

EAST ENTRY REPLACEMENT KENOSHA COUNTY ADMINISTRATION BUILDING KENOSHA COUNTY 1010 56TH STREET KENOSHA, WI 53140 KC23-001

GENERAL PLAN NOTES

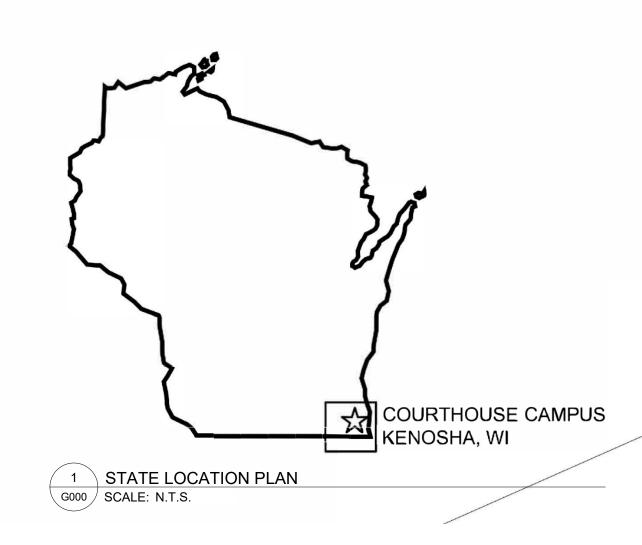
- NEW CONSTRUCTION IN BOLD.
- 2. DIMENSIONS ARE TO FACE OF MASONRY, CMU OR CONCRETE, OR GYP PARTITION.
- 3. PATCH WALLS, FLOORS, AND CEILING TO MATCH EXISTING, ADJACENT FINISHES AND PROVIDE SMOOTH AND CONTINUOUS SURFACES AT ALL WORK INCLUDING REMOVAL OF MISCELLANEOUS ITEMS SUCH AS THERMOSTATS, SIGNAGE, AND CASEWORK.
- 4. ALL PENETRATIONS THROUGH FIRE RATED CONSTRUCTION, WHETHER FROM ELECTRICAL OR OTHER ACTIVITY, SHALL BE FIRESTOPPED AND/OR HAVE FIRE DAMPERS WITH EQUIVALENT HOURLY RATING.
- PROVIDE FIRE STOPPING AT PIPING PENETRATIONS THROUGH FLOOR.
- PATCH AND PREPARE EXPOSED SURFACES TO RECEIVE NEW FINISHES OVER ALL HOLES IN FLOOR, WALLS, AND CEILINGS WHERE MECHANICAL EQUIPMENT OR CONNECTIONS WERE ABANDONED AND EXPOSED.
- 7. DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS PRIOR TO WORK.
- 8. VERIFY EXISTING CONDITIONS AND FINISHES PRIOR TO ALL WORK.
- 9. INSPECTIONS AS REQUIRED BY LOCAL AUTHORITIES SHALL BE COORDINATED BY GENERAL CONTRACTOR.
- 10. FOR ALL EXISTING PLASTER WALLS & EXPOSED PORTION OF PLASTER CEILING IN NEED OF PATCHING OR REPAIR: REFER TO THE NATIONAL PARK SERVICE PRESERVATION BRIEF 21 "REPAIRING HISTORIC FLAT PLASTER WALLS AND CEILINGS" FOR APPROPRIATE METHODS AND MATERIALS CONFIRM SYSTEM & METHOD WITH ARCHITECT/OWNER PRIOR TO REPAIR.
- 11. THE CONTRACTOR SHALL CALL "DIGGER'S HOTLINE" AT (800) 242-8511, 48 HOURS (EXCLUDING WEEKENDS AND/OR HOLIDAYS) PRIOR TO DIGGING ANY EXCAVATION. "DIGGER'S HOTLINE" WILL CONTACT UTILITY COMPANIES TO LOCATE AND MARK THEIR UNDERGROUND FACILITIES. NO SUCH WORK SHALL COMMENCE PRIOR TO VERIFICATION THAT ALL UTILIITIES HAVE RESPONDED.
- 12. ALL DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE CODES. ALL PERMITS ARE BY THE CONTRACTOR.
- 13. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF, AND COORDINATION WITH, ALL DIMENSIONS SHOWN ON THESE DRAWINGS RELATIVE TO EXISTING CONDITIONS PRIOR TO BEGINNING WORK.
- 14. CONTRACTOR SHALL REPORT IMMEDIATELY TO THE ARCHITECT ANY DIMENSIONS AND/OR DISCREPANCIES VERBALLY. A WRITTEN REPORT SHOULD PROMPTLY FOLLOW. CONTRACTOR SHALL CEASE WORK IN THE AFFECTED AREA UNTIL DIRECTED BY THE ARCHITECT.
- 5. THE CONTRACTOR SHALL PROVIDE ALL METHODS AND EQUIPMENT FOR PROTECTING THE BUILDING, ALL MATERIALS, AND PERSONNEL FROM FIRE OR OTHER DAMAGE PRIOR TO STARTING. THE CONTRACTOR SHALL SUBMIT TO APPROVED METHODS AND EQUIPMENT IN WRITING FOR THE OWNER AND ARCHITECT'S REVIEW PRIOR TO STARTING WORK.
- 6. THE CONTRACTOR SHALL COMPLY WITH ALL SAFETY AND HEALTH LAWS AND REGULATIONS.

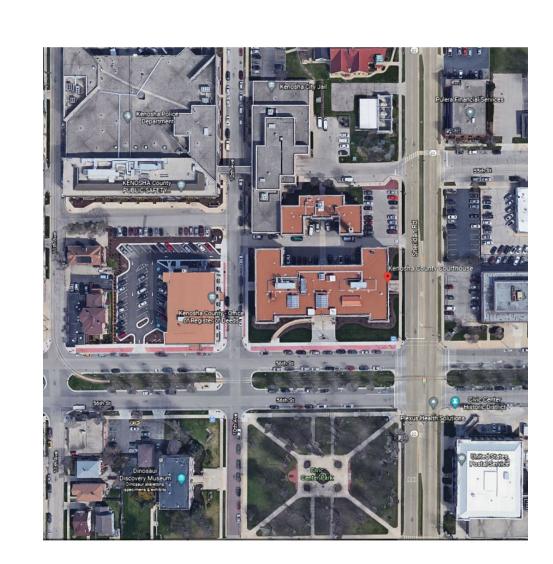
- . THE CONTRACTOR SHALL PROVIDE ALL SHORING, BRACING, SHEATHING, REQUIRED FOR THE SAFETY AND PROPER EXECUTION OF THE WORK. MAINTAIN EGRESS AT DESIGNATED ENTRANCE POINTS. COORDINATE ALL TEMPORARY CLOSURES OF CODE-REQUIRED EGRESS
- EXECUTION OF THE WORK WILL INVOLVE CONSIDERATION FOR ALLOWING THE OWNER TO CONTINUE THE OPERATION OF THE PREMISES AND ADJACENT FACILITIES. PRIOR TO AWARD OF THE CONTRACT, A CONSTRUCTION SCHEDULE PREPARED BY THE CONTRACTOR SHALL BE SUBMITTED TO THE ARCHITECT AND SHALL BE COORDINATED WITH THE FACILITIES DEPARTMENT. OWNER'S APPROVAL OF THE PROPOSED SCHEDULE SHALL SUPERCEDE THE CONTRACT, PROVIDED THE OVERALL TIME IS NOT CHANGED.
- 19. THE CONTRACTOR SHALL REVIEW ALL EXISTING CONDITIONS TO DETERMINE ALL SERVICES (ELECTRICAL, MECHANICAL, PLUMBING, ETC.)
 AFFECTED BY THE REPAIR WORK. THE CONTRACTOR SHALL MAKE NECESSARY TEMPORARY CONNECTIONS TO MAINTAIN EXISTING
 SERVICES TO ALL AREAS OF THE BUILDING DIRECTLY AND INDIRECTLY AFFECTED BY THE WORK. THE CONTRACTOR SHALL SUBMIT
 METHODS AND SCHEDULE OF CONNECTIONS TO THE OWNER FOR APPROVAL PRIOR TO BEGINNING WORK.
- 0. AS THE WORK PROGRESSES, THE CONTRACTOR SHALL PRODUCE "AS-BUILT" DRAWINGS FOR THE INSTALLATION OF ALL REPAIR ITEMS UNDER THE CONTRACT. THE ARCHITECT WILL PROVIDE THE GENERAL CONTRACTOR WITH A SET OF REPRODUCIBLE PLANS FOR THIS PURPOSE. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE AS-BUILT DRAWINGS ACCORDING TO THE JOB PROGRESS. EACH PAY REQUEST SUBMITTED BY THE CONTRACTOR SHALL BE ACCOMPANIED BY A COPY OF THE UPDATED AS-BUILT DRAWINGS.

SHEET INDEX

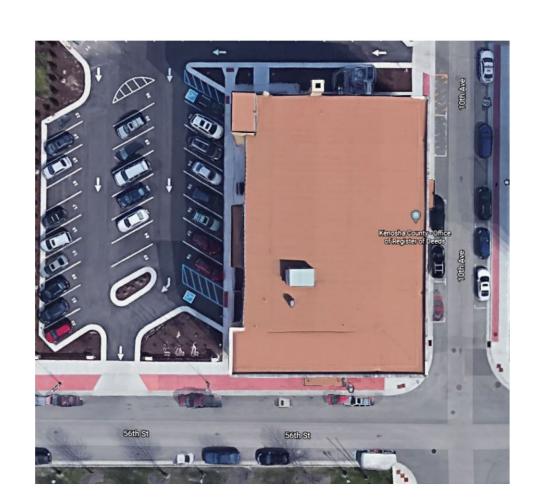
COVER SHEET DEMOLITION - EAST ELEVATION A101 DEMOLITION - ENLARGED ELEVATION, PLAN & SECTION **EAST ELEVATION** A201 A202 ENLARGED ELEVATION, PLAN & SECTION LOWER LEVEL FLOOR PLAN DOOR & FRAME TYPE DETAILS, & DOOR SCHEDULE A801 **GUIDELINE SPECIFICATIONS** A802 **GUIDELINE SPECIFICATIONS GUIDELINE SPECIFICATIONS**

GUIDELINE SPECIFICATIONS

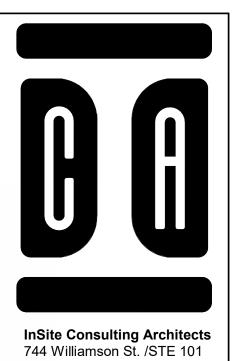












Madison, Wisconsin 53703

1.800.453.8086 info@icsarc.com

EAST ENTRY REPLACEMENT
KENOSHA COUNTY ADMINISTRATION BUILDING
KENOSHA COUNTY
TO 10 56TH STREET KENOSHA WI 53140

Revisions:

No. Date: Description:

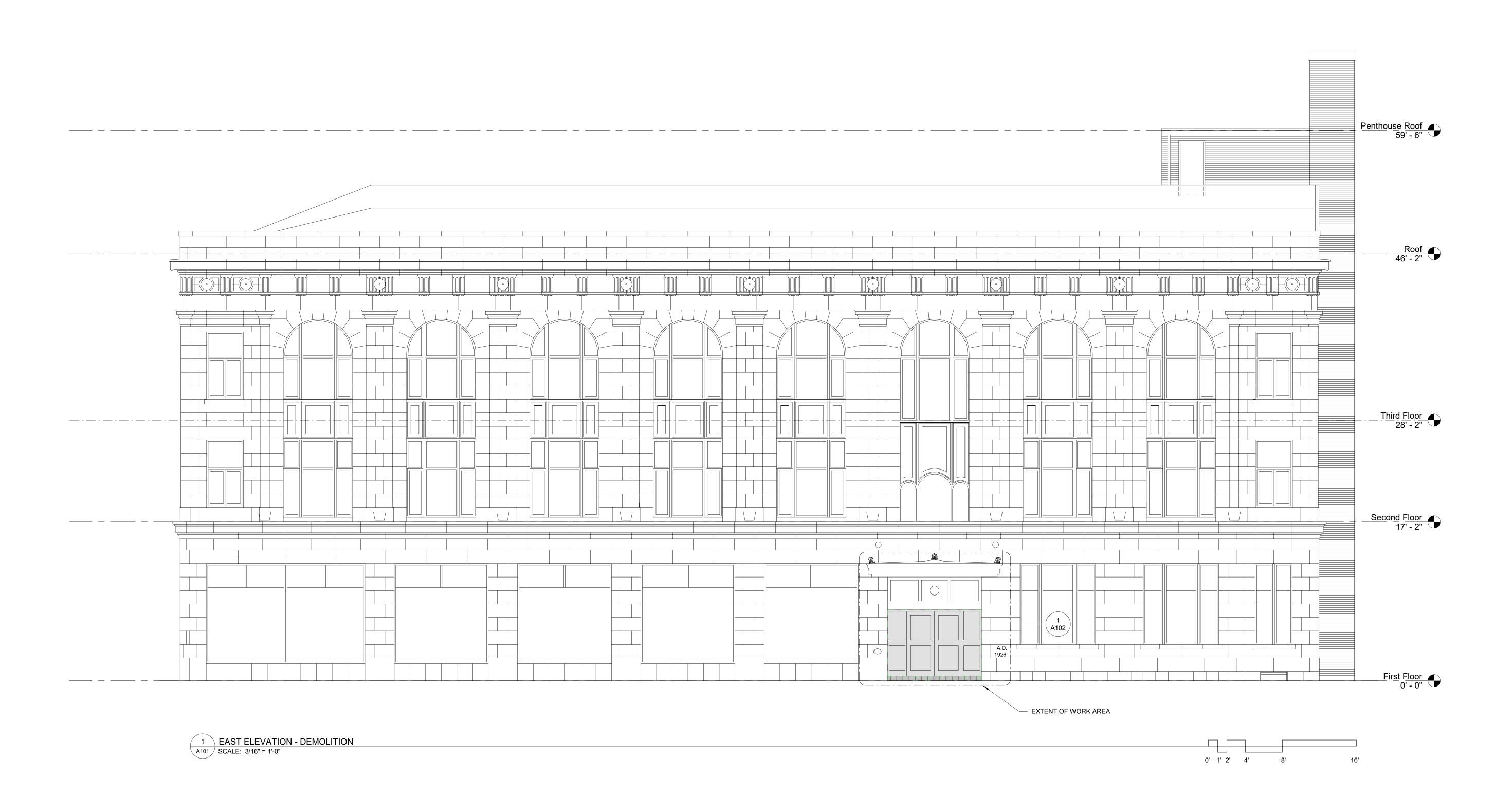
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EAST ENTRY REPLACEMENT KENOSHA COUNTY ADMINISTRATION BUILDING KENOSHA COUNTY 1010 56TH STREET KENOSHA, WI 53140

Graphic Scale

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3/16" = 1'-0"

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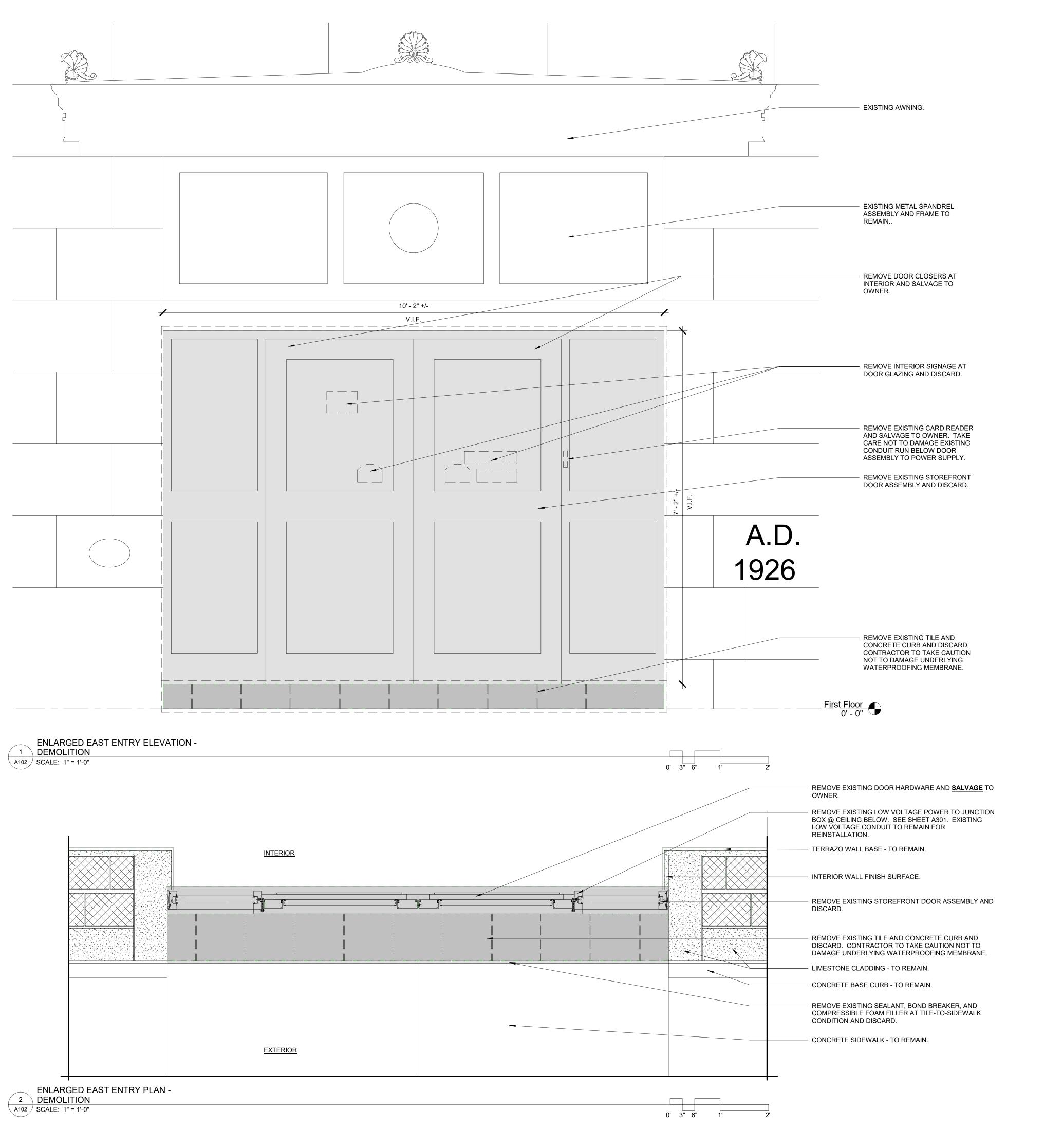
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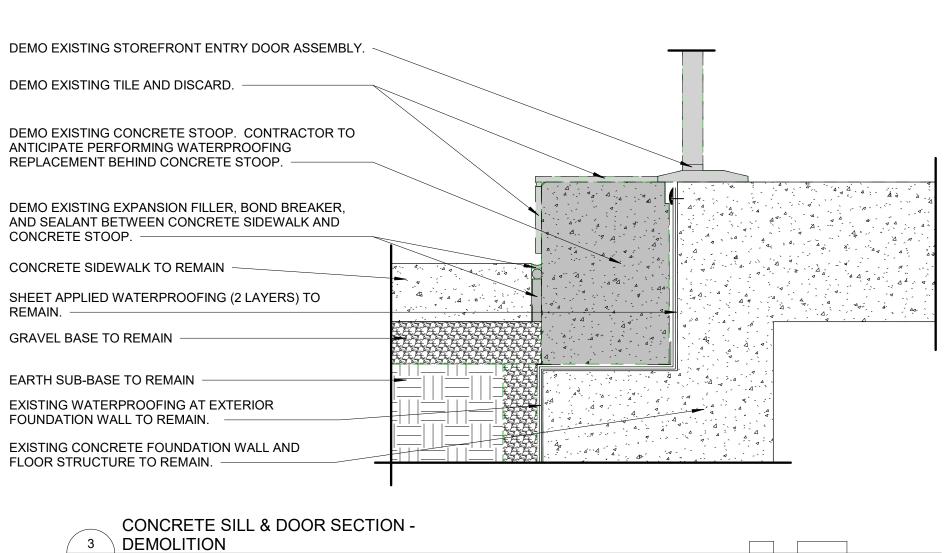
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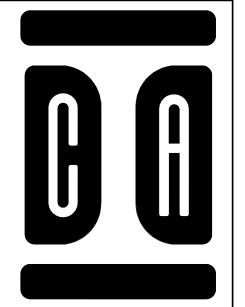


GENERAL DEMO PLAN NOTES

- 1. ALL ITEMS SHOWN DASHED TO BE REMOVED. DEMOLITION DRAWINGS REPRESENT THE GENERAL SCOPE OF DEMOLITION WORK. CONTRACTOR IS RESPONSIBLE FOR PERFORMING ALL DEMOLITION WORK REQUIRED FOR NEW CONSTRUCTION UNLESS NOTED OTHERWISE. INCIDENTAL WORK ASSOCIATED, BUT NOT SHOWN ON THE CONSTRUCTION DOCUMENTS, MAY BE REQUIRED OUTSIDE THE PROJECT AREAS. THIS WORK IS PART OF THE CONTRACT, AND IS TO BE COMPLETED IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS, AT NO ADDITIONAL COST TO THE OWNER.
- 2. ALL DIMENSIONS SHOWN ON DEMOLITION PLANS ARE FOR REFERENCE ONLY. COORDINATE LENGTH OF CONCRETE STEP REMOVAL WITH EXISTING CONDITIONS AND ARCHITECTURAL DRAWINGS. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES TO ARCHITECT PRIOR TO BEGINNING WORK.
- 3. ITEMS THAT ARE TO BE REMOVED AND REINSTALLED, OR SAVED, ARE TO BE TAGGED AND CAREFULLY STORED.
- ALL ITEMS INDICATED TO REMAIN ARE TO BE PROTECTED FROM DAMAGE. DAMAGED ITEMS ARE TO BE PATCHED & REPAIRED, OR REPLACED AS REQUIRED. PROVIDE SMOOTH & CONTINUOUS SURFACES TO MATCH EXISTING, ADJACENT SURFACE (MATCH EXISTING CONDITION AT DOOR, JAMBS). VERIEY IN FIELD.
- SHORE OPENINGS AS REQUIRED, UPON REMOVAL OF DOORS. SECURE ALL NEW FRAMES PER MANUFACTURER'S RECOMMENDATIONS.
- MAINTAIN STRUCTURAL INTEGRITY AT ALL TIMES. DO NOT REMOVE STRUCTURAL ELEMENTS UNLESS EXPLICITLY NOTED AND REPLACED WITH APPROPRIATE STRUCTURAL ELEMENTS.
- CEILING GRID AND TILES IN CORRIDOR (EAST VESTIBULE) AREAS AND TENANT PROGRAM SPACE ON GROUND FLOOR (EAST) SHALL BE REMOVED AS NECESSARY FOR ELECTRICAL WORK ONLY. REMOVE GRID AND TILES ONLY IN AREAS WHERE NECESSARY FOR ELECTRICAL ACCESS. STORE AND REINSTALL GRID AND TILES AFTER COMPLETION.
- PROTECT TREES, SHRUBS, LAWNS, AND HARDSCAPES WITHIN PROJECT LIMITS. RESTORE DAMAGED FEATURES TO ORIGINAL CONDITION.
- 9. PROVIDE PHOTO DOCUMENTATION OF ALL SITE CONDITIONS PRIOR TO COMMENCEMENT OF WORK PROVIDE COPY TO ARCHITECT AT PROJECT START.
- PRIOR TO ANY BUILDING SYSTEMS SHUTDOWN, COORDINATE WITH THE OWNER. AT NO TIME SHALL ANY BUILDING SYSTEMS BE INTERRUPTED DURING NORMAL OPERATIONAL TIMES.
- 11. REMOVE SPOILS FROM SITE FOR ALL EXCAVATION ACTIVITIES.



A102 | SCALE: 1" = 1'-0"



InSite Consulting Architects 744 Williamson St. /STE 101 Madison, Wisconsin 53703 1.800.453.8086 info@icsarc.com

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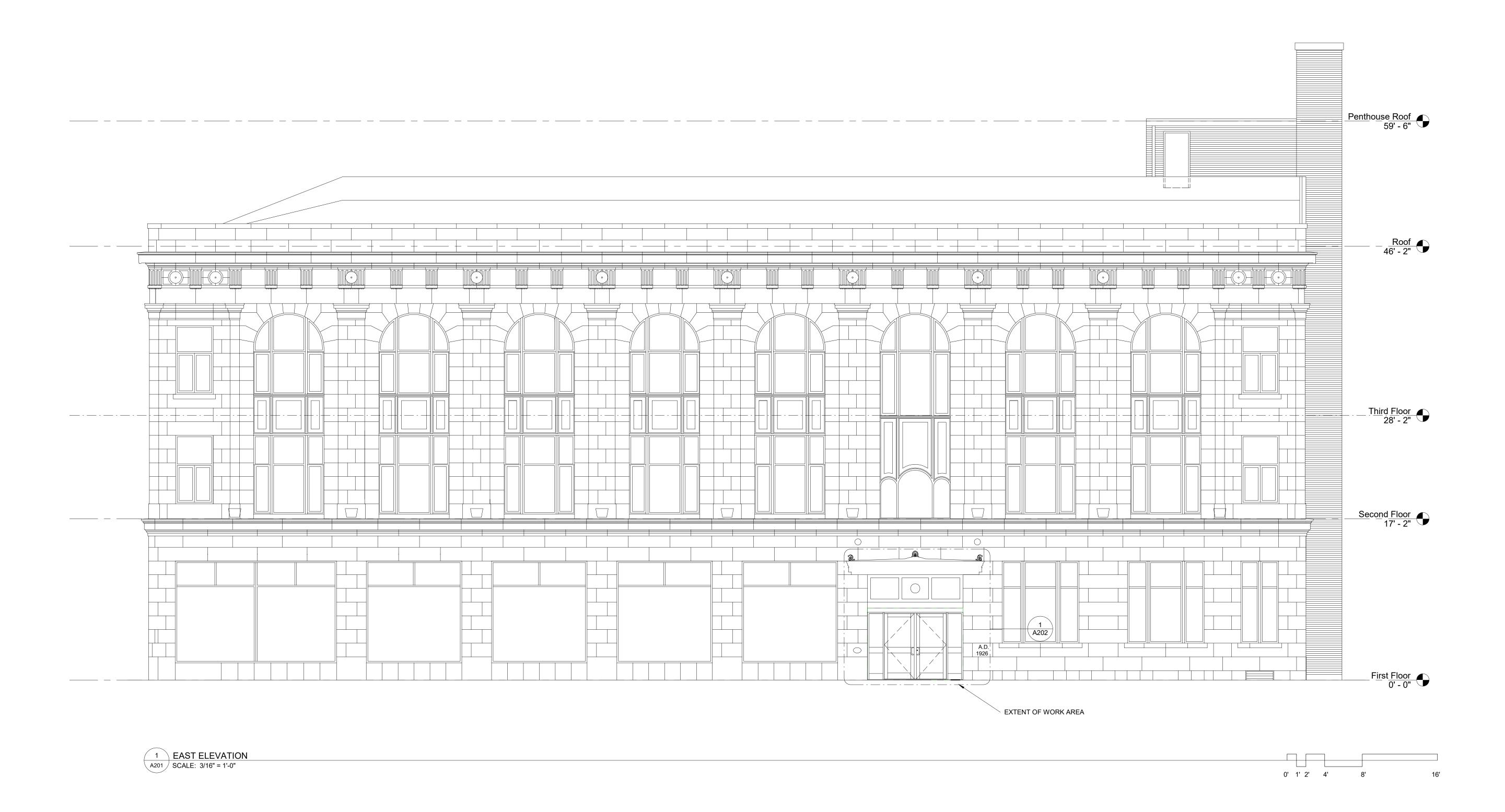
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EAST ELEVATION

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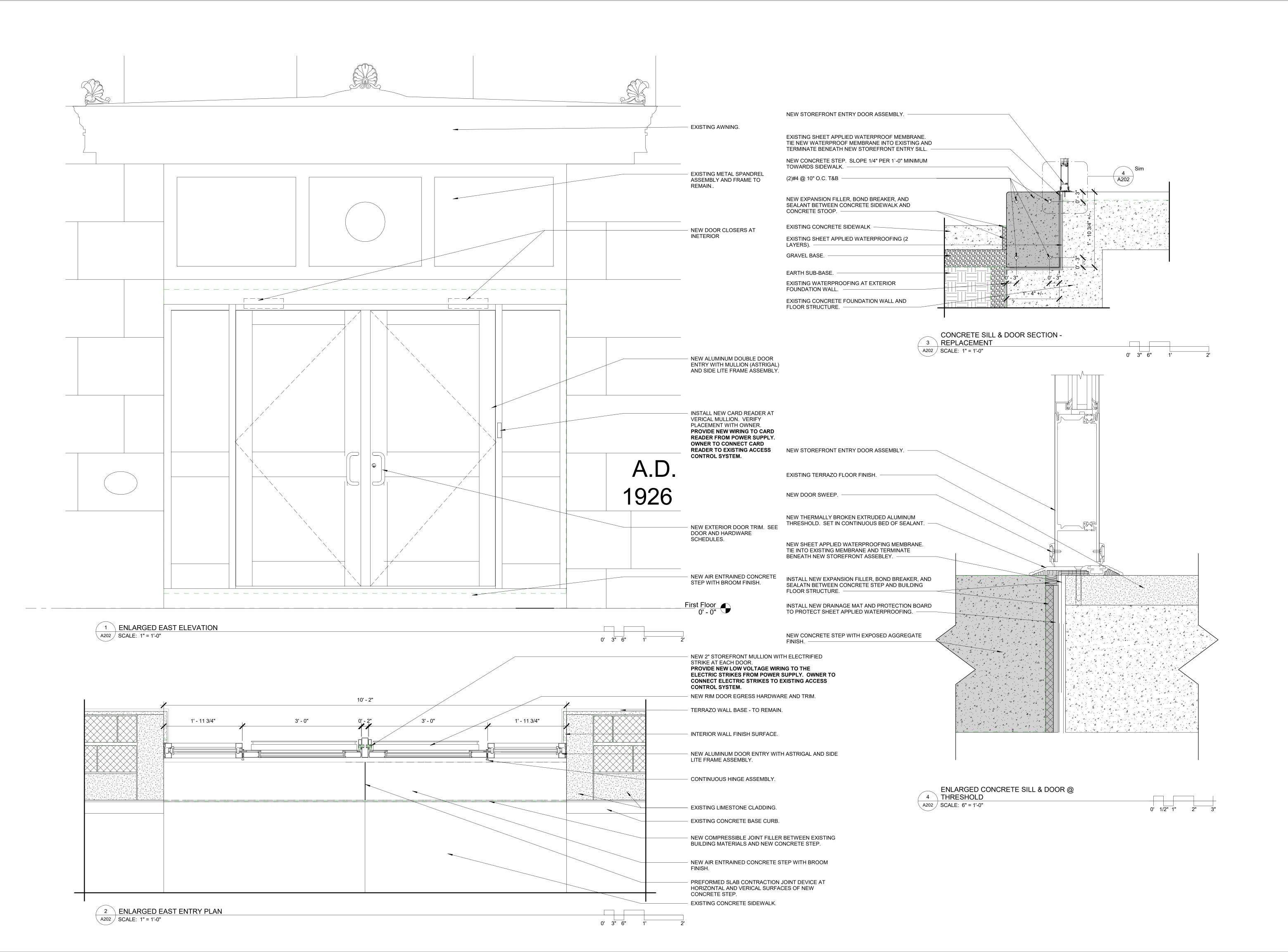
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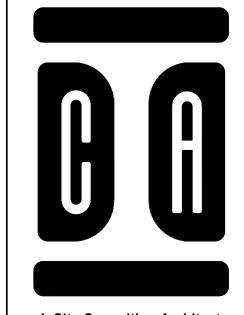
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Date Issued





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EAST ENTRY REPLACEMENT
KENOSHA COUNTY ADMINISTRATION BUILDING
KENOSHA COUNTY
1010 56TH STREET KENOSHA, WI 53140

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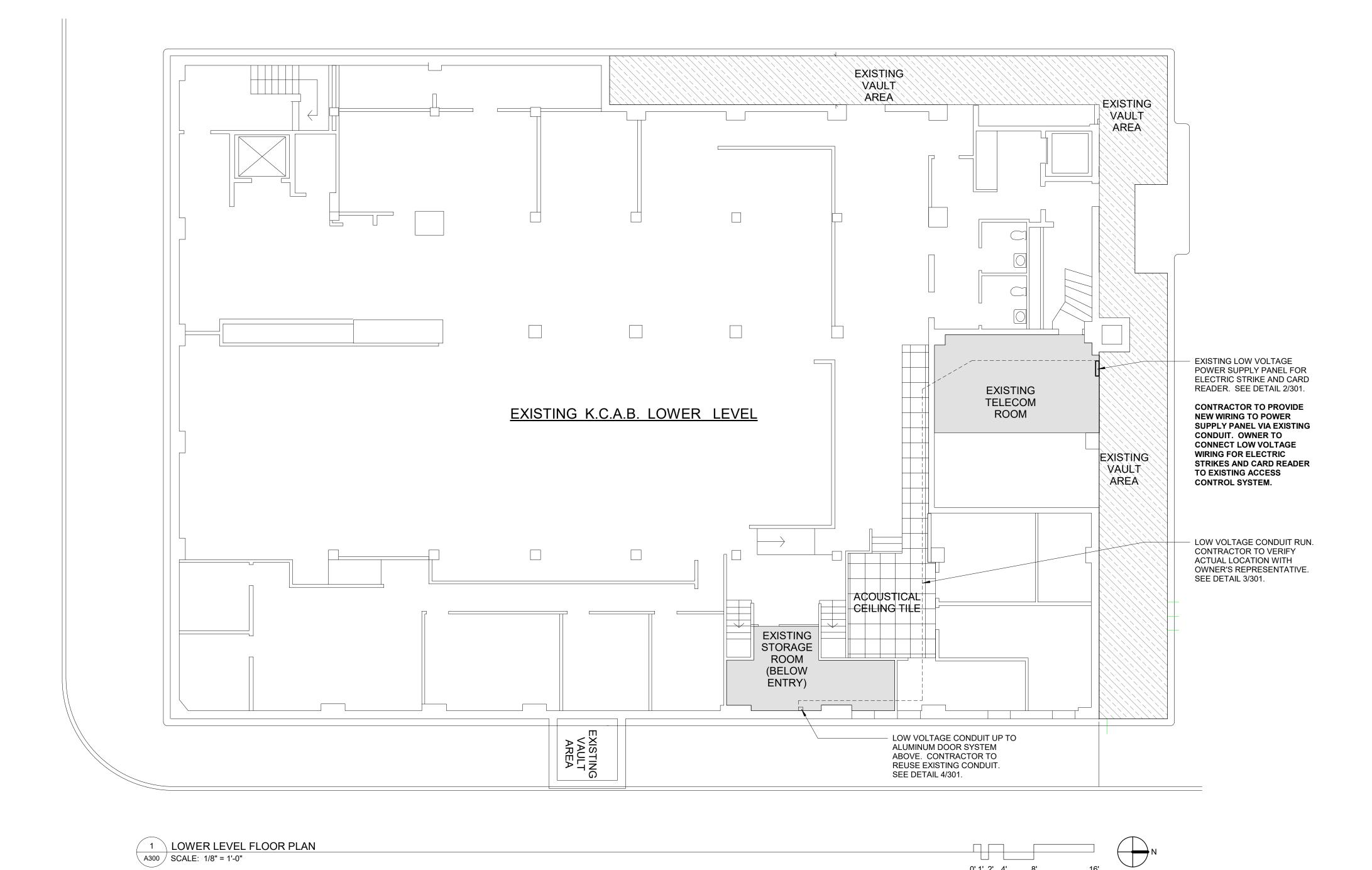
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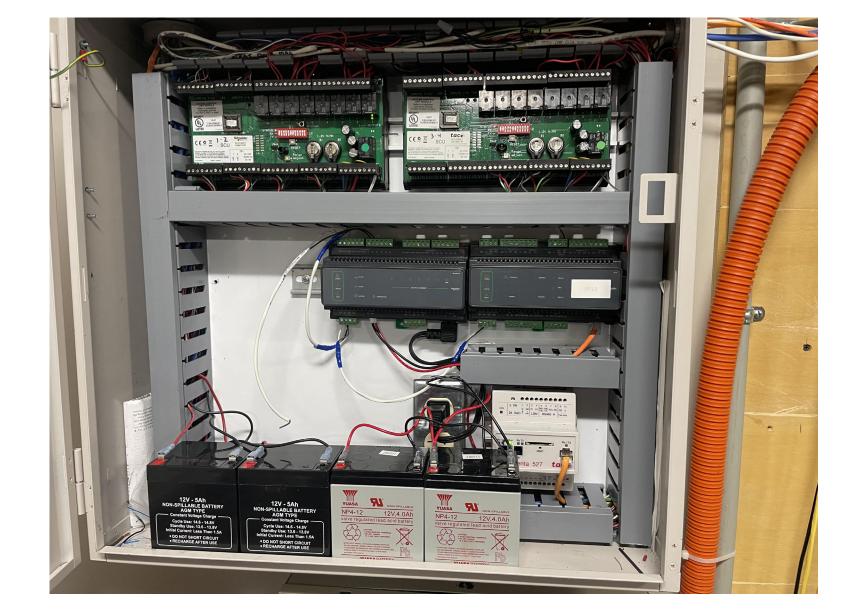
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REPRESENTATIVE VIEW OF A.C.T IN LOWER LEVEL

SCALE: N.T.S.



LOWER LEVEL STORAGE ROOM
(BELOW ENTRY)

SCALE: N.T.S.



EAST ENTRY REPLACEMENT
KENOSHA COUNTY ADMINISTRATION BUILDING
KENOSHA COUNTY
1010 56TH STREET KENOSHA, WI 53140

FLOOR PLAN

LOWER LEVEL

Graphic Scale As indicated

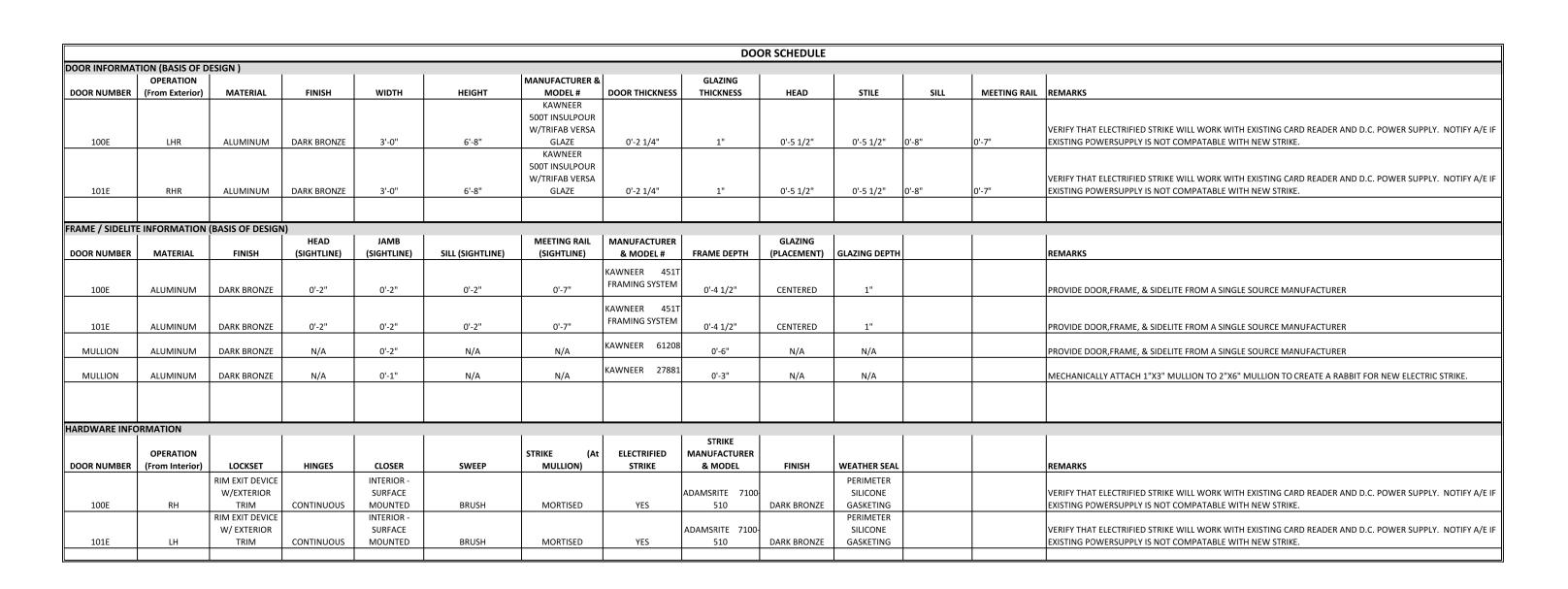
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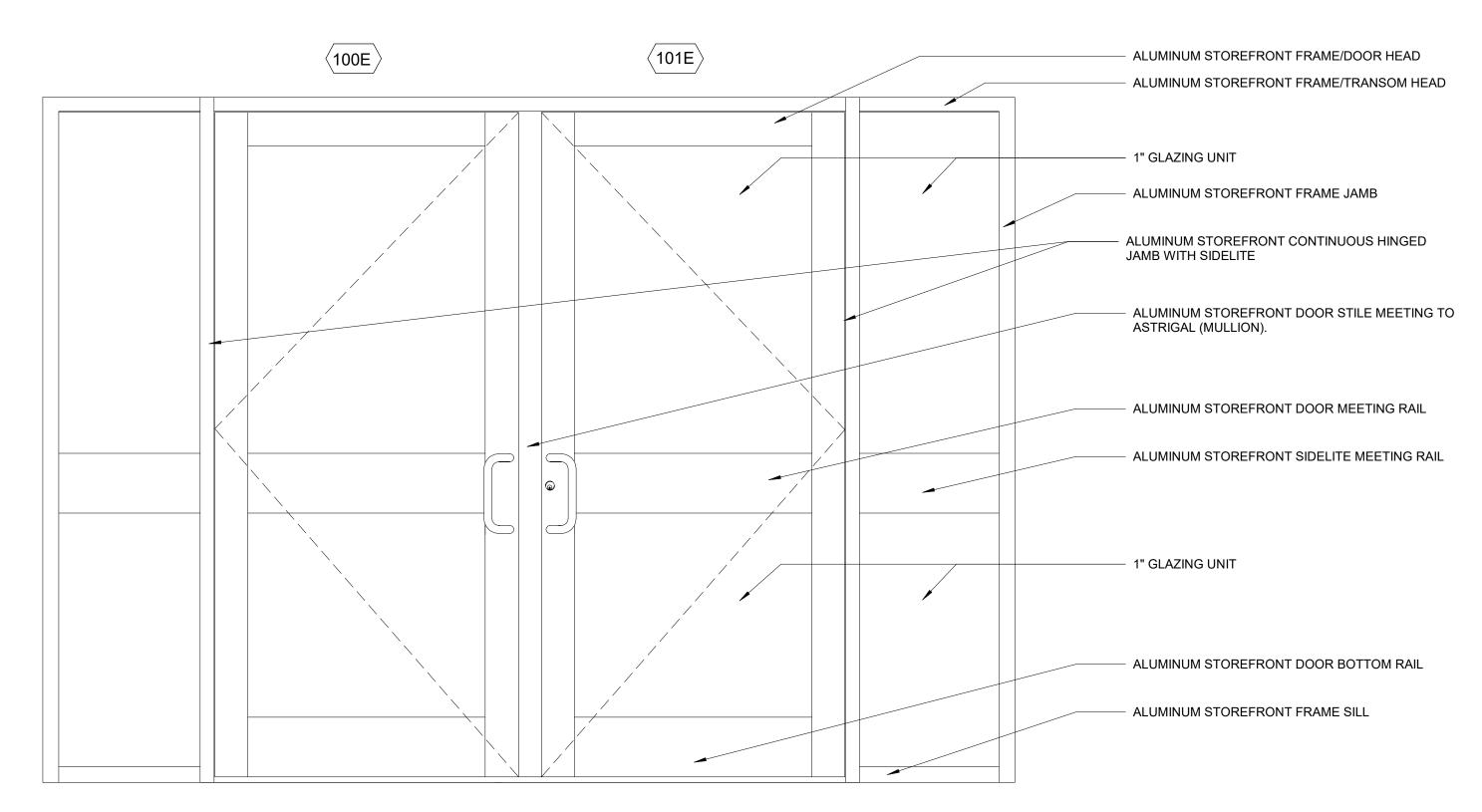
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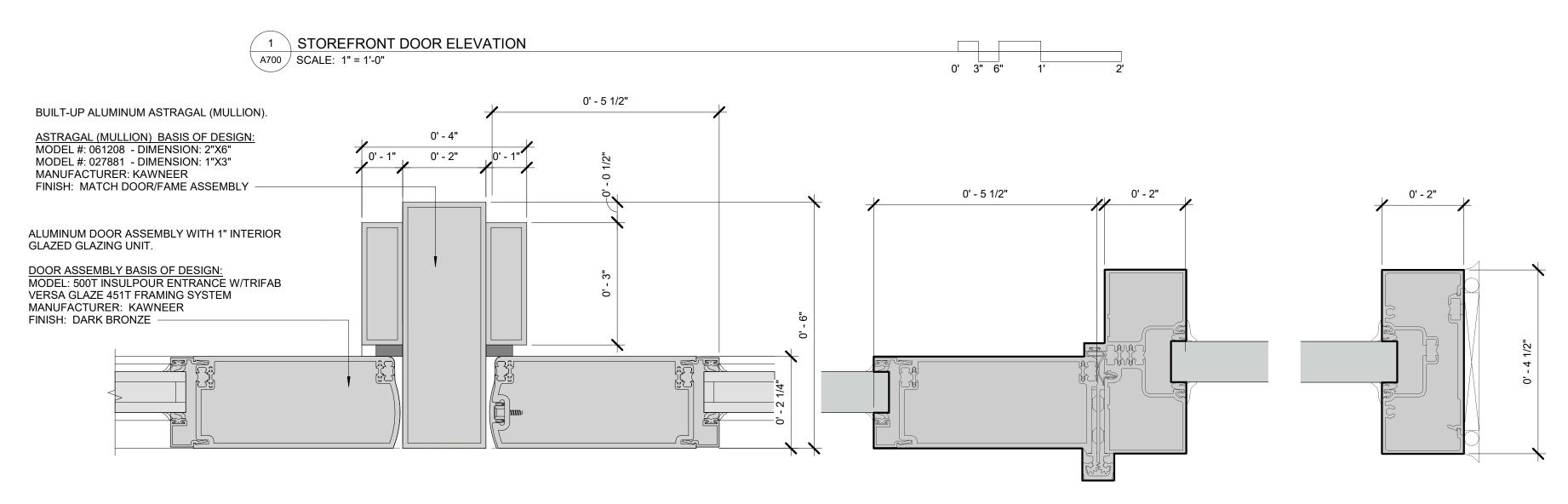
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Date Issued



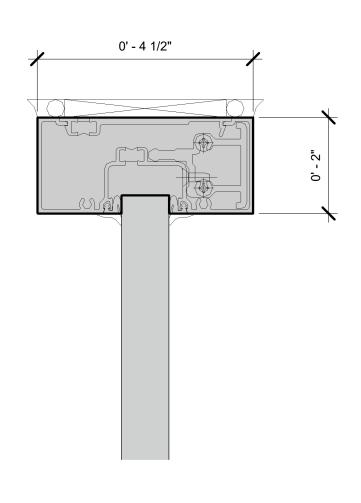


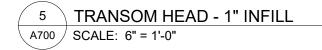


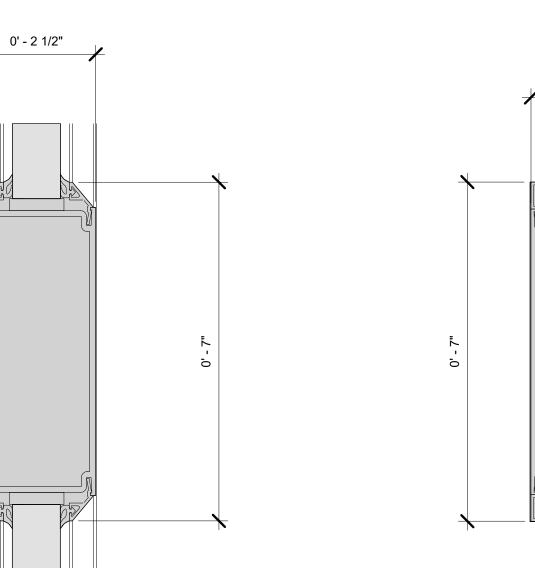
2 DOOR MEETING STILE
A700 SCALE: 6" = 1'-0"

3 CGH STILE W/SIDELITE - 1" INFILL
A700 SCALE: 6" = 1'-0"

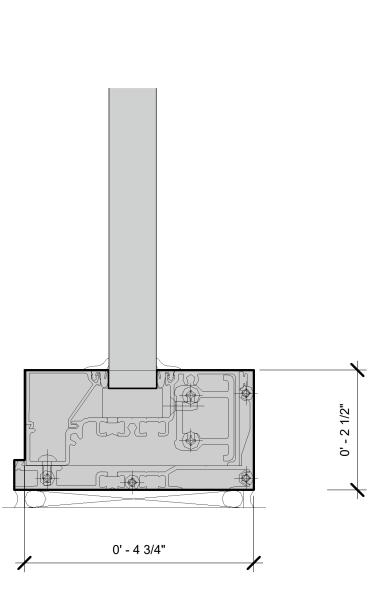
4 JAMB - 1" INFILL A700 | SCALE: 6" = 1'-0"



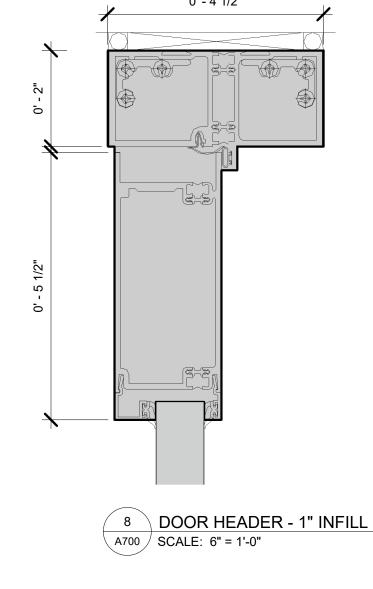




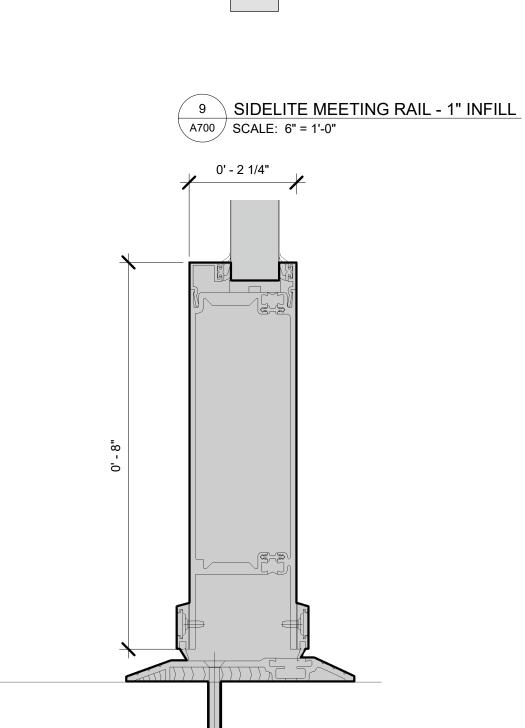




7 SILL WITH SEALANT OPTION - 1 " INFILL A700 SCALE: 6" = 1'-0"



0' - 2 1/4"



10 OPTIONAL BOTTOM RAIL - 1" INFILL SCALE: 6" = 1'-0"



SCHEDUL

DOOR

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BUILDING

ACEMENT Y ADMINIST DETAIL KENOSH EAST ENTRY REPLA KENOSHA COUNTY KENOSHA COUNTY 1010 56TH STREET **FRAME** ∞ DOOR Revisions: Graphic Scale As indicated KC23-001 Number Set Type 100% CD SET 05/26/2023 Issued A700

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 011000 SUMMARY

PART 1 GENERAL

1.01 PROJECT

- A. Project Name: East Elevation Replacement
- B. Owner's Name: Kenosha County
- C. Architect's Name: InSite Consulting Architects.
- D. The Project consists of the alteration of the existing East Elevation Entry Door assembly and concrete step.

1.02 DESCRIPTION OF ALTERATIONS WORK

A. The Project consists of the alteration of the existing East Elevation Entry Door Assembly and tile clad concrete step. The work will involve the removal of the existing East Entry Door Assembly and associated door hardware. Upon removal, the base concrete stoop and deteriorated tile will be removed. New work will involve the placement of a new concrete step, providing positive drainage away from the building. As-necessary touchup to the existing underlying waterproofing system is anticipated in the work. A new Entry Door Assembly will also be installed with a central mullion between the double doors. The mullion will contain two electrified strikes which will be operated with a new proximity card reader and tied into the existing power supply unit located in the lower level. New door hardware and accessories will be provided to continue the usability of the east entry by building staff.

1.03 OWNER OCCUPANCY

- A. Owner intends to continue to occupy adjacent portions of the existing building during the entire construction period.
- B. Owner intends to occupy the Project upon Substantial Completion.
- C. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.

D. Schedule the Work to accommodate Owner occupancy. 1.04 CONTRACTOR USE OF SITE AND PREMISES

- A. Construction Operations: Limited to areas noted on Drawings.
- 1. Locate and conduct construction activities in ways that will limit disturbance to site.
- B. Arrange use of site and premises to allow:
- Owner occupancy. Work by Others.
- C. 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.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION 011000 **SECTION 013000**

ADMINISTRATIVE REQUIREMENTS PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Site mobilization meeting.
- B. Number of copies of submittals.
- C. Submittal procedures.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION 3.01 ELECTRONIC DOCUMENT SUBMITTAL SERVICE

- A. All documents transmitted for purposes of administration of the contract are to be in electronic (PDF, MS Word, or MS Excel) format, as appropriate to the
- 1. It is Contractor's responsibility to submit documents in allowable format.
- B. Project Closeout: Architect will determine when to terminate the service for the project and is responsible for obtaining archive copies of files for Owner.

3.02 SITE MOBILIZATION MEETING

- A. Architect will schedule meeting at the Project site prior to Contractor occupancy
- B. Attendance Required:
- Contractor. Owner.
- Architect. 4. Contractor's superintendent.
- Use of premises by Owner and Contractor. Construction facilities and controls provided by Owner.
- Temporary utilities provided by Owner. Security and housekeeping procedures
- Schedules.
- Application for payment procedures.
- D. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by

3.03 SUBMITTALS FOR REVIEW

- A. When the following are specified in individual sections, submit them for review:
- Product data. Shop drawings.
- Samples for selection
- B. Submit to Architect for review for the limited purpose of checking for compliance with information given and the design concept expressed in Contract Documents.
- C. Samples will be reviewed for aesthetic, color, or finish selection.
- D. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article below and for record documents purposes described in Section 017800 - Closeout Submittals.

3.04 NUMBER OF COPIES OF SUBMITTALS

- A. Electronic Documents: Submit one electronic copy in PDF format; an electronically-marked up file will be returned. Create PDFs at native size and right-side up; illegible files will be rejected.
- B. Samples: Submit the number specified in individual specification sections; one of which will be retained by Architect.

1. Retained samples will not be returned to Contractor unless specifically so stated **END OF SECTION 013000**

SECTION 015000

TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

- 1.01 SECTION INCLUDES A. Temporary Controls: Barriers, enclosures, and fencing.
- B. Security requirements.
- C. Waste removal facilities and services.

1.02 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas, to prevent access to areas that could be hazardous to workers or the public, to allow for owner's use of site and to protect existing facilities and adjacent properties from damage from construction operations and demolition.
- B. Provide barricades and covered walkways required by governing authorities for public rights-of-way and for public access to existing building.

C. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

1.03 INTERIOR ENCLOSURES

- Provide temporary partitions and ceilings as indicated to separate work areas from Owner-occupied areas, to prevent penetration of dust and moisture into
- Owner-occupied areas, and to prevent damage to existing materials and equipment. B. Construction: Framing and reinforced polyethylene sheet materials with closed joints and sealed edges at intersections with existing surfaces:

1.04 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 weekly.
- C. If materials to be recycled or re-used on the project must be stored on-site, provide suitable non-combustible containers; locate containers holding flammable material outside the structure unless otherwise approved by the authorities having jurisdiction.
- D. Open free-fall chutes are not permitted. Terminate closed chutes into appropriate containers with lids.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION 015000 SECTION 017000 EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Examination, preparation, and general installation procedures.
- B. Requirements for alterations work, including selective demolition.

- C. Cutting and patching.
- D. Cleaning and protection.

E. Closeout procedures, including Contractor's Correction Punch List, except payment procedures. 1.02 RELATED REQUIREMENTS

- A. Section 011000 Summary: Limitations on working in existing building; continued occupancy; work sequence; identification of salvaged and relocated
- B. Section 013000 Administrative Requirements: Submittals procedures, Electronic document submittal service.

1.03 REFERENCE STANDARDS

A. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations 2022, with Errata (2021).

1.04 SUBMITTALS

- See Section 013000 Administrative Requirements, for submittal procedures.
- B. Cutting and Patching: Submit written request in advance of cutting or alteration that affects:
- Structural integrity of any element of Project. Integrity of weather exposed or moisture resistant element.
- Efficiency, maintenance, or safety of any operational element. Visual qualities of sight exposed elements. 5. Work of Owner or separate Contractor.

1.05 PROJECT CONDITIONS

- A. Use of explosives is not permitted.
- B. Grade site to drain. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.
- C. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
- D. 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.
- 1. Provide dust-proof enclosures to prevent entry of dust generated outdoors. 2. Provide dust-proof barriers between construction areas and areas continuing to be occupied by Owner.
- E. Noise Control: Provide methods, means, and facilities to minimize noise produced by construction operations.
- 1.06 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. 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. D. 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.
- E. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish
- Coordinate completion and clean-up of work of separate sections.
- 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

2.01 PATCHING MATERIALS

- A. New Materials: As specified in product sections; match existing products and work for patching and extending work.
- B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.

PART 3 EXECUTION 3.01 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.
- 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. 3.02 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.
- 3.03 GENERAL INSTALLATION REQUIREMENTS A. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to
- necessity for replacement. B. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- C. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
- D. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
- E. Make neat transitions between different surfaces, maintaining texture and appearance. 3.04 CUTTING AND PATCHING
- A. Whenever possible, execute the work by methods that avoid cutting or patching.
- B. Perform whatever cutting and patching is necessary to: Complete the work.
 - Fit products together to integrate with other work. Provide openings for penetration of mechanical, electrical, and other services.
- Match work that has been cut to adjacent work. Repair areas adjacent to cuts to required condition
- Repair new work damaged by subsequent work.
- Remove samples of installed work for testing when requested. Remove and replace defective and non-complying work.
- C. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work,
- minimize damage and restore to original condition. D. Employ original installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.
- E. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.

F. Restore work with new products in accordance with requirements of Contract Documents.

- 3.05 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 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 daily and dispose off-site; do not burn or bury.

3.06 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. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- D. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- E. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing material manufacturer.
- F. Remove protective coverings when no longer needed; reuse or recycle coverings if possible.

A. Adjust operating products and equipment to ensure smooth and unhindered operation.

- 3.08 FINAL CLEANING
- A. Use cleaning materials that are nonhazardous.
- B. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
- 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 site; sweep paved areas, rake clean landscaped surfaces.
- 3.09 CLOSEOUT PROCEDURES A. Make submittals that are required by governing or other authorities.
- 1. Provide copies to Architect and Owner. B. Accompany Project Coordinator on preliminary inspection to determine items to be listed for completion or correction in the Contractor's Correction Punch List for Contractor's Notice of Substantial Completion.

F. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.

C. Notify Architect when work is considered ready for Architect's Substantial Completion inspection.

- D. 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.
- 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.
- F. Correct items of work listed in Final Correction Punch List and comply with requirements for access to Owner-occupied areas.
- G. Notify Architect when work is considered finally complete and ready for Architect's Substantial Completion final inspection. H. Complete items of work determined by Architect listed in executed Certificate of Substantial Completion.
 - **END OF SECTION 017000**

DIVISION 02 - EXISTING CONDITIONS SECTION 024100 DEMOLITION

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Selective demolition of building elements for alteration purposes. 1.02 RELATED REQUIREMENTS

1.05 SUBMITTALS

PART 3 EXECUTION

- A. Section 011000 Summary: Limitations on Contractor's use of site and premises.
- B. Section 011000 Summary: Description of items to be salvaged or removed for re-use by Contractor.
- C. Section 015000 Temporary Facilities and Controls: Site fences, security, protective barriers, and waste removal.
- D. Section 017000 Execution and Closeout Requirements: Project conditions; protection of bench marks, survey control points, and existing construction to remain; reinstallation of removed products; temporary bracing and shoring.
- A. Demolition: Dismantle, raze, destroy or wreck any building or structure or any part thereof. B. Remove: Detach or dismantle items from existing construction and dispose of them off site, unless items are indicated to be salvaged or reinstalled.

E. Existing to Remain: Designation for existing items that are not to be removed and that are not otherwise indicated to be salvaged or reinstalled.

- C. Remove and Salvage: Detach or dismantle items from existing construction in a manner to prevent damage. Clean, package, label and deliver salvaged items to Owner in ready-for-reuse condition.
- D. Remove and Reinstall: Detach or dismantle items from existing construction in a manner to prevent damage. Clean and prepare for reuse and reinstall where
- 1.04 REFERENCE STANDARDS A. 29 CFR 1926 - Safety and Health Regulations for Construction Current Edition.
- B. NFPA 241 Standard for Safeguarding Construction, Alteration, and Demolition Operations 2022, with Errata (2021)
- A. See Section 013000 Administrative Requirements for submittal procedures.
- B. Site Plan: Indicate:

1. Areas for temporary construction and field offices. PART 2 PRODUCTS -- NOT USED

3.01 DEMOLITION

A. Remove paving and curbs required to accomplish new work.

entrances and exits from removal operations.

- B. Remove other items indicated, for salvage, relocation, and recycling. 3.02 GENERAL PROCEDURES AND PROJECT CONDITIONS
- A. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public. Obtain required permits.
- 2. 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. Provide, erect, and maintain temporary barriers and security devices.
- Conduct operations to minimize effects on and interference with adjacent structures and occupants. Do not close or obstruct roadways or sidewalks without permits from authority having jurisdiction. 6. Conduct operations to minimize obstruction of public and private entrances and exits. Do not obstruct required exits at any time. Protect persons using
- 7. Obtain written permission from owners of adjacent properties when demolition equipment will traverse, infringe upon, or limit access to their property.
- Protect existing structures and other elements to remain in place and not removed. Provide bracing and shoring.
- Prevent movement or settlement of adjacent structures. 3. Stop work immediately if adjacent structures appear to be in danger.

B. Do not begin removal until receipt of notification to proceed from Owner.

- D. Partial Removal of Paving and Curbs: Neatly saw cut at right angle to surface. 3.03 SELECTIVE DEMOLITION FOR ALTERATIONS
- A. Existing construction and utilities indicated on drawings are based on casual field observation and existing record documents only. Verify construction and utility arrangements are as indicated
- Report discrepancies to Architect before disturbing existing installation. 3. Beginning of demolition work constitutes acceptance of existing conditions that would be apparent upon examination prior to starting demolition.
- B. Remove existing work as indicated and required to accomplish new work. 1. Remove items indicated on drawings.
- C. Services including, but not limited to, Electrical and Telecommunications: Remove existing systems and equipment as indicated. Maintain existing active systems to remain in operation, and maintain access to equipment and operational components.
- Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service. Verify that abandoned services serve only abandoned facilities before removal.
- 4. 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.
- D. Protect existing work to remain.

Repair adjacent construction and finishes damaged during removal work.

- Prevent movement of structure. Provide shoring and bracing as required. Perform cutting to accomplish removal work neatly and as specified for cutting new work.
- 3.04 DEBRIS AND WASTE REMOVAL
- B. Leave site in clean condition, ready for subsequent work. C. Clean up spillage and wind-blown debris from public and private lands.

END OF SECTION 024100 DIVISION 03 - CONCRETE SECTION 033000

CAST-IN-PLACE CONCRETE

PART 1 GENERAL

- 1.01 SECTION INCLUDES
- A. Concrete formwork. B. Floors and slabs on grade.
- C. Concrete reinforcement.

D. Joint devices associated with concrete work

4. Patch to match new work.

A. Remove debris, junk, and trash from site.

- E. Concrete curing. 1.02 RELATED REQUIREMENTS
- A. Section 079200 Joint Sealants: Products and installation for sealants and joint fillers for saw cut joints and isolation joints in slabs.

A. ACI CODE-318 - Building Code Requirements for Structural Concrete and Commentary 2019 (Reapproved 2022).

- B. ACI PRC-211.1 Selecting Proportions for Normal-Density and High Density-Concrete Guide 2022. C. ACI PRC-223 - Shrinkage-Compensating Concrete - Guide 2021.
- D. ACI PRC-302.1 Guide to Concrete Floor and Slab Construction 2015. E. ACI PRC-305 - Guide to Hot Weather Concreting 2020.
- F. ACI PRC-306 Guide to Cold Weather Concreting 2016. G. ACI PRC-308 - Guide to External Curing of Concrete 2016.

J. ACI SPEC-301 - Specifications for Concrete Construction 2020.

M. ASTM C33/C33M - Standard Specification for Concrete Aggregates 2018.

- H. ACI PRC-347 Guide to Formwork for Concrete 2014 (Reapproved 2021). I. ACI SPEC-117 - Specification for Tolerances for Concrete Construction and Materials 2010 (Reapproved 2015).
- K. ASTM A615/A615M Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement 2022. L. ASTM A775/A775M - Standard Specification for Epoxy-Coated Steel Reinforcing Bars 2022.
- N. ASTM C150/C150M Standard Specification for Portland Cement 2022. O. ASTM C260/C260M - Standard Specification for Air-Entraining Admixtures for Concrete 2010a (Reapproved 2016).

P. ASTM C309 - Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete 2019

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- R. ASTM C1059/C1059M Standard Specification for Latex Agents for Bonding Fresh to Hardened Concrete 2021.
- S. ASTM C1602/C1602M Standard Specification for Mixing Water Used in the Production of Hydraulic Cement Concrete 2018.
- T. ASTM D994/D994M Standard Specification for Preformed Expansion Joint Filler for Concrete (Bituminous Type) 2011 (Reapproved 2022).
- U. ASTM D1751 Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient
- V. ASTM D1752 Standard Specification for Preformed Sponge Rubber, Cork and Recycled PVC Expansion Joint Fillers for Concrete Paving and Structural
- W. ASTM D3963/D3963M Standard Specification for Fabrication and Jobsite Handling of Epoxy-Coated Steel Reinforcing Bars 2021.
- X. ASTM D8139 Standard Specification for Semi-Rigid, Closed-Cell Polypropylene Foam, Preformed Expansion Joint Fillers for Concrete Paving and Structural

1.04 SUBMITTALS

- A. See Section 013000 Administrative Requirements for submittal procedures.
- B. Product Data: Submit manufacturers' data on manufactured products showing compliance with specified requirements and installation instructions.
- For curing compounds, provide data on method of removal in the event of incompatibility with floor covering adhesives. 2. For membrane-forming, moisture emission-reducing, curing and sealing compound, provide manufacturer's installation instructions,
- C. Mix Design: Submit proposed concrete mix design.
- 1. Indicate proposed mix design complies with requirements of ACI SPEC-301, Section 4 Concrete Mixtures. 2. Indicate proposed mix design complies with requirements of ACI CODE-318, Chapter 5 - Concrete Quality, Mixing and Placing.
- D. Samples for Pigment Color Selection: Submit manufacturer's complete sample chip set, including pigment number and required dosage rate for each color.

E. Warranty: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with manufacturer. 1.05 QUALITY ASSURANCE

- A. Perform work of this section in accordance with ACI SPEC-301 and ACI CODE-318
- B. Follow recommendations of ACI PRC-305 when concreting during hot weather.

C. Follow recommendations of ACI PRC-306 when concreting during cold weather.

1.06 MOCK-UPS

A. Construct and erect mock-up panel for architectural concrete surfaces indicated to receive special treatment or finish as result of formwork

1. Panel Size: Sufficient to illustrate full range of treatment. 1.07 WARRANTY

A. See Section 017800 - Closeout Submittals for additional warranty requirements

PART 2 PRODUCTS

- 2.01 FORMWORK A. Formwork Design and Construction: Comply with guidelines of ACI PRC-347 to provide formwork that will produce concrete complying with tolerances of ACI
- B. Form Materials: Contractor's choice of standard products with sufficient strength to withstand hydrostatic head without distortion in excess of permitted
- tolerances . Form Facing for Exposed Finish Concrete: Contractor's choice of materials that will provide smooth, stain-free final appearance.
- 2. Form Coating: Release agent that will not adversely affect concrete or interfere with application of coatings.
- 3. Form Ties: Cone snap type that will leave no metal within 1-1/2 inches of concrete surface.

2.02 REINFORCEMENT MATERIALS

- A. Reinforcing Steel: ASTM A615/A615M, Grade 60 (60,000 psi).
- Type: Deformed billet-steel bars.
- 2. Finish: Epoxy coated in accordance with ASTM A775/A775M, unless otherwise indicated.
- B. Reinforcement Accessories:
- 1. Chairs, Bolsters, Bar Supports, Spacers: Sized and shaped for adequate support of reinforcement during concrete placement. 2.03 CONCRETE MATERIALS

A. Cement: ASTM C150/C150M, Type I - Normal Portland type.

- 1. Acquire cement for entire project from same source.
- B. Fine and Coarse Aggregates: ASTM C33/C33M.
- 1. Acquire aggregates for entire project from same source.
- C. Color Additives: Pure, concentrated mineral pigments specifically intended for mixing into concrete and complying with ASTM C979/C979M.
- D. Water: ASTM C1602/C1602M; clean, potable, and not detrimental to concrete.

2.04 ADMIXTURES

- A. Do not use chemicals that will result in soluble chloride ions in excess of 0.1 percent by weight of cement.
- B. Air Entrainment Admixture: ASTM C260/C260M.

2.05 BONDING AND JOINTING PRODUCTS

- A. Latex Bonding Agent: Non-redispersable acrylic latex, complying with ASTM C1059/C1059M, Type II.
- Slab Isolation Joint Filler: 1/2 inch thick, height equal to slab thickness, with removable top section that will form 1/2 inch deep sealant pocket after removal. Material: ASTM D1751, cellulose fiber.
- 2. Products:
- a. Nomaco, Inc; Nomaflex Expansion Joint Filler with Void Cap Option: www.nomaco.com/#sle.
- b. W. R. Meadows, Inc; Fiber Expansion Joint Filler with Snap-Cap: www.wrmeadows.com/#sle.
- c. Or approved equal.. C. Slab Contraction Joint Device: Preformed linear strip intended for pressing into wet concrete to provide straight route for shrinkage cracking.
- - a. W. R. Meadows, Inc; Speed-E-Joint: www.wrmeadows.com/#sle.
- b. Or approved equal..

2.06 CONCRETE MIX DESIGN

- A. Proportioning Normal Weight Concrete: Comply with ACI PRC-211.1 recommendations.
- B. Admixtures: Add acceptable admixtures as recommended in ACI PRC-211.1 and at rates recommended or required by manufacturer.
- Compressive Strength, when tested in accordance with ASTM C39/C39M at 28 days: 3,000 pounds per square inch. 2. Maximum Aggregate Size: 5/8 inch.

2.07 MIXING

- A. On Project Site: Mix in drum type batch mixer, complying with ASTM C685/C685M. Mix each batch not less than 1-1/2 minutes and not more than 5 minutes.
- 1. Colored Concrete: Add pigments in strict accordance with manufacturer's instructions to achieve consistent color from batch to batch. B. Adding Water: If concrete arrives on-site with slump less than suitable for placement, do not add water that exceeds the maximum water-cement ratio or
- exceeds the maximum permissible slump.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify lines, levels, and dimensions before proceeding with work of this section.

3.02 PREPARATION

- A. Formwork: Comply with requirements of ACI SPEC-301. Design and fabricate forms to support all applied loads until concrete is cured and for easy removal without damage to concrete.
- B. Verify that forms are clean and free of debris before applying release agent.
- C. Coordinate placement of embedded items with erection of concrete formwork and placement of form accessories.
- D. Where new concrete is to be bonded to previously placed concrete, prepare existing surface by cleaning and applying bonding agent in according to bonding agent manufacturer's instructions.

1. Use latex bonding agent only for non-load-bearing applications. 3.03 INSTALLING REINFORCEMENT AND OTHER EMBEDDED ITEMS

- A. Fabricate and handle epoxy-coated reinforcing in accordance with ASTM D3963/D3963M.
- B. Comply with requirements of ACI SPEC-301. Clean reinforcement of loose rust and mill scale, and accurately position, support, and secure in place to achieve not less than minimum concrete coverage required for protection.

3.04 PLACING CONCRETE

- A. Place concrete in accordance with ACI PRC-304.
- B. Notify Architect not less than 24 hours prior to commencement of placement operations.
- C. Maintain records of concrete placement. Record date, location, quantity, air temperature, and test samples taken.
- D. Ensure reinforcement will not be disturbed during concrete placement.
- E. Place concrete continuously without construction (cold) joints wherever possible; where construction joints are necessary, before next placement prepare joint
- surface by removing laitance and exposing the sand and sound surface mortar, by sandblasting or high-pressure water jetting. F. Finish floors level and flat, unless otherwise indicated, within the tolerances specified below.

3.05 SLAB JOINTING

- A. Locate joints as indicated on drawings.
- B. Isolation Joints: Use preformed joint filler with removable top section for joint sealant, total height equal to thickness of slab, set flush with top of slab. 1. Install wherever necessary to separate slab from other building members, including columns, walls, equipment foundations, footings, stairs, manholes,
- sumps, and drains. 3.06 FLOOR FLATNESS AND LEVELNESS TOLERANCES
- A. Maximum Variation of Surface Flatness: 1. Exposed Concrete Floors: 1/4 inch in 10 feet.
- B. Correct the slab surface if tolerances are less than specified

- C. Correct defects by grinding or by removal and replacement of the defective work. Areas requiring corrective work will be identified. Re-measure corrected areas by the same process.
- 3.07 CONCRETE FINISHING
- A. Repair surface defects, including tie holes, immediately after removing formwork.
- B. Exposed Form Finish: Rub down or chip off and smooth fins or other raised areas 1/4 inch or more in height. Provide finish as follows:
- C. Concrete Slabs: Finish to requirements of ACI PRC-302.1 and as follows:
- 1. Other Surfaces to Be Left Exposed: Trowel as described in ACI PRC-302.1, minimizing burnish marks and other appearance defects. 3.08 CURING AND PROTECTION
- A. Comply with requirements of ACI PRC-308. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury
- B. Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete.
- C. Formed Surfaces: Cure by moist curing with forms in place for full curing period. D. Surfaces Not in Contact with Forms:
- 1. Initial Curing: Start as soon as free water has disappeared and before surface is dry. Keep continuously moist for not less than three days by water ponding, water-saturated sand, water-fog spray, or saturated burlap. 2. Final Curing: Begin after initial curing but before surface is dry.
- 3.09 DEFECTIVE CONCRETE A. Defective Concrete: Concrete not complying with required lines, details, dimensions, tolerances or specified requirements.
- B. Repair or replacement of defective concrete will be determined by the Architect. The cost of additional testing shall be borne by Contractor when defective concrete is identified.
- C. Do not patch, fill, touch-up, repair, or replace exposed concrete except upon express direction of Architect for each individual area. 3.10 PROTECTION

A. Do not permit traffic over unprotected concrete floor surface until fully cured.

END OF SECTION 033000 DIVISION 07 - THERMAL AND MOISTURE PROTECTION SECTION 071300

SHEET WATERPROOFING

PART 1 GENERAL

- 1.01 SECTION INCLUDES A. Self-adhered rubberized asphalt sheet membrane.
- 1.02 ABBREVIATIONS
- A. NRCA National Roofing Contractors Association
- 1.03 REFERENCE STANDARDS
- A. ASTM D5295/D5295M Standard Guide for Preparation of Concrete Surfaces for Adhered (Bonded) Membrane Waterproofing Systems 2018.
- B. ASTM D6506/D6506M Standard Specification for Asphalt Based Protection Board for Below-Grade Waterproofing 2001, with Editorial Revision (2018).
- C. NRCA (WM) The NRCA Waterproofing Manual 2021.

1.04 SUBMITTALS

- A. See Section 013000 Administrative Requirements for submittal procedures.
- B. Product Data: Provide data for membrane.
- C. Shop Drawings: Indicate special joint or termination conditions and conditions of interface with other materials.
- D. Certificate: Certify that products meet or exceed specified requirements.
- E. Manufacturer's Installation Instructions: Indicate acceptable installation temperatures. F. Manufacturer's qualification statement.
- G. Installer's qualification statement.

H. Warranty: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with manufacturer. 1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than three years of documented
- B. Installer Qualifications: Company specializing in performing work of the type specified and with at least three years of documented experience.
- 1.06 FIELD CONDITIONS A. Maintain ambient temperatures above 40 degrees F for 24 hours before and during application and until liquid or mastic accessories have cured.
- 1.07 WARRANTY
- A. See Section 017800 Closeout Submittals for additional warranty requirements. B. Contractor to correct defective Work within period of five years after Date of Substantial Completion; remove and replace materials concealing waterproofing at no extra cost to Owner.

PART 2 PRODUCTS 2.01 SHEET WATERPROOFING APPLICATIONS

2.02 SHEET WATERPROOFING MATERIALS

- Location: Beneath new concrete step. Tie into existing membrane system. Lap per manufactuers recommendation. Terminate beneath new entry door
- 2. Cover with protection board.
- A. Self-Adhered Rubberized Asphalt Sheet Membrane:

A. Self-Adhered Rubberized Asphalt Sheet Membrane:

- Thickness: 63 mil, 0.061 inch, minimum.
- Sheet Width: 3.28 feet, minimum. Tensile Strength: a. Membrane: 325 psi, minimum, measured in accordance with ASTM D412 Method A, using die C and at spindle-separation rate of 2 inches per
- 4. Elongation at Break: Greater than 300 percent, minimum, measured in accordance with ASTM D412.
- 5. Low Temperature Flexibility: Unaffected when tested in accordance with ASTM D1970/D1970M at minus 25 degrees F, 180 degree bend on 1 inch
- 6. Peel Adhesion to Concrete: 9 lb/inch, minimum, when tested in accordance with ASTM D903.
- Lap Adhesion: 9 lb/inch, minimum, measured in accordance with ASTM D4541.
- 8. Puncture Resistance: 60 lb, minimum, in accordance with ASTM E154/E154M. 9. Water Absorption: 0.1 percent increase in weight, maximum, measured in accordance with ASTM D570, 24 hour immersion.

10. Adhesives, Sealants, Tapes, and Accessories: As recommended by membrane manufacturer. 2.03 ACCESSORIES

- A. Sealant for Cracks and Joints In Substrates: Resilient elastomeric joint sealant compatible with substrates and waterproofing materials.
- B. Protection Board: Provide type capable of preventing damage to waterproofing due to backfilling and construction traffic.
- C. Drainage Panel: Drainage layer with geotextile filter fabric on earth side. Composition: Dimpled polystyrene, polyethylene, or polypropylene core; polypropylene filter fabric.
- D. Cant Strips: Premolded composition material.
- E. Surface Conditioner: type, compatible with membrane.
- F. Adhesives: As recommended by membrane manufacturer.
- G. Thinner and Cleaner: As recommended by adhesive manufacturer, compatible with sheet membrane.

PART 3 EXECUTION 3.01 EXAMINATION

- A. Verify existing conditions are acceptable prior to starting work.
- B. Verify substrate surfaces are durable; free of matter detrimental to adhesion or application of waterproofing system.
- C. Do not proceed with work until unsatisfactory conditions have been corrected. 3.02 PREPARATION A. Protect adjacent surfaces from damage not designated to receive waterproofing.
- B. Clean and prepare surfaces to receive waterproofing in accordance with manufacturer's instructions; vacuum substrate clean.
- C. Do not apply waterproofing to surfaces unacceptable to membrane manufacturer.

D. Fill nonmoving joints and cracks with a filler compatible with waterproofing materials.

- E. Seal moving cracks with sealant and nonrigid filler, using procedures recommended by sealant and waterproofing manufacturers.
- F. Prepare building expansion joints at locations as indicated on drawings. 3.03 INSTALLATION - MEMBRANE
- A. Install membrane waterproofing in accordance with manufacturer's instructions and NRCA (WM) applicable requirements.
- B. Roll out membrane, and minimize wrinkles and bubbles. C. Self-Adhering Membrane: Remove release paper layer, and roll out onto substrate with a mechanical roller to provide full contact bond.

D. Overlap edges and ends, minimum 3 inches, seal permanently waterproof by method recommended by manufacturer, and apply uniform bead of sealant to

- E. Reinforce membrane with multiple thickness of membrane material over joints, whether joints are static or dynamic.
- F. Weather lap joints on sloped substrate in direction of drainage, and seal joints and seams. G. Flexible Flashings: Seal items watertight that penetrate through waterproofing membrane with flexible flashings.
- H. Seal membrane and flashings to adjoining surfaces. 3.04 INSTALLATION - DRAINAGE PANEL AND PROTECTION BOARD

- A. Place drainage panel directly against membrane, butt joints, place to encourage drainage downward; scribe and cut boards around projections, penetrations,
- B. Place protection board directly against drainage panel; butt joints, and scribe and cut boards around projections, penetrations, and interruptions. 3.05 PROTECTION
- A. Do not permit traffic over unprotected or uncovered membrane.

END OF SECTION 071300 SECTION 079200 JOINT SEALANTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Nonsag gunnable joint sealants.
- B. Joint backings and accessories.

1.02 REFERENCE STANDARDS

- A. ASTM C920 Standard Specification for Elastomeric Joint Sealants 2018.
- B. ASTM C1193 Standard Guide for Use of Joint Sealants 2016.
- C. ASTM C1248 Standard Test Method for Staining of Porous Substrate by Joint Sealants 2022.
- D. ASTM C1521 Standard Practice for Evaluating Adhesion of Installed Weatherproofing Sealant Joints 2019 (Reapproved 2020). E. SCAQMD 1168 - Adhesive and Sealant Applications 1989, with Amendment (2022).

1.03 SUBMITTALS

- See Section 013000 Administrative Requirements for submittal procedures.
- B. Product Data: Submit manufacturer's technical datasheets for each product to be used; include the following:
- Physical characteristics, including movement capability, VOC content, hardness, cure time, and color availability. List of backing materials approved for use with the specific product.
- Substrates that product is known to satisfactorily adhere to and with which it is compatible. 4. Substrates the product should not be used on.
- C. Color Cards for Selection: Where sealant color is not specified, submit manufacturer's color cards showing standard colors available for selection. D. Samples for Verification: Where custom sealant color is specified, obtain directions from Architect and submit at least two physical samples for verification of color of each required sealant.

PART 2 PRODUCTS 2.01 MANUFACTURERS

A. Nonsag Sealants:

4. Or approved equal.

- Dow; ____: www.dow.com/#sle.
- Sika Corporation; _____: www.usa.sika.com/#sle. Tremco Commercial Sealants & Waterproofing; ____: www.tremcosealants.com/#sle
- 2.02 JOINT SEALANT APPLICATIONS
 - 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:
 - a. Joints between door, window, and other frames and adjacent construction. b. Joints between different exposed materials.
 - 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
 - a. Joints between door, window, and other frames and adjacent construction. b. Other joints indicated below.
- B. Exterior Joints: Use nonsag nonstaining silicone sealant, unless otherwise indicated. C. Interior Joints: Use nonsag polyurethane sealant, unless otherwise indicated
- 1. Type ___ Other Floor Joints: Self-leveling polyurethane traffic-grade sealant. 2.03 JOINT SEALANTS - GENERAL

A. Sealants and Primers: Provide products having lower volatile organic compound (VOC) content than indicated in SCAQMD 1168. B. Colors: As indicated on drawings.

Products:

- 2.04 NONSAG JOINT SEALANTS
- A. Nonstaining Silicone Sealant: ASTM C920, Grade NS, Uses M and A; not expected to withstand continuous water immersion or traffic. Movement Capability: Plus and minus ____ percent, minimum.
- Nonstaining to Porous Stone: Nonstaining to light-colored natural stone when tested in accordance with ASTM C1248.
- Dirt Pick-Up: Reduced dirt pick-up compared to other silicone sealants. Color: To be selected by Architect from manufacturer's standard range.
- a. Dow; DOWSIL 756 SMS Building Sealant: www.dow.com/#sle. b. Or approved equal..
- below traffic surface; not expected to withstand continuous water immersion. Movement Capability: Plus 100 percent and minus 50 percent, minimum.

B. Type ____ - Silicone Sealant: ASTM C920, Grade NS, Use T; single component, explicitly approved by manufacturer for traffic exposure when recessed

- 2. Color: To be selected by Architect from manufacturer's standard range. C. Type ____ - Polyurethane Sealant: ASTM C920, Grade NS, Uses M and A; single or multi-component; not expected to withstand continuous water immersion
 - Movement Capability: Plus and minus 50 percent, minimum. Color: To be selected by Architect from manufacturer's standard range.
 - Service Temperature Range: Minus 40 to 180 degrees F. Products: a. Master Builders Solutions: MasterSeal NP1: www.master-builders-solutions.com/en-us/#sle.
- b. Sika Corporation; Sikaflex-1a: www.usa.sika.com/#sle. c. Tremco Commercial Sealants & Waterproofing; Vulkem 116: www.tremcosealants.com/#sle

d. Or approved equal..

2.05 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

or traffic.

- PART 3 EXECUTION
- 3.01 EXAMINATION Verify that joints are ready to receive work.

and sealant manufacturers for specific application.

- B. Verify that backing materials are compatible with sealants. C. Verify that backer rods are of the correct size.
- 3.02 INSTALLATION
- B. Provide joint sealant installations complying 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.

A. Install this work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.

E. Do not install sealant when ambient temperature is outside manufacturer's recommended temperature range, or will be outside that range during the entire curing period, unless manufacturer's approval is obtained and instructions are followed.

F. Nonsag Sealants: Tool surface concave, unless otherwise indicated; remove masking tape immediately after tooling sealant surface. **END OF SECTION 079200 DIVISION 08 - OPENINGS**

SECTION 084313

ALUMINUM-FRAMED STOREFRONTS

PART 1 GENERAL

1.01 SECTION INCLUDES

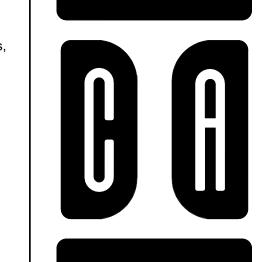
- A. Aluminum-framed storefront, with vision glass B. Infill panels of glass.
- C. Aluminum doors and frames. D. Weatherstripping.
- E. Door hardware. 1.02 RELATED REQUIREMENTS

1.03 REFERENCE STANDARDS

A. Section 079200 - Joint Sealants: Sealing joints between frames and adjacent construction.

A. AAMA CW-10 - Care and Handling of Architectural Aluminum from Shop to Site 2015.

- B. Section 087100 Door Hardware: Hardware items other than specified in this section. C. Section 088000 - Glazing: Glass and glazing accessories.
- B. AAMA 501.2 Quality Assurance and Diagnostic Water Leakage Field Check of Installed Storefronts, Curtain Walls, and Sloped Glazing Systems 2015. C. AAMA 503 - Voluntary Specification for Field Testing of Newly Installed Storefronts, Curtain Walls and Sloped Glazing Systems 2014.
- D. AAMA 609 & 610 Cleaning and Maintenance Guide for Architecturally Finished Aluminum (Combined Document) 2015
 - E. AAMA 611 Voluntary Specification for Anodized Architectural Aluminum 2020.



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Revisions: Graphic Scale

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A. Manufacturer Qualifications: Company specializing in performing work of type specified and with at least three years of documented experience.

B. Protect finished aluminum surfaces with wrapping. Do not use adhesive papers or sprayed coatings that bond to aluminum when exposed to sunlight or

A. Do not install sealants when ambient temperature is less than 40 degrees F. Maintain this minimum temperature during and 48 hours after installation.

C. Provide five year manufacturer warranty against failure of glass seal on insulating glass units, including interpane dusting or misting. Include provision for

D. Provide five year manufacturer warranty against excessive degradation of exterior finish. Include provision for replacement of units with excessive fading,

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

3. Fabrication: Joints and corners flush, hairline, and weatherproof, accurately fitted and secured; prepared to receive anchors and hardware; fasteners

Construction: Eliminate noises caused by wind and thermal movement, prevent vibration harmonics, and prevent "stack effect" in internal spaces.

6. Expansion/Contraction: Provide for expansion and contraction within system components caused by cycling temperature range of 170 degrees F over a

1. Wind Loads: Design and size components to withstand the specified load requirements without damage or permanent set, when tested in accordance

2. Air Leakage: 0.06 cfm/sq ft maximum leakage of storefront wall area when tested in accordance with ASTM E283/E283M at 1.57 psf pressure

3. Air Leakage: 0.06 cfm/sq ft maximum leakage of storefront wall area when tested in accordance with ASTM E283/E283M at 1.57 psf pressure

A. Aluminum Framing Members: Tubular aluminum sections, thermally broken with interior section insulated from exterior, drainage holes and internal weep

A. Superior Performing Organic Coatings System: Manufacturer's standard multi-coat superior performing organic coatings system complying with AAMA 2605,

B. Superior Performing Organic Coatings System: Polyvinylidene fluoride (PVDF) multi-coat superior performing organic coatings system complying with AAMA

2605, including at least 70 percent PVDF resin, and at least 80 percent of aluminum extrusion and panels surfaces having minimum total dry film thickness

including at least 70 percent polyvinylidene fluoride (PVDF) resin, and at least 80 percent of aluminum extrusion and panels surfaces having minimum total dry

5. System Internal Drainage: Drain to the exterior by means of a weep drainage network any water entering joints, condensation occurring in glazing

b. Touch-up surfaces cut during fabrication so that no natural aluminum is visible in completed assemblies, including joint edges.

7. Movement: Allow for movement between storefront and adjacent construction, without damage to components or deterioration of seals.

8. Perimeter Clearance: Minimize space between framing members and adjacent construction while allowing expected movement.

a. Member Deflection: Limit member deflection to flexure limit of glass in any direction, with full recovery of glazing materials.

Basis of Design: KAWNEER COMPANY, INC., TRIFAB VG 451T CENTER FRAME: www.kawneer.com

Basis of Design: KAWNEER COMPANY INC., 500T INSULPOUR THERMAL ENTRANCES: www.kawneer.com.

B. Other Manufacturers: Provide either the product identified as "Basis of Design" or an equivalent product of another manufacturer.

12 hour period without causing detrimental effect to system components, anchorages, and other building elements.

with ASTM E330/E330M, using loads 1.5 times the design wind loads and 10 second duration of maximum load.

B. Installer Qualifications: Company specializing in performing work of type specified and with at least three years of documented experience.

1.05 QUALITY ASSURANCE

1.07 FIELD CONDITIONS

1.08 WARRANTY

PART 2 PRODUCTS

2.01 MANUFACTURERS

1.06 DELIVERY, STORAGE, AND HANDLING

replacement of failed units.

A. Aluminum-Framed Storefronts:

Or approved equal..

A. Center-Set Style, Thermally-Broken:

2.03 BASIS OF DESIGN -- SWINGING DOORS

2.04 ALUMINUM-FRAMED STOREFRONT

difference.

1. Glazing Stops: Flush.

C. Swing Doors: Glazed aluminum.

Thickness: 2-1/4 inches.

Top Rail: 5 inches wide.

Glazing Stops: Beveled.

6. Finish: Same as storefront.

(DFT) of 1.2 mils, 0.0012 inch.

c. Or approved equal...

C. Color: As indicated on drawings.

1. Manufacturers:

B. Fasteners: Stainless steel.

Vertical Stiles: 5 inches wide

A. Extruded Aluminum: ASTM B221 (ASTM B221M).

film thickness (DFT) of 1.2 mils, 0.0012 inch.

a. PPG; Duranar: www.ppgmetalcoatings.com/#sle.

b. Sherwin-Williams Company; Fluropon: www.coil.sherwin.com/#sle.

Bottom Rail: 7 inches wide.

B. Glazing: See Section 088000.

drainage system.

2.05 COMPONENTS

2.06 MATERIALS

2.07 FINISHES

chalking, or flaking.

A. Handle products of this section in accordance with AAMA CW-10.

. Kawneer North America: www.kawneer.com.

2. Vertical Mullion Dimensions: 2 inches wide by 6 inches deep.

channel, and migrating moisture occurring within system

a. Factory finish all surfaces that will be exposed in completed assemblies.

and attachments concealed from view; reinforced as required for imposed loads.

C. Glazing Gaskets: Type to suit application to achieve weather, moisture, and air infiltration requirements.

2.02 BASIS OF DESIGN -- FRAMING FOR INSULATING GLAZING

A. Wide Stile, Insulating Glazing, Thermally-Broken:

1. Finish: Superior performing organic coatings.

A. See Section 017800 - Closeout Submittals for additional warranty requirements.

B. Correct defective Work within a five year period after Date of Substantial Completion.

 a. Or approved equal. C. Door Sweep Perimeter Seal: Neoprene blade gasket sweep strip in an aluminum extrusion applied to the interior exposed surface of the bottom rail with concealed fasteners. Manufacturer: Zero International (Allegion) www.zerointernational.com Model: 477-D-36 4. Color: Aluminum Dark Bronze Anodized (D) a. Or approved equal. D. Threshold: Extruded aluminum, one piece per door opening, ribbed surface; thermally broken. Manufacturer: Zero International (Allegion) www.zerointernational.com Model: 546-D-226-74.25 Color: Aluminum Dark Bronze Anodized (D) a. Or approved equal. E. Hinges: Butt type, swing clear; continuous hinge. Provide on doors as indicated. Manufacturer: Kawneer Company, Inc. Model: Continuous Gear Hinge a. Or approved equal. F. Push/Pull Set: Standard configuration push/pull handles. Provide on doors as indicated. Manufacturer: Von Duprin (Allegion) Model: 990NL a. Or approved equal. G. Exit Devices: RIM exit device Provide on doors as indicated. Manufacturer: Von Duprin (Allegion Model: CD-99-NL-OP-710-3'-LH-990NL (Door 101E) 4. Model: CD-99-NL-OP-710-3'-RH-990NL (Door 100E) a. Or approved equal. H. Electrified Strike: Provide on doors as indicated. Manufacturer: Adams Rite (Assa Abloy) www.adamsrite.com Model: 7100-510 Voltage: 24VDC (Continuous) Fail Safe/Secure: Fail Secure (Field selectable at time of installation) No alternates will be allowed. Door Closers: Exposed overhead. 1. Provide on doors as indicated. a. Top Jam (Push Side) Mount Manufacturer: LCN (Allegion) Model: 4040XP surface closer without adjustable hold-open. 4. Color: 695 Dark Bronze a. Or approved equal. J. Locks: Cores Owner Provided, Contractor Installed (OPCI). K. Smart Card Reader: HID iCLASS SE Provide on door mullion as indicated Manufacturer: HID Global www.hidglobal.com Model: R15 4. Voltage: 5-16 VDC PART 3 EXECUTION 3.01 EXAMINATION A. Verify dimensions, tolerances, and method of attachment with other work. B. Verify that storefront wall openings and adjoining water-resistive and/or air barrier seal materials are ready to receive work of this section. 3.02 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. Provide alignment attachments and shims to permanently fasten system to building structure. D. Align assembly plumb and level, free of warp or twist. Maintain assembly dimensional tolerances, aligning with adjacent work. Provide thermal isolation where components penetrate or disrupt building insulation.

The door weathering on a butt hinge door and frame shall be comprised of a thermoplastic elastomer weathering on a tubular shape.

B. Other Manufacturers: Provide either the product identified as "Basis of Design" or an equivalent product of another manufacturer.

2.08 HARDWARE

Model: 188S-BK-25

4. Color: Black (BK)

A. For each door, include weatherstripping, sill sweep strip, and threshold.

Manufacturer: Zero International (Allegion) www.zerointernational.com

F. Install sill flashings. Turn up ends and edges; seal to adjacent work to form water tight dam.

G. Where fasteners penetrate sill flashings, make watertight by seating and sealing fastener heads to sill flashing. H. Pack fibrous insulation in shim spaces at perimeter of assembly to maintain continuity of thermal barrier.

I. Set thresholds in bed of sealant and secure.

J. Install hardware using templates provided. K. Touch-up minor damage to factory applied finish; replace components that cannot be satisfactorily repaired.

3.03 TOLERANCES

A. Maximum Variation from Plumb: 0.06 inch per 3 feet non-cumulative or 0.06 inch per 10 feet, whichever is less. B. Maximum Misalignment of Two Adjoining Members Abutting in Plane: 1/32 inch.

3.04 ADJUSTING A. Adjust operating hardware for smooth operation. 3.05 CLEANING

A. Remove protective material from pre-finished aluminum 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.

3.06 PROTECTION A. Protect installed products from damage until Date of Substantial Completion.

END OF SECTION 084313 SECTION 088000 GLAZING

1.01 SECTION INCLUDES A. Insulating glass units. B. Glazing compounds.

PART 1 GENERAL

1.02 RELATED REQUIREMENTS A. Section 079200 - Joint Sealants: Sealants for other than glazing purposes.

B. Section 084313 - Aluminum-Framed Storefronts: Glazing provided as part of storefront assembly. 1.03 REFERENCE STANDARDS A. 16 CFR 1201 - Safety Standard for Architectural Glazing Materials Current Edition.

B. AAMA 501.6 - Recommended Dynamic Test Method for Determining the Seismic Drift Causing Glass Fallout from Window Wall, Curtain Wall and Storefront C. ANSI Z97.1 - American National Standard for Safety Glazing Materials Used in Buildings - Safety Performance Specifications and Methods of Test 2015

D. ASCE 7 - Minimum Design Loads and Associated Criteria for Buildings and Other Structures Most Recent Edition Cited by Referring Code or Reference

E. ASTM C864 - Standard Specification for Dense Elastomeric Compression Seal Gaskets, Setting Blocks, and Spacers 2005 (Reapproved 2019).

F. ASTM C920 - Standard Specification for Elastomeric Joint Sealants 2018. G. ASTM C1036 - Standard Specification for Flat Glass 2021.

H. ASTM C1048 - Standard Specification for Heat-Strengthened and Fully Tempered Flat Glass 2018. ASTM C1172 - Standard Specification for Laminated Architectural Flat Glass 2019.

K. ASTM C1349 - Standard Specification for Architectural Flat Glass Clad Polycarbonate 2017. L. ASTM C1376 - Standard Specification for Pyrolytic and Vacuum Deposition Coatings on Flat Glass 2021a. M. ASTM E1300 - Standard Practice for Determining Load Resistance of Glass in Buildings 2016.

N. ASTM E2190 - Standard Specification for Insulating Glass Unit Performance and Evaluation 2019. O. GANA (SM) - GANA Sealant Manual 2008. P. IGMA TM-3000 - North American Glazing Guidelines for Sealed Insulating Glass Units for Commercial & Residential Use 1990 (2016).

Q. NFRC 100 - Procedure for Determining Fenestration Product U-factors 2020.

J. ASTM C1193 - Standard Guide for Use of Joint Sealants 2016.

R. NFRC 200 - Procedure for Determining Fenestration Product Solar Heat Gain Coefficient and Visible Transmittance at Normal Incidence 2020. S. NFRC 300 - Test Method for Determining the Solar Optical Properties of Glazing Materials and Systems 2023. 1.04 ADMINISTRATIVE REQUIREMENTS A. Preinstallation Meeting: Convene a preinstallation meeting one week before starting work of this section; require attendance by each of the affected installers. 1.05 SUBMITTALS A. See Section 013000 - Administrative Requirements for submittal procedures. B. Product Data on Insulating Glass Unit Glazing Types: Provide structural, physical and environmental characteristics, size limitations, special handling and C. Product Data on Glazing Compounds and Accessories: Provide chemical, functional, and environmental characteristics, limitations, special application requirements, and identify available colors. D. Certificate: Certify that products of this section meet or exceed specified requirements E. Manufacturer's qualification statement. F. Installer's qualification statement. G. Warranty Documentation: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer. H. Maintenance Materials: Furnish the following for Owner's use in maintenance of project. See Section 016000 - Product Requirements, for additional provisions. 2. Extra Insulating Glass Units: One of each glass size and each glass type. 1.06 QUALITY ASSURANCE A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years of documented B. Installer Qualifications: Company specializing in performing work of the type specified and with at least three years documented experience. 1.07 MOCK-UPS A. Provide on-site glazing mock-up with the specified glazing components. B. Mock-ups may remain as part of the Work. 1.08 FIELD CONDITIONS A. Do not install glazing when ambient temperature is less than 40 degrees F. B. Maintain minimum ambient temperature before, during and 24 hours after installation of glazing compounds. 1.09 WARRANTY A. See Section 017800 - Closeout Submittals for additional warranty requirements. B. Insulating Glass Units: Provide a five (5) year manufacturer warranty to include coverage for seal failure, interpane dusting or misting, including providing products to replace failed units. PART 2 PRODUCTS 2.01 MANUFACTURERS

A. Float Glass Manufacturers: Cardinal Glass Industries; ____: www.cardinalcorp.com/#sle Guardian Glass, LLC; _____: www.guardianglass.com/#sle. Pilkington North America Inc; _____: www.pilkington.com/na/#sle. 4. Saint Gobain North America; _____: www.saint-gobain.com/#sle. 5. Vitro Architectural Glass (formerly PPG Glass); _____: www.vitroglazings.com/#sle.

2.02 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. Comply with ASTM E1300 for design load resistance of glass type, thickness, dimensions, and maximum lateral deflection of supported glass. 3. 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.

Glass thicknesses listed are minimum. B. Weather-Resistive Barrier Seals: Provide completed assemblies that maintain continuity of building enclosure water-resistive barrier, vapor retarder, and/or air

1. In conjunction with weather barrier related materials described in other sections, as follows: 2. To maintain a continuous vapor retarder and/or air barrier throughout glazed assembly from glass pane to heel bead of glazing sealant. C. Thermal and Optical Performance: Provide exterior glazing products with performance properties as indicated. Performance properties are in accordance with

manufacturer's published data as determined with the following procedures and/or test methods:

Center of Glass U-Value: Comply with NFRC 100 using Lawrence Berkeley National Laboratory (LBNL) WINDOW 6.3 computer program. Center of Glass Solar Heat Gain Coefficient (SHGC): Comply with NFRC 200 using Lawrence Berkeley National Laboratory (LBNL) WINDOW 6.3

computer program.

3. Solar Optical Properties: Comply with NFRC 300 test method.

2.03 GLASS MATERIALS A. Float Glass: Provide float glass based glazing unless otherwise indicated.

Kind FT - Fully Tempered Type: Complies with ASTM C1048. 2.04 INSULATING GLASS UNITS A. Manufacturers: Glass: Any of the manufacturers specified for float glass.

Cardinal Glass Industries: www.cardinalcorp.com/#sle. Guardian Glass, LLC: www.guardianglass.com/#sle. Pilkington North America Inc: www.pilkington.com/na/#sle.Pilkington North America Inc: www.pilkington.com/na/#sle. Viracon, Apogee Enterprises, Inc: www.viracon.com/#sle.

Vitro Architectural Glass (formerly PPG Glass); _____: www.vitroglazings.com/#sle. 7. Substitutions: See Section 016000 - Product Requirements.

B. Fabricator: Certified by glass manufacturer for type of glass, coating, and treatment involved and capable of providing specified warranty. C. Insulating Glass Units: Types as indicated.

1. Durability: Certified by an independent testing agency to comply with ASTM E2190. 2. 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.

4. 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. 6. Purge interpane space with dry air, hermetically sealed. D. Type IG-1 - Insulating Glass Units: Vision glass, double glazed

Applications: Exterior glazing unless otherwise indicated. Space between lites filled with air. 3. Outboard Lite: Fully tempered float glass, 1/4 inch thick, minimum. a. Tint: Clear. b. Coating: Self-cleaning type, on #1 surface.

c. Coating: Low-E (passive type), on #2 surface. 4. Inboard Lite: Fully tempered float glass, 1/4 inch thick, minimum. a. Tint: Clear. 5. Total Thickness: 1 inch. Thermal Transmittance (U-Value), Summer - Center of Glass:

Visible Light Transmittance (VLT): _____ percent, nominal. 8. Solar Heat Gain Coefficient (SHGC): _____, nominal. 2.05 BASIS OF DESIGN - INSULATING GLASS UNITS

A. Basis of Design - Insulating Glass Units: Vision glazing, with low-e coating. Applications: Exterior insulating glass glazing unless otherwise indicated.

B. Manufacturers:

Space between lites filled with air. Total Thickness: 1 inch. Thermal Transmittance (U-Value), Summer - Center of Glass: , nominal. Glazing Method: Dry glazing method, gasket glazing. 6. 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. 8. Spacer Color: Black. 9. 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. 10. Color: Black. 11. Purge interpane space with dry air, hermetically sealed.

12. Basis of Design - Saint-Gobain North America: www.saint-gobain-northamerica.com/#sle. a. Outboard Lite: Fully tempered float glass, 1/4 inch thick, minimum. 1) Glass Substrate: Clear. b. Inboard Lite: Fully tempered float glass, 1/4 inch thick, minimum. 1) Low-E Coating:

13. Other Manufacturers: Provide either the product identified as "Basis of Design" or an equivalent product of another acceptable manufacturer. 2.06 GLAZING COMPOUNDS A. Type GC-1 - Glazing Putty: Polymer modified latex recommended by manufacturer for outdoor use, knife grade consistency; gray color.

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07	AC	CESSORIES
	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. Continuous by one half the height of the glazing stop by thickness to suit application, self adhesive on one face.
	C.	Glazing Splines: Resilient silicone extruded shape to suit glazing channel retaining slot; ASTM C864 Option II; color black.
ART 3 EXECUTION		
01	1 VERIFICATION OF CONDITIONS	
	A.	Verify that openings for glazing are correctly sized and within tolerances, including those for size, squareness, and offsets at corners.

- B. Verify that surfaces of glazing channels or recesses are clean, free of obstructions that may impede moisture movement, weeps are clear, and support framing is ready to receive glazing system.
- C. Proceed with glazing system installation only after unsatisfactory conditions have been corrected.

- A. Clean contact surfaces with appropriate solvent and wipe dry within maximum of 24 hours before glazing. Remove coatings that are not tightly bonded to
- B. Seal porous glazing channels or recesses with substrate compatible primer or sealer.
- C. Prime surfaces scheduled to receive sealant where required for proper sealant adhesion.

3.03 INSTALLATION, GENERAL

- A. Install glazing in compliance with written instructions of glass, gaskets, and other glazing material manufacturers, unless more stringent requirements are indicated, including those in glazing referenced standards.
- B. Install glazing sealants in accordance with ASTM C1193, GANA (SM), and manufacturer's instructions.
- C. Prevent glass from contact with any contaminating substances that may be the result of construction operations such as, and not limited to the following; weld

splatter, fire-safing, plastering, mortar droppings, etc. 3.04 INSTALLATION - DRY GLAZING METHOD (GASKET GLAZING)

- A. Application Exterior and/or Interior Glazed: Set glazing infills from either the exterior or the interior of the building.
- B. Place setting blocks at 1/4 points with edge block no more than 6 inch from corners.
- C. Rest glazing on setting blocks and push against fixed stop with sufficient pressure on gasket to attain full contact.
- D. Install removable stops without displacing glazing gasket; exert pressure for full continuous contact.

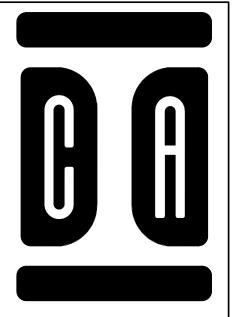
3.05 CLEANING

- A. Remove excess glazing materials from finish surfaces immediately after application using solvents or cleaners recommended by manufacturers.
- B. Remove nonpermanent labels immediately after glazing installation is complete.
- C. Clean glass and adjacent surfaces after sealants are fully cured.
- D. Clean glass on both exposed surfaces not more than 4 days prior to Date of Substantial Completion in accordance with glass manufacturer's written

3.06 PROTECTION

- A. After installation, mark pane with an 'X' by using removable plastic tape or paste; do not mark heat absorbing or reflective glass units.
- B. Remove and replace glass that is damaged during construction period prior to Date of Substantial Completion.

END OF SECTION 088000



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NO. BUIL 40 ATION EAST ENTRY REPLACEMENT KENOSHA COUNTY ADMINISTF KENOSHA COUNTY 1010 56TH STREET KENOSHA

SPECIFICATIONS

GUIDELINE KC23-001

100% CD SET

05/26/2023

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