-pine-fir; NLGA
  4. Hem-fir; WCLIB, or WWPA
  5. Western woods; WCLIB or WWPA
- B. Sizes: Nominal sizes as indicated on Drawings, S4S.
- C. Moisture Content: Kiln-dry or MC15.
- D. Wood Stud Framing (2 by 2 through 2 by 6):
  1. Grade: No. 2.
- E. Wood Joist, Rafter, and Small Beam Framing (2 by 6 through 4 by 16):
  1. Grade: No. 2.
- F. Wood Blocking, Nailers, Grounds, and Furring:
  1. Lumber: S4S, No. 2 or Standard Grade.
  2. Boards: Standard or No. 3.

## 2.3 CONSTRUCTION PANELS

- A. General: Provide APA rated construction panels as specified.
- B. Additional Sheathing Requirements: See Structural Drawings.
- C. Blocking Applications:
  1. Plywood Blocking/Nailers - Concealed From View But Located Within Exterior Enclosure: PS 1, C-C Plugged or better, Exterior grade.
  2. Plywood Blocking/Nailers - Other Locations: PS 1, C-D Plugged or better.

## 2.4 FASTENERS

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this article for material and manufacture.
  1. Provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M unless otherwise indicated.

## 2.5 METAL FRAMING ANCHORS

- A. Framing anchors shall be provided as shown on drawings or as required by code. Manufactured anchors are to be installed per manufacturer requirements. Substitutions between manufacturer products is acceptable when the substituted anchor is rated by the manufacturer for the same or greater allowable loads in the same application.
- B. Metal framing anchors to be fabricated from stamped steel shall be as follows:
  1. Galvanized-Steel Sheet: Hot-dip, zinc-coated steel sheet complying with ASTM A 653/A 653M, G60 coating designation for interior locations or unless otherwise indicated.
  2. Hot-Dip, Heavy-Galvanized Steel Sheet: ASTM A 653/A 653M; structural steel (SS), high-strength low-alloy steel Type A (HSLAS Type A), or high-strength low-alloy steel Type B (HSLAS Type B); G185 coating designation; and not less than 0.036 inch thick for use in contact wood-preserved-treated lumber and where indicated.
  3. Stainless-Steel Sheet: ASTM A 666, type 304, where indicated.

## 2.6 ACCESSORIES

- A. Connectors: Hot dipped galvanized steel, sized to suit framing conditions.
  1. For contact with preservative treated wood in exposed locations, provide minimum G185 galvanizing complying with ASTM A653/A653M.
- B. Construction Adhesives: Adhesives complying with ASTM C557 or ASTM D3498.

## 2.7 FACTORY WOOD TREATMENT - GENERAL

- A. Treated Lumber and Plywood: Comply with requirements of AWPA U1 - Use Category System for wood treatments determined by use categories, expected service conditions, and specific applications.
  1. Fire-Retardant Treated Wood: Mark each piece of wood with producer's stamp indicating compliance with specified requirements, and also stamped "Kiln Dried After Treatment" ("KDAT").
  2. Preservative-Treated Wood: Provide lumber and plywood marked or stamped by an AISC-accredited testing agency, certifying level and type of treatment in accordance with AWPA standards, and also stamped "Kiln Dried After Treatment" ("KDAT").

## 2.8 FIRE RETARDANT TREATMENT (FRT)

- A. Exterior Treat: AWPA U1, Category UCFB, Commodity Specification H, chemically treated and pressure impregnated, capable of providing a maximum flame spread index of 25 when tested in accordance with ASTM E84, with no evidence of significant combustion when test is extended for an additional 20 minutes both before and after accelerated weathering test performed in accordance with ASTM D2898.
  1. Kiln dry wood after treatment to a maximum moisture content of 19 percent for lumber and 15 percent for plywood.
- 2. Applications:
  - a. Treat exterior rough carpentry items.
  - b. Do not use treated wood in direct contact with the ground.

## 2.9 PRESERVATIVE TREATMENT (PT)

- A. Preservative Pressure Treatment of Lumber Above Grade (for non-rot resistant lumber): AWPA U1, using waterborne preservative to 0.25 lb/cu ft retention.
  1. Preservative Chemicals: Acceptable to authorities having jurisdiction and containing no arsenic or chromium
- 2. For exposed items indicated to receive a stained or natural finish, chemical formulations shall not require incising, contain colorants, bleed through, or otherwise adversely affect finishes.
- 3. Kiln dry lumber after treatment to maximum moisture content of 19 percent.
- 4. Categories:
  - a. Use Category UC2 for interior construction not in contact with ground.
  - b. Use Category UC3b for exterior construction not in contact with ground.
  - c. Use Category UC4a for items in contact with ground.
- 5. Applications:
  - a. Treat lumber exposed to weather.
  - b. Treat lumber in contact with roofing, flashing, or waterproofing.
  - c. Treat lumber in contact with masonry or concrete.
  - d. Treat lumber in other locations as indicated.

- B. Self-Adhering, High-Temperature Sheet Underlayment: Minimum 30 mils thick, consisting of a slip-resistant polyethylene- or polypropylene-film top surface laminated to a layer of butyl- or SBS-modified asphalt adhesive, with release-paper backing; specifically designed to withstand high metal temperatures beneath metal roofing. Provide primer according to written recommendations of underlayment manufacturer.
    - 1. Thermal Stability: Stable after testing at 220 deg F; ASTM D 1970.
    - 2. Low-Temperature Flexibility: Passes after testing at minus 20 deg F; ASTM D 1970.
  - C. Primer: Zinc chromate type.
  - D. Protective Backing Paint: Zinc molybdate alkylid.
  - E. Bituminous Coating: Cold-applied asphalt mastic, noncorrosive compound free of asbestos, sulfur, and other deleterious impurities; 15 mil dry film thickness per coat.
  - F. Concealed Sealants: Non-curing butyl sealant.
  - G. Exposed Sealants: ASTM C920; elastomeric sealant, with minimum movement capability as recommended by manufacturer for substrates to be sealed; color to match adjacent material.
  - H. Plastic Cement: ASTM D4586/D4586M, Type I.
- 2.6 FINISHES
- A. PVDF (Polyvinylidene Fluoride) Coating: Superior performance organic finish with minimum 70 percent PVDF fluoropolymer resin by weight, multiple coat, thermally cured finish system; color as indicated.

### PART 3 EXECUTION

#### 3.1 UNDERLAYMENT INSTALLATION

- A. Self-Adhering Sheet Underlayment: Apply primer if required by manufacturer. Comply with temperature restrictions of underlayment manufacturer for installation. Apply at locations indicated below, wrinkle free, in shingle fashion to shed water, and with end laps of not less than 6 inches staggered 24 inches between courses. Overlap side edges not less than 3-1/2 inches. Roll laps with roller. Cover underlayment within 14 days.
- 3.2 INSTALLATION - GENERAL
  - A. Comply with SMACNA Architectural Sheet Metal Manual.
  - B. Metal Protection: Where dissimilar metals will contact each other or corrosive substrates, protect against galvanic action by painting contact surfaces with bituminous coating or by other permanent separation as recommended by SMACNA.
    - 1. Coat back side of uncoated aluminum and stainless-steel sheet metal flashing and trim with bituminous coating where concealed flashing and trim will contact wood, ferrous metal, or cementitious construction.
  - 2. Underlayment: Where installing metal directly on cementitious or wood substrates, install underlayment and cover with a slip sheet.
  - C. Conceal fasteners and expansion provisions where possible in exposed work and locate to minimize possibility of leakage. Cover and seal fasteners and anchors as required for a tight installation.
  - D. Seal metal joints water tight.

#### 3.3 SCHEDULE

- A. Counterflashings, Visible:
  - 1. Prefinished Galvanized Steel: 0.0217 inch.
  - 2. Finish: High-performance organic coating.
- B. Counterflashings, Concealed:
  - 1. Stainless Steel: 0.0187 inch.
  - 2. Finish: 2D dull annealed.
- C. Flashing Receivers, Visible:
  - 1. Prefinished Galvanized Steel: 0.0217 inch.
  - 2. Finish: High-performance organic coating.
- D. Flashing Receivers, Concealed:
  - 1. Stainless Steel: 0.0187 inch.
  - 2. Finish: 2D dull annealed.
- E. Miscellaneous Sheet Metal Fabrications, Trims, Flashings, and Top of Wall Closures, Visible:
  - 1. Prefinished Galvanized Sheet Steel: 0.0276 inch.
  - 2. Finish: Superior-performance organic coating.
- F. Aluminum Glazing Frame Flashing, Concealed:
  - 1. Stainless Steel: 0.0187 inch.
  - 2. Finish: 2D dull annealed.
- G. Aluminum Glazing Frame Flashing, Visible:
  - 1. Aluminum: 0.032 inch.
  - 2. Finish: Superior-performance organic coating.
- H. Aluminum Glazing Frame Sill Extensions, Visible:
  - 1. Aluminum: 0.040 inch.
  - 2. Finish: Superior-performance organic coating.

### END OF SECTION

#### SECTION 07 92 00 - JOINT SEALANTS

### PART 1 GENERAL

#### 1.1 SUBMITTALS

- A. Product Data: Submit manufacturer's technical data sheets for each product to be used.
- B. Color Cards for Selection: Where sealant color is not specified, submit manufacturer's color cards showing standard colors available for selection.
- C. Joint-Sealant Schedule: Include the following information:
  - 1. Joint-sealant application, joint location, and designation.
  - 2. Joint-sealant manufacturer and product name.
  - 3. Joint-sealant formulation.
  - 4. Joint-sealant color.

### PART 2 PRODUCTS

#### 2.1 JOINT SEALANT APPLICATIONS

- A. Scope:
  - 1. Exterior Joints: Seal open joints, whether or not the joint is indicated on drawings, unless specifically indicated not to be sealed. Exterior joints to be sealed include, but are not limited to, the following items.
    - a. Wall expansion and control joints.
    - b. Joints between door, window, and other frames and adjacent construction.
    - c. Joints between different exposed materials.
    - d. Openings below ledge angles in masonry.
    - e. Other joints indicated below.
  - 2. Interior Joints: Do not seal interior joints unless specifically indicated to be sealed. Interior joints to be sealed include, but are not limited to, the following items.
    - a. Joints between door, window, and other frames and adjacent construction.
    - b. In sound-rated wall and ceiling assemblies, gaps at electrical outlets, wiring devices, piping, and other openings; between wall/ceiling and other construction; and other flanking sound paths.
      - 1) Exception: Through-penetrations in sound-rated assemblies that are also fire-rated assemblies.
    - c. Other joints indicated below.
- 2.2 JOINT SEALANTS - GENERAL
  - A. Sealants and Primers: Provide products having lower volatile organic compound (VOC) content than indicated in SCAQMD 1168.
  - B. Colors for concealed locations: Manufacturer's Standard.
  - C. Colors for exposed locations: As selected by Architect from Manufacturer's Full Range.
- 2.3 NONSAG JOINT SEALANTS
  - A. Type JS-1 - Non-Staining Silicone Sealant: ASTM C920, Grade NS, Uses M and A; not expected to withstand continuous water immersion or traffic.
    - 1. Locations:
      - a. Control and expansion joints in unit masonry.
      - b. Joints between metal panels or metal materials.
      - c. Joints between different materials listed above.
    - d. Perimeter joints between materials listed above and frames of doors, windows and louvers.
    - e. Control and expansion joints in ceilings and other overhead surfaces.
  - 2. Movement Capability: Plus and minus 50 percent, minimum.
  - 3. Non-Staining To Porous Stone: Non-staining to light-colored natural stone and marble when tested in accordance with ASTM C1248.
  - 4. Dirt Pick-Up: Reduced dirt pick-up compared to other silicone sealants.
  - 5. Color: To be selected by Architect from manufacturer's full range.
- B. Type JS-3 - Acrylic Emulsion Latex: Water-based; ASTM C834, single component, non-staining, non-bleeding, non-sagging; not intended for exterior use.
  - 1. Locations:
    - a. Interior non-moving exposed sealant joints in gypsum drywall construction
    - b. Perimeter joints between interior wall surfaces and frames of interior doors, windows, and openings.
  - 2. Color: To be selected by Architect from manufacturer's full range.
- C. Type JS-4 - Butyl Sealant: Solvent-based; ASTM C1311; single component, nonsag; not expected to withstand continuous water immersion or traffic.
  - 1. Locations:
    - a. Aluminum thresholds.
    - b. Sill plates.
  - 2. Service Temperature Range: Minus 13 to 180 degrees F.

- d. Perimeter joints between materials listed above and frames of doors, windows and louvers.
  - e. Control and expansion joints in ceilings and other overhead surfaces.
- 2.6 MOVEMENT CAPABILITY: Plus and minus 50 percent, minimum.
3. NON-STAINING TO POROUS STONE: Non-staining to light-colored natural stone and marble when tested in accordance with ASTM C1248.
4. DIRT PICK-UP: Reduced dirt pick-up compared to other silicone sealants.
5. COLOR: TO BE SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE.
- B. Type JS-3 - Acrylic Emulsion Latex: Water-based; ASTM C834, single component, non-staining, non-bleeding, non-sagging; not intended for exterior use.
    - 1. Locations:
      - a. Interior non-moving exposed sealant joints in gypsum drywall construction
      - b. Perimeter joints between interior wall surfaces and frames of interior doors, windows, and openings.
    - 2. Color: To be selected by Architect from manufacturer's full range.
  - C. Type JS-4 - Butyl Sealant: Solvent-based; ASTM C1311; single component, nonsag; not expected to withstand continuous water immersion or traffic.
    - 1. Locations:
      - a. Aluminum thresholds.
      - b. Sill plates.
    - 2. Service Temperature Range: Minus 13 to 180 degrees F.
- 2.4 SELF-LEVELING SEALANTS
- A. Type JS-5 - Self-Leveling Polyurethane Sealant for Continuous Water Immersion: Polyurethane; ASTM C920, Grade P, Uses M and A; single component; explicitly approved by manufacturer for traffic exposure and continuous water immersion.
    - 1. Locations:
      - a. Isolation and contraction joints in cast-in-place concrete slabs.
      - b. Control and expansion joints in tile flooring.
    - 2. Movement Capability: Plus and minus 25 percent, minimum.
    - 3. Hardness Range: 35 to 55, Shore A, when tested in accordance with ASTM C661.
    - 4. Color: Color as selected.

### 2.5 ACCESSORIES

- A. Backer Rod: Cylindrical cellular foam rod with surface that sealant will not adhere to, compatible with specific sealant used, and recommended by backing and sealant manufacturers for specific application.
  - 1. Closed Cell and Bi-Cellular: 25 to 33 percent larger in diameter than joint width.
- B. Backing Tape: Self-adhesive polyethylene tape with surface that sealant will not adhere to and recommended by tape and sealant manufacturers for specific application.
- C. Primers: Type recommended by sealant manufacturer to suit application; non-staining.

### PART 3 EXECUTION

#### 3.1 INSTALLATION

- A. Perform work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.
- B. Perform installation in accordance with ASTM C1193.
- C. Install bond breaker backing tape where backer rod cannot be used.
- D. Install sealant free of air pockets, foreign embedded matter, ridges, and sags, and without getting sealant on adjacent surfaces.
- E. Nonsag Sealants: Tool surface concave, unless otherwise indicated; remove masking tape immediately after tooling sealant surface.
- F. Concrete Floor Joint Filler: After full cure, shave joint filler flush with top of concrete slab.

### END OF SECTION

#### DIVISION 08 - OPENINGS

#### SECTION 08 03 00 - CONSERVATION TREATMENT FOR PERIOD OPENINGS

### PART 1 GENERAL

#### 1.1 ADMINISTRATIVE REQUIREMENTS

- A. Preinstallation Meeting: Convene one week prior to commencing work of this section.
  - 1. Review installation conditions, procedures, and coordination with related work.

#### 1.2 SUBMITTALS

- A. Shop Drawings: Include plans, elevations, sections, and details for replacement and replication elements.
  - 1. Indicate proposed repair methods.
  - 2. Indicate component profiles and joinery.
  - 3. Include installation templates for replacement hardware items.
- B. Product Data:
  - 1. Lumber Products: Species, cut, dimensions, physical and functional characteristics.
  - 2. Metal Products: Alloy and finish, dimensions, physical and functional characteristics.
  - 3. Cleaning Compounds and Solutions: Physical characteristics and manufacturer's recommendations.
- C. Paint Analysis Report: Laboratory analysis of each type of existing paint.
- D. Replacement Component Samples: Two samples of each type of component.
- E. Vision Glass Samples: Four samples of each type of replacement glass.
- F. Conservation treatment quality control plan.
- G. Restorer's qualification statement.

#### 1.3 QUALITY ASSURANCE

- A. Conservation Treatment Quality Control Plan: Prior to commencing work of this section, receive written approval of plan of proposed restoration and cleaning work. Include the following:
  - 1. Description of methods of dust containment.
  - 2. Description of methods of protecting surrounding construction and landscape features.
  - 3. Description of sequencing, work procedures, materials, and tools proposed for each type of conservation treatment specified.
  - 4. Description of methods for deconstruction of individual door and window units and tools and methods for cleaning and refinishing for reuse.
  - 5. Description of methods and approach for matching materials and compatibility with original materials.
  - 6. Description of methods and approach to periodic and final cleaning of door and window surfaces.
- B. Restorer Qualifications: Company specializing in period restoration with minimum five years of documented experience.
  - 1. Removal of doors and windows and hardware is to be performed by experienced craftspeople who have demonstrated proficiency on historic structures.

#### 1.4 MOCK-UPS

- A. See Section 01 40 00 - Quality Requirements for additional requirements.
- B. Clean one of each type of metal door and window to indicate safe and effective means and methods of cleaning each type of metal alloy used in period doors and windows.
- C. Approved restoration mock-up areas, including results of procedures employed, will remain and become the quality standard for work of this section.

#### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Package, deliver, and store wood items to protect from damage and dimensional changes from improper temperature and relative humidity exposure.
  - B. Avoid humidity build-up under coverings. Prevent corrosion of metals and damage to factory-applied painted finishes.
- 1.6 FIELD CONDITIONS
- A. Maintain materials and surrounding air temperature to minimum 40 degrees F prior to, during, and 48 hours after completion of metal period treatment work.
  - B. Maintain materials and surrounding air temperature to maximum 90 degrees F prior to, during, and 48 hours after completion of metal period treatment work.

### PART 2 PRODUCTS

#### 2.1 METAL MATERIALS

- A. See Section 05 03 00 - Conservation Treatment for Period Metals for generally applicable metal restoration procedures, materials, and products.
- B. Fabrication Methods: Match existing work.

#### 2.2 WOOD MATERIALS

- A. See Section 06 03 00 - Conservation Treatment for Period Wood for wood restoration procedures, materials, and products.
- B. Machining: Profile new moldings and shapes to match period items, based on samples provided by Architect.
- C. Carpenter Methods: Match those exhibited in existing work.

#### 2.3 GLASS MATERIALS

- A. See Section 08 80 00.

#### 2.4 OPERATING HARDWARE

- A. Replacement Hardware: For damaged or missing hardware; match existing to greatest extent technically and aesthetically possible. Duplicate operating functions of existing hardware. Match approved samples.
- 2.5 REPLACEMENT/REPLICA DOORWAYS
- A. Custom-fabricate replacement doors to match key features of existing units.
    - 1. Fabricate using same or similar materials.
    - 2. Replicate configuration of stiles, rails, and infill panels.
    - 3. Replicate proportions and profiles of the frame components, door leaf components, exterior trim, and interior trim.
    - 4. Provide weatherstripping that does not significantly change the original appearance of the units.

### PART 3 EXECUTION

#### 3.1 RESTORERS

- A. Acceptable Restorers:
  - 1. Artisan Renovations.

#### 3.2 EXAMINATION

- A. Verify that surfaces to be cleaned and restored are ready for work of this section.
  - B. Consult paint analysis report of existing finishes to determine appropriate materials and methods for new, matching finishes.
- 3.3 WOOD DOOR OPENING REPAIR
- A. Provide repairs including, but not limited to, the following:
    - 1. Wood Damage: Wood which is split, checked, or shows signs of rot:
      - a. See Section 060300 for treatments involving consolidation, patching, and dutchman installation of wood components.
      - b. Dry wood components.
      - c. Treat decayed areas with a fungicide.
      - d. Waterproof with three applications of boiled linseed oil.
      - e. Fill cracks and holes with patching putty.
    - 2. Gaps and Loose Joints: Tighten moving joints in stile and rail doors. Inject adhesives into holes drilled into joints.
    - 3. Replace deteriorated parts with new, matching pieces.
    - 4. Splice new wood onto existing members.

#### 3.4 WOOD WINDOW OPENING REPAIR

- A. Provide repairs indicated.
- B. Repair Class I:
  - 1. Remove loose exterior and interior paint.
  - 2. Remove and repair sashes.
    - a. Gaps and Loose Joints: Tighten moving joints in sashes. Inject adhesives into holes drilled into joints.
  - 3. Repair window frame.
  - 4. Weatherstrip and reinstall sashes. Pin shut where indicated.
  - 5. Reglaze sashes where required by replicating methods and final appearance used in similar existing windows.
  - 6. Prime and paint.
- C. Repair Class II: Perform Class I repairs and the following:
  - 1. Wood Damage: Repair as indicated for wood which is split, checked, or shows signs of rot.
    - a. See Section 060300 for treatments involving consolidation and patching of wood components.
    - b. Dry affected wood components.
    - c. Treat decayed areas with a fungicide.
    - d. Waterproof with three applications of boiled linseed oil.
    - e. Fill cracks and holes with patching putty.
- D. Repair Class III: Perform Class I and Class II repairs and the following:
  - 1. Replace deteriorated parts with new matching pieces.
  - 2. Splice new wood onto existing members.

#### 3.5 METAL WINDOW OPENING REPAIR

- A. Repairs: Perform, as applicable, various repairs, including but not limited to the following:
  - 1. Remove rusted-out or corroded metal. Stabilize remaining metal using rust-inhibiting coatings and restore component profiles using patching compounds specified in Section 050300.
  - 2. Replace missing screws or fasteners.
  - 3. Cut out structurally weakened sections.
  - 4. Straighten bent or bowed sections.
  - 5. Weld or splice-in missing sections.
- 3.6 HARDWARE CLEANING
  - A. Surface Preparation: Remove hardware. Store in secure location for reinstallation after refinishing is complete.
  - B. Cleaning: Remove adhesive residue and paint and varnish drips using paint stripper applied with soft cloths. If required, apply light pressure using natural bristle brush.
  - 1. Retain statutory finish on bronze items. Do not apply solvents which may remove patina.
  - 2. Clean bronze and stainless steel items using mild soap and water. For stubborn dirt and hard-to-clean areas, use of silicon carbide abrasive pads is allowed.
- 3.7 HARDWARE INSTALLATION
  - A. Install replacement hardware in doors and windows that complements functionality of existing hardware.
  - B. Install hardware in accordance with manufacturer's instructions and applicable codes.
  - C. Use templates provided by hardware item manufacturer.
  - D. Do not install surface-mounted items until substrate finishes are complete.

#### 3.8 REGLAZING

- A. Remove existing, deteriorated glazing putty.
  - B. Remove deteriorated sash spring clips.
  - C. Remove paint and pretreat and prime metal surfaces.
  - D. Bed replacement glass in putty. Secure with sash spring clips.
  - E. Press and smooth glazing putty against glass and sash.
  - F. Cure putty in accordance with manufacturer's instructions.
- 3.9 WEATHERIZATION
- A. Apply weatherstripping at operable openings.
- 3.10 CLEANING
- A. Immediately remove stains resulting from the work of this section.
  - B. Clean surrounding surfaces.

### END OF SECTION

#### SECTION 08 11 13 - HOLLOW METAL DOORS AND FRAMES

### PART 1 GENERAL

#### 1.1 ADMINISTRATIVE REQUIREMENTS

- A. Coordination:
    - 1. Coordinate with wall construction for anchor placement.
    - 2. Coordinate installation of hardware.
    - 3. Coordinate installation of glazing.
- 1.2 SUBMITTALS
- A. Product Data: Materials and details of design and construction, hardware locations, reinforcement type and locations, anchorage and fastening methods, and finishes.
  - B. Door Schedule: Provide schedule coordinated with numbering on drawings and hardware schedule. Indicate door types and openings receiving electrified hardware.
- 1.3 QUALITY ASSURANCE
- A. Conform to requirements of ANSI A250.8 - SDI-100, and as supplemented in this Section.
- 1.4 REGULATORY REQUIREMENTS
- A. Conform to applicable Building Code for fire rated assemblies.
  - B. Accessibility: Conform to ADA and applicable building codes.
  - C. Fire: Assemble assembly construction to conform to UL 10C.
  - D. Installed Frame and Door Assemblies: Comply with NFPA 80 for fire rated class indicated.
- 1.5 DELIVERY, STORAGE, AND HANDLING
- A. Comply with NAAMM HMMMA 840 or ANSI/SDI A250.8 (SDI-100) in accordance with specified requirements.

### PART 2 PRODUCTS

#### 2.1 MANUFACTURERS

- A. Basis of Design:
  - 1. VT Industries, Inc.; Eggers Stile and Rail Collection, Full Glass Style E201: www.vtindustries.com
- B. Other Acceptable Manufacturers:
  - 1. Maiman by Assa Abloj: www.assaablojdss.com
  - 2. Masonite: https://architectural.masonite.com
  - 3. Marshfield DoorSystems, Inc.: www.marshfielddoors.com
  - 4. Oshkosh Door Company: www.oshkoshdoor.com
  - 5. TruStile Doors, LLC: www.trustile.com
  - 6. Substitutions: See Section 01 60 00 - Product Requirements.

#### 2.2 DOORS

- A. Quality Standard: Custom Grade, Heavy Duty performance, in accordance with AIA/AI/MAC/WI (AWS) or AIA/MAC/WI (NAAWS), unless otherwise indicated.
  - B. Opaque Finish Interior Doors: 1-3/4 inches thick unless otherwise indicated; solid lumber construction; mortise and tenon joints. Opaque finish as indicated on drawings.
  - C. Wood: Paint grade mahoe
  - D. Stile and Rail Widths: 4-1/2 inches.
  - E. Bottom Rail: 10 inches.
  - F. Molding Profile (Sticking): Ogee.
  - G. Panel Designs: Full glass.
- 2.3 DOOR CONSTRUCTION
- A. Factory machine doors for finish hardware in accordance with hardware requirements and dimensions. Do not machine for surface hardware.
- 2.4 FINISHES
- A. Finish work in accordance with AIA/AI/MAC/WI (AWS), Section 5 - Finishing for grade specified and as follows:
    - 1. Opaque:
      - a. System - 11, Polyurethane, Catalyzed.
      - b. Color: Black, as selected by Architect.
      - c. Sheen: Satin.
  - B. Factory finish doors in accordance with approved sample.

### END OF SECTION

#### SECTION 08 41 13 - ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS

### PART 1 GENERAL

#### 1.1 ADMINISTRATIVE REQUIREMENTS

- A. Coordination:
    - 1. Coordinate with wall construction for anchor placement.
    - 2. Coordinate installation of hardware.
    - 3. Coordinate installation of glazing.
- 2.5 ACCESSORIES
- A. Glazing: See Section 08 80 00.
  - B. Door Hardware: See Section 08 71 00.
- PART 3 EXECUTION
- 3.1 EXAMINATION
- A. Verify existing conditions before starting work.
  - B. Verify that opening sizes and tolerances are acceptable.
  - C. Do not install doors in frame openings that are not plumb or are out of tolerance for size or alignment.
- 3.2 INSTALLATION
- A. Install doors in accordance with manufacturer's instructions and specified quality standards.
  - B. Factory-Finished Doors: Do not field cut or trim; if fit or clearance is not correct, replace door.
- 3.3 TOLERANCES
- A. Comply with specified quality standard for fit, clearance, and joinery tolerances.

### END OF SECTION

#### SECTION 08 36 13.16 - OVERHEAD GLAZED SECTIONAL DOORS

### PART 1 GENERAL

#### 1.1 ADMINISTRATIVE REQUIREMENTS

- A. Coordination:
  - 1. Coordinate installation of electrical service. Complete power and control wiring from disconnect to unit components.

#### 1.2 SUBMITTALS

- A. Shop Drawings: Indicate opening dimensions and required tolerances, connection details, anchorage spacing, hardware locations, and installation details.
  - B. Product Data: Show component construction, anchorage method, and hardware.
  - C. Samples: Submit two panel finish samples, 3 x 3 inch in size, illustrating color and finish.
- 1.3 WARRANTY
- A. Correct defective Work within a two year period after Date of Substantial Completion.
  - B. Include 5 year manufacturer warranty against excessive degradation of exterior finish.
  - C. Warranty: Include coverage for electric motor and transmission.
    - 1. Provide five year manufacturer warranty for electric operating equipment.

### PART 2 PRODUCTS

#### 2.1 MANUFACTURERS

- A. Basis of Design Manufacturer:
    - 1. Overhead Door Corporation: www.overheaddoor.com.
    - a. Model No. 521.
- 2.2 ALUMINUM DOORS
- A. Aluminum Doors: Stile and rail aluminum with glazed panels; low headroom, with track and hardware; complying with DASMA 102, Commercial application.
    - 1. Performance: Withstand positive and negative wind loads equal to 1.5 times design wind loads specified by local code without damage or permanent set, when tested in accordance with ASTM E330/E330M, using 10 second duration of maximum load.
    - 2. Door Nominal Thickness: 2 inches thick.
    - 3. Finish: Factory finished with polyester baked enamel powder coat; black color.
    - 4. Glazed Lights: Full panel width, each row; set in place with butyl tape and locking retainer.
    - 5. Operation: Electric.
    - 6. Glazing: Fully tempered glass; single pane; clear; 1/4 inch overall thickness.

#### 2.3 COMPONENTS

- A. Track: Rolled galvanized steel, 0.090 inch minimum thickness; 2 inch wide, continuous one piece per side; galvanized steel mounting brackets 1/4 inch thick.
- B. Lift Mechanism: Torsion spring on cross head shaft, with braided galvanized steel lifting cables/strapping.
- C. Sill Weatherstripping: Resilient rubber strip, one piece; fitted to bottom of door panel, full length contact.
- D. Jamb Weatherstripping: Roll formed steel section full height of jamb, fitted with resilient weatherstripping, placed in moderate contact with door panels.
- E. Head Weatherstripping: EPDM rubber seal, one piece full length.
- F. Panel Joint Weatherstripping: Neoprene foam seal, one piece full length.
- G. Lock: Inside side mounted, adjustable keeper, spring activated latch bar with feature to retain in locked or retracted position.

#### 2.4 MATERIALS

- A. Sheet Steel: Hot-dipped galvanized steel sheet, ASTM A653/A653M, with G90/Z275 coating, plain surface.
  - B. Aluminum Sheet: ASTM B209 (ASTM B209M), 5005 alloy, H14 temper, plain surface.
  - C. Aluminum Extrusions: ASTM B221 (ASTM B221M), 6063 alloy, T6 temper.
  - D. Float Glass: Provide float glass glazing, unless noted otherwise.
- 2.5 ELECTRIC OPERATION
- A. Operator, Controls, Actuators, and Safeties: Comply with UL 325; provide products listed by ITS (DIR), UL (DIR), or testing agency acceptable to authorities having jurisdiction.
    - 1. Provide interlock switches on motor operated units.
  - B. Electric Operators:
    - 1. Mounting: As required.
    - 2. Motor Enclosure:
      - a. Exterior Doors: NEMA MG 1, Type 4; open drip proof.
    - 3. Motor Rating: As recommended by door manufacturer.
    - 4. Motor Voltage: 120 volts, single phase, 60 Hz.
    - 5. Motor Controller: NEMA ICS 2, full voltage, reversing magnetic motor starter.
    - 6. Controller Enclosure: NEMA 250, Type 4.
    - 7. Opening Speed: 12 inches per second.
    - 8. Brake: Adjustable friction clutch type, activated by motor controller.
    - 9. Manual override in case of power failure.
    - 10. Emergency Manual Operation: Push-up type.
  - C. Control Station: Provide standard three button (Open-Close-Stop) momentary-contact control device for each operator complying with UL 325.
    - 1. 24 volt circuit.
    - 2. Surface mounted, at interior door jamb.
    - 3. Entrapment Protection Devices: Provide sensing devices and safety mechanisms complying with UL 325.
      - a. Primary Device: Provide electric sensing edge, wireless sensing, or NEMA 4X photo eye sensors as required with momentary-contact control device.
  - D. Safety Edge: Located at bottom of sectional door panel, full width; electro-mechanical sensitized type, wired to stop and reverse door direction upon striking object; hollow neoprene covered to provide weatherstrip seal.

### PART 3 EXECUTION

#### 3.1 EXAMINATION

- A. Verify existing conditions before starting work.
  - B. Verify that opening sizes and tolerances are acceptable.
- 3.2 INSTALLATION
- A. Install doors and frames in accordance with manufacturer's instructions and related requirements of specified door and frame standards or custom guidelines indicated.
  - B. Install fire rated units in accordance with NFPA 80.
- 3.3 SCHEDULE
- A. Refer to Door and Frame Schedule on the drawings.

### END OF SECTION

#### SECTION 08 14 33 - STILE AND RAIL WOOD DOORS

### PART 1 GENERAL

#### 1.1 SUBMITTALS

- A. Product Data: Indicate stile and rail core materials and construction; veneer species, type and characteristics.
  - B. Shop Drawings: Illustrate door opening criteria, elevations, sizes, types, swings, special beveling, factory finishing criteria, identify cutouts for glazing.
  - C. Samples: Submit two samples of door construction, 12 by 12 inches in size cut from bottom corner of door.
- 1.2 WARRANTY
- A. Interior Doors:
    - 1. Provide manufacturer's warranty for five years.
    - 2. Provide installer's special warranty covering workmanship and installation for two years.
  - B. Include coverage for warping beyond specified installation tolerances and defective materials.

PART 1 GENERAL

1.1 SUBMITTALS

- A. Product Data: Provide component dimensions, describe components within assembly, anchorage and fasteners, glass and infill, and internal drainage details.
- B. Shop Drawings: Indicate system dimensions, framed opening requirements and tolerances, affected related work, expansion and contraction joint location and details, and field welding required.
- C. Samples: Submit two samples 12 inches long illustrating finished aluminum surface, glass, glazing materials.
- D. Design Data: Provide framing member structural and physical characteristics, engineering calculations, and dimensional limitations.
- E. Hardware Schedule: Complete itemization of each item of hardware to be provided for each door, cross-referenced to door identification numbers in Contract Documents.

1.2 QUALITY ASSURANCE

- A. Designer Qualifications: Design structural support framing components under direct supervision of a Professional Structural Engineer experienced in design of this work and licensed at Michigan.

1.3 WARRANTY

- A. Correct defective Work within a five year period after Date of Substantial Completion.
- B. Provide 20 year manufacturer warranty against excessive degradation of exterior finish. Include provision for replacement of units with excessive fading, chalking, or flaking.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Basis of Design Manufacturer:
  - 1. Basis of Design:
    - a. Framing: Kawneer Trifab 451T, Thermally Broken, Front Glazed Framing System.
    - b. Doors: Kawneer 350 Medium Stile.

2.2 STOREFRONT SYSTEM

- A. Aluminum-Framed Storefront: Factory fabricated, factory finished aluminum framing members with infill, and related flashings, anchorage and attachment devices.

- 1. Finish: Superior performing organic coatings.
  - a. Factory finish all surfaces that will be exposed in completed assemblies.
  - b. Touch-up surfaces out during fabrication so that no natural aluminum is visible in completed assemblies, including joint edges.
- 2. Finish Color: Black.
- B. Design Requirements: Design and size components to withstand the specified load requirements without damage or permanent set, when tested in accordance with ASTM E330/E330M, using loads 1.5 times the design wind loads and 10 second duration of maximum wind load.
  - 1. Design Wind Loads: Comply with requirements of applicable code.
  - 2. Member Deflection: Limit member deflection to L/175 of clear span, 3/4 inch total, or to flexure limit of glass in any direction, whichever is less, with full recovery of glazing materials.
- C. Water Penetration Resistance on Manufactured Assembly: No uncontrolled water on interior face, when tested in accordance with ASTM E331 at pressure differential of 8 psf.
  - 1. Fastener Heads must be seated and sealed against sill flashing on any fasteners that penetrate through the sill flashing.
- D. Air Leakage Laboratory Test: Maximum of 0.06 cu ft/min sq ft of wall area, when tested in accordance with ASTM E283 at 6.24 psf pressure differential across assembly.
- E. Condensation Resistance Factor of Framing: 60, minimum, measured in accordance with AAMA 1503.
- F. Overall U-factor Including Glazing: 0.40 Btu/(hr sq ft deg F), maximum.

2.3 COMPONENTS

- A. Aluminum Framing Members: Tubular aluminum sections, thermally broken at exterior applications, with drainage holes and internal weep drainage system.
  - 1. Structurally Reinforced Members: Extruded aluminum with internal reinforcement of structural steel member.
- B. Glazing: As specified in Section 08 80 00.
- C. Swing Doors: Glazed aluminum.
  - 1. Thickness: 1-3/4 inches.
  - 2. Top Rail: 3.5 inches wide.
  - 3. Vertical Stiles: 3.5 inches wide.
  - 4. Bottom Rail: 10 inches wide.
  - 5. Finish: Same as storefront.
- 2.4 MATERIALS
  - A. Extruded Aluminum: ASTM B221 (ASTM B221M).
  - B. Sheet Aluminum: ASTM B209 (ASTM B209M).
  - C. Fasteners: Stainless steel.
  - D. Exposed Flashings: Aluminum sheet, 20 gage, 0.032 inch minimum thickness; finish to match framing members.
- 2.5 FINISHES
  - A. Superior Performing Organic Coatings System: Manufacturer's standard multi-coat superior performing organic coatings system complying with AAMA 2605, including at least 70 percent polyvinylidene fluoride (PVDF) resin, and at least 80 percent of aluminum extrusion and panels surfaces having minimum total dry film thickness (DFT) of 1.2 mils, 0.0012 inch.
  - B. Touch-Up Materials: As recommended by coating manufacturer for field application.

2.6 HARDWARE

- A. For each door, include weatherstripping.
- B. Door Hardware: As specified in Section 08 71 00, except as specified in this Section.
- C. Weatherstripping: Wool pile, continuous and replaceable; provide on all doors.
- D. Finishing: Apply factory finish to all surfaces that will be exposed in completed assemblies, including exposed fasteners.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install wall system in accordance with manufacturer's instructions.
- B. Attach to structure to permit sufficient adjustment to accommodate construction tolerances and other irregularities.
- C. Align assembly plumb and level, free of warp or twist. Maintain assembly dimensional tolerances, aligning with adjacent work.

END OF SECTION

SECTION 08 44 26 - STRUCTURAL GLASS CURTAIN WALLS

PART 1 GENERAL

1.1 SUBMITTALS

- A. Product Data: Manufacturer's product literature on each component of system.
  - B. Shop Drawings: Indicate system dimensions, framed opening requirements and tolerances, anticipated deflection under load, affected related work, drainage network, expansion and contraction joint location and details, and field welding required.
  - C. Shop Drawings: Provide details of proposed structural sealant glazing (SSG) and weather sealant joints indicating dimensions, materials, bite, thicknesses, profile, and support framing.
- 1.2 QUALITY ASSURANCE
- A. Designer Qualifications: Design structural support framing components under direct supervision of a Professional Structural Engineer experienced in design of this work and licensed at Michigan.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Basis of Design Manufacturer:
  - 1. Tubelite, Inc.: Product 400 4-Side SSG Cassette: www.tubeliteinc.com.
  - 2. Substitutions: See Section 01 60 00 - Product Requirements.

2.2 CURTAIN WALL

- A. Structural Glass Curtain Wall: Frameless, fully tempered glass, structural sealant glazed on four sides, with structural supports as indicated on drawings.
  - 1. Glass for Main Part of Envelope: Monolithic (single).
  - 2. Glass Tint: Clear.
- B. Construction: Fabricate completely in shop or factory, to fit spaces available, eliminate noises caused by wind and thermal movement, and prevent vibration harmonics.
- 4. Perimeter Interface With Adjacent Construction: Provide concealed perimeter frame; fit neatly to adjacent construction; if necessary, take field measurements before beginning fabrication.
- 5. Provide anchors, fittings, hardware, and accessories as required for proper and complete installation.

2.3 PERFORMANCE REQUIREMENTS

- A. Structural: Design and size components to withstand the following load requirements without damage or permanent set.
  - 1. Design Wind Loads: Comply with requirements of ASCE 7 and AAMA TIR-A15
  - 2. Movement: Accommodate the following movement without damage to components or deterioration of seals:
    - a. Expansion and contraction caused by 180 degrees F surface temperature.
    - b. Expansion and contraction caused by cycling temperature range of 170 degrees F over a 12 hour period.
    - c. Movement of curtain wall relative to perimeter framing.
    - d. Deflection of structural support framing, under permanent and dynamic loads.
- 3. Structural Sealant Glazing (SSG) System: For individual glass lites, design framing members to not exceed a deflection normal to wall of L/175 between supports with 3/4 inch maximum, and a deflection parallel to wall of L/360 with 1/8 inch maximum, whichever is less.
- 4. Structural Glazing Adhesive: Limit working stress to 20 psi.
- B. Water Penetration Resistance on Manufactured Assembly: No uncontrolled water on interior face when tested in accordance with ASTM E331 at test pressure differential of 15 lbf/sq ft.
- C. Air Leakage Laboratory Test: Maximum of 0.06 cu ft/min/sq ft of wall area, when tested in accordance with ASTM E283 at 6.27 pounds per square foot pressure differential across assembly.

2.4 MATERIALS

- A. Tempered Glass: Tempered to minimum stress level of 16,000 pounds per square inch.
    - 1. Rollerwave Distortion: Not more than average of 0.0007 inch peak to valley, with maximum sag at leading and trailing edges of 0.01 inch.
  - B. Fittings and Exposed Fasteners: Stainless steel, Type 316 alloy, with bright mirror polished finish.
  - C. Structural Sealant Glazing (SSG) Adhesive: Neutral curing, silicone sealant formulated for SSG applications in compliance with ASTM C1184 and structural glazing industry guidelines, ASTM C1401.
  - 1. SSG adhesive in compliance with ASTM C920, Type M - Multicomponent, Grade NS, Class 50, Use NT, G, and A.
  - 2. Ultimate Tensile Strength: Minimum of 50 psi as determined by test method ASTM C1135 under the following conditions.
    - a. Exposure to air temperatures of 190 degrees F and minus 20 degrees F.
    - b. Water Immersion for seven days, minimum.
    - c. Exposure to weathering for 5,000 hours, minimum.
  - 3. Sealant Design Tensile Strength: 20 psi, maximum.
  - 4. Hardness: 20 to 60 with Type A-2 durometer in compliance with test method ASTM C661.
  - 5. SSG sealant tested for compatibility with glazing accessories in compliance with ASTM C1087, tested for accelerated weathering in compliance with ASTM C793, and in compliance with insulating glass secondary sealant design standards of ASTM C1249.
- D. Concealed Fasteners, Anchors, and Frames: Stainless steel.

2.5 FINISHES

- A. Apply one coat of bituminous paint to concealed aluminum and steel surfaces in contact with cementitious or dissimilar materials.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install curtain wall system in accordance with manufacturer instructions.
  - B. Attach to structure to permit sufficient adjustment to accommodate construction tolerances and other irregularities.
  - C. Structural Sealant Glazing (SSG) Adhesive: Install structural sealant glazing adhesive and weatherseal sealant in accordance with manufacturer's instructions.
- 3.2 FIELD QUALITY CONTROL
- A. Provide services of curtain wall manufacturer's field representative to observe for proper installation of system and submit report.
  - B. Repair or replace curtain wall components that have failed designated field testing, and retest to verify performance complies with specified requirements.
- 3.3 CLEANING
- A. Remove protective material from prefinished metal surfaces.
  - B. Wash down surfaces with a solution of mild detergent in warm water, applied with soft, clean wiping cloths, and take care to remove dirt from corners and to wipe surfaces clean.
  - C. Remove excess sealant by moderate use of mineral spirits or other solvent acceptable to structural glass manufacturer.

END OF SECTION

SECTION 08 51 13 - ALUMINUM WINDOWS

PART 1 GENERAL

1.1 SUBMITTALS

- A. Product Data: Provide component dimensions, information on glass and glazing, internal drainage details, and descriptions of hardware and accessories.
  - B. Shop Drawings: Indicate opening dimensions, elevations of different types, framed opening tolerances, method for achieving air and vapor barrier seal to adjacent construction, anchorage locations, and installation requirements.
  - C. Samples: Submit two samples, 12 by 12 inch in size illustrating typical corner construction, accessories, and finishes.
  - D. Grade Substantiation: Prior to submitting shop drawings or starting fabrication, submit one of the following showing compliance with specified grade:
    - 1. Evidence of AAMA Certification.
    - 2. Evidence of WDMA Certification.
    - 3. Evidence of CSA Certification.
    - 4. Test report(s) by independent testing agency itemizing compliance and acceptable to authorities having jurisdiction.
    - E. Test Reports: Prior to submitting shop drawings or starting fabrication, submit test report(s) by independent testing agency showing compliance with performance requirements in excess of those prescribed by specified grade.
- 1.2 WARRANTY
- A. Correct defective Work within a five year period after Date of Substantial Completion.
  - B. Provide five year manufacturer warranty against failure of glass seal on insulating glass units, including interpane dusting or misting. Include provision for replacement of failed units.
  - C. Provide 20 year manufacturer warranty against excessive degradation of exterior finish. Include provision for replacement of units with excessive fading, chalking, or flaking.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Basis of Design Manufacturer [Type W.6]:

- 1. Allied Window Performance, Panels; Product Monumental MOL: www.alliedwindow.com.

B. Basis of Design Manufacturer [Type W.5A-C]:

- 1. Quaker; Product H650: www.quakercommercialwindows.com.
  - a. Type A - Window Series: Fixed-In-Place Single Hung Window.
  - b. Type B - Window Series: Fixed-In-Place Single Hung Window.
  - c. Type C - Window Series: Backset Fixed Window.
- C. Basis of Design Manufacturer [Type W.1]:
  - 1. Quaker; Product H650: www.quakercommercialwindows.com.
    - a. Window Series: Backset Fixed Transom.
  - D. Substitutions: See Section 01 6000 - Product Requirements.

2.2 ALUMINUM WINDOWS

- A. Windows: Tubular aluminum sections, factory fabricated, factory finished, thermally broken, vision glass, related flashings, anchorage and attachment devices.
  - 1. Frame Depth: 4-1/8 inches.
  - 2. Provide units factory glazed.
  - 3. Fabrication: Joints and corners flush, hairline, and weatherproof, accurately fitted and secured; prepared to receive anchors; fasteners and attachments concealed from view; reinforced as required for operating hardware and imposed loads.
  - 4. Movement: Accommodate movement between window and perimeter framing and deflection of lintel, without damage to components or deterioration of seals.
  - 5. System Internal Drainage: Drain to the exterior by means of a weep drainage network any water entering joints, condensation occurring in glazing channel, and migrating moisture occurring within system.
  - 6. Thermal Movement: Design to accommodate thermal movement caused by 180 degrees F surface temperature without buckling stress on glass, joint seal failure, damaging loads on structural elements, damaging loads on fasteners, reduction in performance or other detrimental effects.
- B. Fixed, Non-Operable Type:
  - 1. Construction: Thermally broken.
  - 2. Exterior Finish: Superior performing organic coatings.
  - 3. Interior Finish: Superior performing organic coatings.
- C. Storm Type [Type - W.6]:
  - 1. Construction: Non-thermally broken.
  - 2. Exterior Finish: Superior performing organic coatings.
  - 3. Interior Finish: Superior performing organic coatings.

2.3 PERFORMANCE REQUIREMENTS

- A. Grade: AAMA/WDMA/CSA 1011.S.2/A440 requirements for specific window type:
  - 1. Performance Class (PC): AW.
  - 2. Performance Grade (PG): Equivalent to or greater than specified design pressure.
- B. Design Pressure (DP): In accordance with applicable codes and as indicated in Structural Drawings.
- C. Member Deflection: Limit member deflection to flexure limit of glass in any direction, with full recovery of glazing materials.
- D. Water Leakage: No uncontrolled leakage on interior face when tested in accordance with ASTM E331 at differential pressure of 12.11 psf.
- E. Air Leakage: Maximum of 0.1 cu ft/min sq ft per unit area of outside frame dimension, with 6.27 psf differential pressure when tested in accordance with ASTM E283/E283M.
- F. Condensation Resistance Factor of Frame: 70, measured in accordance with AAMA 1503.
- G. Overall Thermal Transmittance (U-value): 0.35, maximum, including glazing, measured on window sizes required for this project.

2.4 COMPONENTS

- A. Glazing: As specified in Section 08 80 00.
- B. Fasteners: Stainless steel.
- C. Simulated Divided Lites: As indicated in drawings.

2.5 MATERIALS

- A. Extruded Aluminum: ASTM B221 (ASTM B221M), 6063 alloy, T6 temper.
- B. Sheet Aluminum: ASTM B209 (ASTM B209M), 5005 alloy, H12 or H14 temper.

2.6 FINISHES

- A. Superior Performing Organic Coatings: AAMA 2605 multiple coat, thermally cured polyvinylidene fluoride system.
  - 1. Polyvinylidene fluoride (PVDF) multi-coat thermoplastic fluoropolymer coating system, including minimum 70 percent PVDF color topcoat and minimum total dry film thickness of 0.9 mil; color and gloss as selected from manufacturer's standard line.
- B. Apply one coat of bituminous coating to concealed aluminum surfaces in contact with dissimilar materials.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install windows in accordance with manufacturer's instructions.
- B. Install window assembly in accordance with AAMA/WDMA/CSA 1011.S.2/A440.
  - 1. Comply with ASTM E2112 for installation of weather barrier materials in conjunction with installation of windows.
- C. Install windows in accordance with ASTM E2112.
- D. Align window plumb and level, free of warp or twist. Maintain dimensional tolerances and alignment with adjacent work.
- E. Set sill members and sill flashing in continuous bead of sealant.
- F. Install glass in accordance with requirements specified in Section 08 80 00.

3.2 FIELD QUALITY CONTROL

- A. Provide services of aluminum window manufacturer's field representative to observe for proper installation of system and submit report.
- B. Repair or replace fenestration components that have failed designated field testing, and retest to verify performance complies with specified requirements.

3.3 ADJUSTING

- A. Adjust hardware for smooth operation and secure weathertight closure.

END OF SECTION

SECTION 08 71 00 - DOOR HARDWARE

PART 1 GENERAL

1.1 SUMMARY

- A. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.
  - 1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
  - 2. ICC/IBC - International Building Code.
  - 3. NFPA 70 - National Electrical Code.
  - 4. NFPA 80 - Fire Doors and Windows.
  - 5. NFPA 101 - Life Safety Code.
  - 6. NFPA 105 - Installation of Smoke Door Assemblies.
  - 7. Michigan Building Code 2015, Local Amendments.
- B. Standards: All hardware specified herein shall comply with the following industry standards as applicable. Any undated reference to a standard shall be interpreted as referring to the latest edition of that standard:
  - 1. ANSI/BHMA Certified Product Standards - A156 Series.
  - 2. UL10C - Positive Pressure Fire Tests of Door Assemblies.
  - 3. ANSI/UL 294 - Access Control System Units.
  - 4. UL 305 - Panic Hardware.
  - 5. ANSI/UL 437- Key Locks.

1.2 SUBMITTALS

- A. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, operational descriptions and finishes.
- B. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing, fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.

- 1. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."

- 2. Organization: Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening. Organize door hardware sets in same order as in the Door Hardware Sets at the end of Part 3. Submittals that do not follow the same format and order as the Door Hardware Sets will be rejected and subject to resubmission.
- 3. Content: Include the following information:
  - a. Type, style, function, size, label, hand, and finish of each door hardware item.
  - b. Manufacturer of each item.
  - c. Fasteners and other pertinent information.
  - d. Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
  - e. Explanation of abbreviations, symbols, and codes contained in schedule.
  - f. Mounting locations for door hardware.
  - g. Door and frame sizes and materials.
  - h. Warranty information for each product.
- 4. Submittal Sequence: Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.
- 5. Keying Schedule: After a keying meeting with the owner has taken place prepare a separate keying schedule detailing final instructions. Submit the keying schedule in electronic format. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner must approve submitted keying schedule prior to the ordering of permanent cylinders/cores.
- D. Operating and Maintenance Manuals: Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Procedures.

1.3 QUALITY ASSURANCE

- A. Manufacturers Qualifications: Engage qualified manufacturers with a minimum 5 years of documented experience in producing hardware and equipment similar to that indicated for this Project and that have a proven record of successful in-service performance.
- B. Certified Products: Where specified, products must maintain a current listing in the Builders Hardware Manufacturers Association (BHMA) Certified Products Directory (CPD).
- C. Installer Qualifications: A minimum 3 years documented experience installing both standard and electrified door hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.
- D. Door Hardware Supplier Qualifications: Experienced commercial door hardware distributors with a minimum 5 years documented experience supplying both mechanical and electromechanical hardware installations comparable in material, design, and extent to that indicated for this Project. Supplier recognized as a factory direct distributor by the manufacturers of the primary materials with a warehousing facility in Project's vicinity. Supplier to have on staff a certified Architectural Hardware Consultant (AHC) available during the course of the Work to consult with Contractor, Architect, and Owner concerning both standard and electromechanical door hardware and keying.
- E. Source Limitations: Obtain each type and variety of door hardware specified in this section from a single source unless otherwise indicated.

- 1. Electrified modifications or enhancements made to a source manufacturer's product line by a secondary or third party source will not be accepted.
- F. Each unit to bear third party permanent label demonstrating compliance with the referenced standards.
- G. Keying Conference: Conduct conference to comply with requirements in Division 01 Section "Project Meetings." Keying conference to incorporate the following criteria into the final keying schedule document:
  - 1. Function of building, purpose of each area and degree of security required.
  - 2. Plans for existing and future key system expansion.
  - 3. Requirements for key control storage and software.
  - 4. Installation of permanent keys, cylinder cores and software.
  - 5. Address and requirements for delivery of keys.
- H. At completion of installation, provide written documentation that components were applied to manufacturer's instructions and recommendations and according to approved schedule.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.
- B. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.
- C. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".

1.5 COORDINATION

- A. Templates: Obtain and distribute to the parties involved templates for doors, frames, and other work specified to be factory prepared for installing standard and electrified hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing hardware to comply with indicated requirements.
- B. Door and Frame Preparation: Doors and corresponding frames are to be prepared, reinforced and pre-wired (if applicable) to receive the installation of the specified electrified, monitoring, signaling and access control system hardware without additional in-field modifications.

1.6 WARRANTY

- A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.
- B. Warranty Period: Unless otherwise indicated, warranty shall be one year from date of Substantial Completion.

1.7 MAINTENANCE SERVICE

- A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

PART 2 PRODUCTS

2.1 SCHEDULED DOOR HARDWARE

- A. General: Provide door hardware for each door to comply with requirements in Door Hardware Sets and each referenced section that products are to be supplied under.
- B. Designations: Requirements for quantity, item, size, finish or color, grade, function, and other distinctive qualities of each type of door hardware are indicated in the Door Hardware Sets at the end of Part 3. Products are identified by using door hardware designations, as follows:
  - 1. Named Manufacturer's Products: Product designation and manufacturer are listed for each door hardware type required for the purpose of establishing requirements. Manufacturers' names are abbreviated in the Door Hardware Schedule.
  - C. Substitutions: Requests for substitution and product approval for inclusive mechanical and electromechanical door hardware in compliance with the specifications must be submitted in writing and in accordance with the procedures and time frames outlined in Division 01, Substitution Procedures. Approval of requests is at the discretion of the architect, owner, and their designated consultants.

2.2 HANGING DEVICES

- A. Continuous Geared Hinges: ANSI/BHMA A156.26 Grade 1-600 continuous geared hinge, with minimum 0.120-inch thick extruded 6063-T6 aluminum alloy hinge leaves and a minimum overall width of 4 inches. Hinges are non-handed, reversible and fabricated to template screw locations. Factory trim hinges to suit door height and prepare for electrical cut-outs.

2.3 DOOR OPERATING TRIM

- A. Flush Bolts and Surface Bolts: Provide products conforming to ANSI/BHMA A156.3 and A156.16, Grade 1.
  - 1. Flush bolts to be furnished with top rod of sufficient length to allow bolt retraction device location approximately six feet from the floor.
  - 2. Furnish dust proof strikes for bottom bolts.
  - 3. Surface bolts to be minimum 8" in length and U.L. listed for labeled fire doors and U.L. listed for windstorm components where applicable.
  - 4. Provide related accessories (mounting brackets, strikes, coordinators, etc.) as required for appropriate installation and operation.
- B. Door Push Plates and Pulls: ANSI/BHMA A156.6 door pushes and pull units of type and design specified in the Hardware Sets. Coordinate and provide proper width and height as required where conflicting hardware dictates.
  - 1. Push/Pull Plates: Minimum .050 inch thick, size as indicated in hardware sets, with beveled edges, secured with exposed screws unless otherwise indicated.
  - 2. Door Pull and Push Bar Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door unless otherwise indicated.
  - 3. Fasteners: Provide manufacturer's designated fastener type as indicated in Hardware Sets.

2.4 CYLINDERS AND KEYING

- A. General: Cylinder manufacturer to have minimum (10) years experience designing secured master key systems and have on record a published security keying system policy.
- B. Cylinder Types: Original manufacturer cylinders able to supply the following cylinder formats and types:
  - 1. Threaded mortise cylinders with rings and cams to suit hardware application.
  - 2. Rim cylinders with back plate, flat-type vertical or horizontal tailpiece, and raised trim ring.
  - 3. Bored or cylindrical lock cylinders with tailpieces as required to suit locks.
  - 4. Tubular deadlocks and other auxiliary locks.
  - 5. Mortise and rim cylinder collars to be solid and recessed to allow the cylinder face to be flush and be free spinning with matching finishes.
  - 6. Keyway: Manufacturer's Standard.
- C. Large Format Interchangeable Cores: Provide removable cores (LFC) as specified, core insert, removable by use of a special key, and for use with only the core manufacturer's cylinder and door hardware.
- D. Patented Cylinders: ANSI/BHMA A156.5, Grade 1 Certified Products Directory (CPD) listed cylinders employing a utility patented and restricted keyway requiring the use of a patented key. Cylinders are to be protected from unauthorized manufacture and distribution by manufacturer's United States patents. Cylinders are to be factory keyed with owner having the ability for on-site original key cutting.
  - 1. Patented key systems shall not be established with products that have an expired patent. Expired systems shall only be specified and supplied to support existing systems.
- E. Keying System: Each type of lock and cylinders to be factory keyed.

2.5 MECHANICAL LOCKS AND LATCHING DEVICES

- A. Mortise Locksets, Grade 1 (Heavy Duty): ANSI/BHMA A156.13, Series 1000, Operational Grade 1 Certified Products Directory (CPD) listed. Locksets are to be manufactured with a corrosion resistant steel case and be field-reversible for handing without disassembly of the lock body.
- 2.6 AUXILIARY LOCKS
  - A. Narrow Case Deadlocks and Deadlatches: ANSI/BHMA 156.13 Series 1000 Grade 1 narrow case deadlocks and deadlatches for swinging or sliding door applications. All functions shall be manufactured in a single sized case formed from 12 gauge minimum, corrosion resistant steel (option for fully stainless steel case and components). Provide minimum 2 7/8" throw laminated stainless steel bolt. Bottom rail deadlocks to have 3/8" diameter bolts.

2.7 DOOR CLOSERS

- A. All door closers specified herein shall meet or exceed the following criteria:
  - 1. General: Door closers to be from one manufacturer, matching in design and style, with the same type door preparations and templates regardless of application or spring size. Closers to be non-handed with full sized covers.
  - 2. Standards: Closers to comply with UL-10C for Positive Pressure Fire Test and be U.L. listed for use of fire rated doors.
  - 3. Size of Units: Comply with manufacturer's written recommendations for sizing of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Where closers are indicated for doors required to be accessible to the Americans with Disabilities Act, provide units complying with ANSI ICC/A117.1.
  - 4. Closer Arms: Provide heavy duty, forged steel closer arms unless otherwise indicated in Hardware Sets.
  - 5. Closers shall not be installed on exterior or corridor side of doors; where possible install closers on door for optimum aesthetics.
  - 6. Closer Accessories: Provide door closer accessories including custom templates, special mounting brackets, spacers and door plates as required for proper installation. Provide through-bolt and security type fasteners as specified in the hardware sets.
- B. Door Closers, Surface Mounted (Heavy Duty): ANSI/BHMA A156.4, Grade 1 Certified Products Directory (CPD) listed surface mounted, heavy duty door closers with complete spring power adjustment, sizes 1 thru 6; and fully operational adjustable according to door size, frequency of use, and opening force. Closers to be rack and pinion type, one piece cast iron or aluminum alloy body construction, with adjustable backcheck and separate non-critical valves for closing sweep and latch speed control. Provide non-handed units standard.
  - 1. Heavy duty surface mounted door closers shall have a 30-year warranty.

2.8 DOOR STOPS AND HOLDERS

- A. General: Door stops and holders to be of type and design as specified below or in the Hardware Sets.
  - B. Door Stops and Bumpers: ANSI



AMY BAKER  
ARCHITECT  
1012 OWANA BOULEVARD  
ROYAL OAK, MI 48067  
(248) 931-3055  
amy@amybakearchitect.com

**SEAL**

THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL THE SEAL AND SIGNATURE OF THE RESPONSIBLE REGISTRANT APPEARS ON THE DRAWING, AND PROPER PERMIT FORMS AND RELATED FEES ARE TRANSMITTED BY THE OWNER, OWNER'S AGENT OR CONTRACTOR TO THE AUTHORITY HAVING JURISDICTION.

**CONSULTANT**

**CLIENT**

**PROJECT**

2021.A03  
1315 Broadway

1315 Broadway  
Detroit, Michigan 48226

**ISSUANCE**

2023-08-21 HDC SUBMISSION

**REVISIONS**

**TITLE**

**SPECIFICATIONS**

**SHEET**

**G4-06**

1. Extend colors to surface edges; colors may change at any edge as directed by Architect.

2. In finished areas, finish pipes, ducts, conduit, and equipment the same color as the wall/ceiling under which they are mounted.

**2.2 PAINT SYSTEMS - INTERIOR**

**A. LATEX PAINTS**

- Paint I-OP-3L - Interior Latex Enamel.  
a. Products:
  - 1) PPG Paints Speedhide Zero Interior Latex.
  - 2) Sherwin-Williams ProMar 200 Zero VOC Interior Latex.
  - 3) Benjamin Moore Ultra Spec 500.

**B. ACRYLIC PAINTS**

- Paint MI-OP-3LA - Acrylic Enamel.  
a. Products:
  - 1) PPG Paints Pitt-Tech Plus WB DTM Industrial Enamel, 90-1210 Series, Semi-Gloss.
  - 2) Sherwin-Williams Pro Industrial DTM Acrylic, B66 Series, Semi-Gloss.
  - 3) Benjamin Moore Super Spec HP DTM Acrylic, Semi-Gloss.
- Paint WI-OP-3LA - Acrylic Enamel.  
a. Products:
  - 1) PPG Paints Speedhide Zero Interior Zero VOC Latex, 6-4510XI, Semi-Gloss.
  - 2) Sherwin-Williams Pro Industrial Acrylic, B66 Series, Semi-Gloss.
  - 3) Benjamin Moore Ultra Spec 500, 539 Series, Semi-Gloss.

**2.3 PRIMERS**

**A. Primers:** Provide the following unless other primer is required or recommended by manufacturer of top coats.

- Interior Drywall Primer Sealer.  
a. Products:
  - 1) PPG Paints Speedhide Zero Interior Zero VOC Latex, 6-4510XI, Semi-Gloss.
  - 2) Sherwin-Williams Pro Industrial Acrylic, B66 Series, Semi-Gloss.
  - 3) Benjamin Moore Ultra Spec 500, 539 Series, Semi-Gloss.

**1. Interior Drywall Primer Sealer.**

- PPG Paints Speedhide Zero Interior Zero VOC Latex, 6-4900XI.
- Sherwin-Williams ProMar 200 Zero VOC Interior Latex Primer, B28 Series.
- Benjamin Moore Ultra Spec 500 Primer 534.

**2. Interior Rust-Inhibitive Water Based Primer.**

- Products:
  - 1) PPG Paints Pitt-Tech Plus Interior/Exterior DTM Waterborne Acrylic Primer/Finish, 4020 PF Series.
  - 2) Sherwin-Williams Pro-Cryl Universal Waterbased Primer.
  - 3) Benjamin Moore Super Spec HP Metal Primer, P04.

**3. Interior Water Based Primer for Galvanized Metal.**

- Products:
  - 1) PPG Paints Pitt-Tech Plus Interior/Exterior DTM Waterborne Acrylic Primer/Finish, 4020 PF Series.
  - 2) Sherwin-Williams Pro-Cryl Universal Waterbased Primer.
  - 3) Benjamin Moore Super Spec HP Metal Primer, P04.

**4. Latex Primer for Interior Wood.**

- Products:
  - 1) PPG Paints; Seal Grip Gripper Interior/Exterior 100% Acrylic Universal Primer/Sealer.
  - 2) Benjamin Moore Fresh Start High-Hiding All Purpose Acrylic Primer.
  - 3) Sherwin-Williams Premium Wall and Wood Primer.

**2.4 ACCESSORY MATERIALS**

**A. Accessory Materials:** Provide primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials as required for final completion of painted surfaces.

**PART 3 EXECUTION**

**3.1 EXAMINATION**

**A. Do not begin application of paints and finishes until substrates have been adequately prepared.**

**B. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application.**

**C. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces is below the following maximums:**

- Interior Wood: 15 percent, measured in accordance with ASTM D4442.

**3.2 PREPARATION**

**A. Clean surfaces thoroughly and correct defects prior to application.**

**B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.**

**C. Remove or repair existing paints or finishes that exhibit surface defects.**

**D. Remove or mask surface appearances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces for finishing.**

**E. Seal surfaces that might cause bleed through or staining of topcoat.**

**F. Remove mildew from impervious surfaces by scrubbing with solution of tetry-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.**

**G. Aluminum:** Remove surface contamination and oils and wash with solvent according to SSPC-SP 1.

**H. Galvanized Surfaces:**

- Remove surface contamination and oils and wash with solvent according to SSPC-SP 1.
- Prepare surface according to SSPC-SP 2.

**I. Ferrous Metal:**

- Solvent clean according to SSPC-SP 1.
- Shop-Primed Surfaces: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces.
- Remove rust, loose mill scale, and other foreign substances using methods recommended in writing by paint manufacturer and blast cleaning according to SSPC-SP 6 "Commercial Blast Cleaning". Protect from corrosion until coated.

**J. Exterior Wood Surfaces to Receive Opaque Finish:** Remove dust, grit, and foreign matter. Seal knots, pitch streaks, and sappy sections. Fill nail holes with tinted exterior caulking compound after prime coat has been applied. Back prime concealed surfaces before installation.

**K. Metal Doors to be Painted:** Prime metal door top and bottom edge surfaces.

**3.3 APPLICATION**

**A. Apply products in accordance with manufacturer's written instructions.**

**B. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.**

**C. Apply each coat to uniform appearance.**

**D. Dark Colors and Deep Clear Colors:** Regardless of number of coats specified, apply additional coats until complete hide is achieved.

**E. Sand wood and metal surfaces lightly between coats to achieve required finish.**

**F. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.**

**3.4 SCHEDULE**

**A. Paint ME-OP-2L - Ferrous Metals, Primed, Latex, 2 Coat:**

- Touch-up with rust-inhibitive primer recommended by top coat manufacturer.
- Semi-gloss: Two coats of light industrial coating.

**B. Paint MgE-OP-3L - Galvanized Metals, Latex, 3 Coat:**

- One coat galvanize primer.
- Semi-gloss: Two coats of light industrial coating.

**C. Paint WE-OP-3L - Wood, Opaque, Latex, 3 Coat:**

- One coat of latex primer sealer.
- Satin: Two coats of latex enamel.

**END OF SECTION**

**SECTION 09 91 23 - INTERIOR PAINTING**

**PART 1 GENERAL**

**1.1 SUBMITTALS**

**A. Product Data:** Provide complete list of products to be used.

**B. Samples:** Submit three paper "draw down" samples, 8-1/2 by 11 inches in size, illustrating range of colors available for each finishing product specified.

**1.2 FIELD CONDITIONS**

**A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.**

**B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.**

**C. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.**

**D. Apply each coat to uniform appearance.**

**E. Sand wood and metal surfaces lightly between coats to achieve required finish.**

**F. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.**

**END OF SECTION**

**SECTION 09 96 00 - HIGH PERFORMANCE COATINGS**

**A. Provide completed assemblies complying with ASTM C840 and GA-216.**

**2.2 BOARD MATERIALS**

**A. Gypsum Wallboard:** Paper-faced gypsum panels as defined in ASTM C1396/C1396M; sizes to minimize joints in place; ends square cut.

- Application: Use for vertical surfaces and ceilings, unless otherwise indicated.
- Mold Resistance: Score of 10, when tested in accordance with ASTM D3273.
  - Mold resistant board is required in areas subject to wetting, steam, or high humidity.

**B. Ceiling Board:** Special sag resistant gypsum ceiling board as defined in ASTM C1396/C1396M; sizes to minimize joints in place; ends square cut.

**C. Exterior Soffit Board:** Exterior gypsum soffit board as defined in ASTM C1396/C1396M; sizes to minimize joints in place; ends square cut.

- Application: Ceilings and soffits in protected exterior areas, unless otherwise indicated.
- Regular Type Thickness: 5/8 inch.

**2.3 ACCESSORIES**

**A. Finishing Accessories:** ASTM C1047, galvanized steel or rolled zinc, unless noted otherwise.

- Types: As detailed or required for finished appearance.
- Special Shapes: In addition to conventional corner bead and control joints, provide U-bead, L-bead, LC-bead, and Casing Bead at exposed panel edges.

**B. Joint Materials:** ASTM C475/C475M and as recommended by gypsum board manufacturer for project conditions.

**PART 3 EXECUTION**

**3.1 BOARD INSTALLATION**

**A. Comply with ASTM C840 and manufacturer's instructions. Install to minimize butt end joints, especially in highly visible locations.**

**3.2 INSTALLATION OF TRIM AND ACCESSORIES**

**A. Control joints:** Place control joints consistent with lines of building spaces and as indicated.

- Not more than 30 feet apart on walls and ceilings over 50 feet long.

**3.3 JOINT TREATMENT**

**A. Finish gypsum board in accordance with levels defined in ASTM C840, as follows:**

- Level 5: Walls and ceilings to receive semi-gloss or gloss paint finish and other areas specifically indicated.
- Level 4: Walls and ceilings to receive paint finish or wall coverings, unless otherwise indicated.
- Level 3: Walls to receive textured wall finish.
- Level 2: In utility areas, behind cabinetry, and on backing board to receive tile finish.
- Level 1: Fire-resistance-rated wall areas above finished ceilings, whether or not accessible in the completed construction.

**END OF SECTION**

**SECTION 09 91 13 - EXTERIOR PAINTING**

**PART 1 GENERAL**

**1.1 SUBMITTALS**

**A. Product Data:** Provide complete list of products to be used, with the following information for each:

- Manufacturer's name, product name and/or catalog number, and general product category (e.g. "alkyd enamel").
- Samples: Submit three paper "draw down" samples, 8-1/2 by 11 inches in size, illustrating range of colors available for each finishing product specified.

**1.2 FIELD CONDITIONS**

**A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.**

**B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.**

**C. Do not apply exterior paint and finishes during rain or snow, or when relative humidity is outside the humidity ranges required by the paint product manufacturer.**

**D. Minimum Application Temperatures for Latex Paints:** 50 degrees F for exterior; unless required otherwise by manufacturer's instructions.

**PART 2 PRODUCTS**

**2.1 PAINTS AND FINISHES - GENERAL**

**A. Paints and Finishes:** Ready mixed, unless required to be a field-catalyzed paint.

- Provide paints and finishes of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
- Provide materials that are compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
- For opaque finishes, tint each coat including primer coat and intermediate coats, one-half shade lighter than succeeding coat, with final finish coat as base color.
- Supply each paint material in quantity required to complete entire project's work from a single production run.
- Do not reduce, thin, or dilute paint or finishes or add materials unless such procedure is specifically described in manufacturer's product instructions.

**B. Volatile Organic Compound (VOC) Content:**

- Provide paints and finishes that comply with the most stringent requirements specified in the following:
  - 40 CFR 59, Subpart D-National Volatile Organic Compound Emission Standards for Architectural Coatings.
  - SQAOMD 1113 Rule.
- Determination of VOC Content: Testing and calculation in accordance with 40 CFR 59, Subpart D (EPA Method 24), exclusive of colorants added to a tint base and water added at project site; or other method acceptable to authorities having jurisdiction.

**C. Colors:** As indicated in Color Schedule.

- Extend colors to surface edges; colors may change at any edge as directed by Architect.

**2.2 PAINT SYSTEMS - EXTERIOR**

**A. Exterior Surfaces to be Painted, Unless Otherwise Indicated:** Including applications listed below.

- Top Coat(s): Exterior Latex Enamel.  
a. Products:
  - 1) PPG Paints Speedhide Exterior 100% Acrylic Latex.
  - 2) Benjamin Moore Ultra Spec EXT.
  - 3) Sherwin Williams A-100 Exterior Acrylic Latex.
- Top Coat(s): Exterior Light Industrial Coating, Water Based.  
a. Products:
  - 1) PPG Paints Pitt-Tech Plus WB DTM Industrial Enamel.
  - 2) Benjamin Moore Super Spec HP DTM Acrylic.
  - 3) Sherwin Williams Pro Industrial DTM Acrylic B66 Series.
- Top Coat Sheen:
  - a. Flat: MPI gloss level 1; use this sheen for overhead surfaces.
  - b. Satin: MPI gloss level 4; use this sheen at wood, fiber cement, cementitious or masonry substrates unless otherwise noted.
  - c. Semi-Gloss: MPI gloss level 5; use this sheen at metal substrates unless otherwise noted.
- Primer: As recommended by top coat manufacturer for specific substrate.

**2.3 PRIMERS**

**A. Primers:** Provide the following unless other primer is required or recommended by manufacturer of top coats.

- Water Based Primer for Galvanized Metal.  
a. Products:
  - 1) PPG Paints: 4020 PF Pitt-Tech Plus Interior/Exterior Waterborne Acrylic Primer Finish DTM Industrial Enamel, (MPI #134).
  - 2) Benjamin Moore: Super Spec HP Metal Primer.
  - 3) Sherwin Williams Pro-Cryl Universal Metal Primer B-66 Series.

**2. Rust-Inhibitive Water Based Primer.**

- Products:
  - 1) PPG Paints: 90-708 Series, Pitt-Tech One-Pack Interior/Exterior Industrial Primer.
  - 2) Benjamin Moore: V110 Acrylic Metal Primer.
  - 3) Sherwin Williams: DTM Acrylic Primer Finish B66W1.

**3. Latex Primer for Exterior Wood.**

- Products:
  - 1) PPG Paints: Seal Grip Interior/Exterior Acrylic Universal Primer/Sealer.
  - 2) Benjamin Moore: Fresh Start High-Hiding All Purpose Acrylic Primer.
  - 3) Sherwin-Williams: Latex Wood Primer.

**2.4 ACCESSORY MATERIALS**

**A. Accessory Materials:** Provide primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials as required for final completion of painted surfaces.

**PART 3 EXECUTION**

**3.1 EXAMINATION**

**A. Do not begin application of paints and finishes until substrates have been properly prepared.**

**B. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially effect proper application.**

**C. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces are below the following maximums:**

- Exterior Wood: 15 percent, measured in accordance with ASTM D4442.

**3.2 PREPARATION**

**A. Clean surfaces thoroughly and correct defects prior to application.**

**B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.**

**C. Remove or repair existing paints or finishes that exhibit surface defects.**

**D. Remove or mask surface appearances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces for finishing.**

**E. Seal surfaces that might cause bleed through or staining of topcoat.**

**F. Remove mildew from impervious surfaces by scrubbing with solution of tetry-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.**

**G. Aluminum:** Remove surface contamination and oils and wash with solvent according to SSPC-SP 1.

**H. Galvanized Surfaces:**

- Remove surface contamination and oils and wash with solvent according to SSPC-SP 1.
- Prepare surface according to SSPC-SP 2.

**I. Ferrous Metal:**

- Solvent clean according to SSPC-SP 1.
- Shop-Primed Surfaces: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces.
- Remove rust, loose mill scale, and other foreign substances using methods recommended in writing by paint manufacturer and blast cleaning according to SSPC-SP 6 "Commercial Blast Cleaning". Protect from corrosion until coated.

**J. Exterior Wood Surfaces to Receive Opaque Finish:** Remove dust, grit, and foreign matter. Seal knots, pitch streaks, and sappy sections. Fill nail holes with tinted exterior caulking compound after prime coat has been applied. Back prime concealed surfaces before installation.

**K. Metal Doors to be Painted:** Prime metal door top and bottom edge surfaces.

**3.3 APPLICATION**

**A. Apply products in accordance with manufacturer's written instructions.**

**B. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.**

**C. Apply each coat to uniform appearance.**

**D. Dark Colors and Deep Clear Colors:** Regardless of number of coats specified, apply additional coats until complete hide is achieved.

**E. Sand wood and metal surfaces lightly between coats to achieve required finish.**

**F. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.**

**3.4 SCHEDULE**

**A. Paint ME-OP-2L - Ferrous Metals, Primed, Latex, 2 Coat:**

- Touch-up with rust-inhibitive primer recommended by top coat manufacturer.
- Semi-gloss: Two coats of light industrial coating.

**B. Paint MgE-OP-3L - Galvanized Metals, Latex, 3 Coat:**

- One coat galvanize primer.
- Semi-gloss: Two coats of light industrial coating.

**C. Paint WE-OP-3L - Wood, Opaque, Latex, 3 Coat:**

- One coat of latex primer sealer.
- Satin: Two coats of latex enamel.

**END OF SECTION**

**SECTION 09 91 23 - INTERIOR PAINTING**

**PART 1 GENERAL**

**1.1 SUBMITTALS**

**A. Product Data:** Provide complete list of products to be used.

**B. Samples:** Submit three paper "draw down" samples, 8-1/2 by 11 inches in size, illustrating range of colors available for each finishing product specified.

**1.2 FIELD CONDITIONS**

**A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.**

**B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.**

**C. Do not apply materials when relative humidity exceeds 85 percent, at temperatures less than 5 degrees F above the dew point, or to damp or wet surfaces.**

**D. Minimum Application Temperatures for Paints:** 50 degrees F for interiors unless required otherwise by manufacturer's instructions.

**PART 2 PRODUCTS**

**2.1 PAINTS AND FINISHES - GENERAL**

**A. Paints and Finishes:** Ready-mixed, unless intended to be a field-catalyzed paint.

- Provide paints and finishes of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
- Provide materials that are compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
- For opaque finishes, tint each coat including primer coat and intermediate coats, one-half shade lighter than succeeding coat, with final finish coat as base color.
- Supply each paint material in quantity required to complete entire project's work from a single production run.
- Do not reduce, thin, or dilute paint or finishes or add materials unless such procedure is specifically described in manufacturer's product instructions.

**B. Volatile Organic Compound (VOC) Content:**

- Provide paints and finishes that comply with the most stringent requirements specified in the following:
  - 40 CFR 59, Subpart D-National Volatile Organic Compound Emission Standards for Architectural Coatings.

**C. Colors:** As indicated on drawings.

**PART 2 PRODUCTS**

**2.1 PERFORMANCE REQUIREMENTS - EXTERIOR GLAZING ASSEMBLIES**

**A. Provide type and thickness of exterior glazing assemblies to support assembly dead loads, and to withstand live loads caused by positive and negative wind pressure acting normal to plane of glass.**

- Design Pressure: Calculated in accordance with ASCE 7 and requirements in Structural Drawings.
- Comply with ASTM E1300 for design load resistance of glass type, thickness, dimensions, and maximum lateral deflection of supported glass.
- Provide glass edge support system sufficiently stiff to limit the lateral deflection of supported glass edges to less than 1/175 of their lengths under specified design load.
- Design glazing units to reliably perform and remain reliably engaged on all edges under all service and thermal stresses, including those associated with partial shading.
- Limit center of glass deflection to the lesser of 3/4 inch or L/100 (where L is short side dimension of glass unit), or flexure limit of glass, whichever is less, with full recovery of glazing materials.
- Assure and confirm compatibility of all materials in contact with each other.

**2.2 GLASS MATERIALS**

**A. Float Glass:** Provide float glass based glazing unless otherwise indicated.

- Kind FT - Fully Tempered Type: Complies with ASTM C1048.
- Fully Tempered Safety Glass: Complies with ANSI Z97.1 or 16 CFR 1201 criteria for safety glazing used in hazardous locations.
- Impact Resistant Safety Glass: Complies with ANSI Z97.1 - Class B, or 16 CFR 1201 - Category II criteria.
- Thicknesses: As indicated; provide greater thickness as required for exterior glazing wind load design.

**2.3 INSULATING GLASS UNITS**

**A. Fabricator:** Certified by glass manufacturer for type of glass, coating, and treatment involved and capable of providing specified warranty.

**B. Insulating Glass Units - General:** Types as indicated.

- Durability: Certified by an independent testing agency to comply with ASTM E2190.
- Coated Glass: Comply with requirements of ASTM C1376 for pyrolytic (hard-coat) or magnetic sputter vapor deposition (soft-coat) type coatings on flat glass; coated vision glass, Kind CV; coated overhead glass, Kind CO; or coated spandrel glass, Kind CS.
- Metal-Edge Spacers: Aluminum, bent and soldered corners.
- Spacer Color: Black.
- Edge Seal:
  - a. Dual-Sealed System: Provide polyisobutylene sealant as primary seal applied between spacer and glass panes, and silicone, polysulfide, or polyurethane sealant as secondary seal applied around perimeter.
  - b. Color: Black.
- Purge interpane space with dry air, hermetically sealed.

**C. Type GL-01 - Insulating Glass Units:** Vision glass, double glazed.

- Applications: Storefront systems and exterior glazing in new assemblies.
- Space between lites filled with air.
- Outdoor Lite: Fully tempered float glass, 1/4 inch thick, minimum.
  - a. Tint: Clear.
  - b. Coating: Low-E (passive type), on #2 surface.
- Inboard Lite: Fully tempered float glass, 1/4 inch thick, minimum.
  - a. Tint: Clear.
  - b. Total Thickness: 1 inch.
  - c. Thermal Transmittance (U-Value): 0.29, nominal.
  - d. Visible Light Transmittance (VLT): 65 percent, minimum.
  - e. Solar Heat Gain Coefficient (SHGC): 0.28, maximum.
  - f. Glazing Method: Dry glazing method, gasket glazing.
- Type GL-02 - Etched Insulating Glass Units: Vision glass, double glazed, translucent.
  - 1. Applications: Transom glazing behind decorative metal grille.
  - 2. Glass Type: Same as storefront glazing type except provided etched #3 surface.
  - 3. Opacity: As selected by Architect from selection samples.

**2.4 MONOLITHIC GLAZING UNITS**

**A. Type GL-06 - Monolithic Safety Glazing:** Non-fire-rated.

- Applications:
  - a. Replacement glass for historic wood windows.
  - b. Glazed lites in doors, except fire doors.
- Glass Type: Fully tempered safety glass as specified.
- Tint: Clear.
- Thickness: 1/4 inch, nominal.

**2.5 GLAZING COMPOUNDS**

**A. Silicone Sealant:** Single component; neutral curing; capable of water immersion without loss of properties; nonbleeding, nonstaining; ASTM C920 Type S, Grade NS, Class 25, Uses M, A, and G; with cured Shore A hardness range of 15 to 25; color as selected.

**2.6 ACCESSORIES**

**A. Setting Blocks:** Silicone, with 80 to 90 Shore A durometer hardness; ASTM C864 Option II. Length of 0.1 inch for each square foot of glazing or minimum 4 inch by width of glazing rabbet space minus 1/16 inch by height to suit glazing method and pane weight and area.

**B. Spacer Shims:** Neoprene, 50 to 60 Shore A durometer hardness; ASTM C864 Option II. Minimum 3 inch long by one half the height of the glazing stop by thickness to suit application, self adhesive on one face.

**C. Glazing Gaskets:** Resilient silicone extruded shape to suit glazing channel retaining slot; ASTM C864 Option II; color black.

- Size gaskets as required by manufacturer of glazing channel frame to provide proper pressure and bite on glazing units.

**D. Glazing Spines:** Resilient silicone extruded shape to suit glazing channel retaining slot; ASTM C864 Option II; color black.

**E. Glazing Clips:** Manufacturer's standard type.

**PART 3 EXECUTION**

**3.1 INSTALLATION - DRY GLAZING METHOD (GASKET GLAZING)**

**A. Place setting blocks at 1/4 points with edge block no more than 6 inch from corners.**

**B. Rest glazing on setting blocks and push against fixed stop with sufficient pressure on gasket to attain full contact.**

**C. Install removable stops without displacing glazing gasket; exert pressure for full continuous contact.**

**3.2 INSTALLATION - STRUCTURAL SILICONE GLAZING**

**A. Application - Field Glazed:** Follow basic guidelines of structural silicone glazing for glazing application.

**B. Provide design review of the glazing system and project details, adhesion testing, proper surface preparation, training and a quality service program.**

**C. Provide only structural silicone sealant, tested and manufactured for structural glazing.**

**END OF SECTION**

**DIVISION 09 - FINISHES**

**SECTION 09 29 00 - GYPSUM BOARD**

**PART 1 GENERAL**

**1.1 SUBMITTALS**

**A. Product Data:** Provide data on gypsum board, accessories, joint finishing system, and acoustic insulation and sealants.

**PART 2 PRODUCTS**

**2.1 GYPSUM BOARD ASSEMBLIES**

**A. Standard:** Designations used in the Hardware Sets and elsewhere indicate hardware finishes complying with ANSI/BHMA A156.18, including coordination with traditional U.S. finishes indicated by certain manufacturers for your products.

**B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware**

**C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.**

**PART 3 EXECUTION**

**3.1 EXAMINATION**

**A. Examine scheduled openings, with Installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance.**

**B. Notify architect of any discrepancies or conflicts between the door schedule, door types, drawings and scheduled hardware. Proceed only after such discrepancies or conflicts have been resolved in writing.**

**3.2 PREPARATION**

**A. Hollow Metal Doors and Frames:** Comply with ANSI/DHI A115 series.

**B. Wood Doors:** Comply with ANSI/DHI A115-W series.

**3.3 INSTALLATION**

**A. Install each item of mechanical and electromechanical hardware and access control equipment to comply with manufacturer's written instructions and according to specifications.**

- Installers are to be trained and certified by the manufacturer on the proper installation and adjustment of fire, life safety, and security products including: hanging devices; locking devices; closing devices; and seals.

**B. Mounting Heights:** Mount door hardware units at heights indicated in following applicable publications, unless specifically indicated or required to comply with governing regulations:

- DHI TDH-007-20: Installation Guide for Doors and Hardware.
- Where indicated to comply with accessibility requirements, comply with ANSI A117.1 "Accessibility Guidelines for Buildings and Facilities."

**C. Retrofitting:** Install door hardware to comply with manufacturer's published templates and written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work specified in Division 9 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.

**D. Thresholds:** Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants."

**E. Storage:** Provide a secure lock up for hardware delivered to the project but not yet installed. Control the handling and installation of hardware items so that the completion of the work will not be delayed by hardware losses before and after installation.

**3.4 FIELD QUALITY CONTROL**

**A. Field Inspection (Punch Report):** Reference Division 01 Sections "Closeout Procedures". Produce project punch report for each installed door opening indicating compliance with approved submittals and verification hardware is properly installed, operating and adjusted. Include list of items to be completed and corrected, indicating the reasons or deficiencies causing the work to be incomplete or rejected.

- Organization of List: Include separate Door Opening and Deficiencies and Corrective Action Lists organized by Mark, Opening Remarks and Comments, and related Opening Images and Video Recordings.

**3.5 ADJUSTING**

**A. Initial Adjustment:** Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

**3.6 CLEANING AND PROTECTION**

**A. Protect all hardware stored on construction site in a covered and dry place. Protect exposed hardware installed on doors during the construction phase. Install any and all hardware at the latest possible time frame.**

**B. Clean adjacent surfaces soiled by door hardware installation.**

**C. Clean operating items as necessary to restore proper finish. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of owner occupancy.**

**3.7 DEMONSTRATION**

**A. Instruct Owner's maintenance personnel to adjust, operate, and maintain mechanical and electromechanical door hardware.**

**3.8 DOOR HARDWARE SETS**

**A. The hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application and functionality.**

- Quantities listed are for each pair of doors, or for each single door.
- The supplier is responsible for handling and sizing all products.
- Where multiple options for a piece of hardware are given in a single line item, the supplier shall provide the appropriate application for the opening.
- At existing openings with new hardware the supplier shall field inspect existing conditions prior to the submittal stage to verify the specified hardware will work as required. Provide alternate solutions and proposals as needed.

**B. Manufacturer's Abbreviations:**

- FE - PFMKO
- RO - ROCKWOOD
- RU - CORBIN RUSSWIN
- AD - ADAMS RITE
- RF - RIXSON
- NO - NORTON

**SECTION 08 80 00 - GLAZING**

**PART 1 GENERAL**

**1.1 SUBMITTALS**

**A. Product Data on Insulating Glass Unit and Glazing Unit Glazing Types:** Provide structural, physical and environmental characteristics, size limitations, special handling and installation requirements.

**B. Product Data on Glazing Compounds and Accessories:** Provide chemical, functional, and environmental characteristics, limitations, special application requirements, and identify available colors.

**C. Selection Samples:** Submit at least 4 samples demonstrating range of options for acid etch opacity within Architect's designated range for selection.

**1.2 QUALITY ASSURANCE**

**A. Perform Work in accordance with GANA (GM) and IGMA TM-3000 for glazing installation methods.**

**1.3 DELIVERY, STORAGE, AND HANDLING**

**A. Comply with manufacturer's instructions for shipping, handling, storing, and protection of glass and glazing materials. Exercise exceptional care to prevent edge damage to glass.**

**1.4 FIELD CONDITIONS**

**A. Do not install glazing when ambient temperature is less than 40 degrees F.**

**1.5 WARRANTY**

**A. Insulating Glass Units:** Provide a ten (10) year manufacturer warranty to include coverage for seal failure, interpane dusting or misting, including providing products to replace failed units.

PART 1 GENERAL

1.1 ADMINISTRATIVE REQUIREMENTS

A. Pre-Installation Meeting:

- Schedule a conference and inspection to be held on-site before field application of coating systems begins.

1.2 SUBMITTALS

A. Product Data: Provide complete list of all products to be used, with the following information for each:

- Preparation instructions and recommendations.
- Storage and handling requirements and recommendations.
- Installation methods.
- Operation and maintenance data.

B. Verification Samples: For each finish product specified, provide two samples, minimum size 3 x 4 inch square, representing actual product, color and patterns.

1.3 QUALITY ASSURANCE

A. Applicator's Qualifications: Engage a single installer approved by the manufacturer with a minimum of three (3) years' experience in the application of protective coatings with documented skill and successful experience in the installation.

B. Single-Source Responsibility:

- Materials shall be products of a single manufacturer or items standard with manufacturer of specified coating materials.

1.4 FIELD CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

B. Ventilation: Provide ventilation during coating evaporation stage in confined or enclosed areas in accordance with manufacturer's instructions.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Basis of Design:

- Tnemec Company, Incorporated; [www.tnemec.com](http://www.tnemec.com).
- Product Distribution and Technical Representation:
  - Redox Coating Consultants, LLC
  - [www.redoxcoatings.com](http://www.redoxcoatings.com), [redox@redoxcoatings.com](mailto:redox@redoxcoatings.com)

2.2 HIGH PERFORMANCE COATING MATERIALS

A. Compatibility: Provide shop and field primers, and finish-coat materials that are compatible with one another and with the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.

B. Aliphatic Acrylic Polyurethane System (Black):

- Primer, Ferrous Metals (Bare Metal)
  - Tnemec Series 94-H2O Hydro-Zinc
  - Formulation Description: Single Component, Zinc Rich Moisture Cured Urethane
- Stripe and Intermediate Coats, Ferrous & Non-Ferrous Metals
  - Product: Tnemec Series 27 FC Typoxy
  - Generic Chemistry: Polyamide Epoxy
- Finish Coat, Ferrous & Non-Ferrous Metals
  - Product: Tnemec Series 1095 Endura-Shield
  - Generic Chemistry: Aliphatic Acrylic Polyurethane

C. Metallic Accent System (Brite Gold):

- Primer, Ferrous Metals (Bare Metal)
  - Tnemec Series 94-H2O Hydro-Zinc
  - Formulation Description: Single Component, Zinc Rich Moisture Cured Urethane
- Intermediate Coat, Ferrous & Non-Ferrous Metals
  - Product: Tnemec Series V69 Hi-Build Epoxoline II
  - Generic Chemistry: Polyamide Epoxy
- Metallic Finish Coat, Ferrous & Non-Ferrous Metals
  - Product: Tnemec Series 1077 Enduralume
  - Generic Chemistry: Aliphatic Acrylic Polyurethane

PART 3 EXECUTION

3.1 EXAMINATION

A. Do not begin installation until substrates have been properly prepared.

3.2 PROTECTION

A. Protect surrounding areas and surfaces not scheduled to be coated from damage during surface preparation and application of coatings.

B. Immediately remove coatings that fall on surrounding areas and surfaces not scheduled to be coated.

3.3 SURFACE PREPARATION OF FERROUS (BARE) METAL

A. Prepare steel surfaces in accordance with manufacturer's instructions.

B. Fabrication Defects:

- Correct steel and fabrication defects revealed by surface preparation.
- Remove weld spatter and slag.
- Round sharp edges and corners of welds to a smooth contour.
- Smooth weld undercuts and recesses.
- Grind down porous welds to pinhole-free metal.
- Remove weld flux from surface.

C. Ensure surfaces are dry.

D. Abrasive blast to remove visible oil, grease, dirt, dust, mill scale, rust, paint, oxides, corrosion products, and other foreign matter in accordance with SSPC-SP 6 Commercial Blast Cleaning, unless otherwise specified.

E. Abrasive Blast-Cleaned Surfaces: Coat abrasive blast-cleaned surfaces with primer before visible rust forms on surface. Do not leave blast-cleaned surfaces uncoated for more than 8 hours.

3.4 APPLICATION

A. Apply coatings in accordance with manufacturer's instructions.

B. Use application equipment, tools, pressure settings, and techniques in accordance with manufacturer's instructions.

C. Uniformly apply coatings at spreading rate required to achieve specified DFT.

D. Apply coatings to be free of film characteristics or defects that would adversely affect performance or appearance of coating systems.

E. Stripe paint with brush critical locations on steel, such as welds, corners, and edges using specified primer.

3.5 REPAIR

A. Materials and Surfaces Not Scheduled to be Coated: Repair or replace damaged materials and surfaces not scheduled to be coated.

B. Damaged Coatings: Touch-up or repair of damaged coatings. Touch-up of minor damage shall be acceptable where result is not visibly different from adjacent surfaces. Recoat entire surface where touch-up result is visibly different, either in sheen, texture, or color.

C. Coating Defects: Repair in accordance with manufacturer's instructions coatings that exhibit film characteristics or defects that would adversely affect performance or appearance of coating systems.

3.6 PROTECTION OF COATING SYSTEMS

A. Protect surfaces of coating systems from damage during construction.

B. Touch-up, or repair damaged products before substantial completion.

3.7 SCHEDULES

A. Ferrous Metals (Shop-Applied Prime/Stripe/Intermediate Coats, Field Finish)

- Shop Surface Preparation:
  - Solvent clean referencing SSPC-SP 1.
  - Abrasive blast referencing SSPC-SP 6 Commercial Blast Cleaning to provide a minimum angular surface profile of 1.0 mil.
  - Prepared substrates must be clean, dry, and free of contaminants.

2. Shop Applied Primer: Tnemec Series 94-H2O Hydro-Zinc applied at 2.5 to 3.5 mils DFT

3. Shop Applied Stripe Coat: Product as specified, applied to all welded and bolted connections, protrusions, edges, outside corners, etc.

4. Shop Applied Intermediate: Product as specified, applied at 4.0 to 6.0 mils DFT

5. Shop Applied Finish: Product as specified, applied at 2.0 to 3.0 mils DFT

END OF SECTION



AMY BAKER  
ARCHITECT  
1012 OWANA AVENUE  
ROYAL OAK, MI 48067  
(248) 931-3055  
[amy@amybakerarchitect.com](mailto:amy@amybakerarchitect.com)

SEAL

THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL THE SEAL AND SIGNATURE OF THE RESPONSIBLE REGISTRANT APPEARS ON THE DRAWING, AND PROPER PERMIT FORMS AND RELATED FEES ARE TRANSMITTED BY THE OWNER, OWNER'S AGENT OR CONTRACTOR TO THE AUTHORITY HAVING JURISDICTION.

CONSULTANT

CLIENT

PROJECT  
2021\_A03  
**1315 Broadway**

1315 Broadway  
Detroit, Michigan 48226

ISSUANCE  
2023-08-21 HDC SUBMISSION

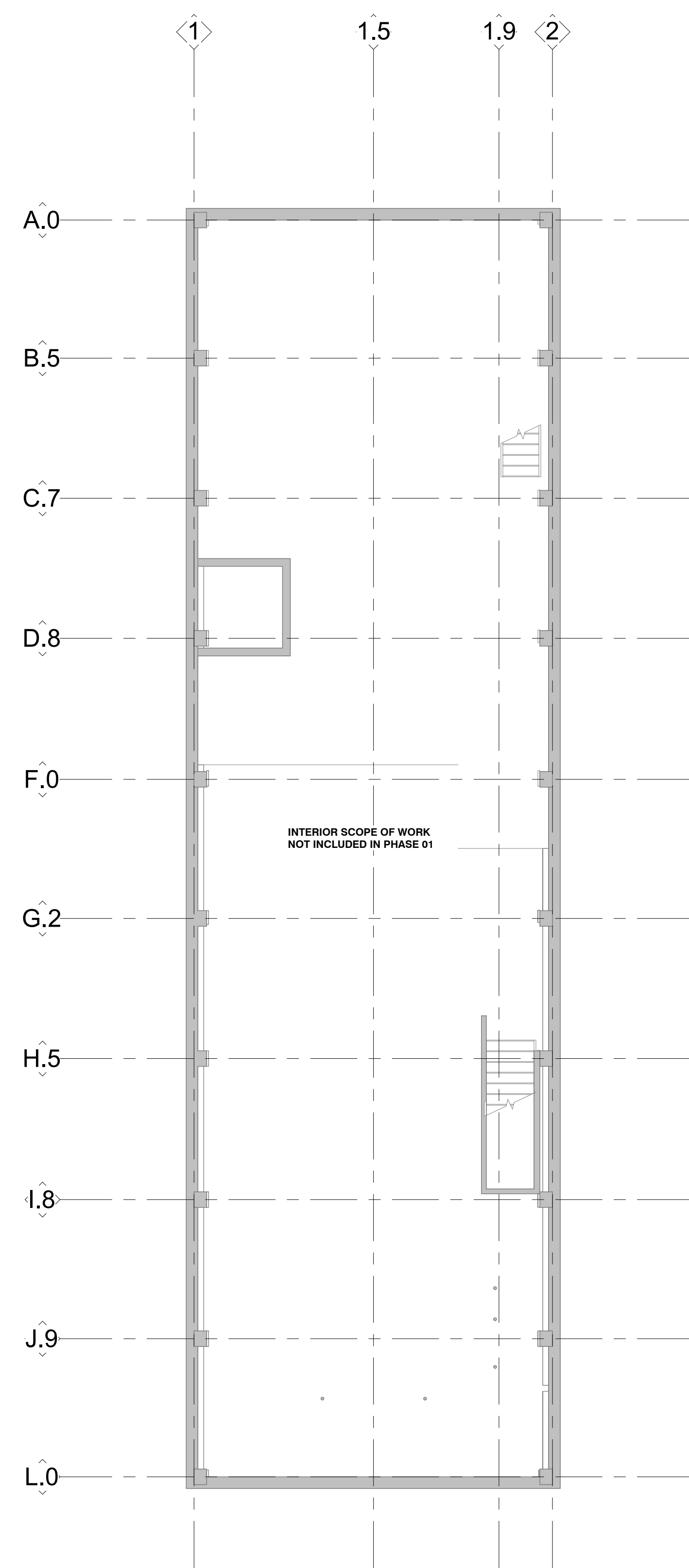
REVISIONS

TITLE  
**SPECIFICATIONS**

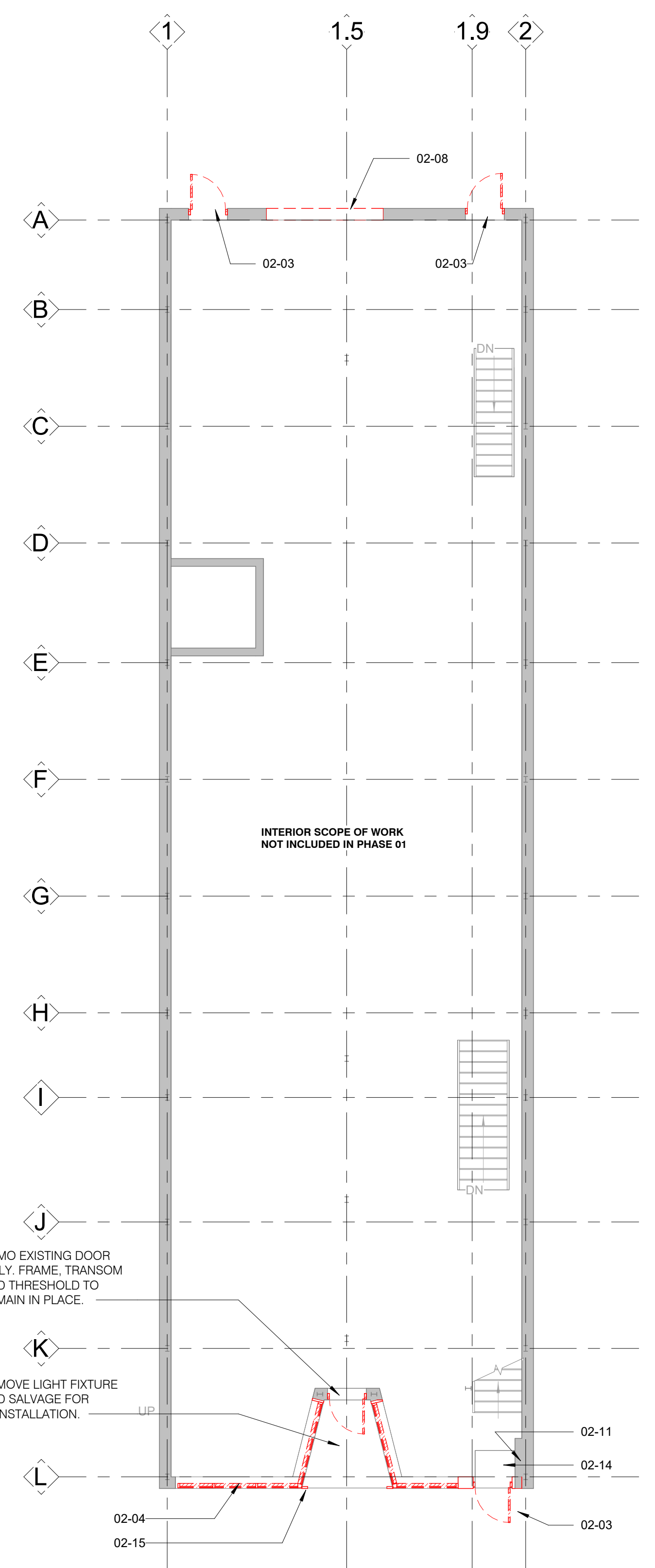
SHEET  
**G4-07**



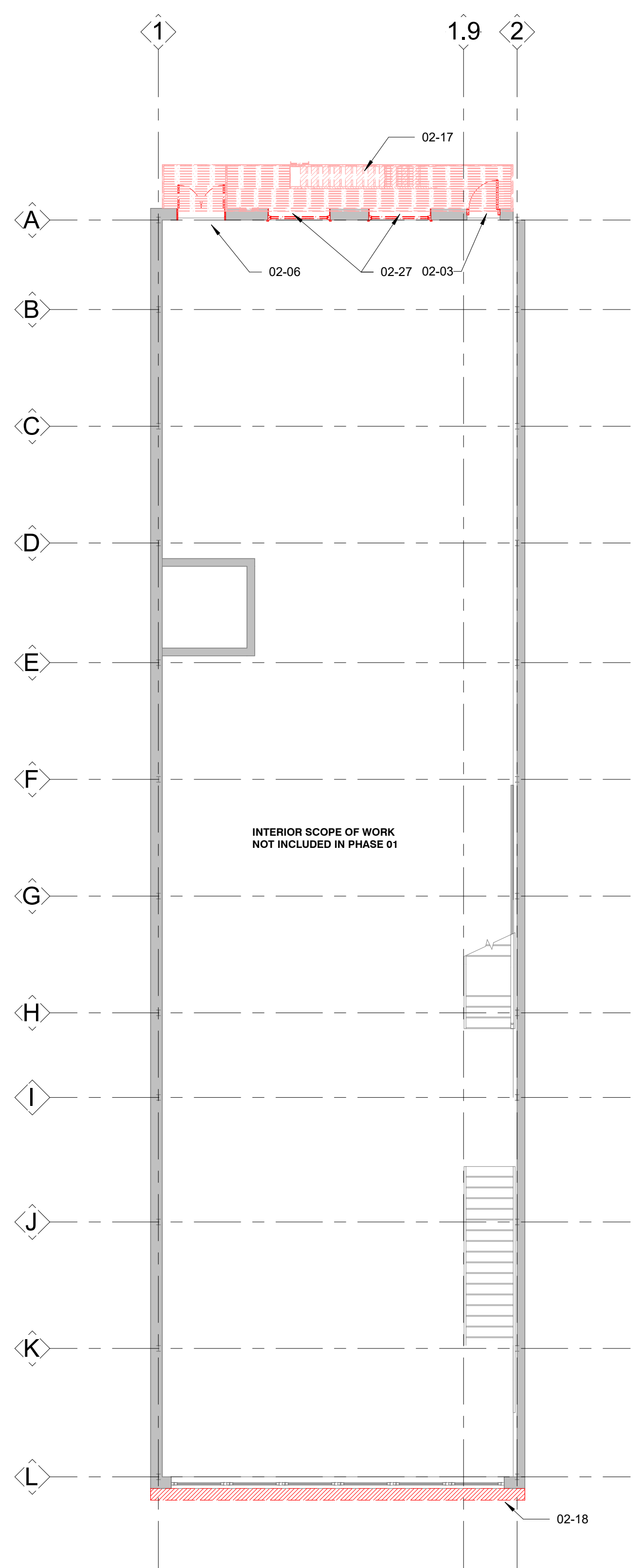
Sheet Size: ARCH D - 24" x 36"  
 AB\_A\_REVIT\_2022 : Template Version  
 C:\Users\coris\OneDrive\Dropbox\Corissa Leveille\Projects\2021.A03 1315 Broadway\07 Production\BIM\2021.A03\_Broadway\_RVT23\_detached.rvt  
 © 2023 Amy Baker Architect



2 **DEMOLITION BASEMENT**  
 A3-10 1/8" = 1'-0"



1 **DEMOLITION FIRST FLOOR**  
 A1-10 1/8" = 1'-0"



3 **DEMOLITION SECOND FLOOR**  
 A1-10 1/8" = 1'-0"

Key Value	Keynote Text
02-03	DEMO EXISTING DOOR AND FRAME.
02-04	DEMO EXISTING ALUMINIUM STOREFRONT.
02-06	REMOVE AND SALVAGE EXISTING HISTORIC WOOD DOORS, DEMO PLYWOOD INFILL AT TRANSOM AND PREP FOR NEW GLAZING.
02-08	DEMO PORTION OF MASONRY WALL FOR NEW OVERHEAD DOOR. REFER TO NEW WORK ON A4-00 FOR SIZE, LOCATION AND SHORING OF NEW OPENING.
02-11	REMOVE PLYWOOD AROUND EXISTING STOREFRONT AT THE BASE AND SIDE COLUMNS.
02-14	SALVAGE/PROTECT HISTORIC MOSAIC FLOOR TILE.
02-15	DEMO BLACK PAINTED ENCLOSURE AND HARDWARE AT THE VESTIBULE SURROUND. REMOVE ELECTRICAL AND CUT BACK TO SOURCE. REFER TO PHOTOS ON A3-50 FOR MORE INFORMATION.
02-17	REMOVE STEPS AND LANDING OF EXISTING FIRE ESCAPE. RETAIN AND PROTECT EXISTING MOUNTING BRACKETS FOR FUTURE REINSTALLATION OF NEW FIRE ESCAPE.
02-18	DEMO EXISTING YELLOW AWNING COMPLETE.
02-27	DEMO EXISTING STEEL WINDOWS AND FRAMES COMPLETE. RETAIN/PROTECT EXISTING SILLS, LINTELS AND HSS MEMBERS.

**DEMO GENERAL NOTES**

- COORDINATE ALL DEMOLITION WORK WITH NEW WORK.
- THE GENERAL CONTRACTOR SHALL REVIEW THE ENTIRE DRAWING SET WITH THE OWNER AND VERIFY ALL PROPOSED WORK AND MEASUREMENTS IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.
- NOTIFY THE ARCHITECT OF ANY DISCREPANCIES IN PLAN.
- DEMOLISH ITEMS IN A WORKMAN-LIKE MANNER FROM TOP TO BOTTOM OR AS NEEDED TO PREVENT COLLAPSE. TAKE CARE TO PREVENT DAMAGE TO SURROUNDING CONSTRUCTION. DO NOT DEMOLISH ANY ITEM THAT MAY BE STRUCTURAL IN NATURE, IF SUCH ITEMS ARE ENCOUNTERED CONTACT THE ARCHITECT FOR DIRECTION PRIOR TO DEMOLISHING THE ITEM.
- CONTRACTOR SHALL VISIT SITE TO VERIFY ACTUAL EXTENT OF DEMOLITION PRIOR TO BID. DO NOT RELY SOLELY ON THE DRAWINGS FOR DEMOLITION SCOPE. ALL DEMOLITION REQUIRED TO CARRY OUT THE WORK OF THE CONTRACT SHALL BE PART OF THE CONTRACT. NO ADDITION TO THE CONTRACT AMOUNT WILL BE ALLOWED DUE TO FAILURE TO FIELD VERIFY DEMOLITION SCOPE OR FAILURE TO EXAMINE ALL CONTRACT DOCUMENTS.
- VERIFY AND INVESTIGATE ALL CONDITIONS IN THE FIELD PRIOR TO STARTING DEMOLITION. NOTIFY ARCHITECT/OWNER OF DISCREPANCIES.
- REMOVE AND REINSTALL ITEMS TO BE SALVAGED WHERE INDICATED AND WHERE ADVISED BY OWNER.
- COORDINATE DEMOLITION WITH OWNER'S REQUIREMENTS AND OTHER CONTRACTORS RETAINED BY THE OWNER.
- CONTRACTOR TO FOLLOW OWNER'S REQUIREMENTS FOR ENSURING SECURITY AND SAFETY OF THE BUILDING THROUGH DEMOLITION AND CONSTRUCTION.
- UTMOST CARE MUST BE TAKEN DURING DEMOLITION TO ENSURE THAT EXISTING CONSTRUCTION TO REMAIN IS NOT DAMAGED. REPAIR OR REPLACE EXISTING CONSTRUCTION DAMAGED BY DEMOLITION ACTIVITIES.
- CONTRACTOR IS TO PROVIDE COMPLETE DUST PROOF ENCLOSURE IN ALL AREAS WHERE DEMOLITION IS TO OCCUR. COMPLY WITH ALL OSHA, NFPA AND OTHER APPLICABLE RULES AND REGULATIONS REGARDING DUST AND DEBRIS REMOVAL.
- INVENTORY SALVAGED ITEMS. LIST SHALL INCLUDE DESCRIPTION OF ITEM, DIMENSIONS (OVERALL WIDTH, HEIGHT, DEPTH), COLOR, APPROX. WEIGHT, AND PHOTO.
- DIMENSIONS AND NEW OPENINGS SHOWN ARE TO BE COORDINATED W/ NEW WORK PLANS.
- REFER TO A4-00 FRAMING PLAN AND DETAILS FOR ADDITIONAL INFORMATION ON SUPPORTING NEW OPENINGS.
- REFER TO SHEET A7-00 FOR WINDOW RESTORATION SCOPE OF WORK. PROTECT EXISTING INTERIOR AND EXTERIOR TRIM, SILLS AND CASING FROM DAMAGE DURING WINDOW SASH REMOVAL. ALL EXISTING TRIMWORK TO REMAIN FOR REPAIR. NOTIFY ARCHITECT IF ANY HISTORIC WOOD TRIM IS BEYOND REPAIR AND REQUIRES REPLICATION.



SEAL

THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL THE SEAL AND SIGNATURE OF THE RESPONSIBLE REGISTRANT APPEARS ON THE DRAWING, AND PROPER PERMIT FORMS AND RELATED FEES ARE TRANSMITTED BY THE OWNER, OWNER'S AGENT OR CONTRACTOR TO THE AUTHORITY HAVING JURISDICTION.

CONSULTANT

CLIENT

**PROJECT**  
 2021.A03  
**1315 Broadway**

1315 Broadway  
 Detroit, Michigan 48226

**ISSUANCE**  
 2023-08-21 HDC SUBMISSION

REVISIONS

**TITLE**  
**DEMOLITION PLANS**

SHEET  
**A1-01**

Sheet Size: ARCH D - 24" x 36" ABA\_REVTILT\_2022\_Template Version  
 C:\Users\coris\OneDrive\Dropbox\Corissa Leveille\Projects\2021\_A03\_1315 Broadway\07\_Production\BIM\2021\_A03\_Broadway\_RVT23\_detached.rvt  
 © 2023 Amy Baker Architect

DEMOLITION KEYNOTE LEGEND	
Key Value	Keynote Text
02-03	DEMO EXISTING DOOR AND FRAME.
02-17	REMOVE STEPS AND LANDING OF EXISTING FIRE ESCAPE; RETAIN AND PROTECT EXISTING MOUNTING BRACKETS FOR FUTURE REINSTALLATION OF NEW FIRE ESCAPE.
02-27	DEMO EXISTING STEEL WINDOWS AND FRAMES COMPLETE. RETAIN/PROTECT EXISTING SILLS, LINTELS AND HSS MEMBERS.

  
**AMY BAKER**  
 ARCHITECT  
 1012 OWANA AVENUE  
 ROYAL OAK, MI 48067  
 (248) 931-3055  
 amy@amybakerarchitect.com

SEAL

THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL THE SEAL AND SIGNATURE OF THE RESPONSIBLE REGISTRANT APPEARS ON THE DRAWING, AND PROPER PERMIT FORMS AND RELATED FEES ARE TRANSMITTED BY THE OWNER, OWNER'S AGENT OR CONTRACTOR TO THE AUTHORITY HAVING JURISDICTION.

CONSULTANT

CLIENT

**PROJECT**  
 2021.A03  
**1315 Broadway**

1315 Broadway  
 Detroit, Michigan 48226

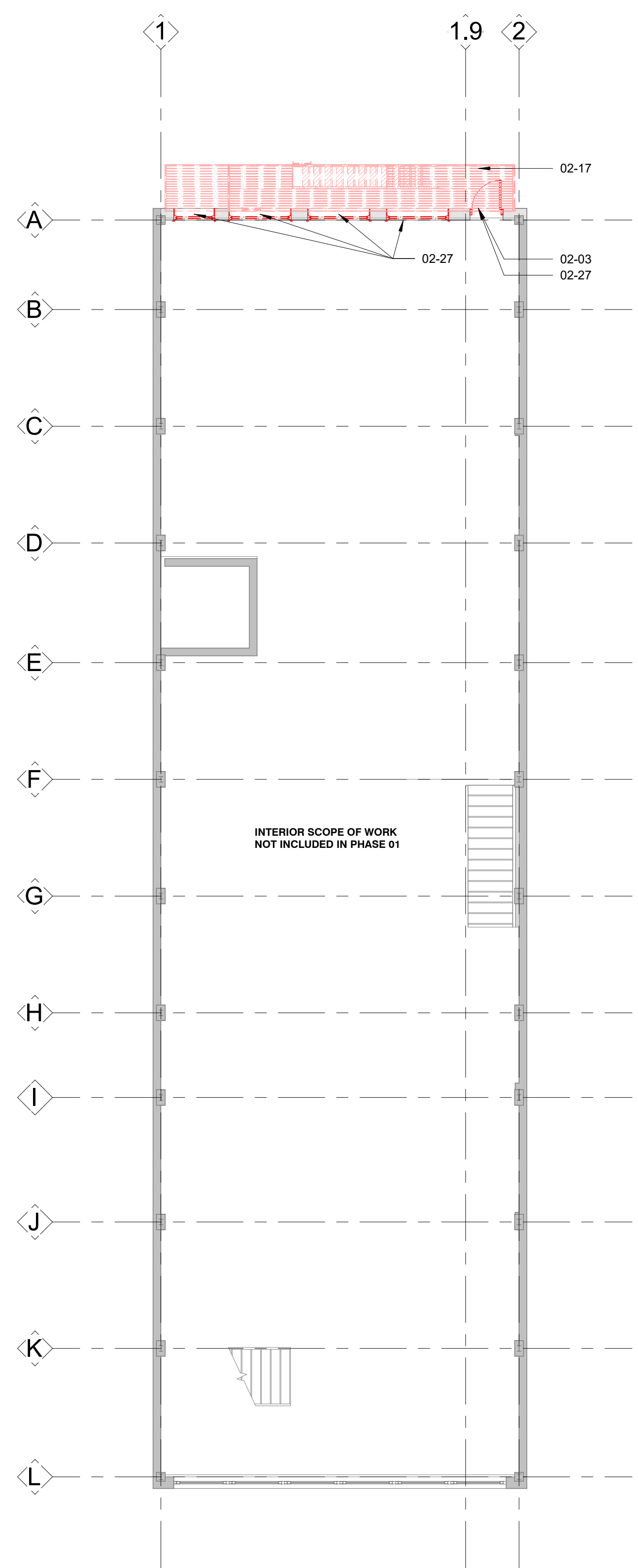
**ISSUANCE**  
 2023-08-21 HDC SUBMISSION

REVISIONS

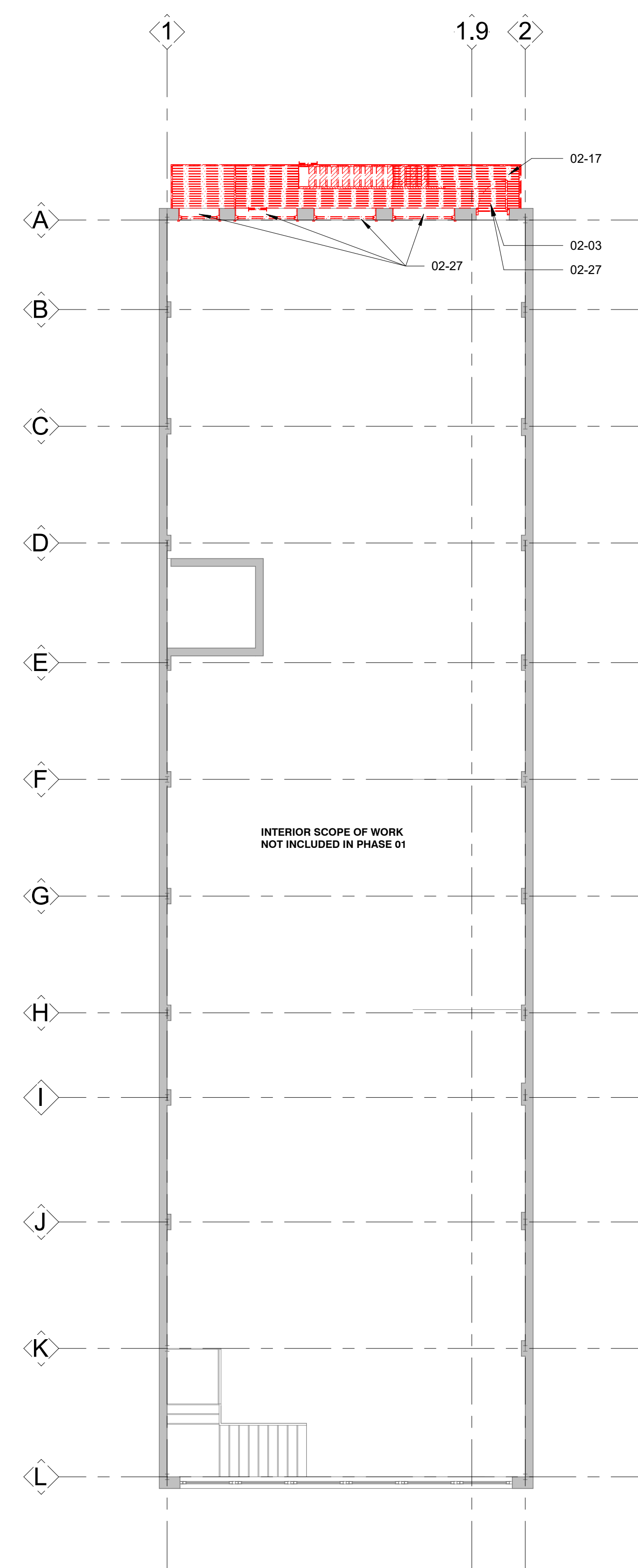
**TITLE**  
**DEMOLITION PLANS**

SHEET

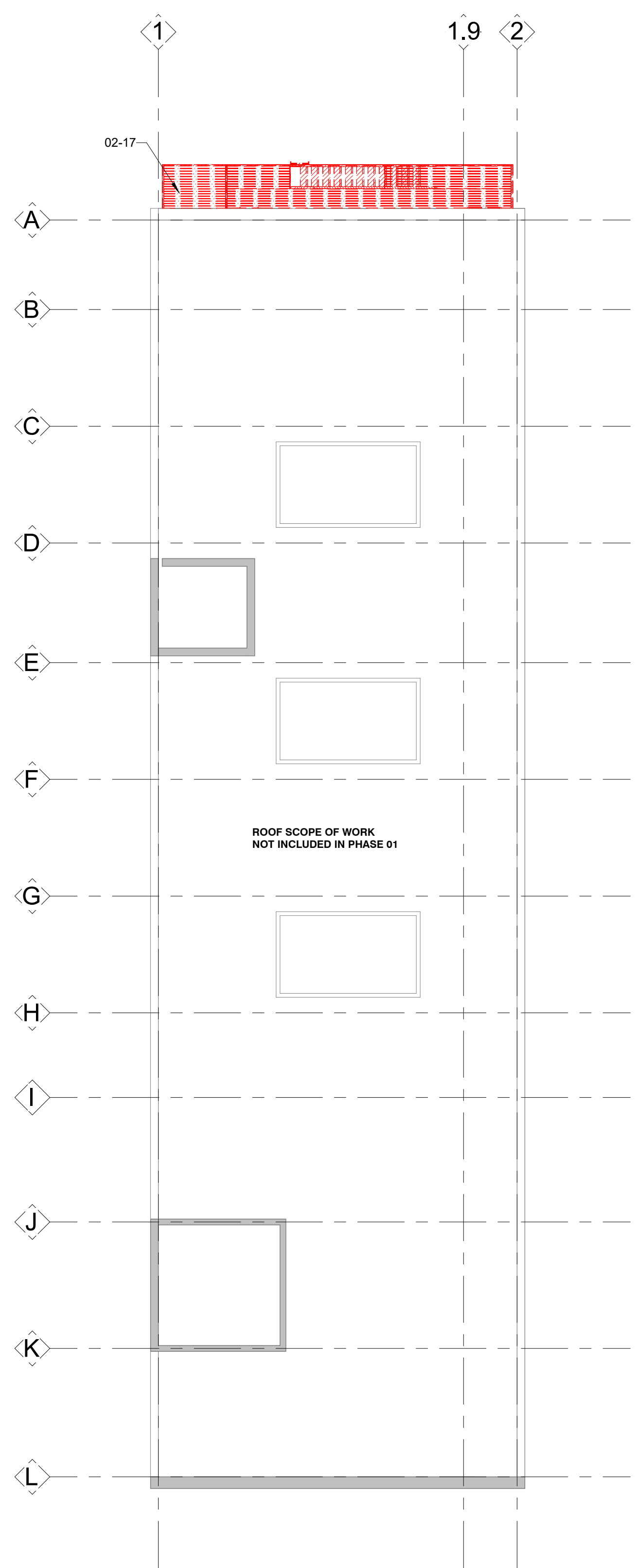
**A1-02**



2 DEMOLITION\_THIRD FLOOR  
 A1-10 1/8" = 1'-0"



1 DEMOLITION\_FOURTH FLOOR  
 A1-10 1/8" = 1'-0"



3 DEMOLITION\_ROOF  
 A1-10 1/8" = 1'-0"

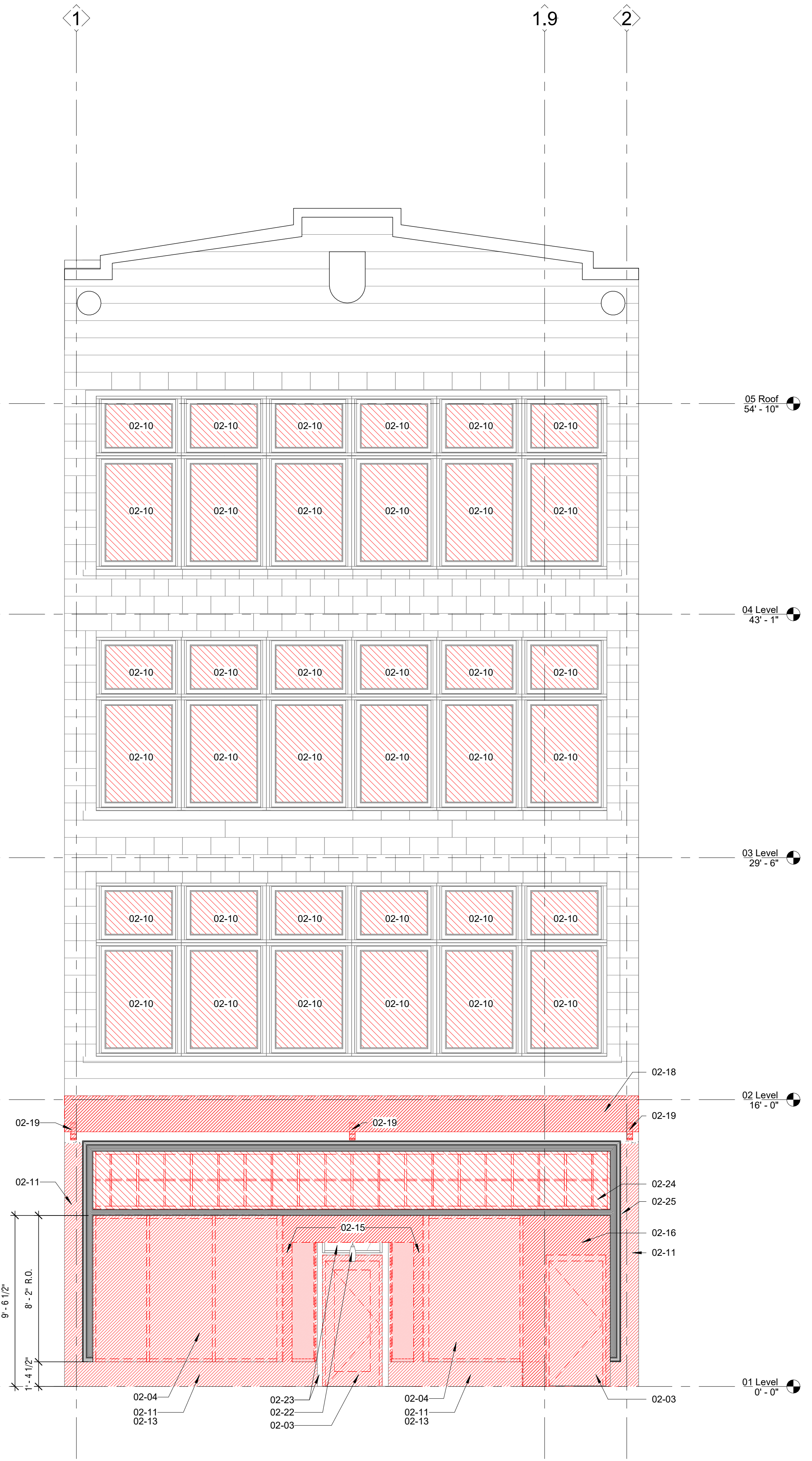
**DEMO GENERAL NOTES**

- COORDINATE ALL DEMOLITION WORK WITH NEW WORK.
- THE GENERAL CONTRACTOR SHALL REVIEW THE ENTIRE DRAWING SET WITH THE OWNER AND VERIFY ALL PROPOSED WORK AND MEASUREMENTS IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.
- NOTIFY THE ARCHITECT OF ANY DISCREPANCIES IN PLAN.
- DEMOLISH ITEMS IN A WORKMAN-LIKE MANNER FROM TOP TO BOTTOM OR AS NEEDED TO PREVENT COLLAPSE. TAKE CARE TO PREVENT DAMAGE TO SURROUNDING CONSTRUCTION. DO NOT DEMOLISH ANY ITEM THAT MAY BE STRUCTURAL IN NATURE, IF SUCH ITEMS ARE ENCOUNTERED CONTACT THE ARCHITECT FOR DIRECTION PRIOR TO DEMOLISHING THE ITEM.
- CONTRACTOR SHALL VISIT SITE TO VERIFY ACTUAL EXTENT OF DEMOLITION PRIOR TO BID. DO NOT RELY SOLELY ON THE DRAWINGS FOR DEMOLITION SCOPE. ALL DEMOLITION REQUIRED TO CARRY OUT THE WORK OF THE CONTRACT SHALL BE PART OF THE CONTRACT. NO ADDITION TO THE CONTRACT AMOUNT WILL BE ALLOWED DUE TO FAILURE TO FIELD VERIFY DEMOLITION SCOPE OR FAILURE TO EXAMINE ALL CONTRACT DOCUMENTS.
- VERIFY AND INVESTIGATE ALL CONDITIONS IN THE FIELD PRIOR TO STARTING DEMOLITION. NOTIFY ARCHITECT/OWNER OF DISCREPANCIES.
- REMOVE AND REINSTALL ITEMS TO BE SALVAGED WHERE INDICATED AND WHERE ADVISED BY OWNER.
- COORDINATE DEMOLITION WITH OWNER'S REQUIREMENTS AND OTHER CONTRACTORS RETAINED BY THE OWNER.
- CONTRACTOR TO FOLLOW OWNER'S REQUIREMENTS FOR ENSURING SECURITY AND SAFETY OF THE BUILDING THROUGH DEMOLITION AND CONSTRUCTION.
- UTMOST CARE MUST BE TAKEN DURING DEMOLITION TO ENSURE THAT EXISTING CONSTRUCTION TO REMAIN IS NOT DAMAGED. REPAIR OR REPLACE EXISTING CONSTRUCTION DAMAGED BY DEMOLITION ACTIVITIES.
- CONTRACTOR IS TO PROVIDE COMPLETE DUST PROOF ENCLOSURE IN ALL AREAS WHERE DEMOLITION IS TO OCCUR. COMPLY WITH ALL OSHA, NFPA AND OTHER APPLICABLE RULES AND REGULATIONS REGARDING DUST AND DEBRIS REMOVAL.
- INVENTORY SALVAGED ITEMS. LIST SHALL INCLUDE DESCRIPTION OF ITEM, DIMENSIONS (OVERALL WIDTH, HEIGHT, DEPTH), COLOR, APPROX. WEIGHT, AND PHOTO.
- DIMENSIONS AND NEW OPENINGS SHOWN ARE TO BE COORDINATED W/ NEW WORK PLANS.
- REFER TO A4-00 FRAMING PLAN AND DETAILS FOR ADDITIONAL INFORMATION ON SUPPORTING NEW OPENINGS.
- REFER TO SHEET A7-00 FOR WINDOW RESTORATION SCOPE OF WORK. PROTECT EXISTING INTERIOR AND EXTERIOR TRIM, SILLS AND CASING FROM DAMAGE DURING WINDOW SASH REMOVAL. ALL EXISTING TRIMWORK TO REMAIN FOR REPAIR. NOTIFY ARCHITECT IF ANY HISTORIC WOOD TRIM IS BEYOND REPAIR AND REQUIRES REPLICATION.

Sheet Size: ARCH D - 24" x 36"  
 AB\_A\_REVIT\_2022\_Template Version  
 C:\Users\coris\OneDrive\Projects\2021.A03 1315 Broadway\07 Production\BIM\2021.A03\_Broadway\_RVT23\_detached.rvt  
 © 2023 Amy Baker Architect



2 DEMOLITION\_ALLEY ELEVATION  
1/4" = 1'-0"



1 DEMOLITION\_BROADWAY ELEVATION  
1/4" = 1'-0"

DEMOLITION KEYNOTE LEGEND	
Key Value	Keynote Text
02-03	DEMO EXISTING DOOR AND FRAME.
02-04	DEMO EXISTING ALUMINIUM STOREFRONT.
02-06	REMOVE AND SALVAGE EXISTING HISTORIC WOOD DOORS. DEMO PLYWOOD INFILL AT TRANSOM AND PREP FOR NEW GLAZING.
02-08	DEMO PORTION OF MASONRY WALL FOR NEW OVERHEAD DOOR. REFER TO NEW WORK ON A4-00 FOR SIZE, LOCATION AND SHORING OF NEW OPENING.
02-10	EXISTING WINDOWS TO BE RESTORED, REPAIRED, REGLAZED, PAINTED AND PINNED SHUT PER THE RESTORATION SCOPE ON SHEET A7-00.
02-11	REMOVE PLYWOOD AROUND EXISTING STOREFRONT AT THE BASE AND SIDE COLUMNS.
02-13	SALVAGE/PROTECT EXTERIOR GRANITE TILE.
02-15	DEMO BLACK PAINTED ENCLOSURE AND HARDWARE AT THE VESTIBULE SURROUND. REMOVE ELECTRICAL AND CUT BACK TO SOURCE. REFER TO PHOTOS ON A3-30 FOR MORE INFORMATION.
02-16	DEMO EXISTING BLACK PAINTED PLYWOOD INFILL.
02-17	REMOVE STEPS AND LANDING OF EXISTING FIRE ESCAPE. RETAIN AND PROTECT EXISTING MOUNTING BRACKETS FOR FUTURE REINSTALLATION OF NEW FIRE ESCAPE.
02-18	DEMO EXISTING YELLOW AWNING COMPLETE.
02-19	DEMO EXISTING LIGHTING FIXTURE COMPLETE.
02-20	REMOVE EXISTING MECHANICAL EXHAUST AND INFILL PLYWOOD AT ORIGINAL ROUND OPENING.
02-21	PROTECT EXISTING ROUND OPENING. PLYWOOD TO REMAIN INTACT UNTIL FUTURE PHASE WHEN F&B TENANT IS IDENTIFIED.
02-22	RETAIN/PROTECT EXISTING WOOD VESTIBULE CEILING AND ALCOVE PENDANT LIGHT FIXTURE.
02-23	RETAIN/PROTECT EXISTING FRONT ENTRANCE DOOR SURROUND (TRANSOM AND THRESHOLD).
02-24	REMOVE AND SALVAGE GRILLWORK FOR REINSTALLATION. BLACK PAINTED PLYWOOD TO BE DEMOLISHED.
02-25	PROTECT EXISTING FLUTED TRIMWORK SURROUNDING THE GRILLWORK AND SIDE WALLS.
02-26	SALVAGE AND PROTECT EXISTING ROOF LADDER FOR FUTURE REPAIR.
02-27	DEMO EXISTING STEEL WINDOWS AND FRAMES COMPLETE. RETAIN/PROTECT EXISTING SILLS, LINTELS AND HSS MEMBERS.

**DEMO LEGEND**

- DEMO SYSTEM COMPLETELY
- DEMO GLAZING OR PLYWOOD FROM WINDOW SYSTEM. FRAME TO BE PROTECTED AND REMAIN INTACT FOR FUTURE REPAIR / RESTORATION.

**DEMO GENERAL NOTES**

1. CLEAN ALL EXTERIOR SURFACES WITH LOW PRESSURE WATER WASH. USE PH NEUTRAL DETERGENT CLEANERS WHERE NECESSARY. REMOVE ALL OILS, DIRT, JOINT SEALANTS, MASTICS, COATINGS, AND PAINTS ON MASONRY SURFACES. WHEREVER DETERGENTS OR CLEANING AGENTS ARE USED, TEST 3X3 AREA OF EACH MASONRY SURFACE TO BE CLEANED TO ENSURE THAT DETERGENTS AND CLEANING PROCEDURES DO NOT ALTER, DAMAGE, OR ETCH THE EXISTING MASONRY.
2. ASSUME THAT 90% OF SURFACE AREA REQUIRES TUCKPOINTING. PROVIDE UNIT PRICE IF ADDITIONAL TUCKPOINTING IS REQUIRED. USE MORTAR MATERIALS HAVING THE SAME COLOR, TEXTURE, MIX DESIGN, JOINT TOOLING AND PROPERTIES AS EXISTING MORTAR.
3. REPAIR OR REPLACE 40% OF EXISTING TERRA COTTA ON BROADWAY ELEVATION. MASONRY RESTORATION CONTRACTOR TO EVALUATE AND PROVIDE SPECIFIC RECOMMENDATIONS TO STABILIZE DAMAGED TERRA COTTA.
4. CONTRACTOR SHALL VISIT SITE TO VERIFY ACTUAL EXTENT OF EXTERIOR DEMOLITION AND NEW EXTERIOR WORK PRIOR TO BID. DO NOT RELY SOLELY ON THE DRAWINGS FOR SCOPE OF WORK. ALL DEMOLITION REQUIRED TO CARRY OUT THE WORK OF THE CONTRACT SHALL BE PART OF THE CONTRACT. NO ADDITION TO THE CONTRACT AMOUNT WILL BE ALLOWED DUE TO FAILURE TO FIELD VERIFY SCOPE OR FAILURE TO EXAMINE ALL CONTRACT DOCUMENTS.
5. VERIFY AND INVESTIGATE ALL CONDITIONS IN THE FIELD PRIOR TO STARTING WORK. NOTIFY ARCHITECT/OWNER OF DISCREPANCIES BETWEEN DRAWINGS AND EXISTING CONDITIONS.
6. LOCATE AND IDENTIFY SERVICES TO REMAIN IN OPERATION, INCLUDING ALL UTILITY LINES, UNDOCUMENTED CONDITIONS, UTILITY RISERS, ETC.
7. REMOVE AND REINSTALL ITEMS TO BE SALVAGED WHERE INDICATED AND WHERE ADVISED BY OWNER.
8. COORDINATE DEMOLITION WITH OTHERS REQUIREMENTS AND OTHER CONTRACTORS RETAINED BY THE OWNER.
9. CONTRACTOR TO FOLLOW OWNER'S REQUIREMENTS FOR ENSURING SECURITY AND SAFETY OF THE BUILDING THROUGH DEMOLITION AND CONSTRUCTION.
10. UTMOST CARE MUST BE TAKEN DURING DEMOLITION AND CONSTRUCTION THAT EXISTING CONSTRUCTION TO REMAIN IS NOT DAMAGED. CONTRACTOR IS RESPONSIBLE FOR REPAIRING OR REPLACING EXISTING CONSTRUCTION DAMAGED BY DEMOLITION ACTIVITY.
11. CONTRACTOR IS TO PROVIDE PROTECTION FROM DUST AND FALLING DEBRIS AND ENCLOSE AREAS WHERE DEMOLITION AND NEW WORK IS TO OCCUR. COMPLY WITH ALL OSHA, NFPA AND OTHER APPLICABLE RULES AND REGULATIONS REGARDING DUST AND DEBRIS REMOVAL.
12. REMOVE ITEMS SCHEDULE FOR DEMOLITION, COMPLETE.
13. WHEN REMOVING MECHANICAL AND ELECTRICAL ITEMS, REMOVAL ALL ASSOCIATED CONSTRUCTION, INCLUDING FASTENERS, CABLE, ROD, ETC.
14. WHERE EXISTING PAINTED SURFACES ARE TO REMAIN: REMOVE ALL LOOSE AND PEELING PAINT BY SCRAPING. CLEAN SURFACES PRIOR TO REPAINTING.
15. CONTRACTOR TO KEEP SITE CLEAN AND SECURE AT THE END OF EACH DAY.
16. REFER TO MASONRY RESTORATION SPECIFICATION FOR FULL SCOPE OF WORK.
17. REMOVE AND REPLACE ALL EXISTING GUTTERS AND DOWNSPOUTS
18. PROVIDE EGRESS LIGHTING AS SCHEDULED AT ALL ENTRY/EXIT DOORS, TYP.



SEAL

THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL THE SEAL AND SIGNATURE OF THE RESPONSIBLE REGISTRANT APPEARS ON THE DRAWING, AND PROPER PERMIT FORMS AND RELATED FEES ARE TRANSMITTED BY THE OWNER, OWNER'S AGENT OR CONTRACTOR TO THE AUTHORITY HAVING JURISDICTION.

CONSULTANT

CLIENT

PROJECT  
 2021.A03  
**1315 Broadway**

1315 Broadway  
 Detroit, Michigan 48226

ISSUANCE  
 2023-08-21 HDC SUBMISSION

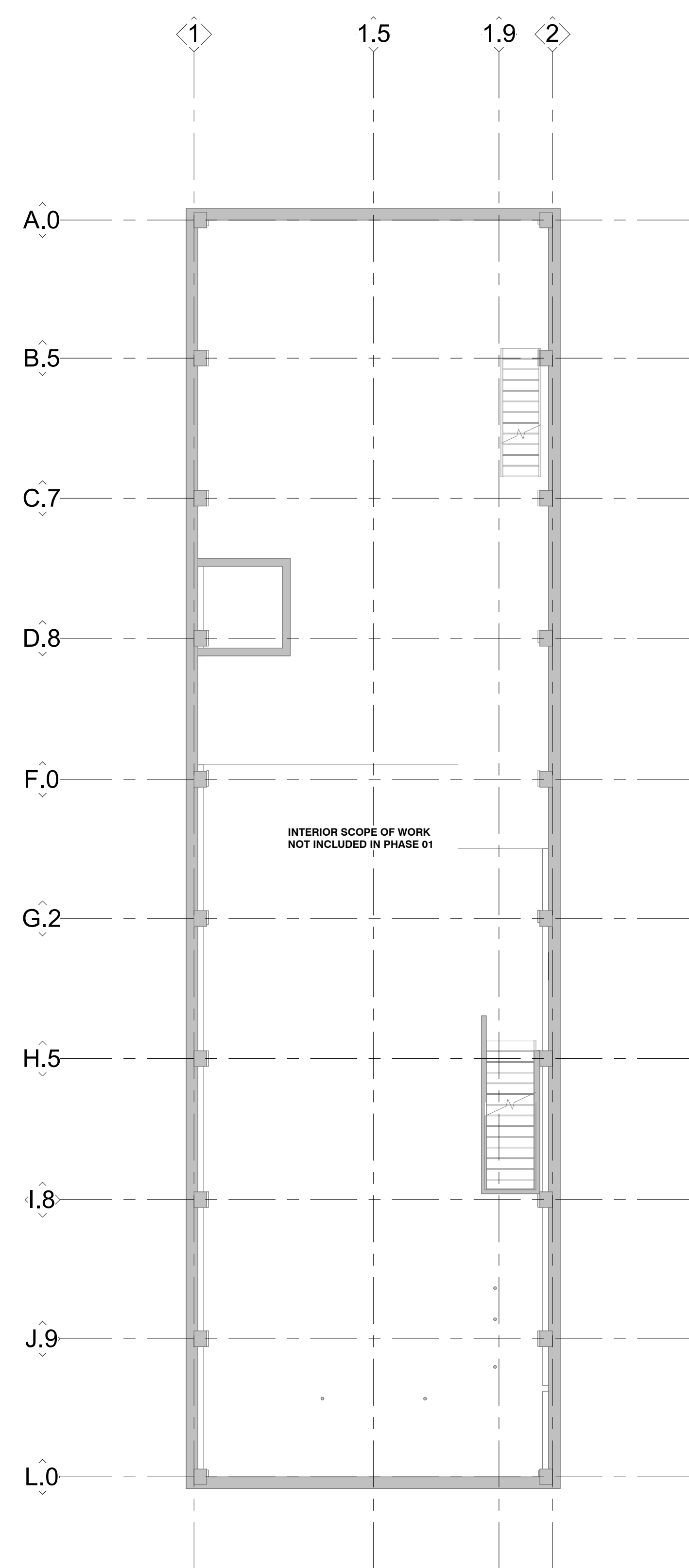
REVISIONS

TITLE  
**DEMO NORTH AND SOUTH ELEVATIONS**

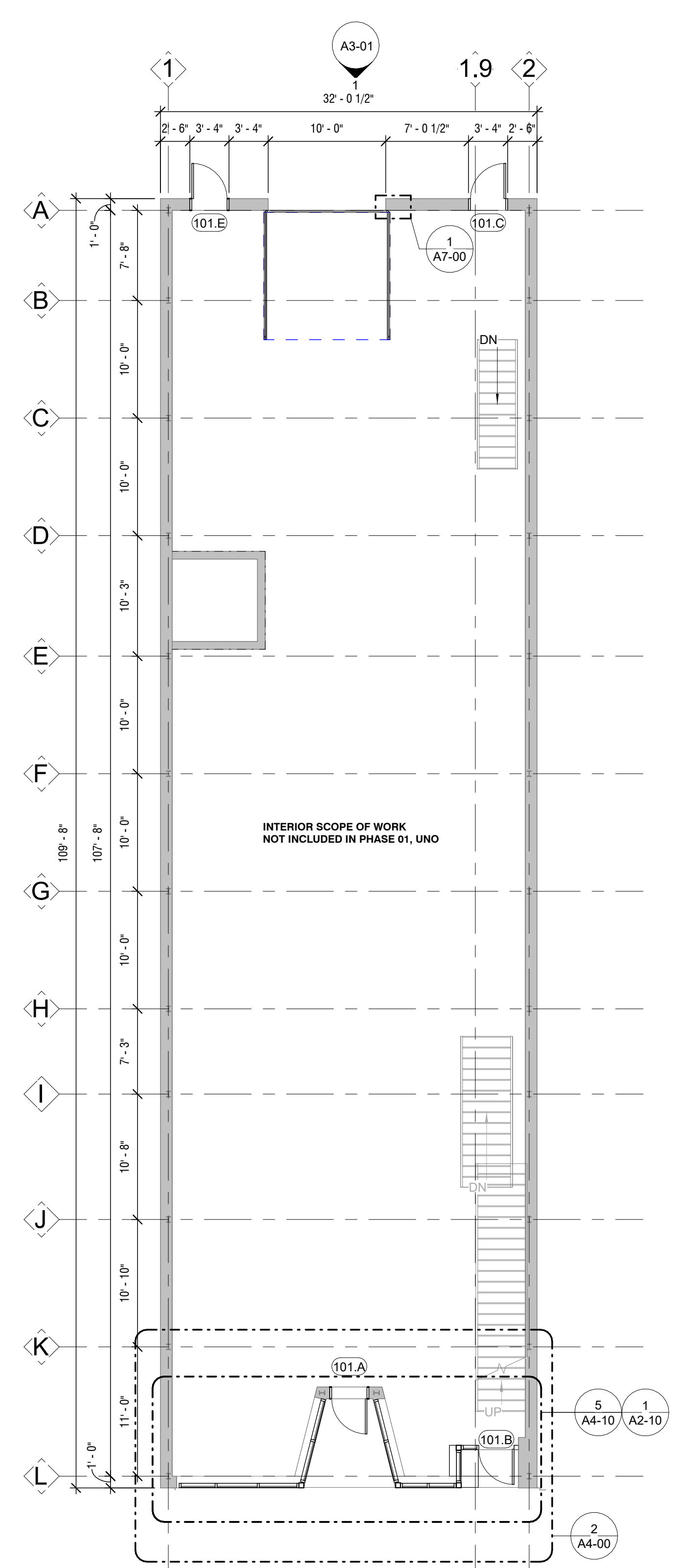
SHEET

**A1-10**

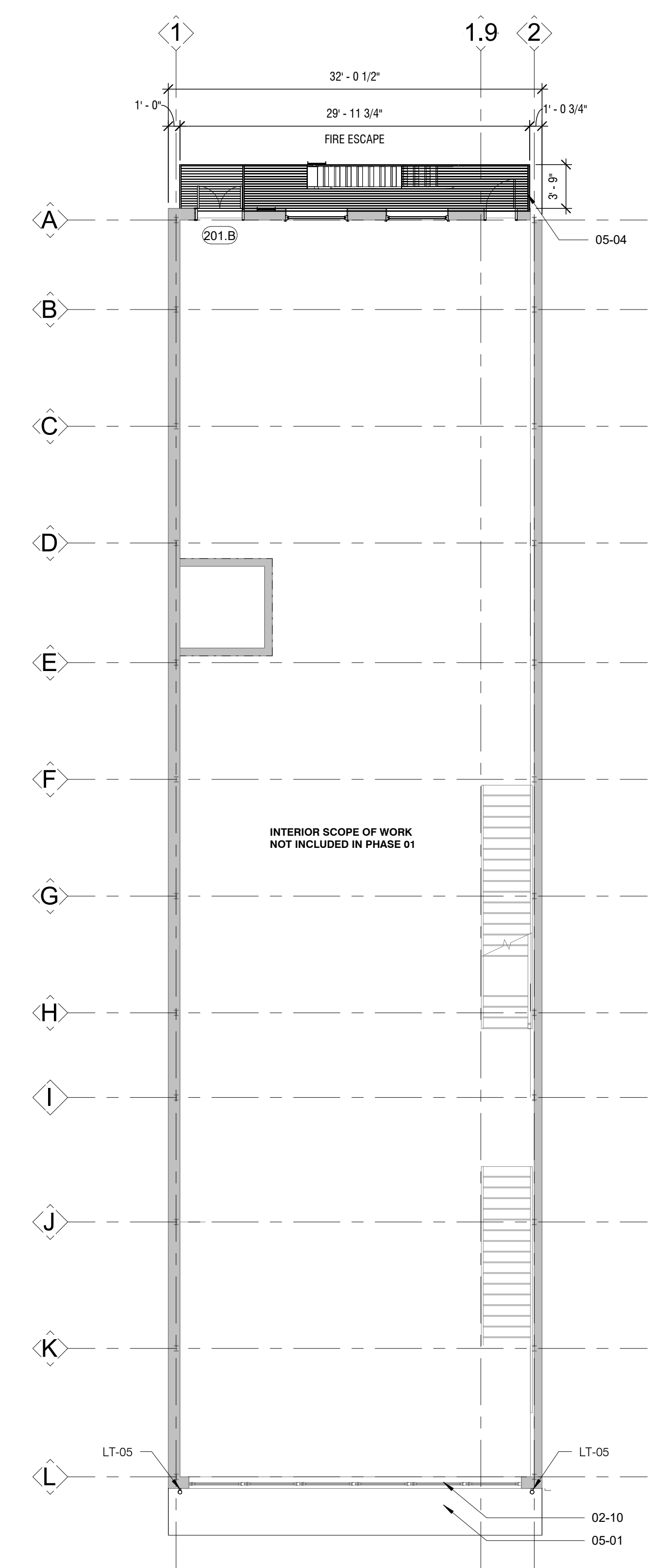
Sheet Size: ARCH D - 24" x 36" ABA\_REVITLT\_2022\_Template Version  
 C:\Users\coris\OneDrive\Projects\2021.A03\_1315 Broadway\07 Production\BIM\2021.A03\_Broadway\_RVT23\_detached.rvt  
 © 2023 Amy Baker Architect



2 FLOOR PLAN BASEMENT  
 A3-10 1/8" = 1'-0"



1 FLOOR PLAN FIRST FLOOR  
 A1-10 1/8" = 1'-0"



3 FLOOR PLAN SECOND FLOOR  
 A1-10 1/8" = 1'-0"

NEW WORK KEYNOTE LEGEND	
Key Value	Keynote Text
02-10	EXISTING WINDOWS TO BE RESTORED, REPAIRED, REGLAZED, PAINTED AND PINNED SHUT PER THE RESTORATION SCOPE ON SHEET A7-00
05-01	NEW METAL AWNING TO REPLACE ALUMINUM BAND.
05-04	NEW STEEL, POWDER COATED FIRE ESCAPE TO BE INSTALLED TO MATCH PROFILES, DIMENSIONS, AND CONFIGURATION OF EXISTING FIRE ESCAPE, UTILIZING EXISTING MOUNTING BRACKETS.

**GENERAL NOTES**

1. ARCH ELEV 0'-0" = EXISTING GRADE ELEVATION, RE: CIVIL
2. CONTRACTOR TO COORDINATE WITH ARCHITECT ALL DISCREPANCIES BETWEEN DRAWINGS AND EXISTING CONDITIONS PRIOR TO ANY WORK OR INSTALLATION
3. CONTRACTOR SHALL FULLY REVIEW AND COORDINATE ARCHITECT'S DRAWINGS WITH ENGINEER'S DRAWINGS. REFER ANY QUESTIONS OR CONFLICT TO ARCHITECT PRIOR TO BEGINNING WORK.
4. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS, COLUMN LOCATIONS AND EXISTING CONDITIONS. NOTIFY ARCHITECT OF ANY POSSIBLE CONFLICTS PRIOR TO INITIATING ANY WORK IN QUESTION.
5. PATCH AND INFILL MISSING OR DAMAGED BRICK AROUND DOOR FRAMES.

  
**AMY BAKER**  
 ARCHITECT  
 1012 OWANA AVENUE  
 ROYAL OAK, MI 48067  
 (248) 931-3055  
 amy@amybakerarchitect.com

SEAL

THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL THE SEAL AND SIGNATURE OF THE RESPONSIBLE REGISTRANT APPEARS ON THE DRAWING, AND PROPER PERMIT FORMS AND RELATED FEES ARE TRANSMITTED BY THE OWNER, OWNER'S AGENT OR CONTRACTOR TO THE AUTHORITY HAVING JURISDICTION.

CONSULTANT

CLIENT

PROJECT  
 2021.A03  
**1315 Broadway**

1315 Broadway  
 Detroit, Michigan 48226

ISSUANCE  
 2023-08-21 HDC SUBMISSION

REVISIONS

NO.	DATE	DESCRIPTION

TITLE  
**FLOOR PLANS**

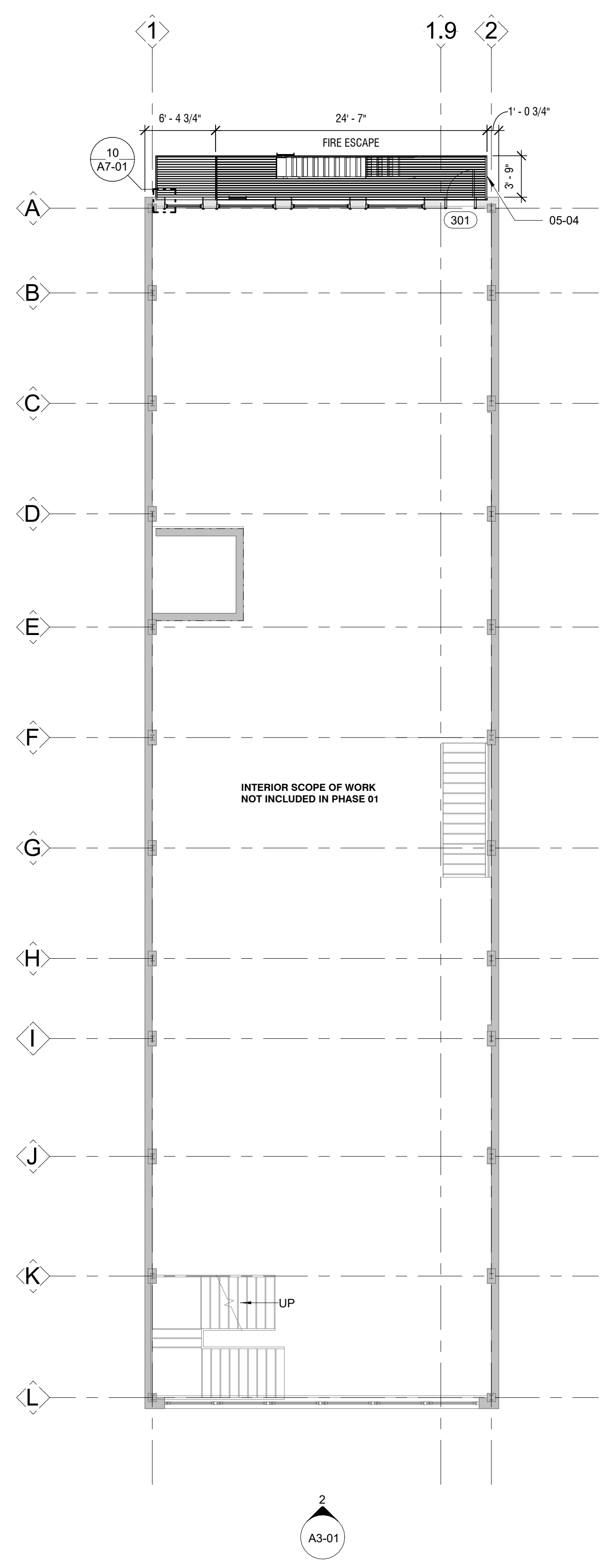
SHEET  
**A2-01**

Sheet Size: ARCH D - 24" x 36"  
 ABA\_REVITILT\_2022\_Template Version  
 C:\Users\coris\OneDrive\Dropbox\Corissa Leveille\Projects\2021.A03\_1315 Broadway\07 Production\BIM\2021.A03\_1315 Broadway\RV123\_detached.rvt  
 © 2023 Amy Baker Architect

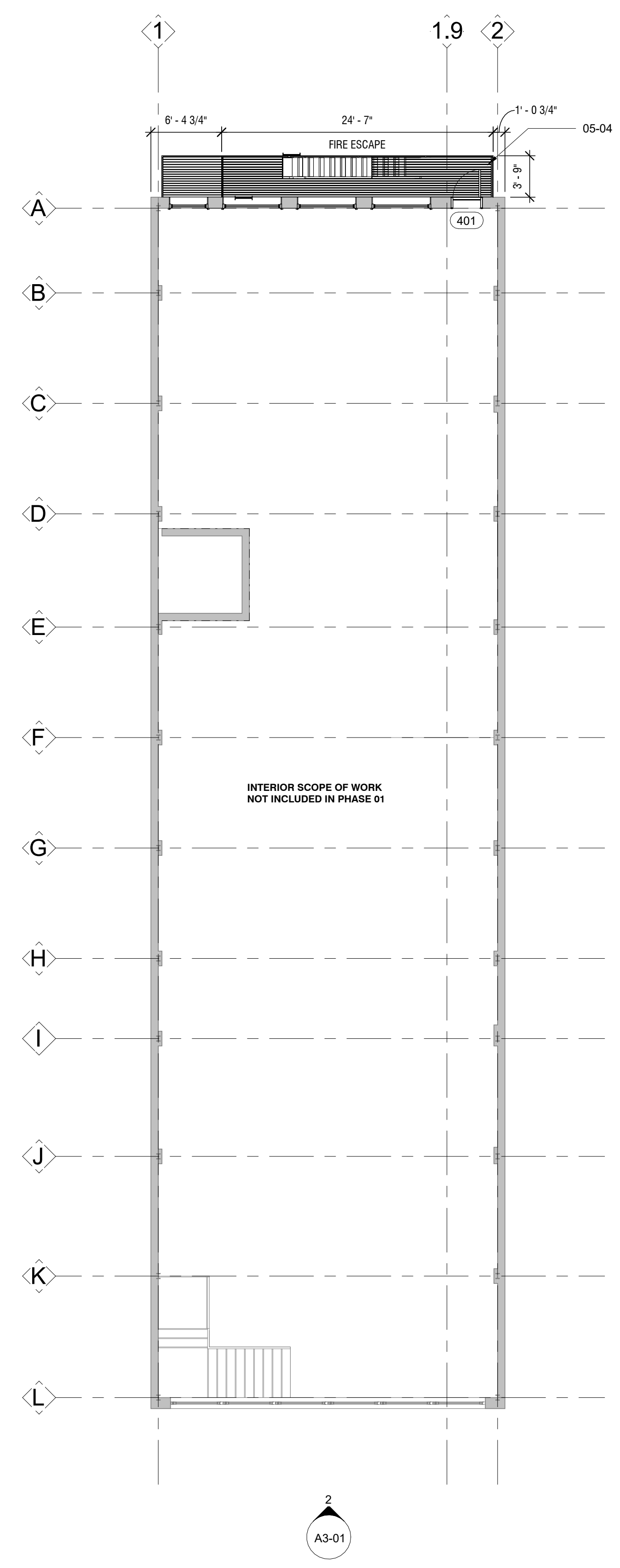
NEW WORK KEYNOTE LEGEND	
Key Value	Keynote Text
05-04	NEW STEEL, POWDER COATED FIRE ESCAPE TO BE INSTALLED TO MATCH PROFILES, DIMENSIONS, AND CONFIGURATION OF EXISTING FIRE ESCAPE, UTILIZING EXISTING MOUNTING BRACKETS.

  
**AMY BAKER ARCHITECT**  
 1012 OWANA AVENUE  
 ROYAL OAK, MI 48067  
 (248) 931-3055  
 amy@amybakerarchitect.com

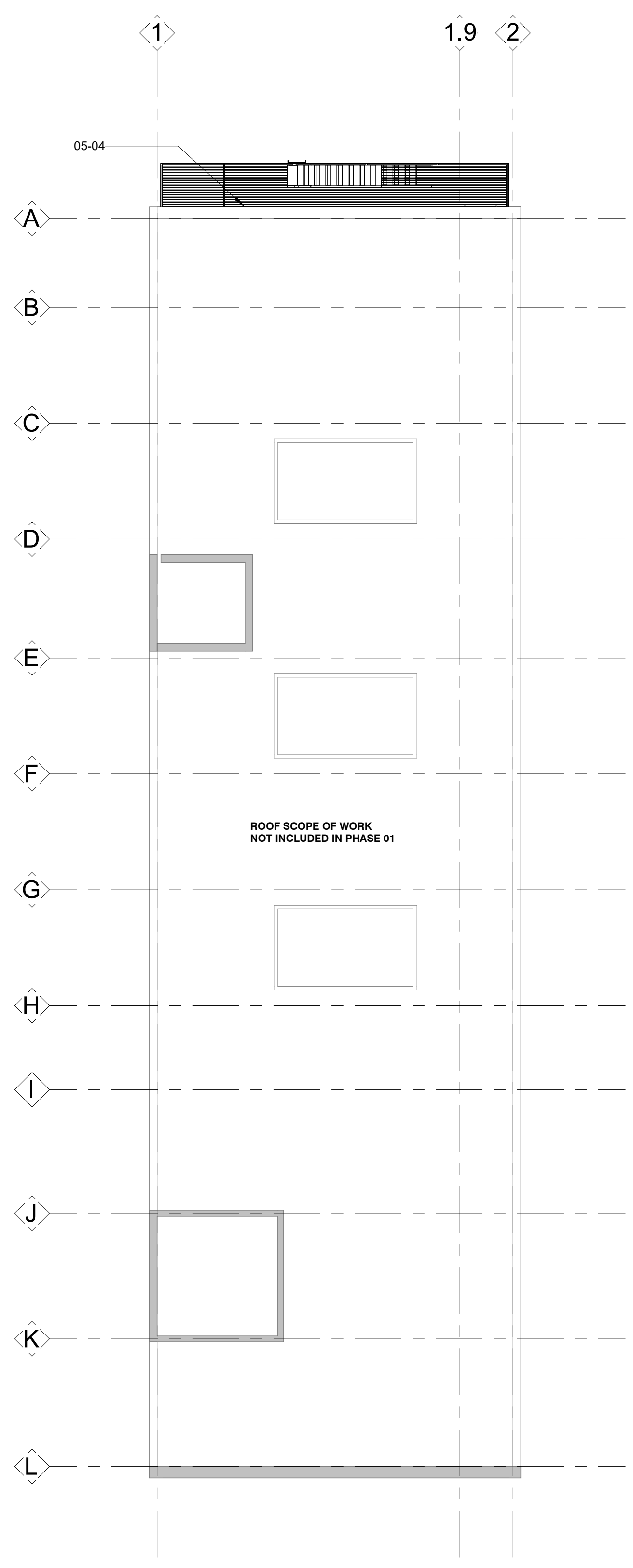
SEAL



3 FLOOR PLAN THIRD FLOOR  
 A1-10 1/8" = 1'-0"



2 FLOOR PLAN FOURTH FLOOR  
 A1-10 1/8" = 1'-0"



1 ROOF PLAN  
 A1-10 1/8" = 1'-0"

**GENERAL NOTES**

1. ARCH ELEV 0'-0" = EXISTING GRADE ELEVATION, RE: CIVIL
2. CONTRACTOR TO COORDINATE WITH ARCHITECT ALL DISCREPANCIES BETWEEN DRAWINGS AND EXISTING CONDITIONS PRIOR TO ANY WORK OR INSTALLATION
3. CONTRACTOR SHALL FULLY REVIEW AND COORDINATE ARCHITECT'S DRAWINGS WITH ENGINEER'S DRAWINGS. REFER ANY QUESTIONS OR CONFLICT TO ARCHITECT PRIOR TO BEGINNING WORK.
4. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS, COLUMN LOCATIONS AND EXISTING CONDITIONS. NOTIFY ARCHITECT OF ANY POSSIBLE CONFLICTS PRIOR TO INITIATING ANY WORK IN QUESTION.
5. PATCH AND INFILL MISSING OR DAMAGED BRICK AROUND DOOR FRAMES.

THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL THE SEAL AND SIGNATURE OF THE RESPONSIBLE REGISTRANT APPEARS ON THE DRAWING, AND PROPER PERMIT FORMS AND RELATED FEES ARE TRANSMITTED BY THE OWNER, OWNER'S AGENT OR CONTRACTOR TO THE AUTHORITY HAVING JURISDICTION.

CONSULTANT

CLIENT

PROJECT  
 2021.A03  
**1315 Broadway**

1315 Broadway  
 Detroit, Michigan 48226

ISSUANCE  
 2023-08-21 HDC SUBMISSION

REVISIONS

TITLE  
**FLOOR PLANS**

SHEET  
**A2-02**

Sheet Size: ARCH D - 24" x 36" : Template Version  
 ABA\_REVITILT\_2022 : Template Version  
 C:\Users\coris\AB A Dropbox\Corissa Leveille\Projects\2021.A03 1315 Broadway\07 Production\BIM\2021.A03\_Broadway\_RVT23\_detached.rvt  
 © 2023 Amy Baker Architect

LIGHT FIXTURE SCHEDULE					
Type Mark	Description	Manufacturer	Model	Finish	Comments
LT-01	EXTERIOR SCONCE	THOMAS O'BRIEN	PHELHAM 10" WALL SCONCE: #9010656	HAND RUBBED ANTIQUE BRASS	
LT-02	EXTERIOR PENDANT	EXISTING	-	-	RESTORE EXISTING FIXTURE
LT-03	EXTERIOR FLUSH FIXTURE	WAC LIGHTING	YORK 12" WIDE LED DRUM CEILING FIXTURE: #FM-45012-AB	AGED BRASS	
LT-04	RECESSED CAN LIGHT	ACULUX	AX4: A-17LM-30K-90CRI-50D-GZ1-120-4ABV-BLSF-WET	BLACK	
LT-05	UPLIGHTING	HYDREL	SPECIALTY ARCHITECTURAL FLOOD: SAF7	BLACK	

NEW WORK KEYNOTE LEGEND	
Key Value	Keynote Text
09-04	REPAIR AND REPAINT EXISTING CEILING.
26-02	RESTORE EXISTING ALCOVE PENDANT FIXTURE.
055000-04	BREAK METAL, 0.040" ALUMINUM, PREFINISHED, BLACK.

**GENERAL NOTES**

- REFER TO ELEVATIONS AND FLOOR PLANS FOR WALL MOUNTED LIGHT FIXTURE LOCATIONS.
- FINAL PLACEMENT OF UPLIGHTING TO BE COORDINATED IN THE FIELD, AT NIGHT TO CONFIRM THE CORRECT POSITIONING AND SPREAD ALONG THE FACE OF THE BUILDING.



**AMY BAKER**  
 ARCHITECT  
 1012 OWANA AVENUE  
 ROYAL OAK, MI 48067  
 (248) 931-3055  
 amy@amybakerarchitect.com

SEAL

THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL THE SEAL AND SIGNATURE OF THE RESPONSIBLE REGISTRANT APPEARS ON THE DRAWING, AND PROPER PERMIT FORMS AND RELATED FEES ARE TRANSMITTED BY THE OWNER, OWNER'S AGENT OR CONTRACTOR TO THE AUTHORITY HAVING JURISDICTION.

CONSULTANT

CLIENT

**PROJECT**  
 2021.A03  
**1315 Broadway**

1315 Broadway  
 Detroit, Michigan 48226

**ISSUANCE**  
 2023-08-21 HDC SUBMISSION

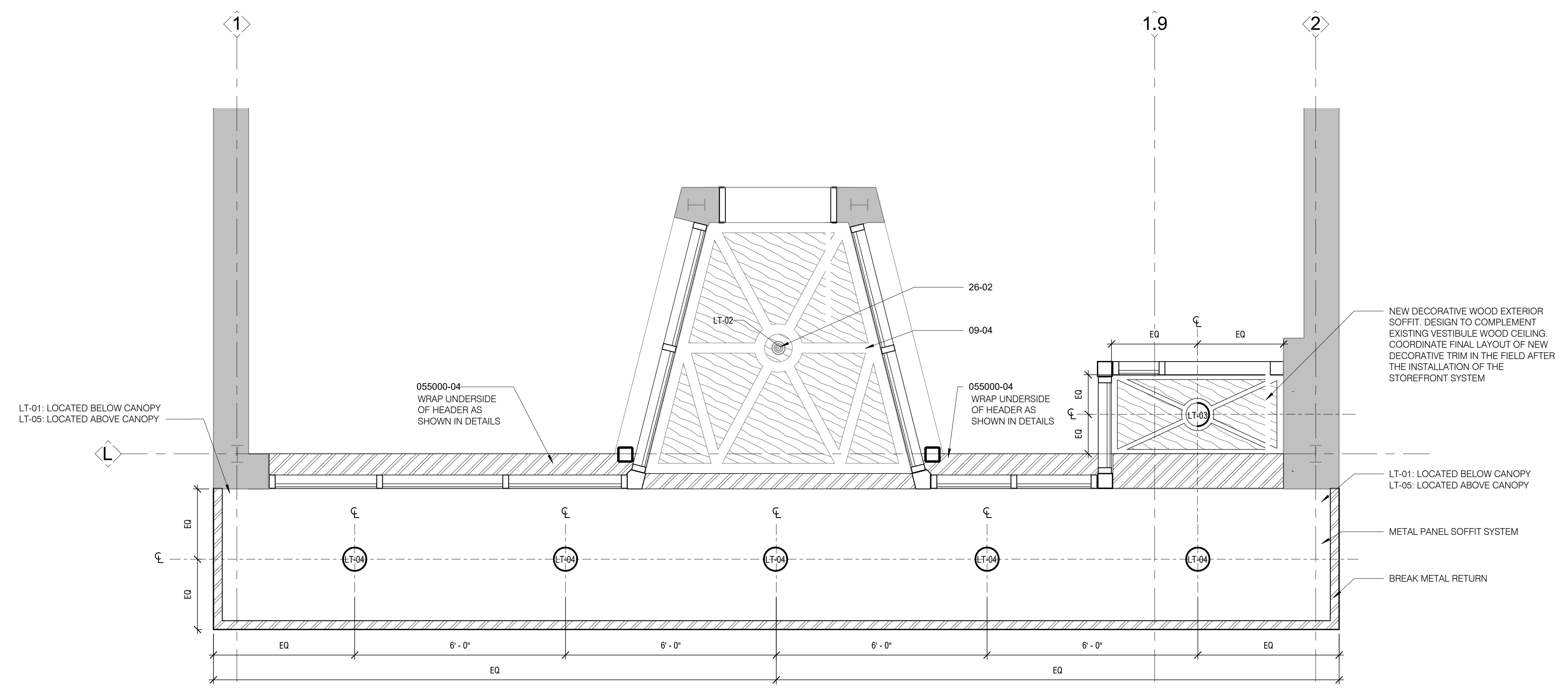
REVISIONS

TITLE

**ENLARGED REFLECTED CEILING PLAN**

SHEET

**A2-10**



**1**  
 A2-01 ENLARGED REFLECTED CEILING PLAN  
 1/2" = 1'-0"

Sheet Size: ARCH D - 24" x 36" ABA\_REVITLT\_2022\_Template Version  
 C:\Users\coris\OneDrive\Projects\2021\_A03\_1315 Broadway\07\_Production\BIM\2021\_A03\_1315 Broadway\_07\_Production\_RVT23\_detached.rvt  
 © 2023 Amy Baker Architect

### LIGHT FIXTURE SCHEDULE

Type Mark	Description	Manufacturer	Model	Finish	Comments
LT-01	EXTERIOR SCONCE	THOMAS O'BRIEN	PHELHAM 10" WALL SCONCE: #9010656	HAND RUBBED ANTIQUE BRASS	
LT-02	EXTERIOR PENDANT	EXISTING	-	-	RESTORE EXISTING FIXTURE
LT-03	EXTERIOR FLUSH FIXTURE	WAC LIGHTING	YORK 12" WIDE LED DRUM CEILING FIXTURE: #FM-45012-AB	AGED BRASS	
LT-04	RECESSED CAN LIGHT	ACULUX	AX4: A-17LM-30K-90CRI-60D-GZ1-120-4ABV-BLSF-WET	BLACK	
LT-05	UPLIGHTING	HYDREL	SPECIALTY ARCHITECTURAL FLOOD: SAF7	BLACK	

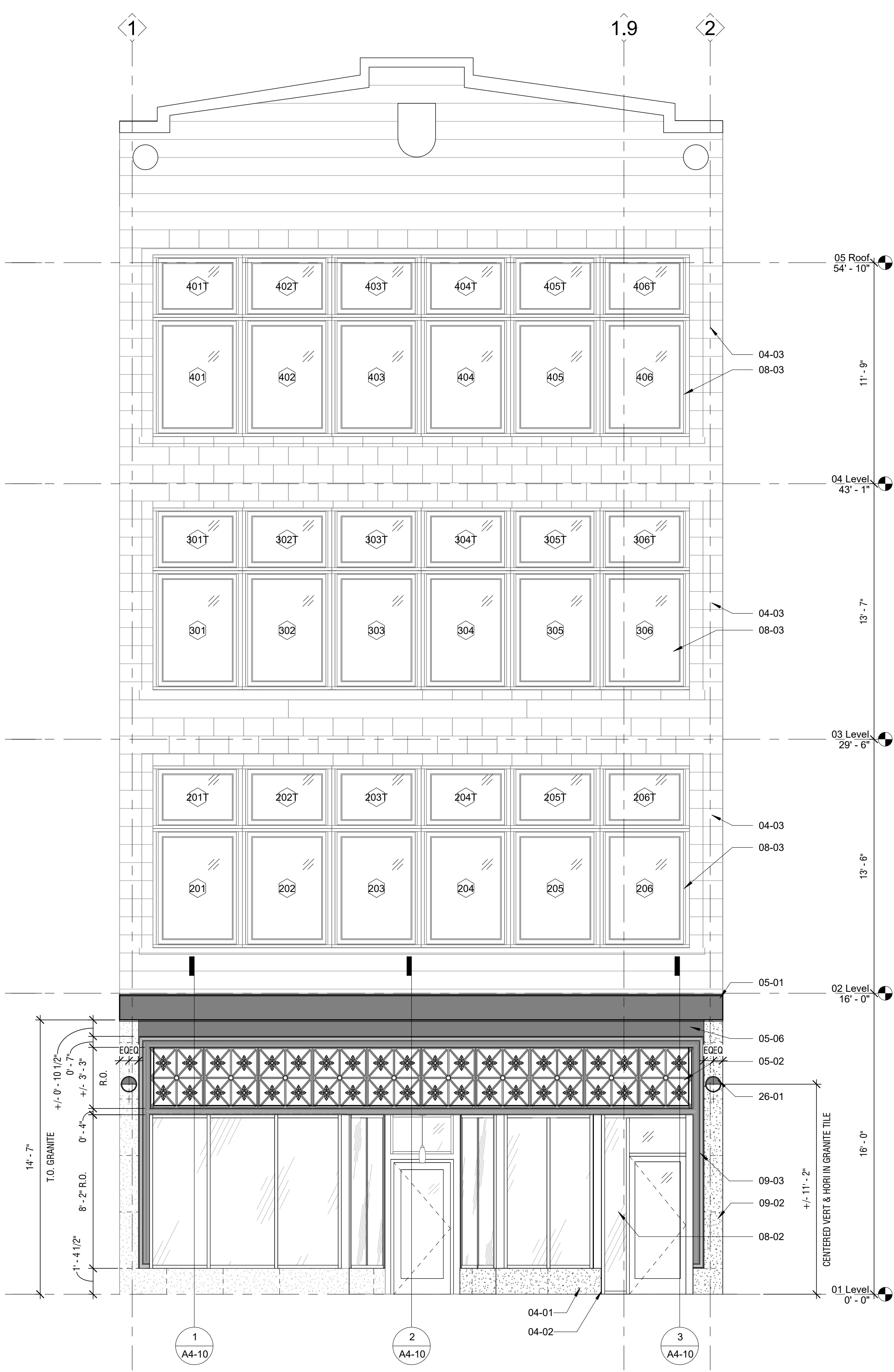
### KEYNOTE LEGEND

Number	Note
04-01	RESTORE EXISTING GRANITE BASE AND COLUMNS.
04-02	INSTALL NEW GRANITE TO MATCH EXISTING AROUND NEW ENTRANCE ALCOVE.
04-03	EXISTING TERRA-COTTA TO BE RESTORED/REPAIRED.
05-01	NEW METAL AWNING TO REPLACE ALUMINUM BAND.
05-02	GRILLWORK TO BE SALVAGED AND PAINTED BLACK. MISSING DECORATIVE LEAVES TO BE PATTERNED AND REPLACED. DECORATIVE LEAVES TO BE PAINTED METALLIC GOLD COLOR. NEW GLASS SSG CASSETTE CURTAIN WALL WITH VERTICAL SSG JOINTS ALIGNED WITH GRILLWORK VERTICAL MULLIONS.
05-03	ROOF LADDER TO BE RESTORED/REPAIRED.
05-04	NEW STEEL, POWDER COATED FIRE ESCAPE TO BE INSTALLED TO MATCH PROFILES, DIMENSIONS, AND CONFIGURATION OF EXISTING FIRE ESCAPE. UTILIZING EXISTING MOUNTING BRACKETS.
05-05	ROUND ALUMINUM LOUVER, PREFINISHED, TO BE INSTALLED FOR F&B TENANT IN EXISTING ROUND OPENING.
05-06	INSTALL FLAT BLACK BRAKE METAL BETWEEN AWNING AND HISTORIC DECORATIVE GRILLWORK FLUTED TRIM.
08-02	NEW STOREFRONT, BASIS OF DESIGN: KAWNEER TRIFAB VERSAGLAZE 451T WITH FRONT-GLASS SETTING.
08-03	EXISTING WOODEN PIVOT WINDOWS AND TRANSOM WINDOWS TO BE RESTORED, REPAIRED, REGLAZED, PAINTED, AND PINNED SHUT.
08-04	NEW GLASS-FRONT GARAGE DOOR. SEE STRUCTURAL DRAWINGS FOR SHORING AND SUPPORT REQUIREMENTS.
08-05	DOUBLE-DOOR TO BE RESTORED & SEALED SHUT. REPLACE EXISTING GLAZING WITH TEMPERED GLAZING. RESTORE EXISTING TRANSOM AND REPLACE PLYWOOD WITH 1/4 INCH TEMPERED, 45-MIN FIRE RATED GLAZING.
08-06	ALUMINUM FRAMED ROUND WINDOW INSTALLED IN EXISTING ROUND OPENING WITH 1-INCH CLEAR INSULATED GLAZING.
08-07	NEW FLUSH HOLLOW METAL DOOR AND FRAME. PAINTED BLACK.
08-11	GLAZED ALUMINUM ENTRANCE DOOR AND TRANSOM. BASIS OF DESIGN: KAWNEER MODEL 350 STANDARD ENTRANCE.
09-01	NEW GRAFFITI ART TO BE REPAIRED WHERE REQUIRED. TOP OF GRAFFITI SHALL NOT EXTEND BEYOND UPPER LIMIT OF EXISTING GRAFFITI.
09-02	BLACK GRANITE BASE AND SIDE COLUMNS TO BE RESTORED, REPAIRED, OR INFILLED WITH MATCHING GRANITE (WHERE MISSING).
09-03	FLUTED TRIM TO BE RESTORED AND REPAINTED.
26-01	NEW SCONCES W/ HISTORIC PROFILE. SEE SPEC.
26-04	ELECTRICAL METER BANK LOCATION.
055000-04	BREAK METAL, 0.040" ALUMINUM, PREFINISHED, BLACK.
084113-01	STOREFRONT.
085113-02	HISTORIC REPLICATED ALUMINUM BACKSET FIXED TRANSOM WINDOW ASSEMBLY.

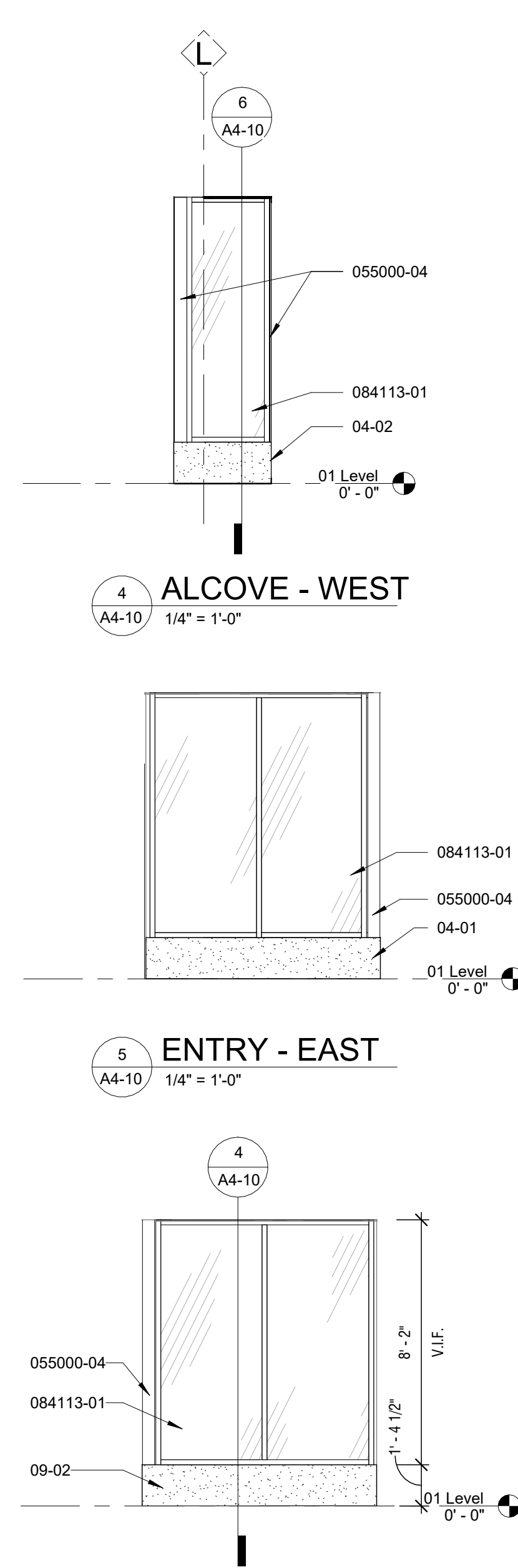
  
**AMY BAKER**  
 ARCHITECT  
 1012 OWANA AVENUE  
 ROYAL OAK, MI 48067  
 (248) 931-3055  
 amy@amybakeraarchitect.com



**1 ALLEY ELEVATION**  
A2-01 1/4" = 1'-0"



**2 BROADWAY ELEVATION**  
A2-01 1/4" = 1'-0"



**3 ENTRY - WEST**  
A4-10 1/4" = 1'-0"

SEAL

THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL THE SEAL AND SIGNATURE OF THE RESPONSIBLE REGISTRANT APPEARS ON THE DRAWING, AND PROPER PERMIT FORMS AND RELATED FEES ARE TRANSMITTED BY THE OWNER, OWNER'S AGENT OR CONTRACTOR TO THE AUTHORITY HAVING JURISDICTION.

CONSULTANT

CLIENT

PROJECT  
2021.A03  
**1315 Broadway**

1315 Broadway  
Detroit, Michigan 48226

ISSUANCE  
2023-08-21 HDC SUBMISSION

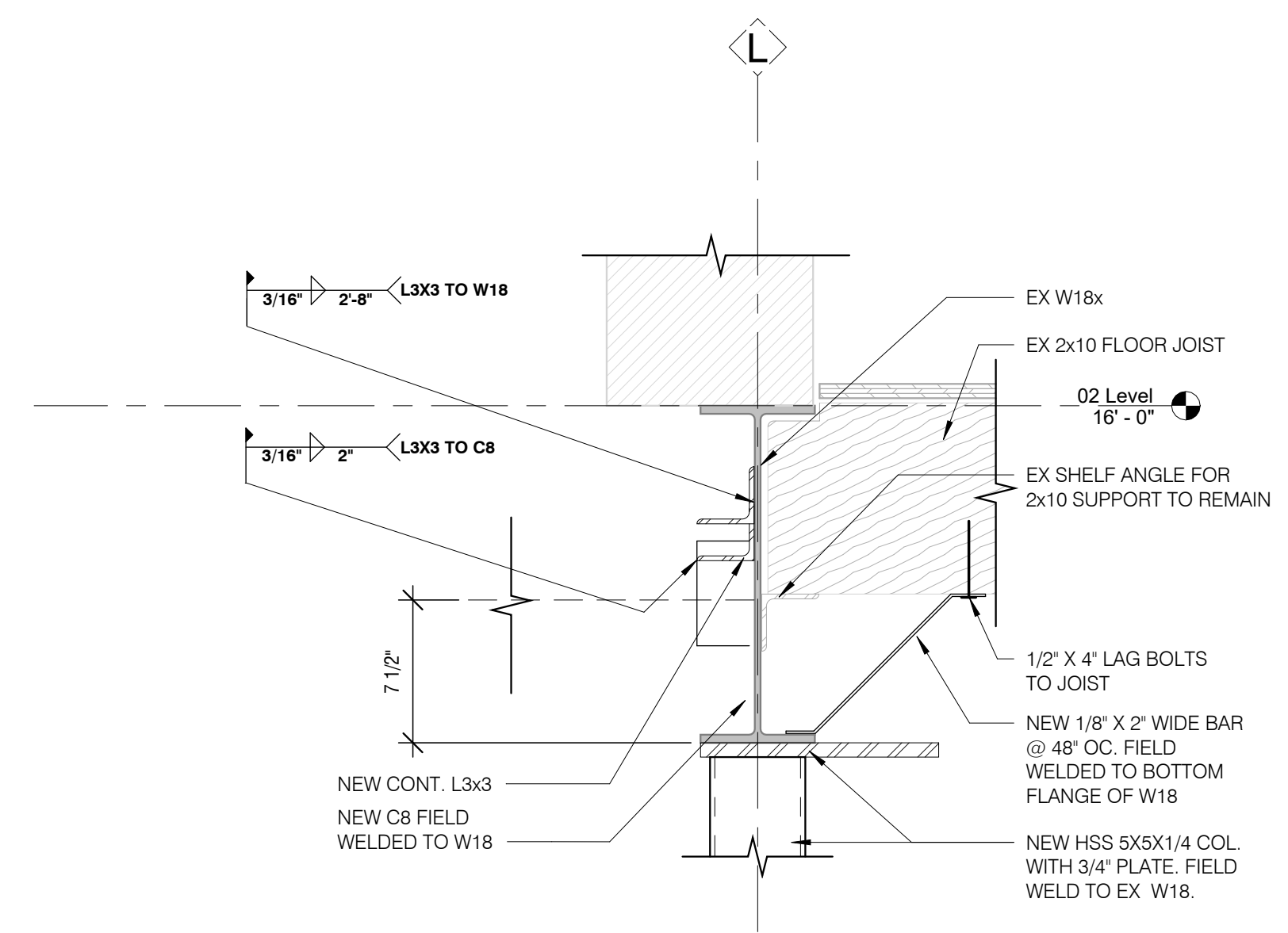
REVISIONS

TITLE  
**NORTH AND SOUTH ELEVATIONS**

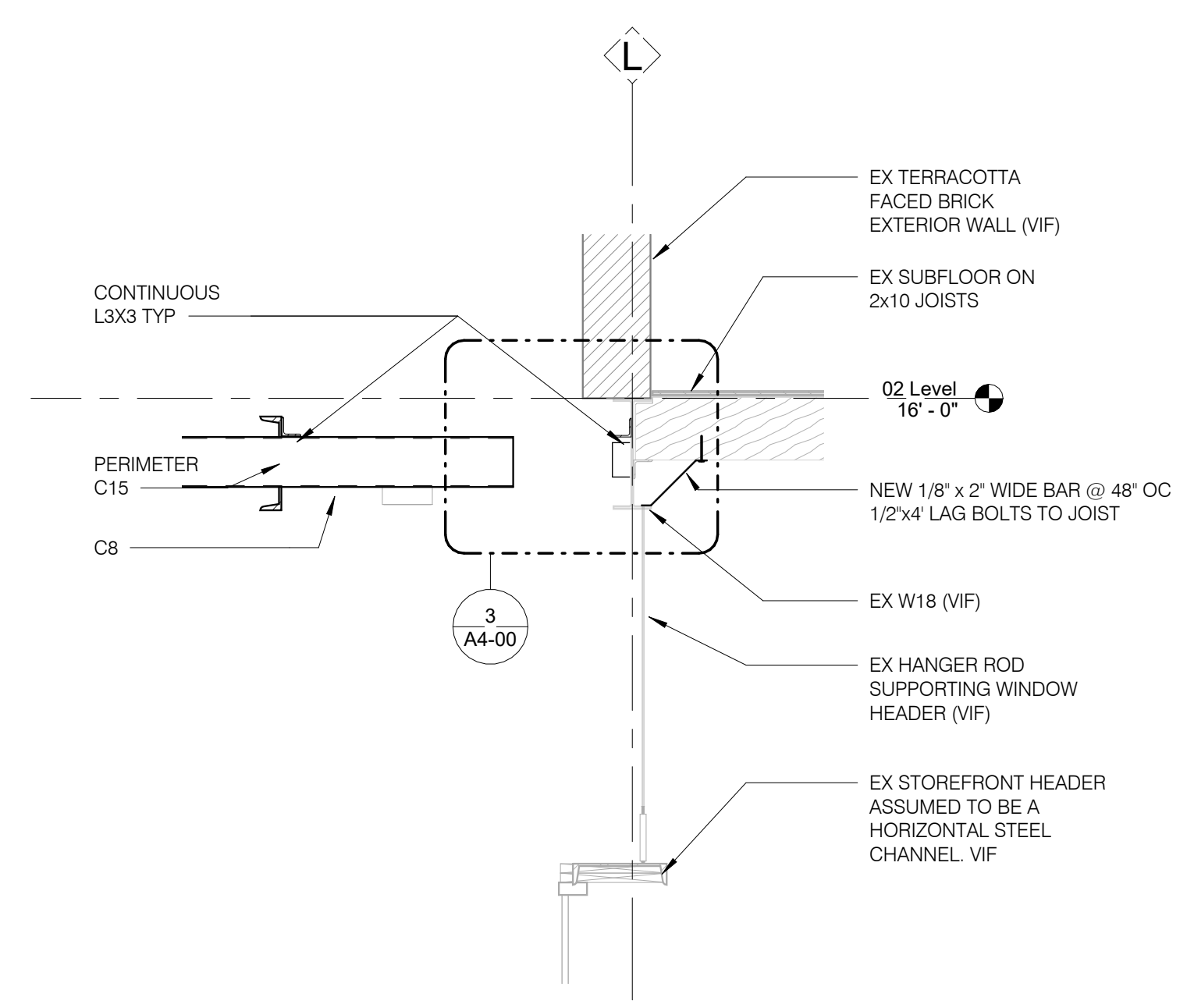
SHEET

**A3-01**

Sheet Size: ARCH D - 24" x 36" ABA\_REVITILT\_2022\_Template Version  
 C:\Users\coris\OneDrive\Dropbox\Corissa Leveille\Projects\2021.A03 1315 Broadway\07 Production\BIM\2021.A03\_Broadway\_RVT23\_detached.rvt  
 © 2023 Amy Baker Architect



**3 WELDING DETAIL AT HSS**  
 A4-00 1 1/2" = 1'-0"



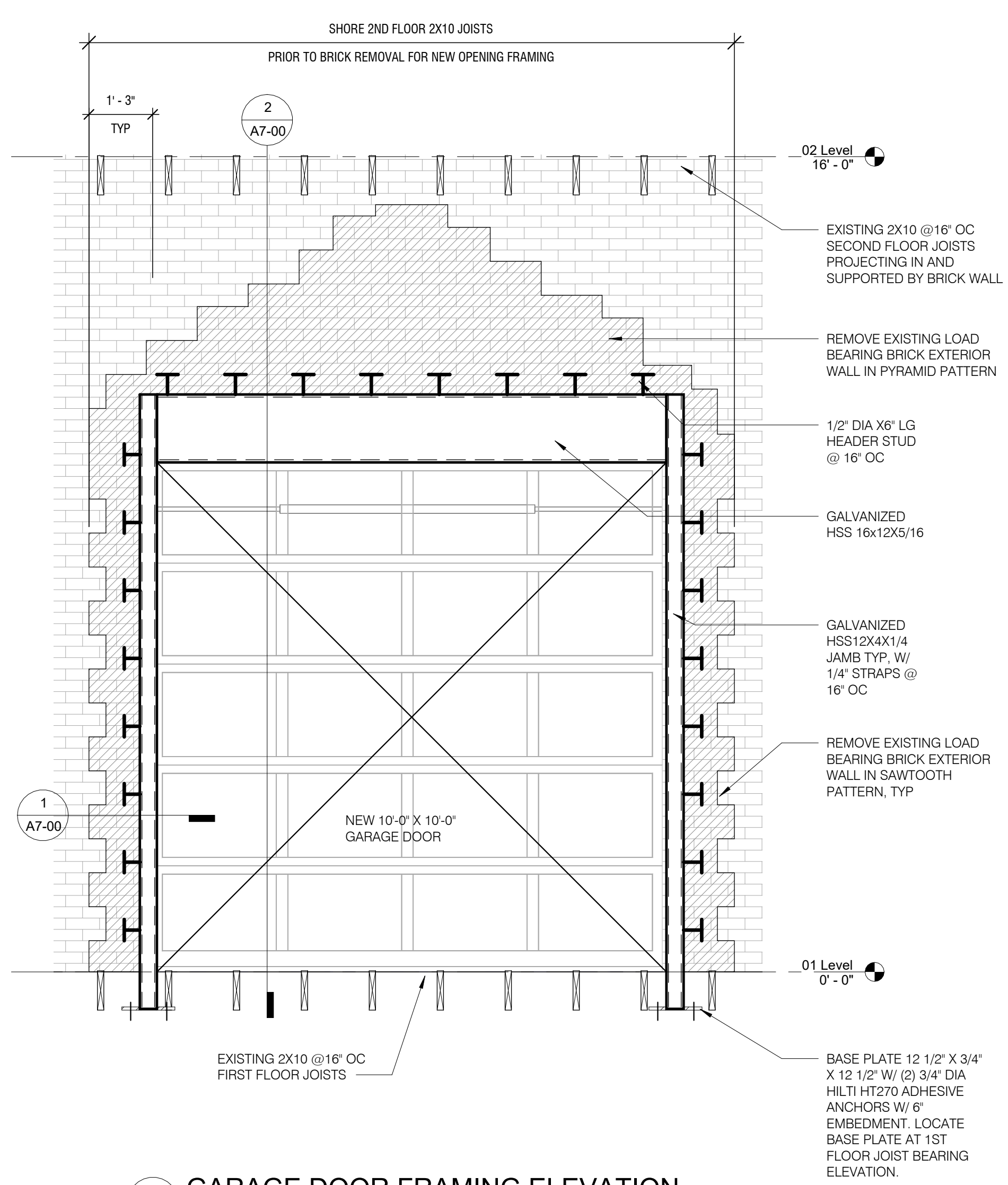
**1 FRAMING CANOPY**  
 A4-00 1/2" = 1'-0"

**FRAMING LEGEND**

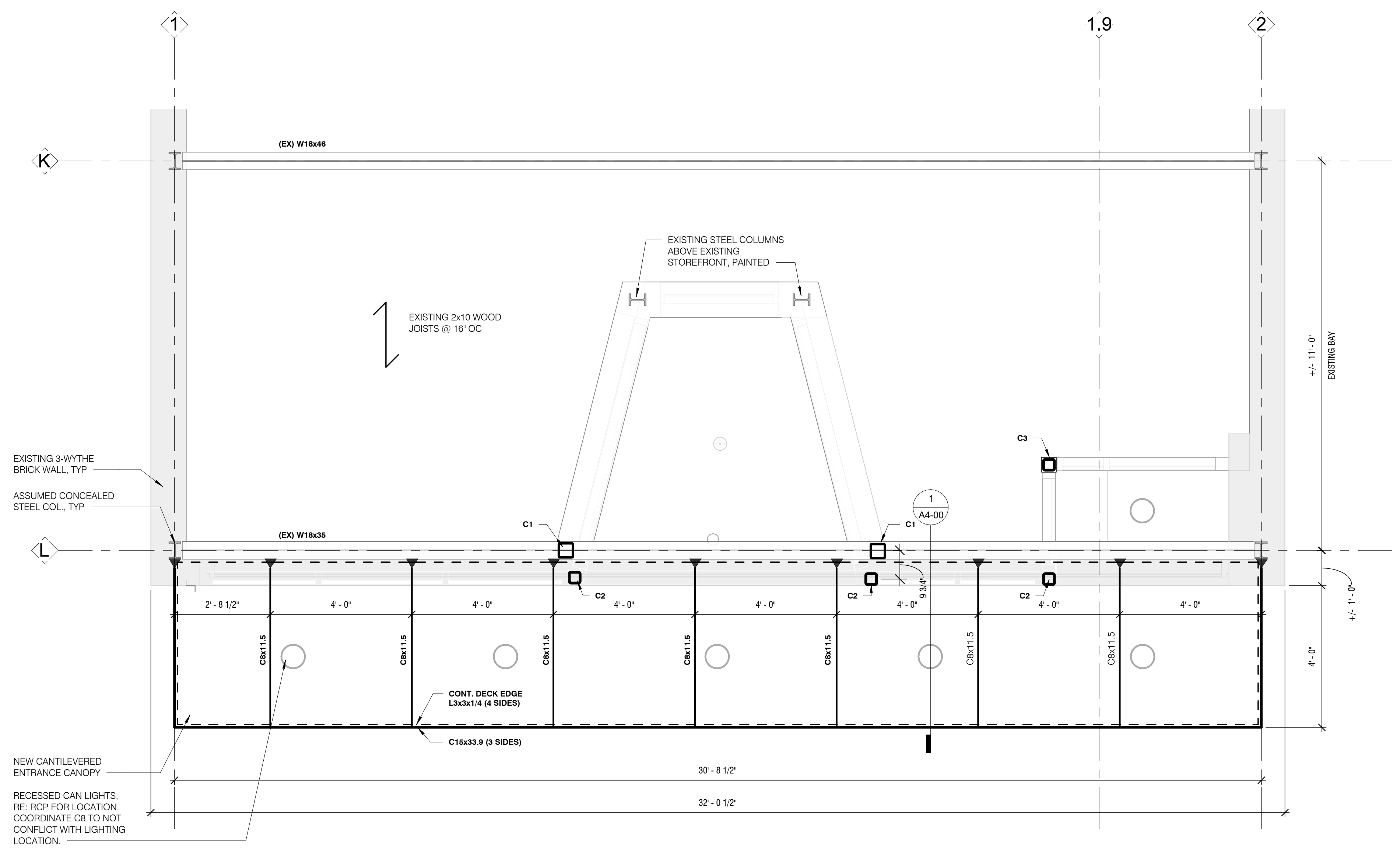
- ▼ INDICATES WELDED CONNECTION
- C1 HSS5x5x1/4 COL. COLUMN ANCHORED TO T.O. BASEMENT WALL AND B.O. W18 LEVEL 02 FLOOR BEAM. LOCATED ON THE INTERIOR OF THE STOREFRONT.
- C2 HSS4x4x1/4 COL. COLUMN ANCHORED TO T.O. MULTIPLYTHE WALL AND B.O. STOREFRONT HEADER. LOCATED IN CORNER OF STOREFRONT SYSTEM.
- C3 HSS4x4x1/4 COL. COLUMN ANCHORED TO T.O. LEVEL 01 FLOOR AND B.O. LEVEL 02 FLOOR FRAMING. LOCATED IN CORNER OF NEW STOREFRONT ALCOVE.

**FRAMING NOTES**

1. VERIFY EXISTING BEAM SIZES. ASSUMED BEAM ABOVE STOREFRONT IS W18x35.
2. TESTING AGENCY TO VERIFY LEVEL OF RUST ON W18 AND NOTIFY A/E FOR POTENTIAL REPAIR.
3. VERIFY CONDITION OF EXISTING STOREFRONT HEADER. NOTIFY A/E IF EXISTING STRUCTURE IS NOT CAPABLE OF SUPPORTING NEW SYSTEMS AND THAT A REPLACEMENT IS REQUIRED.
4. ALL EXPOSED PORTIONS OF COLUMNS, PLATES AND CONNECTIONS TO BE PAINTED P-1, UNO.
5. SALVAGE ALL EXISTING BRICK REMOVED FOR NEW GARAGE DOOR FRAMING FOR REINSTALLATION.



**4 GARAGE DOOR FRAMING ELEVATION**  
 A3-01 1/2" = 1'-0"



**2 CANOPY FRAMING PLAN**  
 A2-01 1/2" = 1'-0"

SEAL

THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL THE SEAL AND SIGNATURE OF THE RESPONSIBLE REGISTRANT APPEARS ON THE DRAWING, AND PROPER PERMIT FORMS AND RELATED FEES ARE TRANSMITTED BY THE OWNER, OWNER'S AGENT OR CONTRACTOR TO THE AUTHORITY HAVING JURISDICTION.

CONSULTANT

CLIENT

**PROJECT**  
 2021.A03  
**1315 Broadway**

1315 Broadway  
 Detroit, Michigan 48226

**ISSUANCE**  
 2023-08-21 HDC SUBMISSION

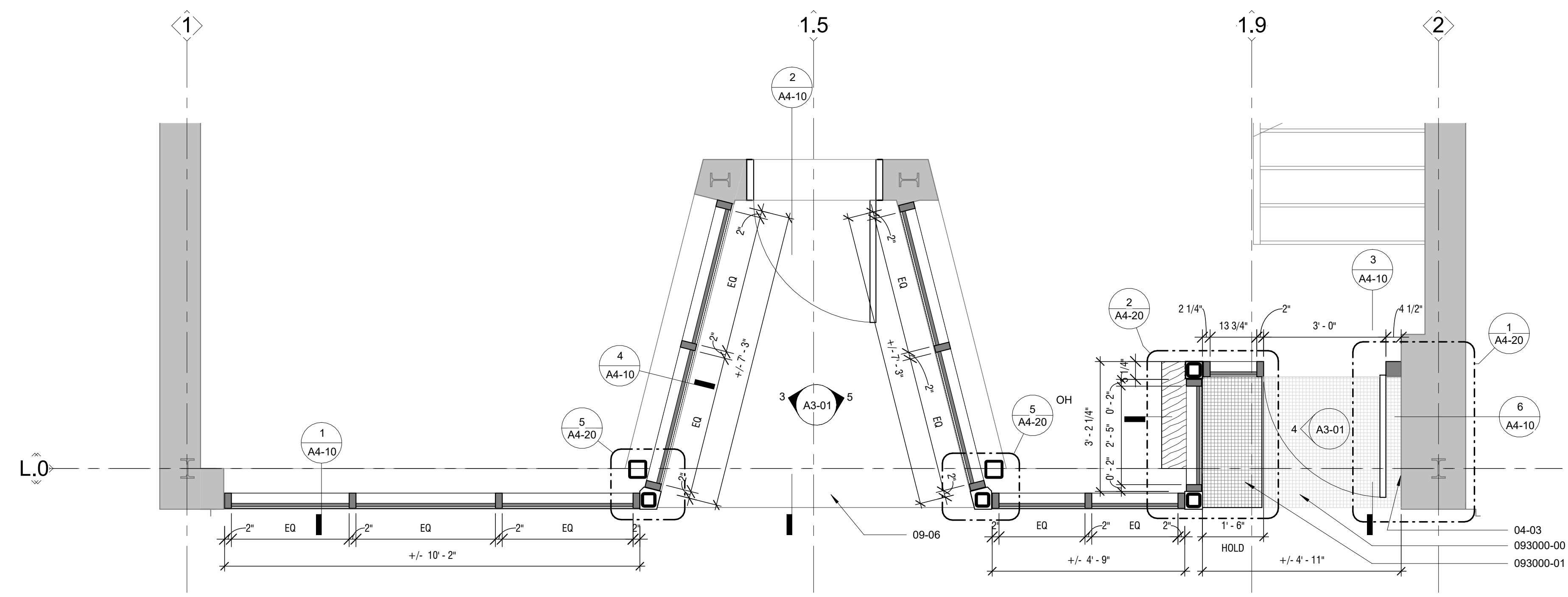
REVISIONS

**TITLE**  
**FRAMING PLAN AND DETAILS**

SHEET

**A4-00**





5 ENLARGED STOREFRONT PLAN  
 1/2" = 1'-0"

KEYNOTE LEGEND	
Number	Note
04-02	INSTALL NEW GRANITE TO MATCH EXISTING AROUND NEW ENTRANCE ALCOVE
04-03	EXISTING TERRA-COTTA TO BE RESTORED/REPAIRED.
05-01	NEW METAL AWNING TO REPLACE ALUMINUM BAND.
05-02	GRILLWORK TO BE SALVAGED AND PAINTED BLACK. MISSING DECORATIVE LEAVES TO BE PATTERNEED AND REPLACED. DECORATIVE LEAVES TO BE PAINTED METALLIC GOLD COLOR. NEW GLASS SSG CASSETTE CURTAIN WALL WITH VERTICAL SSG JOINTS ALIGNED WITH GRILLWORK VERTICAL MULLIONS.
08-12	RETAIN AND RESTORE EXISTING STOREFRONT SURROUND (TRANSOM AND THRESHOLD); INSTALL NEW WOOD DOOR WITH FULL GLASS LITE.
09-04	REPAIR AND REPAINT EXISTING CEILING.
09-06	REPAIR AND RESTORE EXISTING GRANITE TILE AT ENTRY VESTIBULE. INFILL WITH MATCHING GRANITE (WHERE MISSING).
26-02	RESTORE EXISTING ALCOVE PENDANT FIXTURE.
093000-00	EXISTING HISTORIC FLOOR TILE.
093000-01	NEW COMPLIMENTARY FLOOR TILE INFILL.

**ab**  
 AMY BAKER  
 ARCHITECT  
 1012 OWANA AVENUE  
 ROYAL OAK, MI 48067  
 (248) 931-3055  
 amy@amybakerarchitect.com

SEAL

THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL THE SEAL AND SIGNATURE OF THE RESPONSIBLE REGISTRANT APPEARS ON THE DRAWING, AND PROPER PERMIT FORMS AND RELATED FEES ARE TRANSMITTED BY THE OWNER, OWNER'S AGENT OR CONTRACTOR TO THE AUTHORITY HAVING JURISDICTION.

CONSULTANT

CLIENT

PROJECT  
 2021.A03  
 1315 Broadway

1315 Broadway  
 Detroit, Michigan 48226

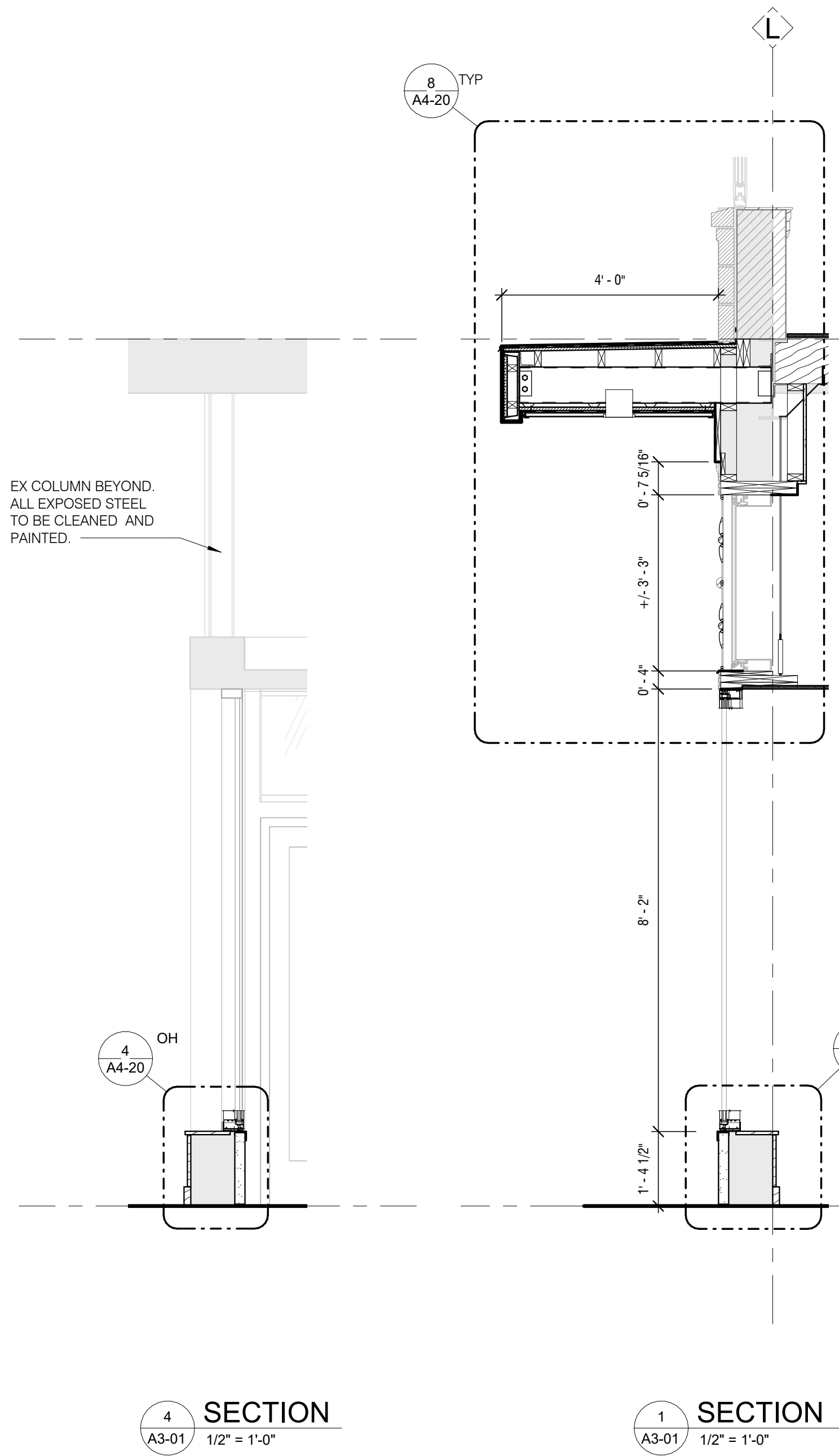
ISSUANCE  
 2023-08-21 HDC SUBMISSION

REVISIONS

TITLE  
 ENLARGED STOREFRONT PLAN AND SECTIONS

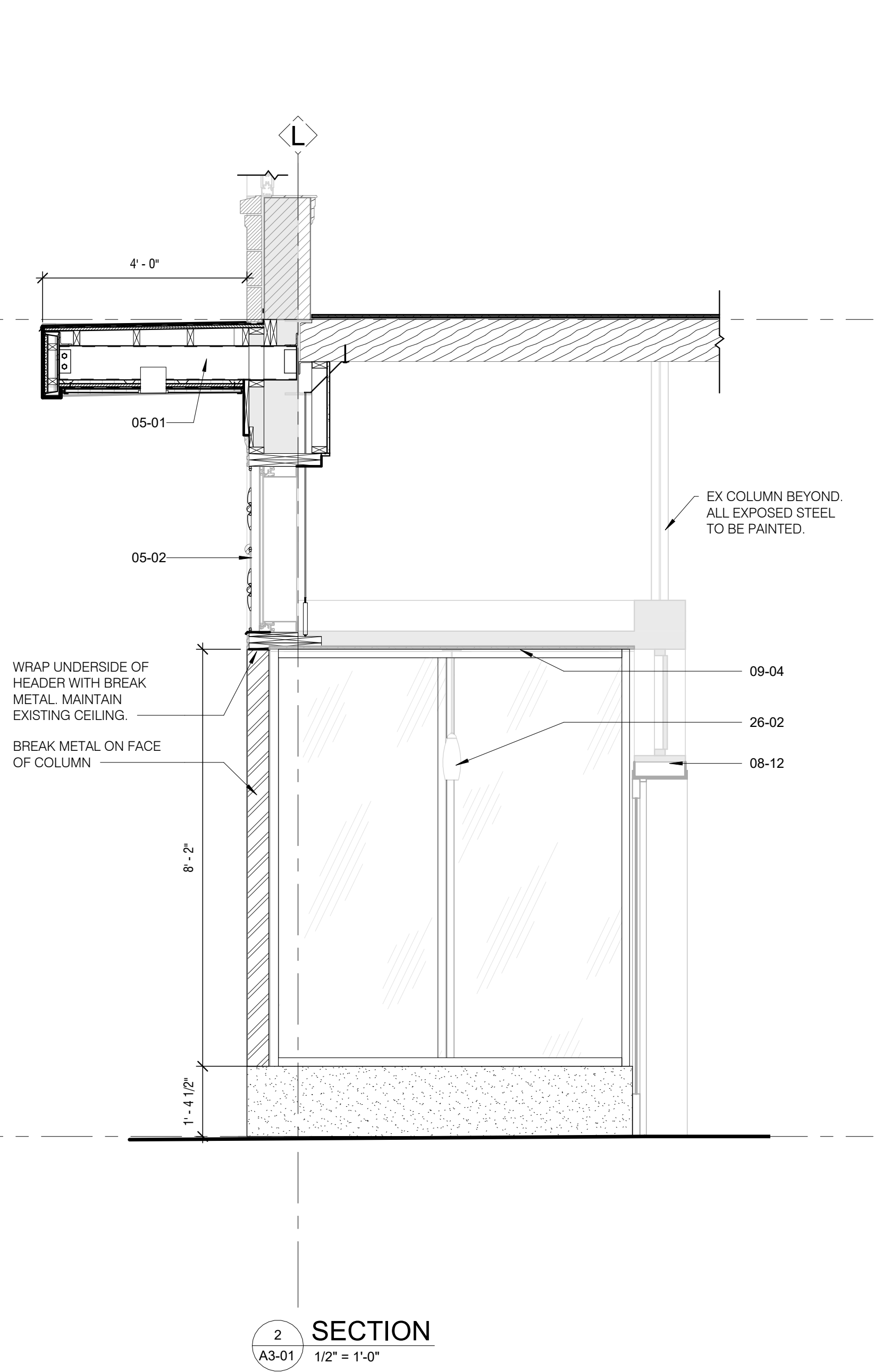
SHEET

A4-10

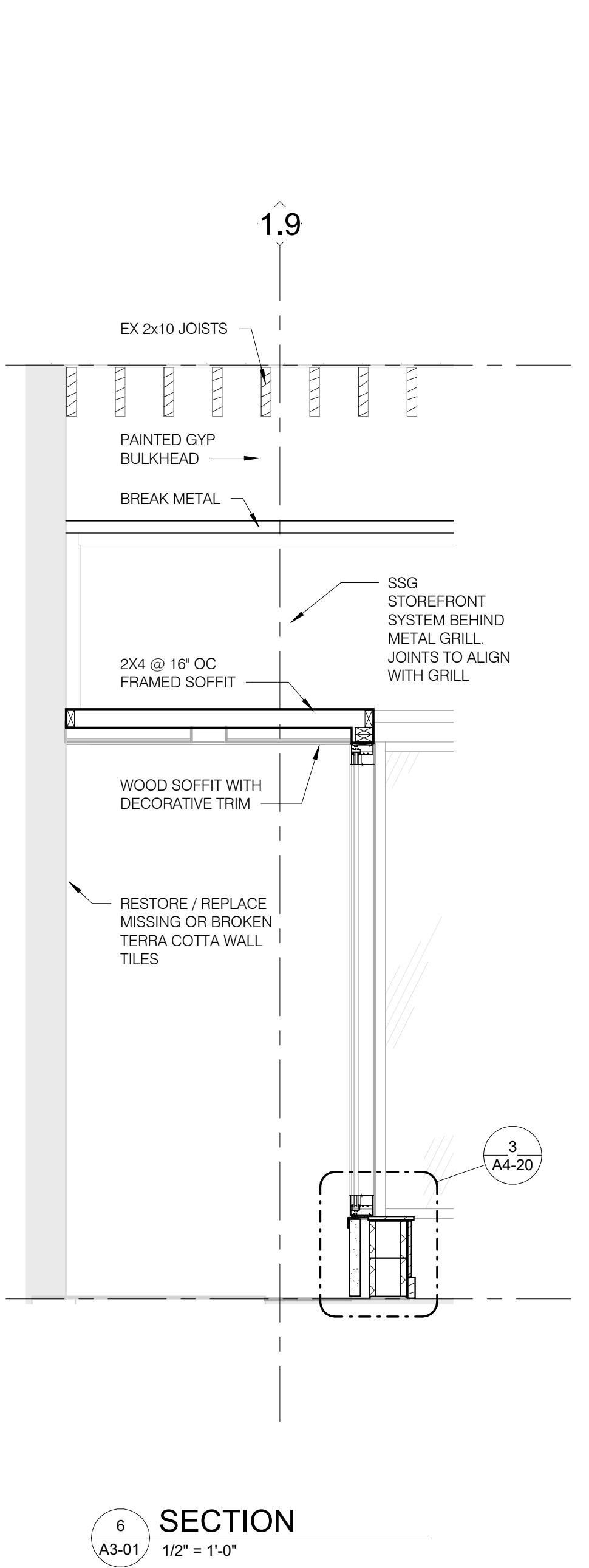


4 SECTION  
 1/2" = 1'-0"

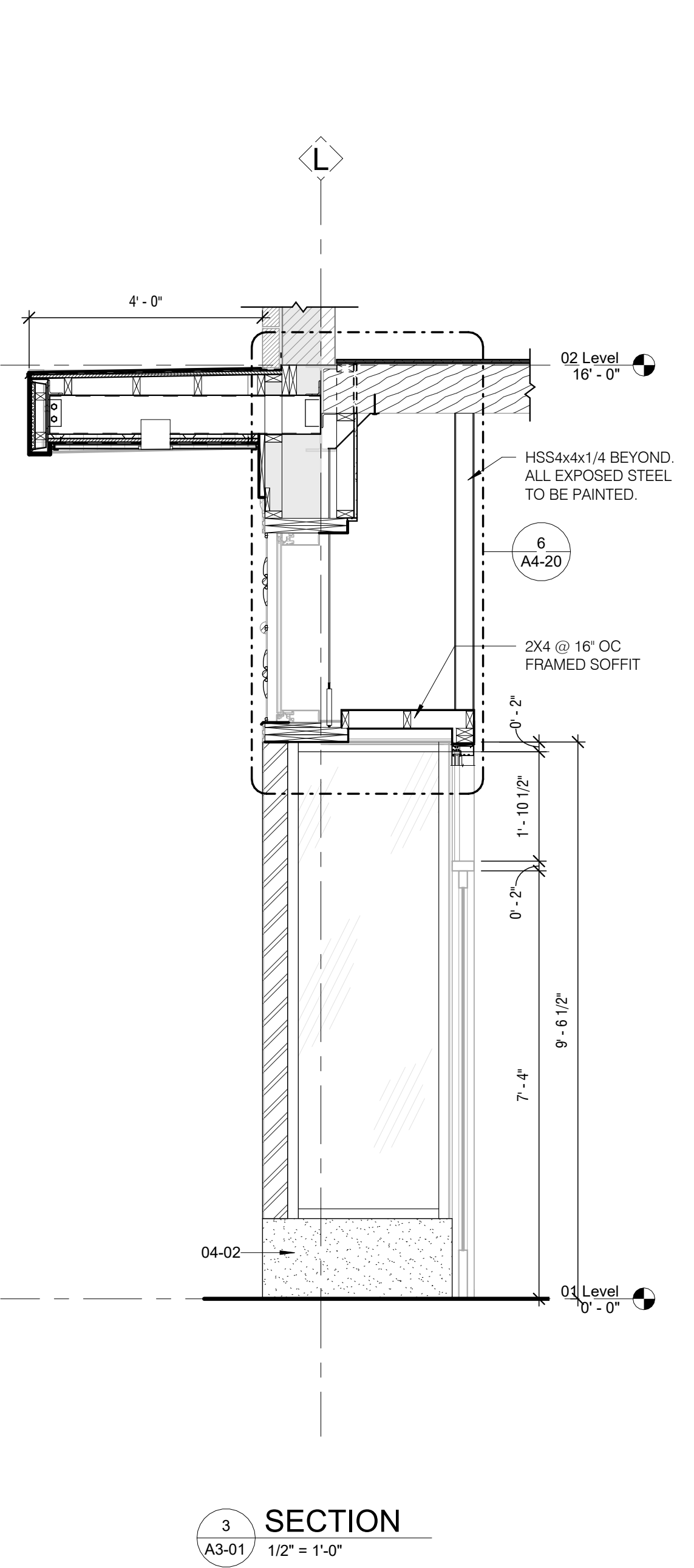
1 SECTION  
 1/2" = 1'-0"



2 SECTION  
 1/2" = 1'-0"

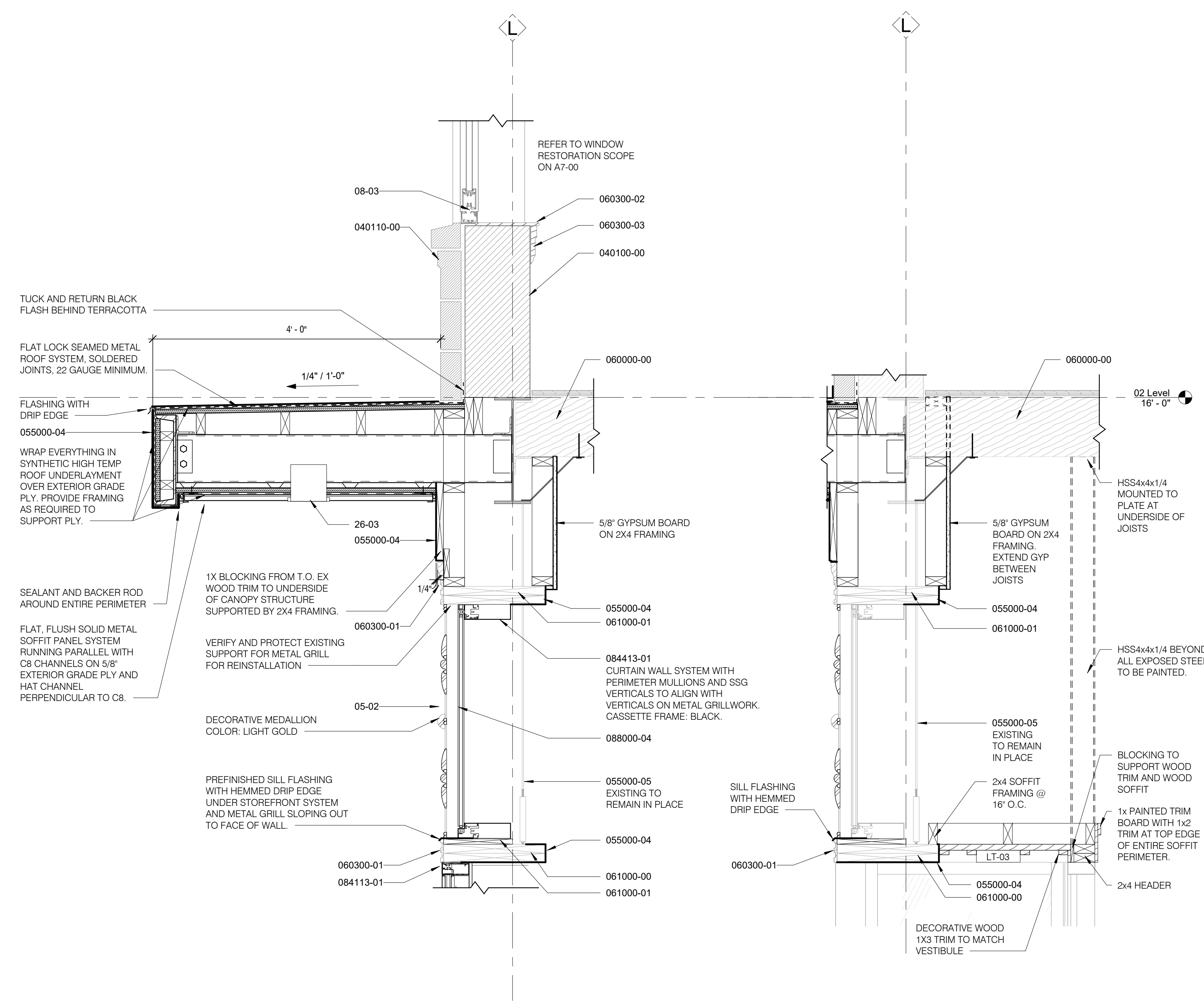


6 SECTION  
 1/2" = 1'-0"

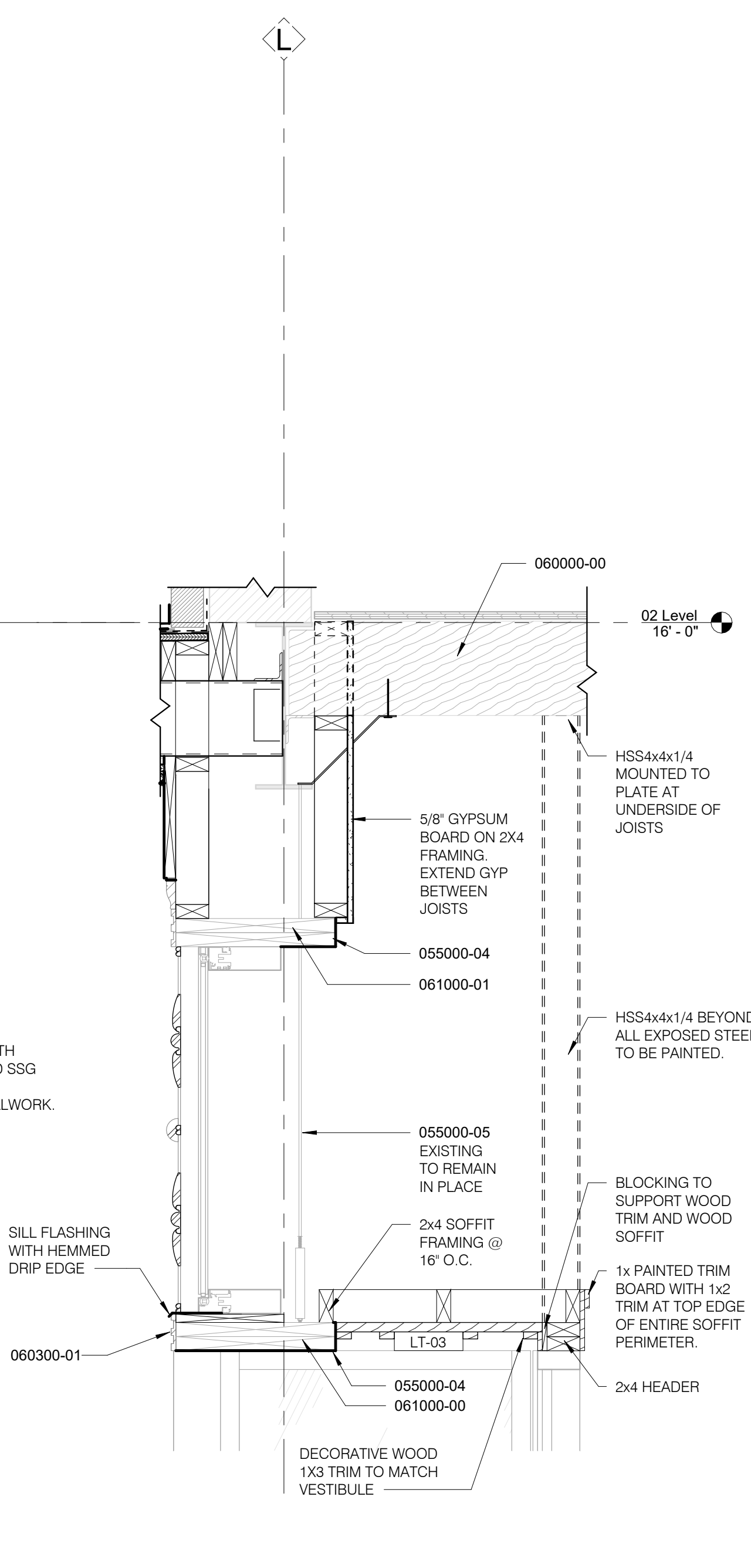


3 SECTION  
 1/2" = 1'-0"

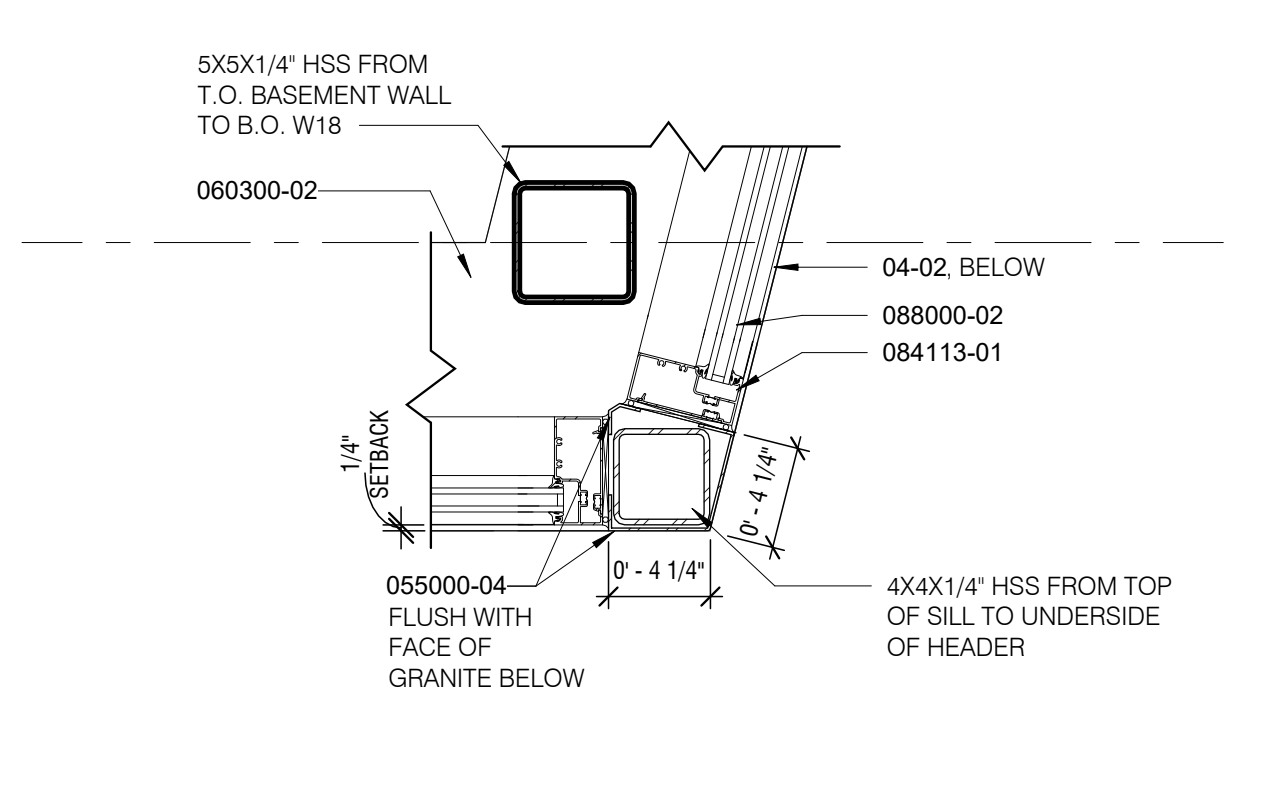
Sheet Size: ARCH D - 24" x 36" ABA\_REVIT\_2022 : Template Version  
 C:\Users\coris\OneDrive\Projects\2021.A03 1315 Broadway\07 Production\BIM\2021.A03\_Broadway\_RVT23\_detached.rvt  
 © 2023 Amy Baker Architect



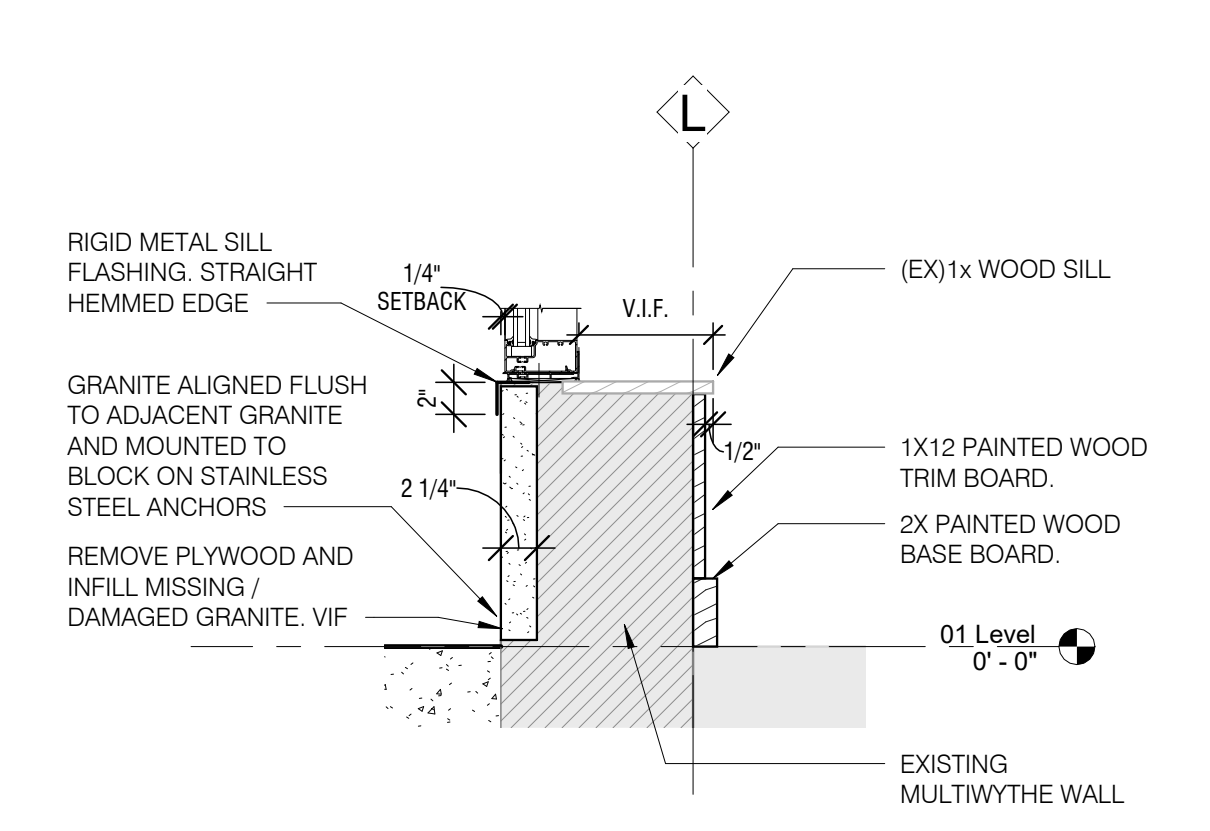
**8 STOREFRONT GRILLWORK & CANOPY**  
A4-10 1" = 1'-0"



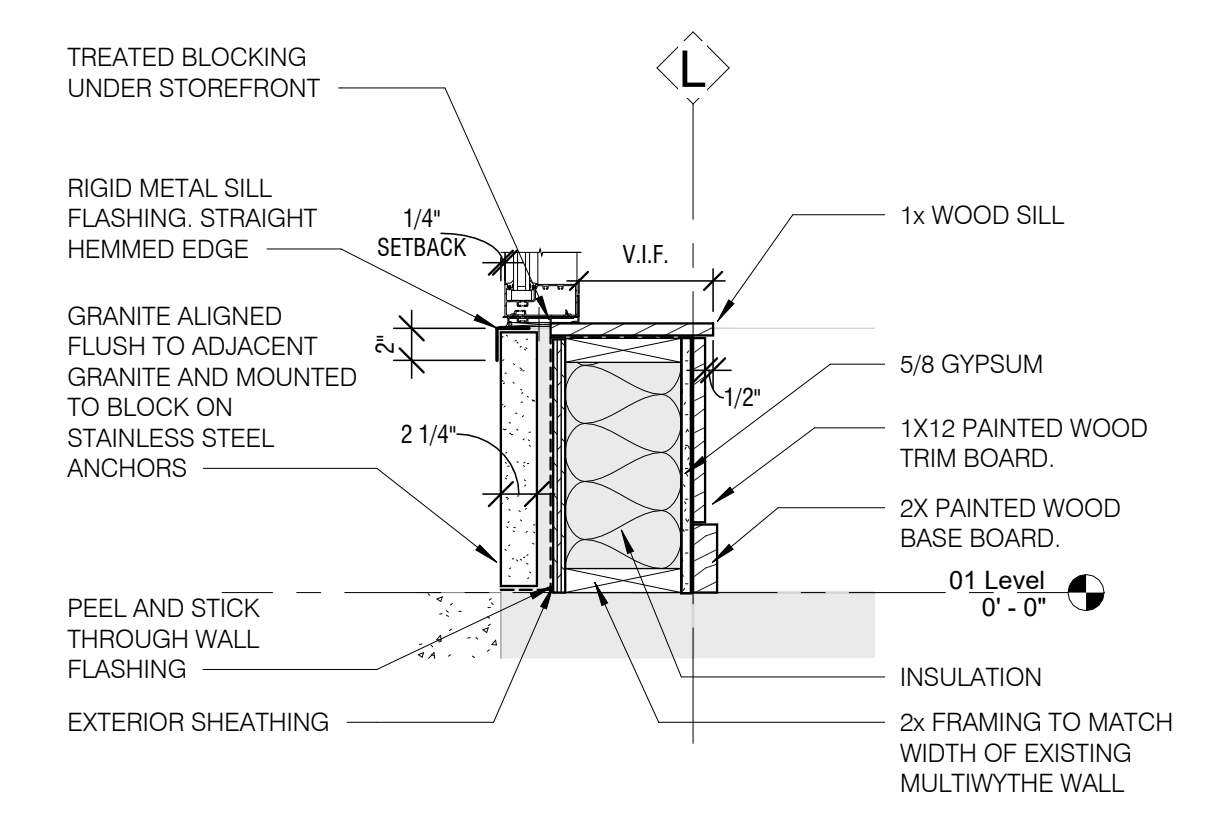
**6 STOREFRONT HEAD**  
A4-10 1" = 1'-0"



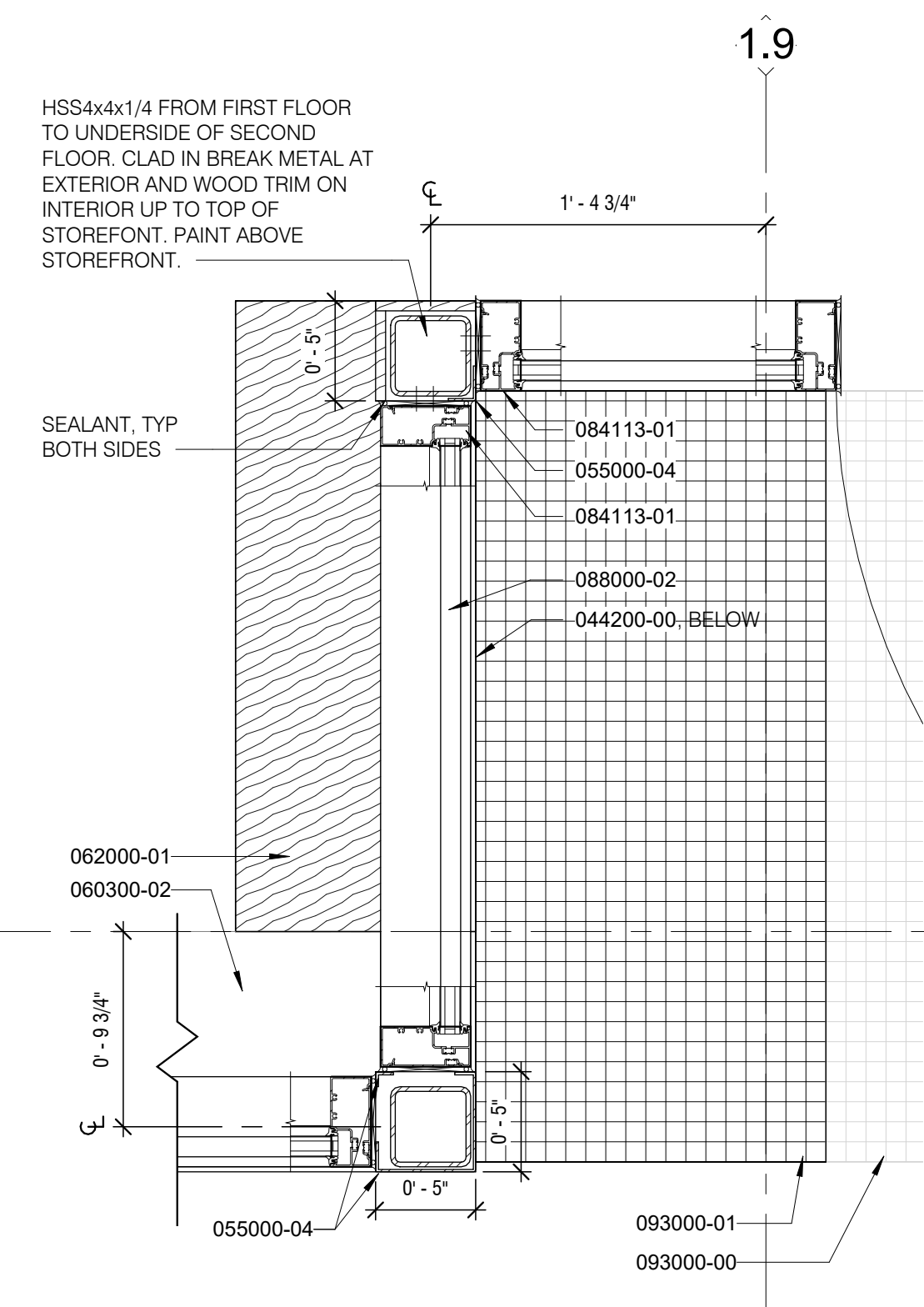
**5 STOREFRONT ANGLED CORNER**  
A4-10 1 1/2" = 1'-0"



**4 STOREFRONT SILL EXISTING**  
A4-10 1" = 1'-0"



**3 STOREFRONT SILL**  
A4-10 1" = 1'-0"

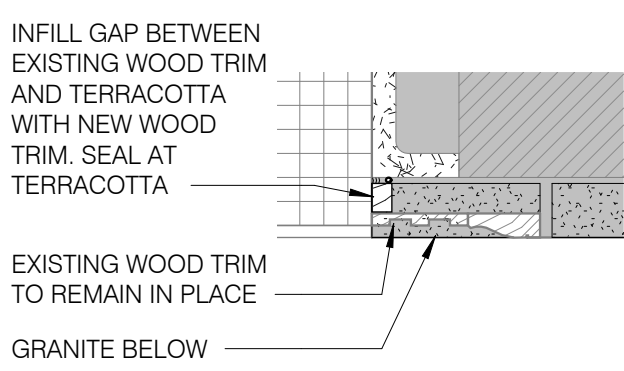


**2 STOREFRONT ALCOVE**  
A4-10 1 1/2" = 1'-0"

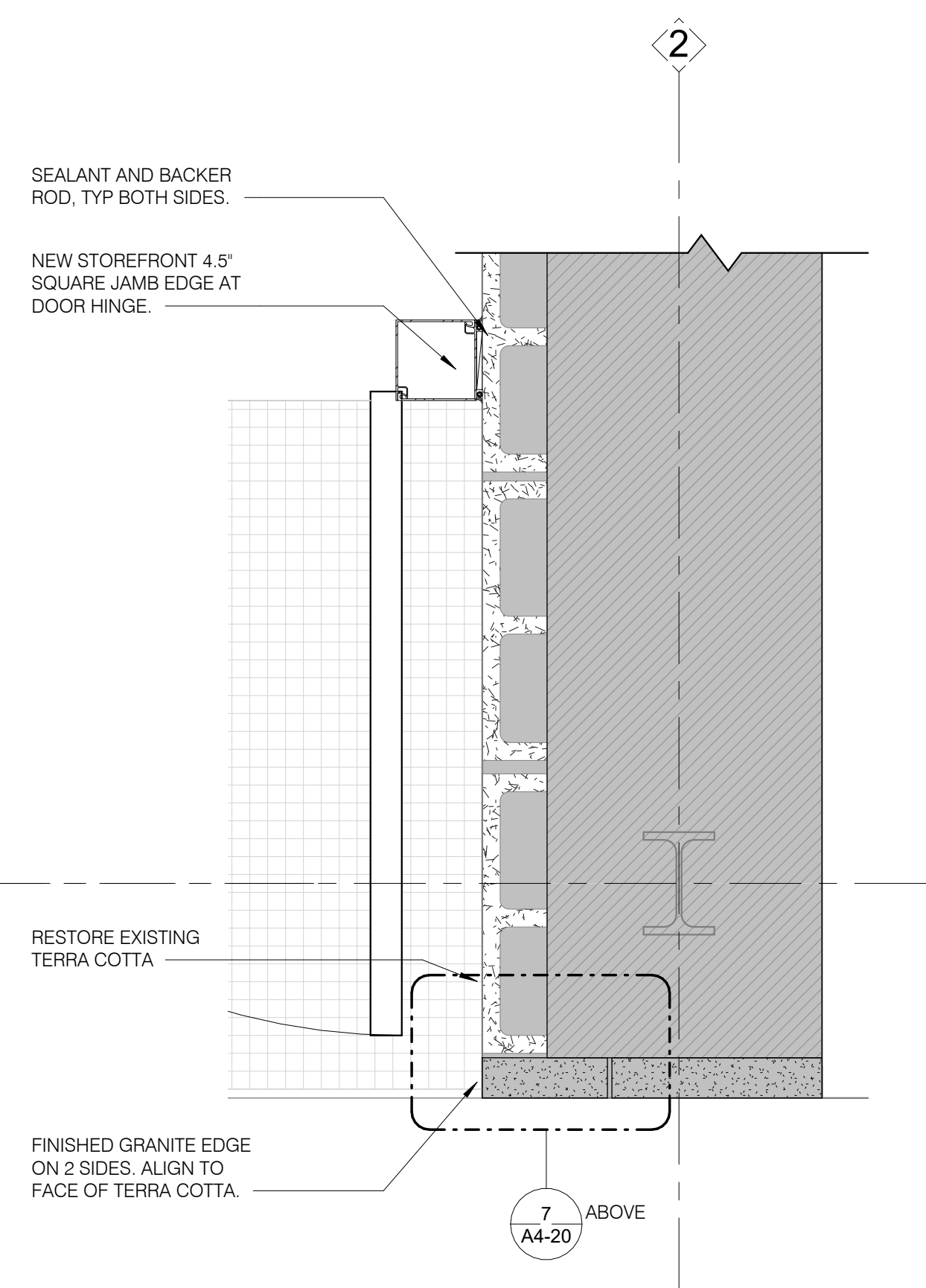
KEYNOTE LEGEND	
Number	Note
04-02	INSTALL NEW GRANITE TO MATCH EXISTING AROUND NEW ENTRANCE ALCOVE.
05-02	GRILLWORK TO BE SALVAGED AND PAINTED BLACK. MISSING DECORATIVE LEAVES TO BE PATTERNED AND REPLACED. DECORATIVE LEAVES TO BE PAINTED METALLIC GOLD COLOR. NEW GLASS SSG CASSETTE CURTAIN WALL WITH VERTICAL SSG JOINTS ALIGNED WITH GRILLWORK VERTICAL MULLIONS.
08-03	EXISTING WOODEN PIVOT WINDOWS AND TRANSOM WINDOWS TO BE RESTORED, REPAIRED, REGLAZED, PAINTED, AND PINNED SHUT.
26-03	NEW RECESSED LIGHT, SEE SPEC.
040100-00	EXISTING MASONRY.
040110-00	EXISTING TERRA COTTA.
044200-00	NEW GRANITE.
055000-04	BREAK METAL, 0.040\"/>

**STOREFRONT GENERAL NOTES**

- ALL DIMENSIONS TO BE VERIFIED IN FIELD AFTER DEMOLITION AND PRIOR TO FABRICATION.
- ALL INTERIOR AND EXTERIOR WOOD TRIM, FRAME, CASING, ETC TO BE PAINTED. EXTERIOR TRIM TO BE BLACK, UNO AND INTERIOR TRIM COLOR TO BE SELECTED BY OWNER.
- WHERE NEW INFILL MATERIAL IS ADJACENT EXISTING MATERIAL, THE NEW AND EXISTING FINISH SHOULD BE ALIGNED FLUSH.
- PROTECT AND STABILIZE EXISTING WOOD HEADERS PRIOR TO STOREFRONT INSTALLATION.



**7 CORNER WOOD TRIM**  
A4-20 1 1/2" = 1'-0"



**1 STOREFRONT DOOR JAMB**  
A4-10 1 1/2" = 1'-0"

  
**AMY BAKER ARCHITECT**  
 1012 OWANA AVENUE  
 ROYAL OAK, MI 48067  
 (248) 931-3055  
 amy@amybakerarchitect.com

SEAL

CONSULTANT

CLIENT

PROJECT  
 2021.A03  
**1315 Broadway**

1315 Broadway  
 Detroit, Michigan 48226

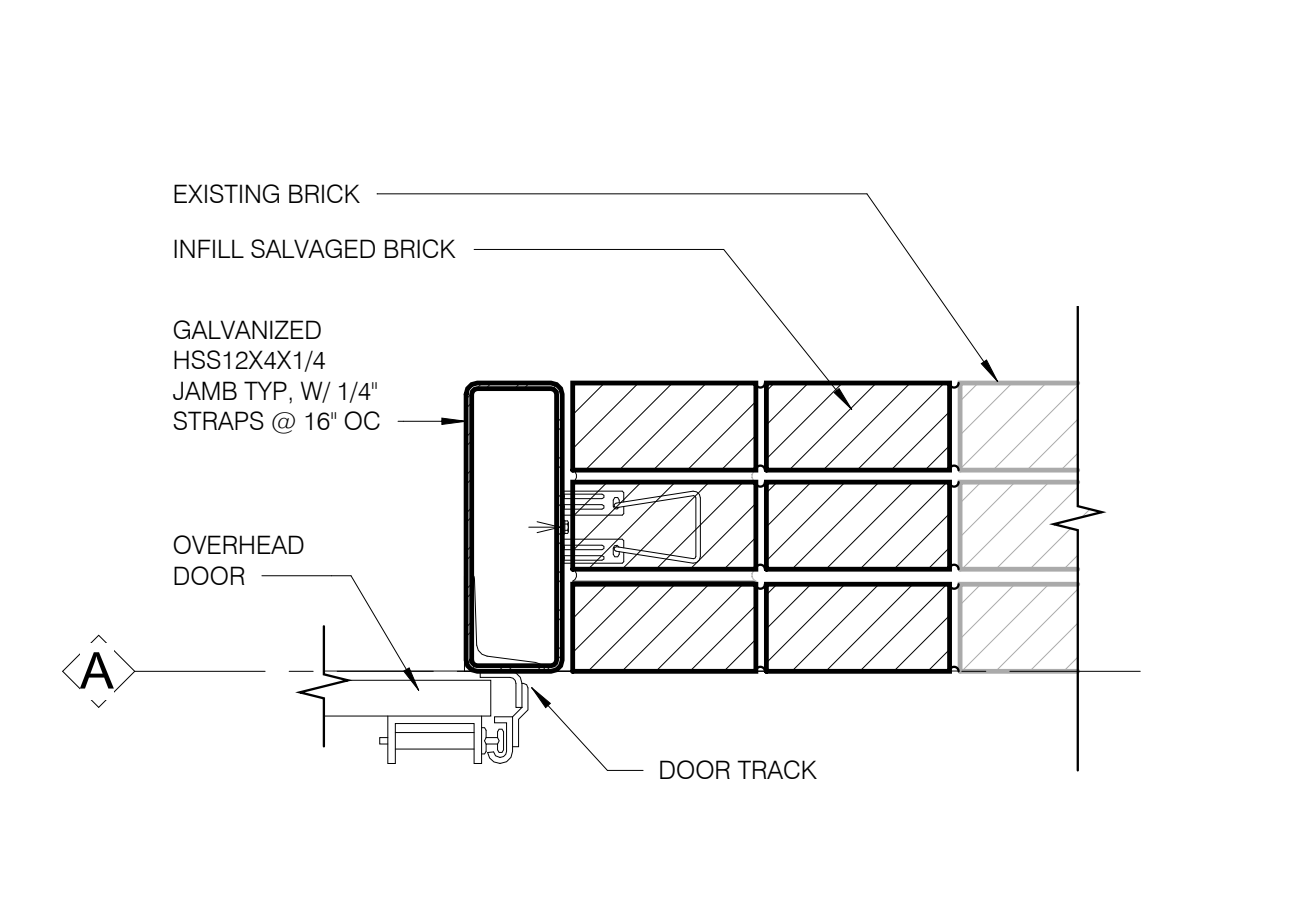
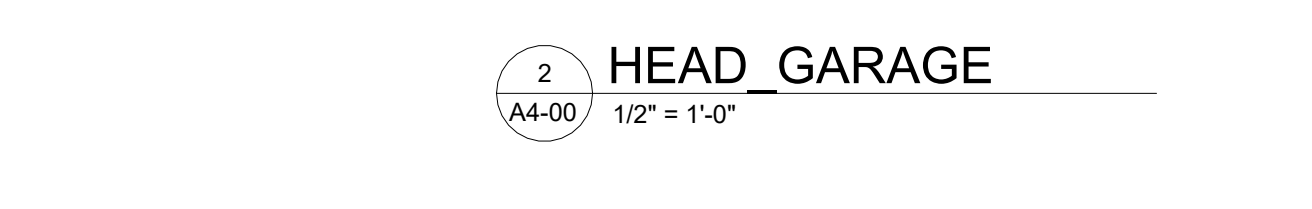
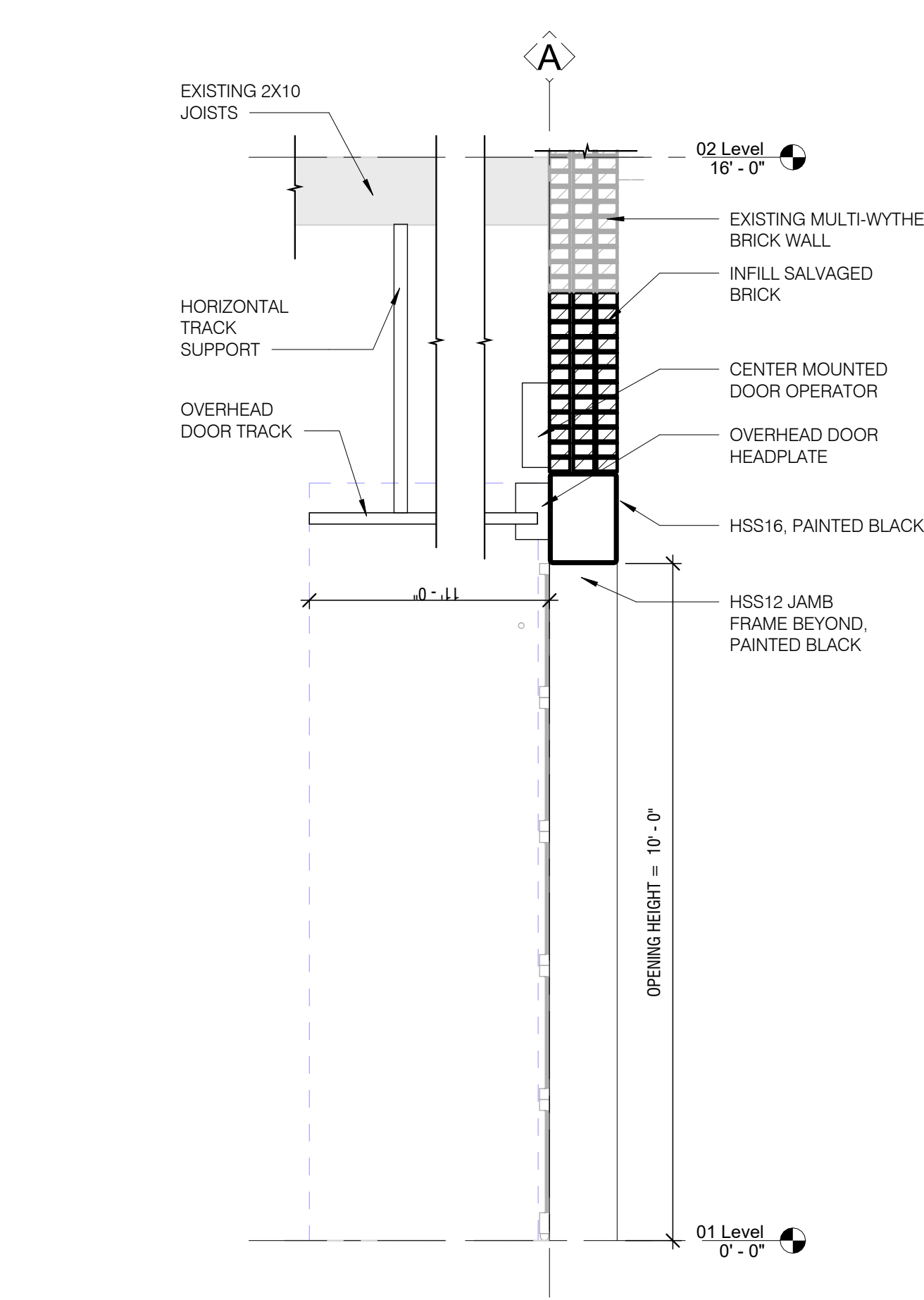
ISSUANCE  
 2023-08-21 HDC SUBMISSION

REVISIONS

TITLE  
**STOREFRONT DETAILS**

SHEET

**A4-20**



### Hardware Sets

**Set: 1.0**

Doors: 101.A, 101.E

1	Continuous Hinge	GFM_SLF-HD1	PE
1	Mortise Deadlock	MS1850S	628 AD
1	Mort. Cylinder	CR1580	606 RU
1	Thumbturn Cylinder	CR1300	606 RU
1	Door Pull / Push	RM5650-1 x B to B Mtg-Type 5HD	US4 RO
1	Conc Overhead Stop	6-X36	606 RF
1	Surface Closer	J7500 x mounting plate to suit application	696 NO
1	Threshold	279x224AFGT x MSES25SS	PE
1	Weatherstrip	- integral within construction of door and frame assembly	00
1	Sweep	29326GNB x TKSP8	PE

Notes: Dead bolt projected and retracted by both key outside and thumb turn inside.

**Set: 2.0**

Doors: 101.B

1	Continuous Hinge	GFM_SLF-HD1	PE
1	Deadlatch	4900	628 AD
1	Paddle Operator	4591 ("PUSH")	US3 AD
1	Mort. Cylinder	CR1580	606 RU
2	Door Pull / Push	RM5650-1 x B to B Mtg-Type 5HD	US4 RO
1	Conc Overhead Stop	6-X36	606 RF
1	Surface Closer	J7500 x mounting plate to suit application	696 NO
1	Threshold	279x292AFGPK x MSES25SS	PE
1	Weatherstrip	- integral within construction of door and frame assembly	00
1	Sweep	29326GNB x TKSP8	PE

Notes: Door normally closed and locked. Valid use of card reader outside temporarily unlocks electric strike permitting access. Key override outside retracts latch bolt. Motion sensor mounted on egress side of door as request to exit for shunting of door monitoring upon egress. Free egress always permitted.

**Set: 3.0**

Doors: 101.C

1	Continuous Hinge	GFM_SLF-HD1	PE
1	Storeroom Lock	ML2049 102R ACP	606 RU
1	Surface Closer	CP57500	696 NO
1	Arm Support Bracket	6890	696 NO
1	Blade Stop Spacer	6891	696 NO
1	Threshold	279x292AFGPK x MSES25SS	PE
1	Weatherstrip	- integral within construction of door and frame assembly	00
1	Sweep	29326GNB x TKSP8	PE

Notes: Latch bolt and deadbolt operated by lever either side. Inside lever simultaneously retracts latch bolt and deadbolt. Outside lever always rigid. Deadbolt projected or retracted by key outside or thumb turn inside. Inside lever always free for egress.

**Set: 4.0**

VOID

**Set: 5.0**

Doors: 201.A, 301, 401

1	Continuous Hinge	GFM_SLF-HD1	PE
1	Storeroom Lock	ML2049 102R ACP	606 RU
1	Surf Overhead Stop	9-X36	606 RF
1	Threshold	279x292AFGPK x MSES25SS	PE
1	Weatherstrip	- integral within construction of door and frame assembly	00
1	Sweep	29326GNB x TKSP8	PE

Notes: \*\* Confirm door hardware preparations in existing door and frame assembly prior to submittal of hardware schedule.

Latch bolt and deadbolt operated by lever either side. Inside lever simultaneously retracts latch bolt and deadbolt. Outside lever always rigid. Deadbolt projected or retracted by key outside or thumb turn inside. Inside lever always free for egress.

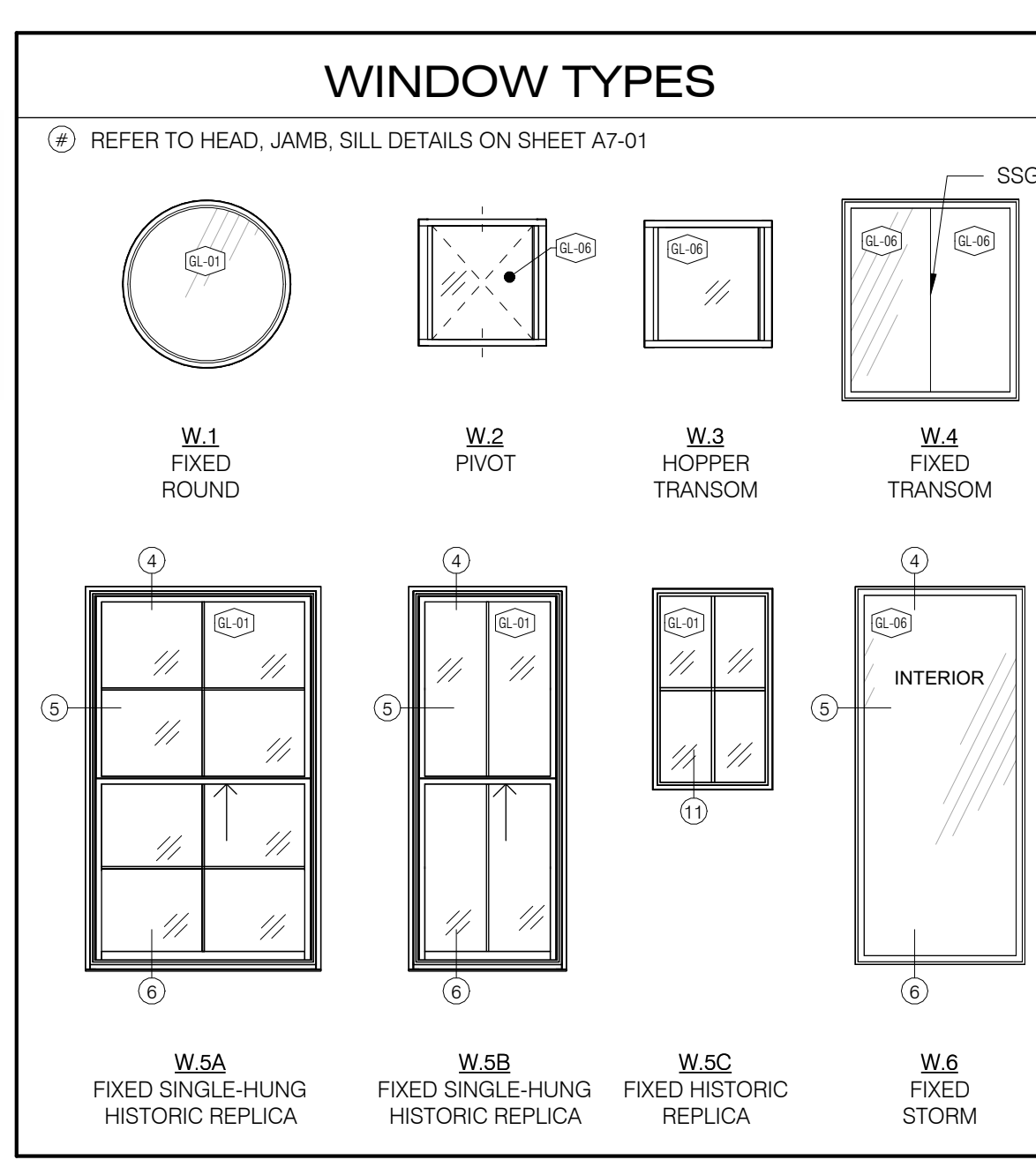
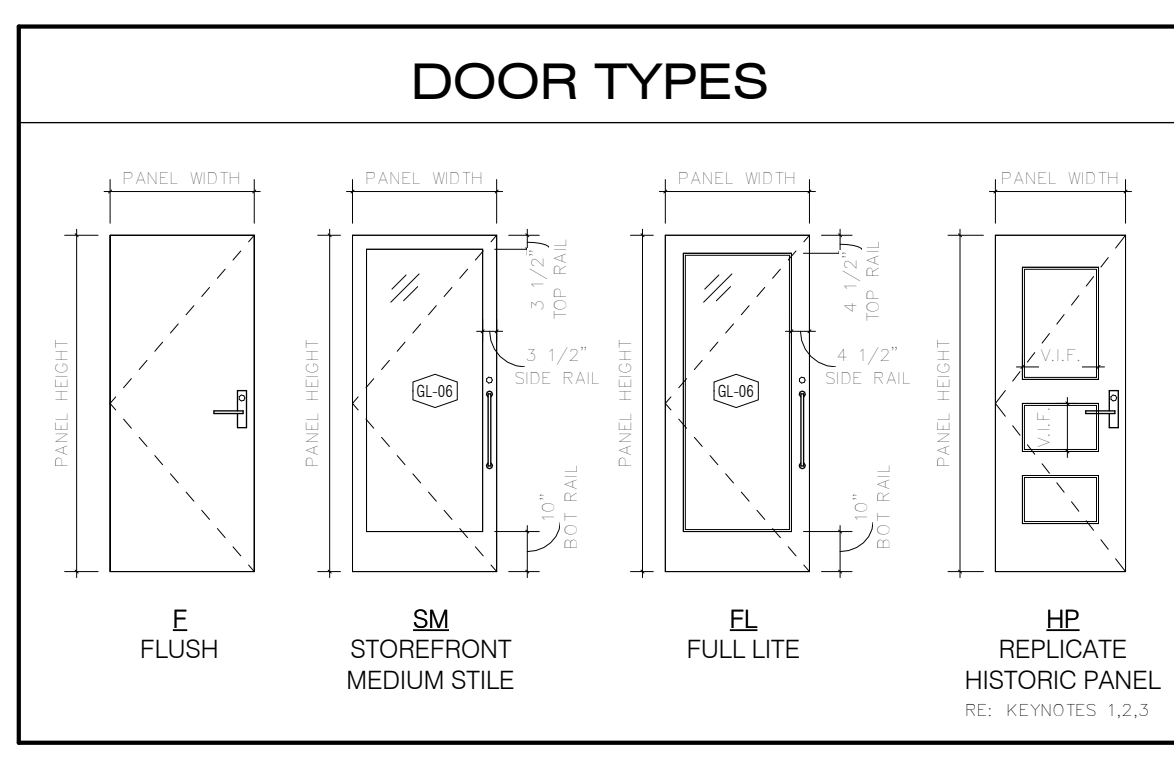
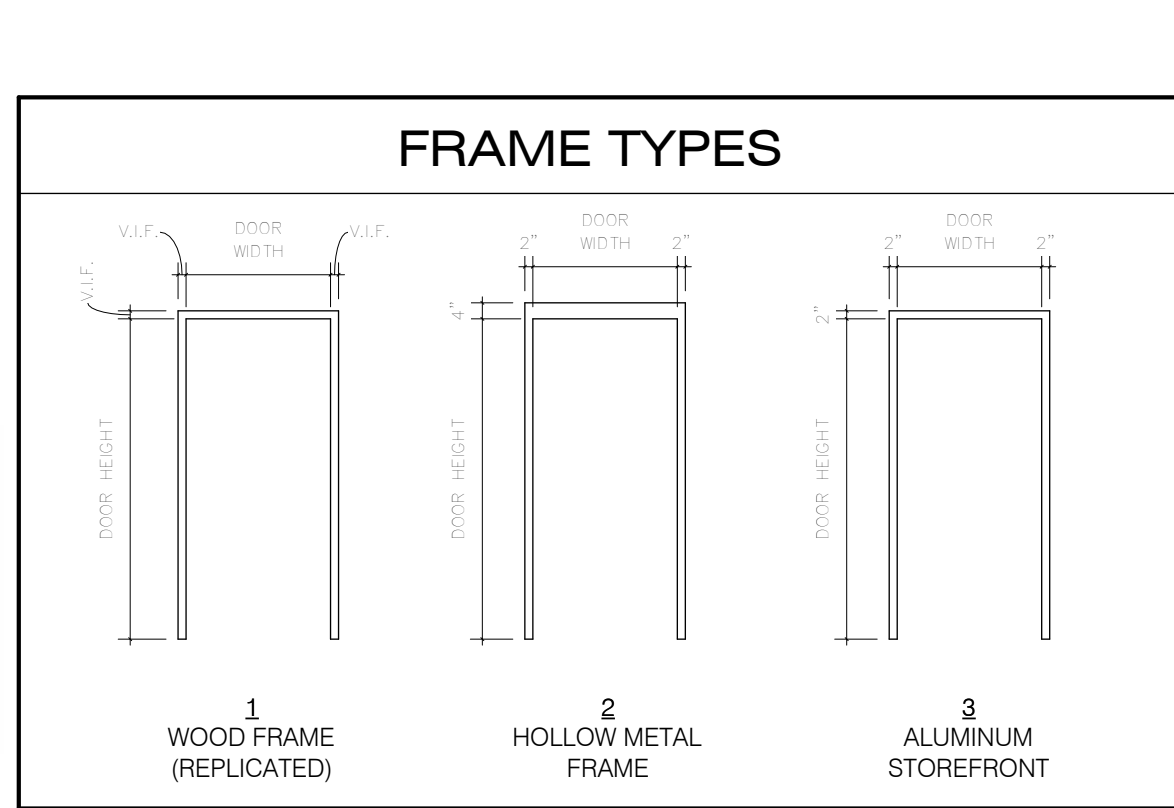
END OF SECTION 087100

### DOOR SCHEDULE\_BP01

DOOR NO.	DOOR			FRAME			DETAILS			FIRE LABEL	HARDWARE	GLAZING	KEYNOTE			
	WIDTH	HEIGHT	THICK	TYPE	MAT.	FINISH	TYPE	MAT.	FINISH					HEAD	JAMB	THRESH
01 Level																
101.A	3'-0"	7'-0"	1 3/4"	FL	WD	P-1	EXIST	WD	P-1	EXIST	EXIST	EXIST	-	1.0	GL-06	4,5
101.B	3'-0"	7'-4"	1 3/4"	SM	AL	P-1	3	AL	P-1		1/A420 & 2/A4-20		-	2.0	GL-06	-
101.C	3'-0"	7'-0"	1 3/4"	F	HM	P-1	2	HM	P-1				-	3.0	-	4
101.E	3'-0"	7'-0"	1 3/4"	SM	AL	P-1	3	AL	P-1				-	1.0	GL-06	4
02 Level																
201.A	2'-6"	7'-0"	1 3/4"	HP	WD	P-1	1	WD	P-1	V.I.F.	V.I.F.	V.I.F.	EXIST	5.0	-	1,4,6
201.B	3'-10"	7'-0"	1 3/4"	HP	EXIST	P-1	EXIST	WD	P-1	EXIST	EXIST	EXIST	EXIST	-	GL-06	2,3,4
03 Level																
301	2'-6"	7'-0"	1 3/4"	HP	WD	P-1	1	WD	P-1	V.I.F.	V.I.F.	V.I.F.	EXIST	5.0	-	1,4,6
04 Level																
401	2'-6"	7'-0"	1 3/4"	HP	WD	P-1	1	WD	P-1	V.I.F.	V.I.F.	V.I.F.	EXIST	5.0	-	1,4,6

### GLAZING INDEX

FINISH CODE	DESCRIPTION	FINISH	THICKNESS	NOTES
GL-01	INSULATED GLAZING	CLEAR	1"	
GL-02	INSULATED GLAZING	ETCHED	1"	
GL-06	TEMPERED GLAZING	CLEAR	1/4"	



### Window Schedule

Mark	Window Type	Phase Created	Width	Height	Glazing	Keynote
01 Level						
101	W.1	Phase 01	4'-0"	4'-0"	GL-01	1
102	L.OUVER	Phase 01	4'-0"	4'-0"	-	5
02 Level						
201	W.2	Existing	4'-9"	6'-4"	GL-06	2
201T	W.3	Existing	4'-9"	3'-4"	GL-06	3
202	W.2	Existing	4'-9"	6'-4"	GL-06	2
202T	W.3	Existing	4'-9"	3'-4"	GL-06	3
203	W.2	Existing	4'-9"	6'-4"	GL-06	2
203T	W.3	Existing	4'-9"	3'-4"	GL-06	3
204	W.2	Existing	4'-9"	6'-4"	GL-06	2
204T	W.3	Existing	4'-9"	3'-4"	GL-06	3
205	W.2	Existing	4'-9"	6'-4"	GL-06	2
205T	W.3	Existing	4'-9"	3'-4"	GL-06	3
206	W.2	Existing	4'-9"	6'-4"	GL-06	2
206T	W.3	Existing	4'-9"	3'-4"	GL-06	3
207	W.5C	Phase 01	2'-10"	3'-11"	GL-01	4
208	W.5A, W.6	Phase 01	5'-4"	8'-11"	GL-01, GL-06	4
209	W.5A, W.6	Phase 01	5'-4"	8'-11"	GL-01, GL-06	4
210	W.4	Existing	4'-2"	4'-9"	GL-06	3
03 Level						
301	W.2	Existing	4'-9"	6'-4"	GL-06	2
301T	W.3	Existing	4'-9"	3'-4"	GL-06	3
302	W.2	Existing	4'-9"	6'-4"	GL-06	2
302T	W.3	Existing	4'-9"	3'-4"	GL-06	3
303	W.2	Existing	4'-9"	6'-4"	GL-06	2
303T	W.3	Existing	4'-9"	3'-4"	GL-06	3
304	W.2	Existing	4'-9"	6'-4"	GL-06	2
304T	W.3	Existing	4'-9"	3'-4"	GL-06	3
305	W.2	Existing	4'-9"	6'-4"	GL-06	2
305T	W.3	Existing	4'-9"	3'-4"	GL-06	3
306	W.2	Existing	4'-9"	6'-4"	GL-06	2
306T	W.3	Existing	4'-9"	3'-4"	GL-06	3
307	W.5C	Phase 01	2'-10"	3'-11"	GL-01	4
308	W.5A, W.6	Phase 01	5'-4"	8'-11"	GL-01, GL-06	4
309	W.5A, W.6	Phase 01	5'-4"	8'-11"	GL-01, GL-06	4
310	W.5A, W.6	Phase 01	5'-4"	8'-11"	GL-01, GL-06	4
311	W.5B, W.6	Phase 01	3'-6"	8'-11"	GL-01, GL-06	4
04 Level						
401	W.2	Existing	4'-9"	6'-4"	GL-06	2
401T	W.3	Existing	4'-9"	3'-4"	GL-06	3
402	W.2	Existing	4'-9"	6'-4"	GL-06	2
402T	W.3	Existing	4'-9"	3'-4"	GL-06	3
403	W.2	Existing	4'-9"	6'-4"	GL-06	2
403T	W.3	Existing	4'-9"	3'-4"	GL-06	3
404	W.2	Existing	4'-9"	6'-4"	GL-06	2
404T	W.3	Existing	4'-9"	3'-4"	GL-06	3
405	W.2	Existing	4'-9"	6'-4"	GL-06	2
405T	W.3	Existing	4'-9"	3'-4"	GL-06	3
406	W.2	Existing	4'-9"	6'-4"	GL-06	2
406T	W.3	Existing	4'-9"	3'-4"	GL-06	3
407	W.5C	Phase 01	2'-10"	3'-11"	GL-01	4
408	W.5A, W.6	Phase 01	5'-4"	8'-11"	GL-01, GL-06	4
409	W.5A, W.6	Phase 01	5'-4"	8'-11"	GL-01, GL-06	4
410	W.5A, W.6	Phase 01	5'-4"	8'-11"	GL-01, GL-06	4
411	W.5B, W.6	Phase 01	3'-6"	8'-11"	GL-01, GL-06	4

### FINISH SCHEDULE

TAG	FINISH	LOCATION	NOTES
PAINT			
P-1	BLACK	TYPICAL, UNO	
P-2	METALLIC: LIGHT GOLD	METAL GRILL DECORATIVE FLORET	HIGH PERFORMANCE COATING
P-3	TO BE SELECTED BY OWNER	INTERIOR WOOD TRIM, SILLS, CASINGS	

**PAINT GENERAL NOTES:**  
 1. PRIOR TO PAINTING, ALL "BLACK" FINISHES MUST BE SUBMITTED FOR REVIEW AND COMPARED IN THE FIELD TO CONFIRM COLOR COMPATIBILITY ACROSS DIFFERENT PRODUCTS AND MANUFACTURERS.

### LIGHT FIXTURE SCHEDULE

Type Mark	Description	Manufacturer	Model	Finish	Comments
LT-01	EXTERIOR SCNCE	THOMAS O'BRIEN	PHELHAM 10" WALL SCNCE: #901056	HAND RUBBED ANTIQUE BRASS	
LT-02	EXTERIOR PENDANT	EXISTING	-	-	RESTORE EXISTING FIXTURE
LT-03	EXTERIOR FLUSH FIXTURE	WAC LIGHTING	YORK 12" WIDE LED DRUM CEILING FIXTURE: #FM-45012-AB	AGED BRASS	
LT-04	RECESSED CAN LIGHT	ACULUX	AX4-A-17LM-30K-90CR-50D-GZ1-120-4ABV-BLSF-WET	BLACK	
LT-05	UPLIGHTING	HYDREL	SPECIALTY ARCHITECTURAL FLOOD: SAF7	BLACK	

### OPENING LEGEND

AL	ALUMINUM
GL	GLASS
WD	WOOD
HM	HOLLOW METAL
MATCH EXIST	MATCH EXISTING
EXIST	EXISTING

### GENERAL NOTES - DOOR

- DOORS, FRAMES, AND HARDWARE IN RATED WALLS SHALL MAINTAIN OPENING PROTECTIVE RATING REQUIREMENTS OF ADJACENT WALLS. UNLESS OTHERWISE INDICATED, PROVIDE 1/4" CLEAR, FULLY TEMPERED SAFETY GLASS IN DOORS AND SIDE LITES. GLASS IN DOORS AND ADJACENT TO DOORS SHALL COMPLY WITH THE CRITERIA FOR CPSC 16 CFR PART 1201, CATEGORY II.
- DOOR CLOSERS SHALL BE ADJUSTABLE AND SET TO COMPLY WITH ACCESSIBLE CRITERIA FOR OPENING TENSION AND CLOSING SPEEDS.
- DOOR CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME REQUIRED TO MOVE THE DOOR TO A POSITION OF 12 DEGREES FROM THE LATCH IS 5 SECONDS MINIMUM. IN ADDITION, CLOSER SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 70 DEGREES, THE DOOR WILL TAKE AT LEAST 3 SECONDS TO MOVE TO A POINT 3 INCHES FROM THE LATCH, MEASURED TO THE LEADING EDGE OF THE DOOR.
- DOOR THRESHOLDS AND TRANSITIONS SHALL NOT EXCEED 1/2" IN HEIGHT.

### DOOR KEYNOTES

- REPLICATE PATTERN OF NEW DOOR TO MATCH EXISTING WOOD DOUBLE DOOR, WITH THE EXCEPTION OF PROVIDING A SOLID WOOD PANEL IN LEU OF TEMPERED GLAZING.
- EXISTING DOOR TO BE RESTORED AND SEALED SHUT.
- REPLACE EXISTING GLAZING WITH TEMPERED GLAZING, GL-06.
- VERIFY EXISTING OPENING IN FIELD PRIOR TO FABRICATION OF DOOR PANEL.
- REPAIR AND RESTORE EXISTING THRESHOLD.
- REPLICATE PATTERN OF NEW DOOR FRAME TO MATCH EXISTING WOOD FRAME AROUND DOUBLE DOOR.

### GENERAL NOTES - WINDOW

- EXISTING WINDOWS ARE TO BE RESTORED, REPAIRED AND REPAINTED. REFER TO RESTORATION SCOPE AND SPECIFICATIONS FOR EXTENT OF RESTORATION.
- EXISTING GLAZING TO BE REPLACED IN ALL WINDOWS. REFER TO THE WINDOW SCHEDULE FOR THE GLAZING TYPE.
- ALL OPENINGS TO BE PROTECTED DURING RESTORATION FOR SAFETY AND SECURITY.
- EACH GLAZED OPENING TO BE VERIFIED PRIOR TO FABRICATION AND APPLIED TO BE PROPER FIT IN THE EXISTING OPENINGS.
- ALL NEW AND EXISTING OPERABLE WINDOWS TO BE FIXED SHUT TO BE NON-OPERABLE.

### WINDOW KEYNOTES

- VERIFY EXISTING ROUND OPENING DIAMETER PRIOR TO FABRICATION.
- PIVOT WINDOW TO BE RESTORED, REPAIRED, PAINTED AND PINNED SHUT.
- TRANSOM WINDOW TO BE RESTORED, REPAIRED AND PAINTED. REPLICATE EXISTING STEEL WINDOW FRAME AND SIMULATED DIVIDED LITE PROFILES WITH NEW WINDOW. INSTALL NEW TEMPERED STORM WINDOW ON THE INTERIOR EDGE OF THE SILL BEHIND THE NEW EXTERIOR WINDOW. PIN BOTH WINDOWS SHUT. INSTALL BREAKMETAL IN EXISTING OPENING FOR FUTURE LOUVER INSTALLATION IN PHASE 02.

### WINDOW SCOPE

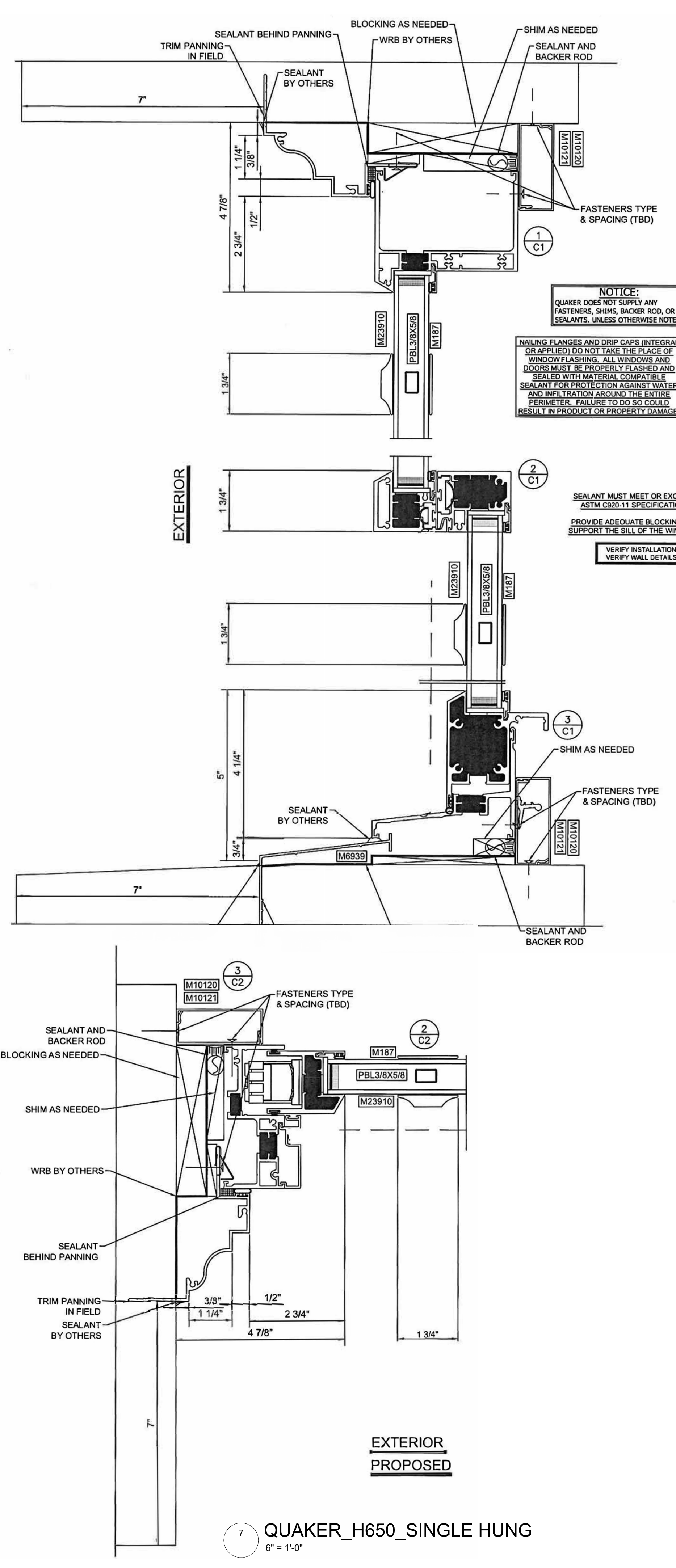
**WOODEN PIVOT WINDOWS & HOPPER TRANSOM (W.2 - W.3)**

- REMOVE SASH FOR OFF SITE RESTORATION AND REINSTALLATION. RESTORATION TO INCLUDE:
  - A. REMOVAL OF ALL HARDWARE
  - B. REMOVE GLAZING STOP AND EXISTING GLAZING, TO BE RECYCLED.
  - C. STRIPE PAINT / FINISHES TO BARE WOOD ON EXTERIOR AND INTERIOR OF SASH.
  - D. REPAIR / REPLACE DAMAGED WOOD ON SASH.
  - E. SET NEW GLASS AND GLAZING STOPS.
  - F. PAINT SASH WITH (2) COATS OF PRIMER AND (2) COATS OF FINISH PAINT. EXTERIOR TO BE P-1 AND INTERIOR TO BE P-3.
  - G. REINSTALL SASH TO BE NON-OPERABLE WITH NO HARDWARE.
- SCRAPE EXISTING PAINT / FINISHES AND PERFORM WOOD REPAIR AS NEEDED ON EXTERIOR AND INTERIOR OF WINDOW FRAME, INCLUDING BUT NOT LIMITED TO EXTERIOR TRIM/CASING AND INTERIOR CASING, APRON AND SILL. SAND ENTIRE UNIT AND PAINT WITH (2) COATS OF PRIMER AND (2) COATS OF FINISH PAINT ON EXTERIOR (P-1) AND INTERIOR (P-3), INCLUDING TRIM, CASING, APRON AND SILLS.

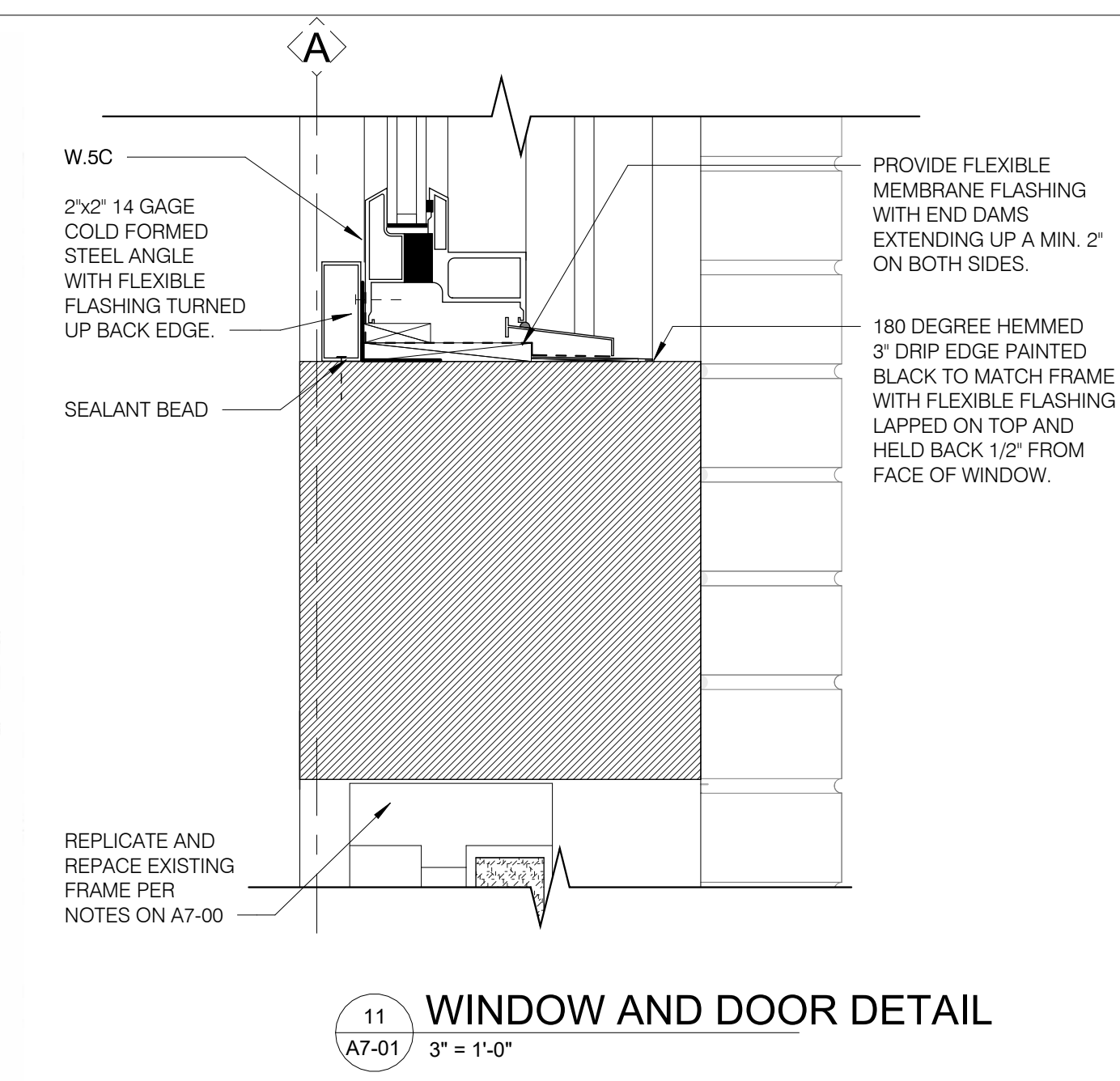
**STEEL SINGLE HUNG WINDOWS (W.5A-C + W.6)**

- REMOVE AND RECYCLE SECURITY GRATES ON EXTERIOR / INTERIOR. REPLICATE EXISTING SINGLE HUNG WINDOW TO MATCH TRIM, PROFILES, MOUNTING, OPERATION, ETC.
- INSTALL SINGLE PANE FIXED TEMPERED STORM WINDOW ON THE INTERIOR FACE OF THE SINGLE HUNG WINDOW. WINDOW TO BE CONTINUOUS WITH NO HORIZONTAL INTERRUPTIONS. REFER TO DETAILS ON A7-01 FOR NEW AND EXISTING CONDITIONS.

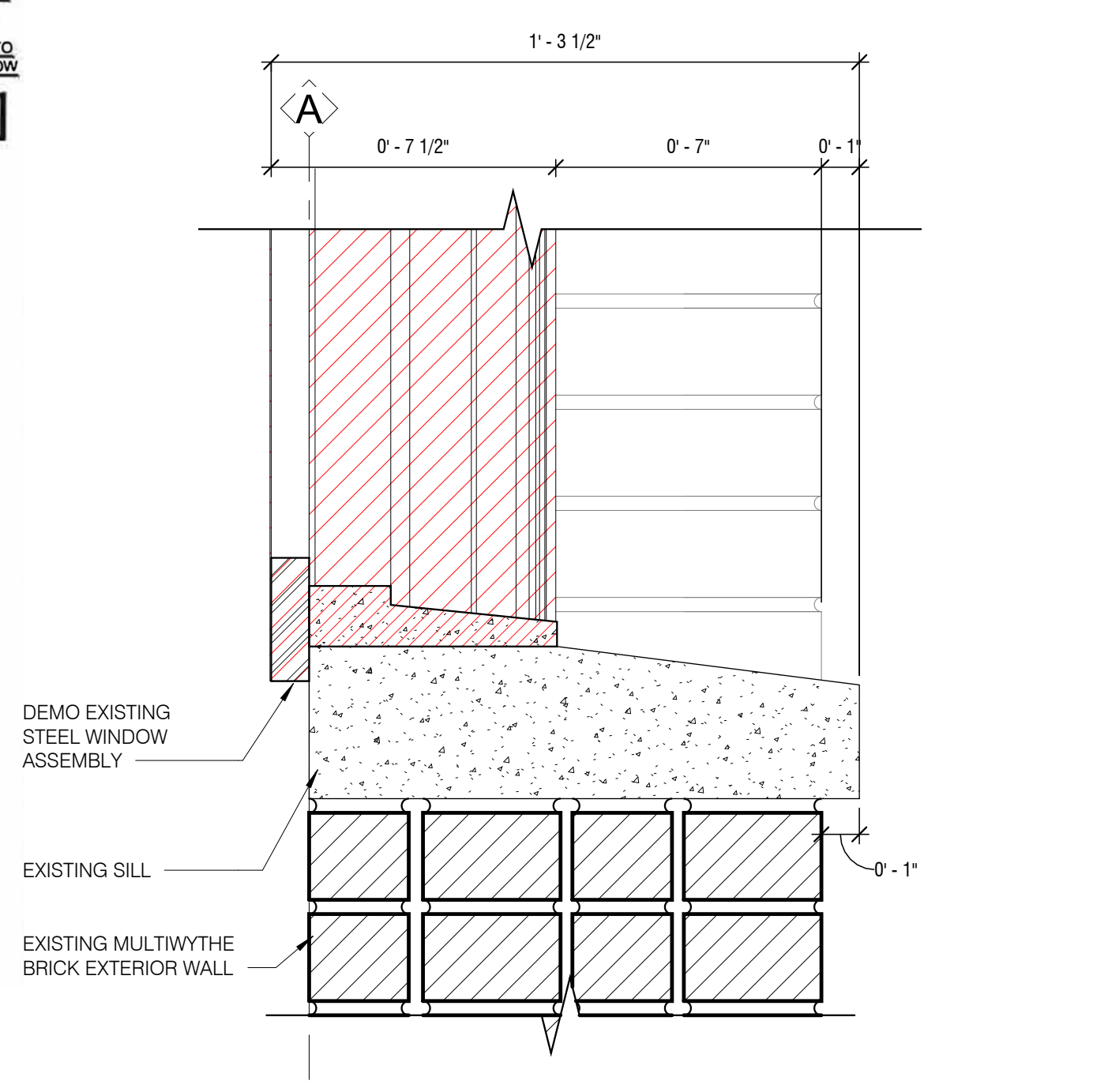
Sheet Size: ARCH D - 24" x 36"  
 ABA\_REVIT\_2022\_Template Version  
 C:\Users\coris\OneDrive\Projects\2021\_A03\_Broadway\07\_Production\BIM\2021\_A03\_Broadway\_RVT23\_detached.rvt  
 © 2023 Amy Baker Architect



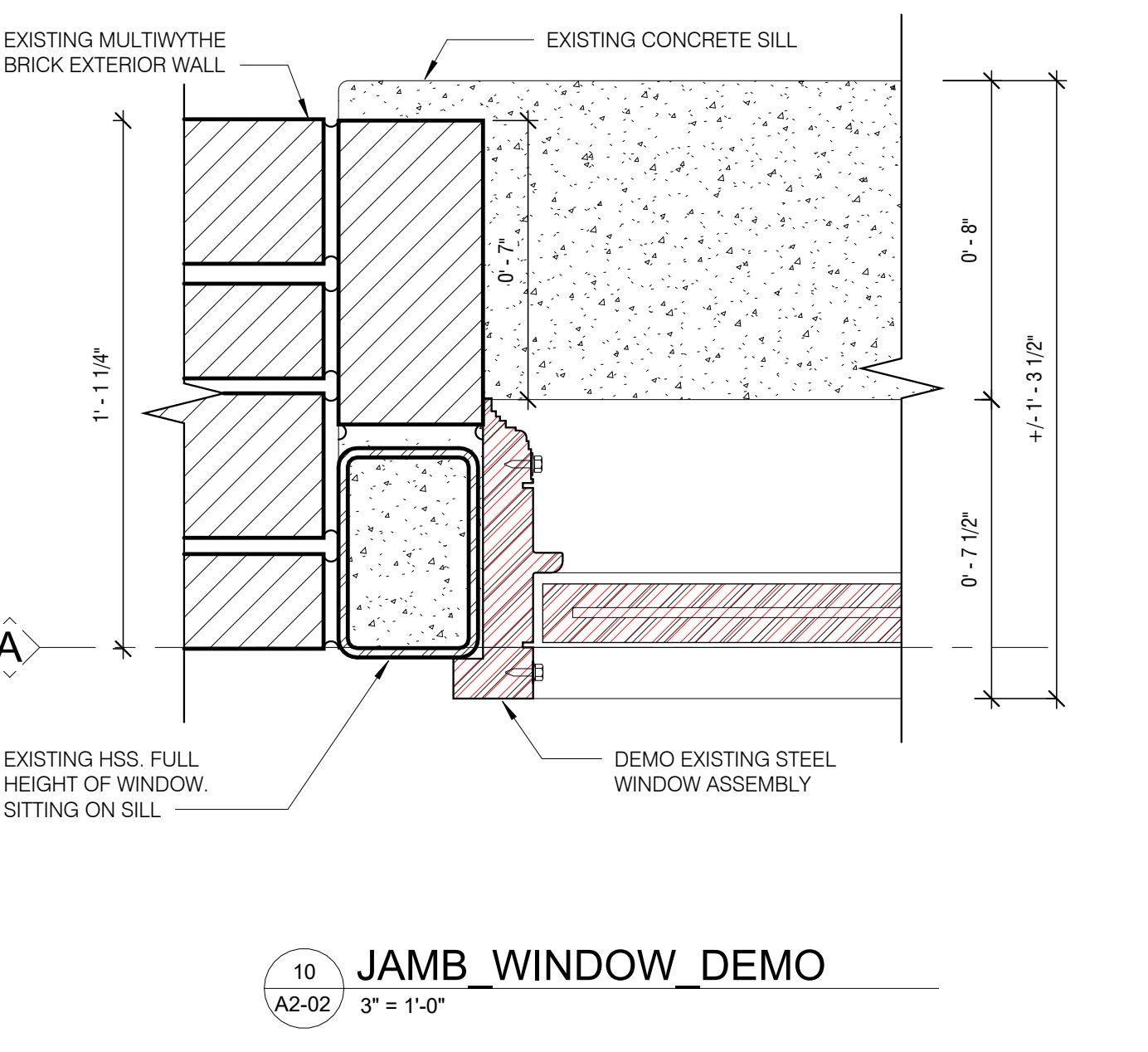
7 QUAKER H650 SINGLE HUNG  
 6" = 1'-0"



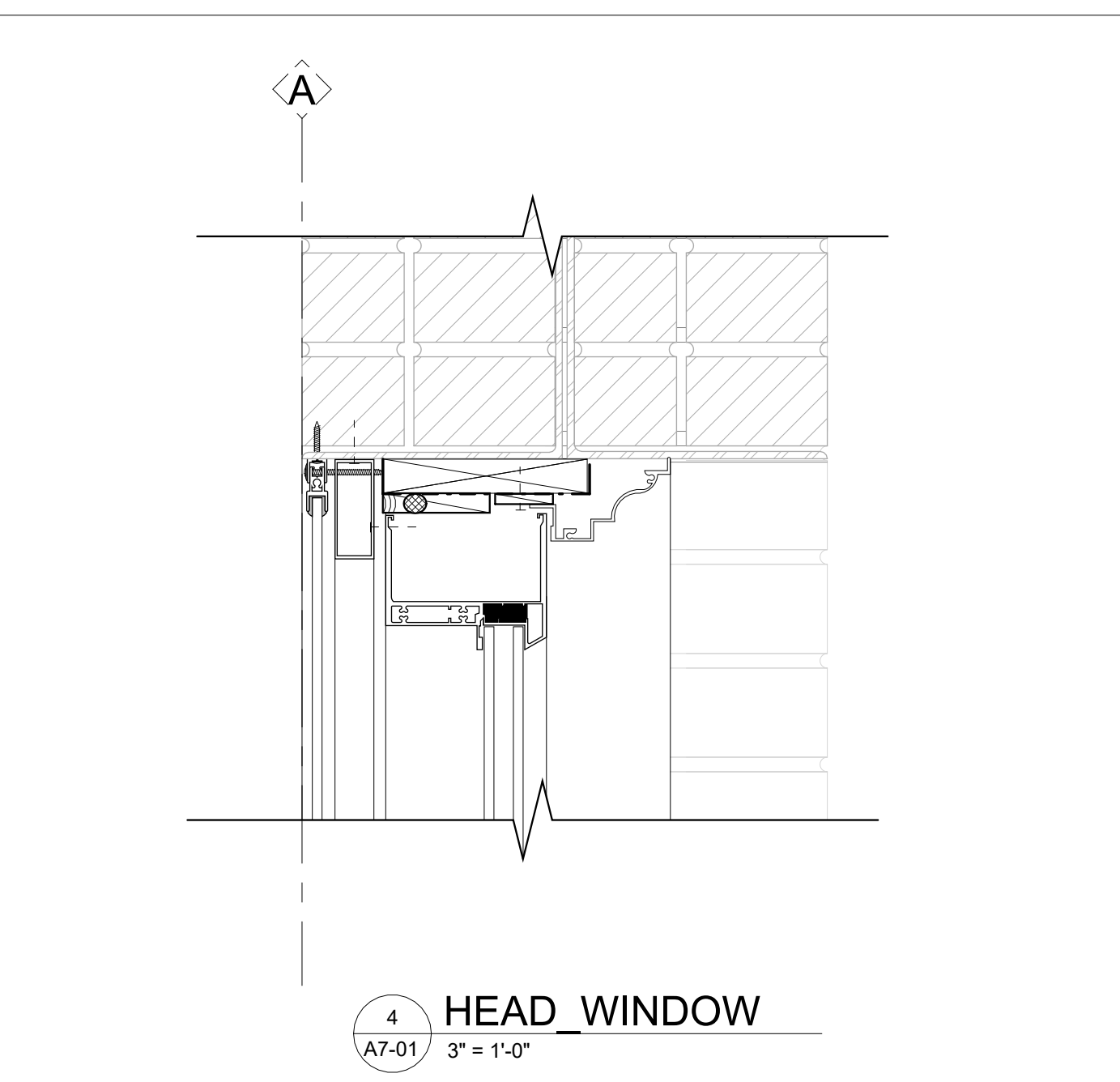
11 WINDOW AND DOOR DETAIL  
 3" = 1'-0"



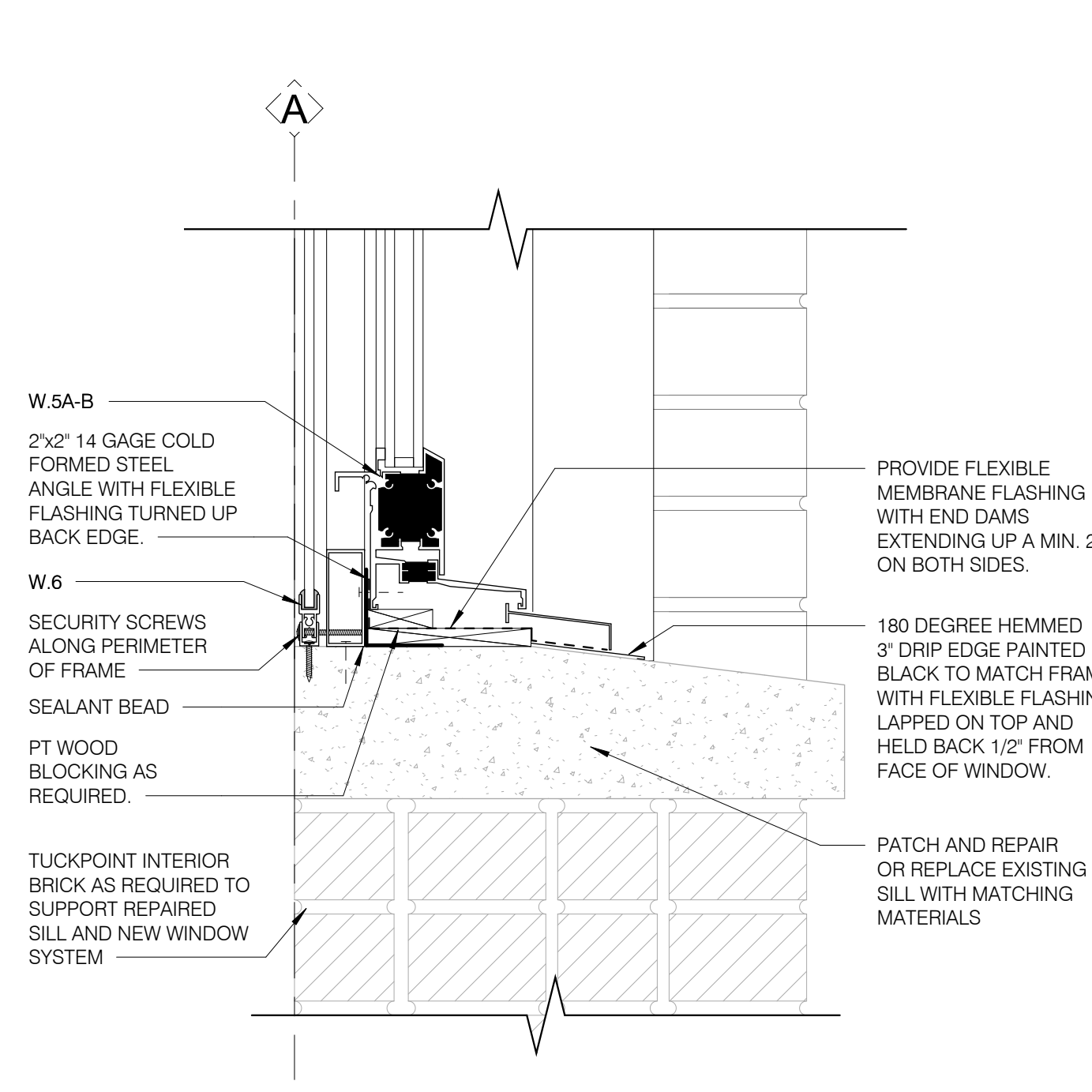
9 SILL WINDOW DEMO  
 3" = 1'-0"



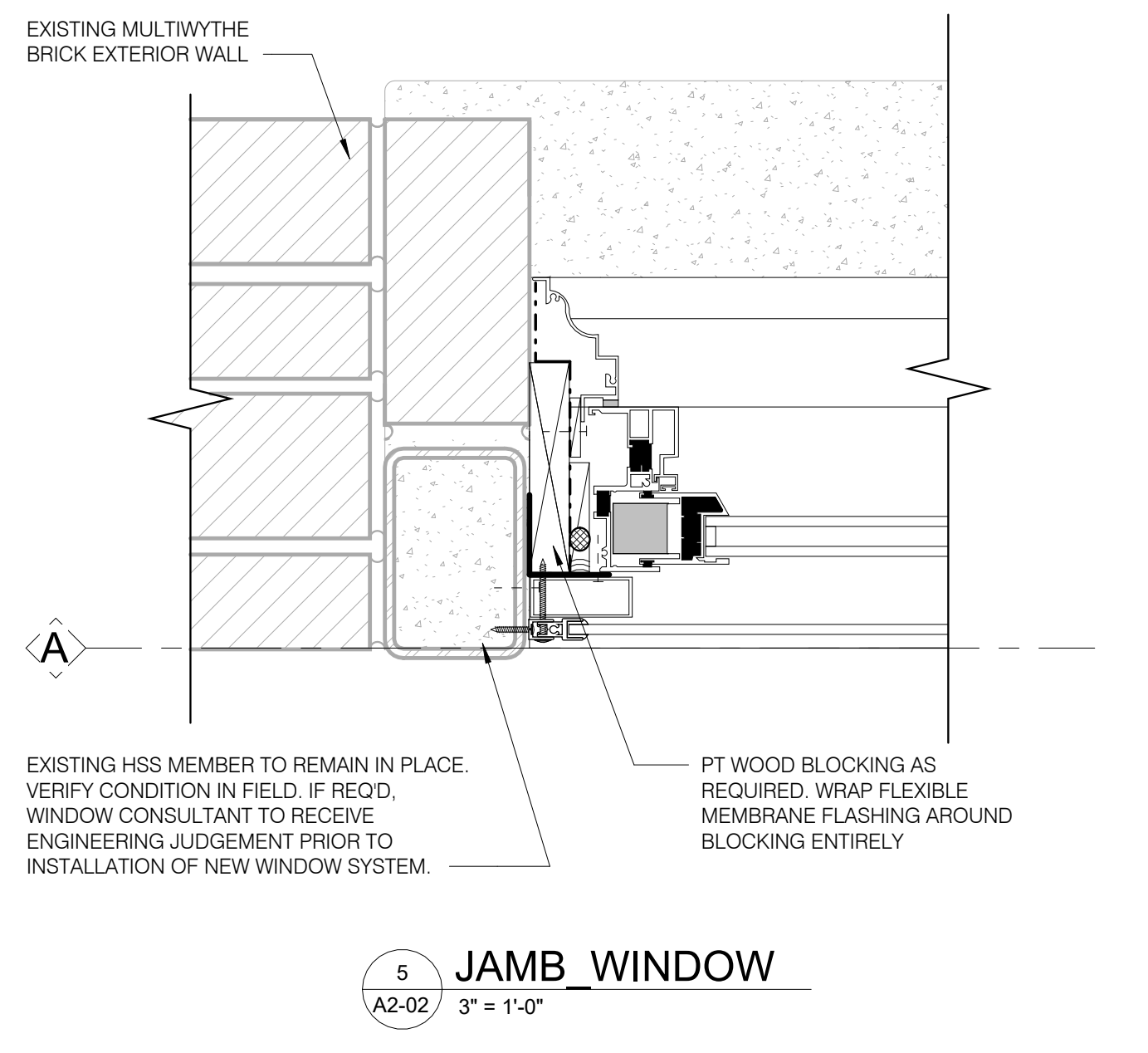
10 JAMB WINDOW DEMO  
 3" = 1'-0"



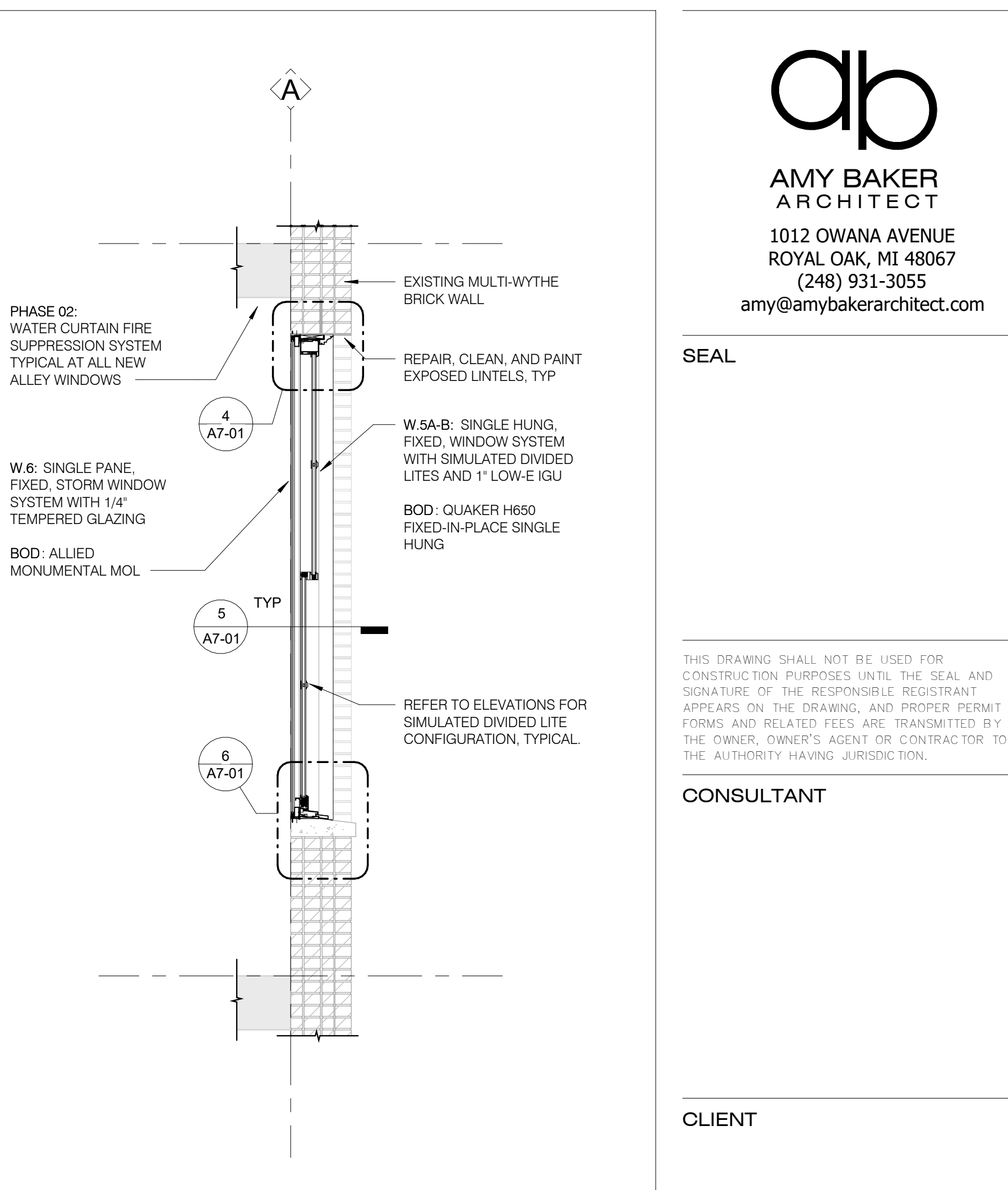
4 HEAD WINDOW  
 3" = 1'-0"



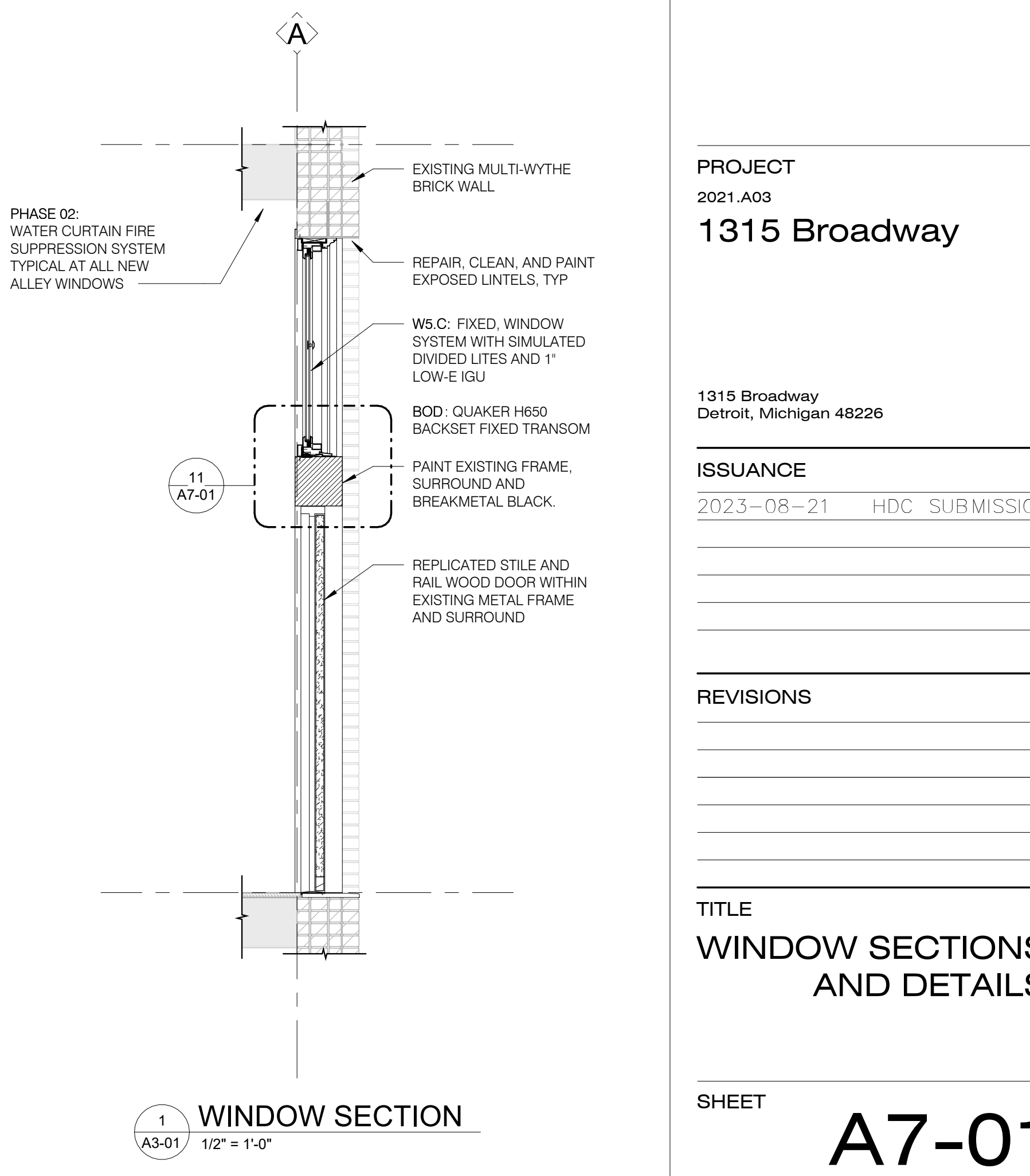
6 SILL WINDOW  
 3" = 1'-0"



5 JAMB WINDOW  
 3" = 1'-0"



3 WINDOW SECTION  
 1/2" = 1'-0"



1 WINDOW SECTION  
 1/2" = 1'-0"

**ab**  
 AMY BAKER  
 ARCHITECT  
 1012 OWANA AVENUE  
 ROYAL OAK, MI 48067  
 (248) 931-3055  
 amy@amybakerarchitect.com

SEAL

THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL THE SEAL AND SIGNATURE OF THE RESPONSIBLE REGISTRANT APPEARS ON THE DRAWING, AND PROPER PERMIT FORMS AND RELATED FEES ARE TRANSMITTED BY THE OWNER, OWNER'S AGENT OR CONTRACTOR TO THE AUTHORITY HAVING JURISDICTION.

CONSULTANT

CLIENT

PROJECT  
 2021.A03  
 1315 Broadway

1315 Broadway  
 Detroit, Michigan 48226

ISSUANCE  
 2023-08-21 HDC SUBMISSION

REVISIONS

TITLE  
 WINDOW SECTIONS AND DETAILS

SHEET  
 A7-01