



**TOWN OF HAMDEN
INVITATION TO BID
BID #2857
ENTRANCE VESTIBULE DOOR REPLACEMENT RIDGE HILL SCHOOL
Hamden, Connecticut**

The Town of Hamden is publicly seeking competitive bids from qualified companies to provide for the removal and installation of new aluminum entry doors, frames, and hardware at lower level student bus drop off and adjacent stair #3 and upper level main entry vestibule at the Ridge Hill School in Hamden, Connecticut.

Sealed proposals (1 original and 4 copies) will be received at the Finance Office to be held in the Purchasing lock box until **11:00 A.M. on June 26, 2018** at which time they will be publicly opened and read aloud. Bids received after the time set will be considered informal and will be rejected.

THERE WILL BE A MANDATORY PRE-BID CONFERENCE RIDGE HILL SCHOOL, 120 CAREW ST. HAMDEN, CT 06517 at 10:00 A.M. June 19, 2018

It is the sole responsibility of the bidder to see that the bid is in the hands of the proper authority prior to the bid opening time.

Specifications for this Bid/RFP may be downloaded at www.biznet.ct.gov or a PDF version may be obtained by e-mailing a request to purchasing@hamden.com or may be obtained at the Purchasing Office, Hamden Government Center 2750 Dixwell Avenue, Hamden, CT between the hours of 8:30 A.M. and 4:30 P.M., Telephone (203) 287-7110.

The Town of Hamden reserves the right to accept or reject any or all options, bids, or proposals, to waive any technicality in a bid or part thereof submitted, and to accept the bid deemed to be in the best interest of the Town of Hamden.

AN AFFIRMATIVE ACTION/EQUAL OPPORTUNITY EMPLOYER MBE's, WBE's, SBE's AND SECTION 3 DESIGNATED ENTERPRISES ARE ENCOURAGED TO APPLY

Philip W. Goodwin
Purchasing Agent

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SECTION 011000 - SUMMARY

PART 1 - GENERAL

1.1 PROJECT INFORMATION

- A. Project Identification: Ridge Hill School Entry Vestibule Door Replacement.
 - 1. Project Location: 120 Carew Road, Hamden, Connecticut, 06517.
- B. Owner: Town of Hamden Connecticut
 - 1. Owner's Representative :
Mark Albanese
Director of Facilities
Hamden Public Schools
60 Public Schools
Hamden, CT 06517
(203) 407-2244
malbanese@hamden.org
- C. Architect: Christopher Williams Architects, LLC
 - 1. Mark Pozzi
Christopher Williams Architects, LLC
85 Willow Street, Building 54
New Haven, CT 06511
(203)776-0184
mpozzi@cwarchitectsllc.com
- D. Architect's Consultants: Architect has retained the following design professionals who have prepared designated portions of the Contract Documents:
- E. The Work consists of:
 - 1. Demolition of existing and installation of new Aluminum Framed Entrances, including mechanical and electromechanical door hardware at the following areas:
 - a. Lower Level Bus Lane and Stair #3.
 - b. Upper Level Main Entrance Vestibule.
- F. Work by Owner: Removal of existing and installation of new power supplies, access control devices, wiring and connections for electromechanical door hardware shall be by Owner's security system vendor. Devices and equipment provided by the Contractor are indicated on the Contract Documents.

1.2 WORK RESTRICTIONS

- A. Contractor's Use of Premises: During construction, Contractor will have limited use of building and site.
 - 1. Owner will occupy premises during construction. Clean up work areas and return to usable condition at the end of each work period.
 - 2. Driveways, Walkways, and Entrances: Keep driveways, parking areas, loading areas and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
- B. On-Site Work Hours: Limit work in the existing building to normal business working hours of 7:00 a.m. to 4:30 p.m., Monday through Friday unless otherwise indicated.
 - 1. Weekend Hours:
 - 2. Early Morning Hours:
 - 3. Deviations in work hours are subject to approval by the Owner.
- C. Use of tobacco products and other controlled substances is not permitted on the property.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

SECTION 01 2300 - ALTERNATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

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

1.3 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 - 1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
 - 2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum and Contract Time

1.4 PROCEDURES

- A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
 - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated revisions to alternates.
- C. Execute accepted alternates under the same conditions as other work of the Contract.

- D. Schedule: A schedule of alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.
- E. Alternates shall be valid for the life of the contract. Alternates not selected at the time of award, but not identified as rejected may be selected within the time frame identified by the Contractor through the construction schedule where the selection will not impact the critical path and overall substantial completion of the contract. Should the Owner wish to exercise executing an Alternate after the last date reflected within the CPM Construction schedule for selection of an Alternate, the Alternate(s) may be negotiated as applicable, in accordance with the requirements associated with a Proposed Change Order.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

- A. Alternate No. 1: Remove existing and install new interior aluminum entrance doors, framing and hardware between Upper Level VESTIBULE A335 and LOBBY A336.
- B. Alternate No. 2: Remove existing and install new interior aluminum entrance doors, framing and hardware between Lower Level LOBBY A110 and VESTIBULES A109 and A111.

END OF SECTION 01 2300

SECTION 01 2500 - SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for substitutions.
- B. Related Requirements:
 - 1. Division 01 Section "Alternates" for products selected under an alternate.
 - 2. Division 01 Section "Product Requirements" for requirements for submitting comparable product submittals for products by listed manufacturers.
 - 3. Divisions 02 through 33 Sections for specific requirements and limitations for substitutions.

1.3 DEFINITIONS

- A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents.
 - 1. Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.
 - 2. Substitutions for Convenience: Changes proposed by Contractor that are not required in order to meet other Project requirements but may offer advantages to Contractor or Owner.

1.4 ACTION SUBMITTALS

- A. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Substitution Request Form: Use CSI Form 13.1A or similar.
 - 2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
 - a. Statement indicating why specified product or fabrication or installation cannot be provided, if applicable. Provide documentation that supports such submission

- b. Coordination information, including a list of changes or revisions needed to other parts of the Work and to construction performed by Owner and separate contractors that will be necessary to accommodate proposed substitution.
 - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Include annotated copy of applicable Specification Section. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
 - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
 - e. Samples, where applicable or requested.
 - f. Certificates and qualification data, where applicable or requested.
 - g. List of similar installations for completed projects with project name and contact names, current phone numbers and addresses of architects and owners who were directly involved with accepting the product substitution.
 - h. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
 - i. Safety Data Sheet that demonstrates that the product does not contain any hazardous material as defined in Section 01-7839 Project Record Documents.
 - j. Detailed comparison of Contractor's construction schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
 - k. Savings to the Owner, including a proposal of change, if any, in the Contract Sum.
 - l. Contractor's certification that proposed substitution complies with requirements in the Contract Documents except as indicated in substitution request, is compatible with related materials, and is appropriate for applications indicated.
 - m. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
3. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within three (3) days of receipt of a request for substitution. Architect will notify the Owner of their recommendation to accept or reject the submission. Upon Owner decision, Architect will notify Contractor of acceptance or rejection of proposed substitution three (3) days of receipt of request, or three (3) days of receipt of additional information or documentation, whichever is later.
- a. Forms of Acceptance: Executed substitution form and/or a Change Order.
 - b. Use product specified if Architect does not issue a decision on use of a proposed substitution within time allocated.

1.5 QUALITY ASSURANCE

- A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. If applicable, engage a qualified testing agency to perform compatibility tests recommended by manufacturers.

1.6 PROCEDURES

- A. Coordination: Revise or adjust affected work as necessary to integrate work of the approved substitutions.

PART 2 - PRODUCTS

2.1 SUBSTITUTIONS

- A. Substitutions for Cause: Submit requests for substitution immediately on discovery of need for change, but not later than three (3) days prior to time required for preparation and review of related submittals.
 - 1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
 - a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
 - b. Requested substitution provides sustainable design characteristics that specified product provided.
 - c. Requested substitution is fully documented and properly submitted.
 - d. Requested substitution does not contain any hazardous material.
 - e. Requested substitution will not adversely affect Contractor's construction schedule.
 - f. Requested substitution has received necessary approvals of authorities having jurisdiction.
 - g. Requested substitution is compatible with other portions of the Work.
 - h. Requested substitution has been coordinated with other portions of the Work.
 - i. Requested substitution provides specified warranty.
 - j. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
 - k. Requested substitution does not require additional design changes to be performed by the architect/engineer in order to incorporate the substitution into the work.
- B. Substitutions for Convenience: Such request shall be submitted by the Contractor three (3) days prior to contract execution. Should an approval of any substitutions for convenience be submitted for consideration after contract execution, it shall be at the

sole discretion of the Owner whether to consider it or not. If the substitution is not accepted than the Contractor is obligated to supply the originally specified product at no additional cost to the Owner. If the substitution is accepted all coordination and liability is the sole responsibility of the Contractor. Contractor shall follow all requirements as outlined for Substitution for Cause.

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 2500

SECTION 013300 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.

1.2 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Architect's responsive action.
- B. Informational Submittals: Written and graphic information and physical samples that do not require Architect's responsive action. Submittals may be rejected for not complying with requirements.

1.3 ACTION SUBMITTALS

- A. Submittal Schedule: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Architect and additional time for handling and reviewing submittals required by those corrections.

1.4 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

- A. Architect's Digital Data Files: Electronic copies of digital data files of the Contract Drawings will not be provided by Architect for Contractor's use in preparing submittals.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 2. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
 - a. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

- C. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
1. Initial Review: Allow 10 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
 2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
 3. Resubmittal Review: Allow 10 days for review of each resubmittal.
- D. Electronic Submittals: Identify and incorporate information in each electronic submittal file as follows:
1. Assemble complete submittal package into a single indexed file incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.
 2. Name file with submittal number or other unique identifier, including revision identifier.
 - a. File name shall use project identifier and Specification Section number followed by a decimal point and then a sequential number (e.g., LNHS-061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., LNHS-061000.01.A).
 3. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Architect.
 4. Transmittal Form for Electronic Submittals: Use electronic form acceptable to Architect, containing the following information:
 - a. Project name.
 - b. Date.
 - c. Name and address of Architect.
 - d. Name of Construction Manager.
 - e. Name of Contractor.
 - f. Name of firm or entity that prepared submittal.
 - g. Names of subcontractor, manufacturer, and supplier.
 - h. Category and type of submittal.
 - i. Submittal purpose and description.
 - j. Specification Section number and title.
 - k. Specification paragraph number or drawing designation and generic name for each of multiple items.
 - l. Drawing number and detail references, as appropriate.
 - m. Location(s) where product is to be installed, as appropriate.
 - n. Related physical samples submitted directly.
 - o. Indication of full or partial submittal.
 - p. Transmittal number
 - q. Submittal and transmittal distribution record.

- r. Other necessary identification.
 - s. Remarks.
- E. Options: Identify options specified under individual Specification Sections.
- F. Deviations: Identify deviations from the Contract Documents on submittals.
- G. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
- 1. Note date and content of previous submittal.
 - 2. Note date and content of revision in label or title block and clearly indicate extent of revision.
 - 3. Resubmit submittals until they are marked with approval notation from Architect's action stamp.
- H. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- I. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Architect's stamp.

PART 2 - PRODUCTS

2.1 SUBMITTAL PROCEDURES

- A. General Submittal Procedure Requirements:
- 1. Submit electronic submittals via email as PDF electronic files.
 - a. Architect will return annotated file. Annotate and retain one copy of file as an electronic Project record document file.
 - 2. Certificates and Certifications Submittals: Provide a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
 - a. Provide a digital signature with digital certificate on electronically-submitted certificates and certifications where indicated.
 - b. Provide a notarized statement on original paper copy certificates and certifications where indicated.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.

1. If information must be specially prepared for submittal because standard published data are not suitable for use, submit as Shop Drawings, not as Product Data.
 2. Mark each copy of each submittal to show which products and options are applicable.
 3. Include the following information, as applicable:
 - a. Manufacturer's catalog cuts.
 - b. Manufacturer's product specifications.
 - c. Standard color charts.
 - d. Statement of compliance with specified referenced standards.
 - e. Testing by recognized testing agency.
 - f. Application of testing agency labels and seals.
 - g. Notation of coordination requirements.
 - h. Availability and delivery time information.
 4. For equipment, include the following in addition to the above, as applicable:
 - a. Wiring diagrams showing factory-installed wiring.
 - b. Printed performance curves.
 - c. Operational range diagrams.
 - d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
 5. Submit Product Data before or concurrent with Samples.
 6. Submit Product Data in the following format:
 - a. PDF electronic file.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
 - a. Identification of products.
 - b. Schedules.
 - c. Compliance with specified standards.
 - d. Notation of coordination requirements.
 - e. Notation of dimensions established by field measurement.
 - f. Relationship and attachment to adjoining construction clearly indicated.
 - g. Seal and signature of professional engineer if specified.
 2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches but no larger than **24 by 36 inches**. Retain subparagraph below unless default submittal format specified elsewhere in this article applies.
 3. Submit Shop Drawings in the following format:

- a. PDF electronic file.
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
 2. Identification: Attach label on unexposed side of Samples that includes the following:
 - a. Generic description of Sample.
 - b. Product name and name of manufacturer.
 - c. Sample source.
 - d. Number and title of applicable Specification Section.
 3. For projects where electronic submittals are required, provide corresponding electronic submittal of Sample transmittal, digital image file illustrating Sample characteristics, and identification information for record.
 4. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
 - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
 - b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
 5. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
 - a. Number of Samples: Submit two full sets of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect will return submittal with options selected.
 6. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
 - a. Number of Samples: Submit two sets of Samples. Architect will retain one sample sets; remainder will be returned.

- 1) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three sets of paired units that show approximate limits of variations.
- E. Product Schedule: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
 1. Submit product schedule in the following format:
 - a. PDF electronic file.
 - F. Test and Inspection Reports and Schedule of Tests and Inspections Submittals: Comply with requirements specified in Section 014000 "Quality Requirements."
 - G. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification and Procedure Qualification Record on AWS forms. Include names of firms and personnel certified.
 - H. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
 - I. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
 - J. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
 - K. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
 - L. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
 - M. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
 - N. Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project.
 - O. Schedule of Tests and Inspections: Comply with requirements specified in Section 014000 "Quality Requirements."

- P. Compatibility Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
- Q. Field Test Reports: Submit written reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
- R. Design Data: Prepare and submit written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

2.2 DELEGATED-DESIGN SERVICES

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
 - 1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Architect.
- B. Delegated-Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit digitally signed PDF electronic file.
 - 1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

- A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.
- B. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 ARCHITECT'S[AND CONSTRUCTION MANAGER'S] ACTION

- A. General: Architect will not review submittals that do not bear Contractor's approval stamp and will return them without action.
- B. Action Submittals: Architect will review each submittal, make marks to indicate corrections or revisions required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action.
- C. Informational Submittals: Architect will review each submittal and will return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.
- D. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.
- E. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

END OF SECTION 013300

SECTION 014000 - QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
- B. Referenced Standards: If compliance with two or more standards is specified and the standards establish different or conflicting requirements, comply with the most stringent requirement. Refer uncertainties to Architect for a decision.
- C. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum. The actual installation may exceed the minimum within reasonable limits. Indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision.
- D. Contractor's Statement of Responsibility: When required by authorities having jurisdiction, submit copy of written statement of responsibility sent to authorities having jurisdiction before starting work on the following systems:
 - 1. Seismic-force-resisting system, designated seismic system, or component listed in the designated seismic system quality-assurance plan prepared by Architect.
 - 2. Main wind-force-resisting system or a wind-resisting component listed in the wind-force-resisting system quality-assurance plan prepared by Architect.
- E. Test and Inspection Reports: Prepare and submit certified written reports specified in other Sections. Include the following:
 - 1. Date of issue.
 - 2. Project title and number.
 - 3. Name, address, and telephone number of testing agency.
 - 4. Dates and locations of samples and tests or inspections.
 - 5. Names of individuals making tests and inspections.
 - 6. Description of the Work and test and inspection method.
 - 7. Identification of product and Specification Section.
 - 8. Complete test or inspection data.
 - 9. Test and inspection results and an interpretation of test results.
 - 10. Record of temperature and weather conditions at time of sample taking and testing and inspecting.
 - 11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
 - 12. Name and signature of laboratory inspector.
 - 13. Recommendations on retesting and reinspecting.

- F. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, notices, receipts for fee payments, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.
- G. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated.
- H. Testing Agency Qualifications: An independent agency with the experience and capability to conduct testing and inspecting indicated; and where required by authorities having jurisdiction, that is acceptable to authorities.
- I. Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.
- J. Testing Agency Responsibilities: Cooperate with Architect and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
 - 1. Notify Architect and Contractor of irregularities or deficiencies in the Work observed during performance of its services.
 - 2. Do not release, revoke, alter, or increase requirements of the Contract Documents or approve or accept any portion of the Work.
 - 3. Do not perform any duties of Contractor.
- K. Associated Services: Cooperate with testing agencies and provide reasonable auxiliary services as requested. Provide the following:
 - 1. Access to the Work.
 - 2. Incidental labor and facilities necessary to facilitate tests and inspections.
 - 3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
 - 4. Facilities for storage and field curing of test samples.
 - 5. Security and protection for samples and for testing and inspecting equipment.
- L. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
 - 1. Schedule times for tests, inspections, obtaining samples, and similar activities.
- M. Special Tests and Inspections: Engage a qualified testing agency to conduct tests and inspections as indicated in individual Specification Sections.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
- B. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 014000

SECTION 016000 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
- B. Comparable Product Requests: Submit request for consideration of each comparable product. Identify product or fabrication or installation method to be replaced.
 - 1. Show compliance with requirements for comparable product requests.
 - 2. Architect will review the proposed product and notify Contractor of its acceptance or rejection.
- C. Basis-of-Design Product Specification Submittal: Show compliance with requirements.
- D. Compatibility of Options: If Contractor is given option of selecting between two or more products, select product compatible with products previously selected.
- E. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.
 - 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
 - 2. Deliver products to Project site in manufacturer's original sealed container or packaging, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
 - 3. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.
 - 4. Store materials in a manner that will not endanger Project structure.
 - 5. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
- F. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

- A. Provide products that comply with the Contract Documents, are undamaged, and, unless otherwise indicated, are new at the time of installation.
 - 1. Provide products complete with accessories, trim, finish, and other devices and components needed for a complete installation and the intended use and effect.
 - 2. Where products are accompanied by the term "as selected," Architect will make selection.
 - 3. Descriptive, performance, and reference standard requirements in the Specifications establish salient characteristics of products.
- B. Where the following headings are used to list products or manufacturers, the Contractor's options for product selection are as follows:
 - 1. Products:
 - a. Where requirements include "one of the following," provide one of the products listed that complies with requirements.
 - b. Where requirements do not include "one of the following," provide one of the products listed that complies with requirements or a comparable product.
 - 2. Manufacturers:
 - a. Where requirements include "one of the following," provide a product that complies with requirements by one of the listed manufacturers.
 - b. Where requirements do not include "one of the following," provide a product that complies with requirements by one of the listed manufacturers or another manufacturer.
 - 3. Basis-of-Design Product: Provide the product named, or indicated on the Drawings, or a comparable product by one of the listed manufacturers.
- C. Where Specifications require "match Architect's sample," provide a product that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches.
- D. Where Specifications include the phrase "as selected by Architect from manufacturer's full range" or similar phrase, select a product that complies with requirements. Architect will select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

2.2 COMPARABLE PRODUCTS

- A. Architect will consider Contractor's request for comparable product when the following conditions are satisfied:
1. Evidence that the proposed product does not require revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
 2. Detailed comparison of significant qualities of proposed product with those named in the Specifications.
 3. List of similar installations for completed projects, if requested.
 4. Samples, if requested.

PART 3 - EXECUTION (Not Used)

END OF SECTION 016000

SECTION 02 4119 – SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes selective removal and subsequent offsite disposal of portions of existing building indicated on drawings and as required to accommodate new construction.

1.2 DEFINITIONS

- A. Remove: Detach items from existing construction and legally dispose of them off-site, unless indicated to be removed and salvaged or removed and reinstalled.
- B. Remove and Salvage: Detach items from existing construction and deliver them to Owner's designated storage area.
- C. Remove and Reinstall: Detach items from existing construction, prepare them for reuse, and reinstall them where indicated.
- D. Existing to Remain: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

1.3 MATERIALS OWNERSHIP

- A. Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain Owner's property, demolished materials shall become Contractor's property and shall be removed from Project site.

1.4 SUBMITTALS

- A. Qualification Data: For firms and persons specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.
- B. Proposed Dust-Control and Noise-Control Measures: Submit statement or drawing that indicates the measures proposed for use, proposed locations, and proposed time frame for their operation. Identify options if proposed measures are later determined to be inadequate.
- C. Schedule of Selective Demolition Activities: Indicate the following:

1. Detailed sequence of selective demolition and removal work, with starting and ending dates for each activity. Ensure Owner's on-site operations are uninterrupted.
 2. Interruption of utility services.
 3. Coordination for shutoff, capping, and continuation of utility services.
 4. Use of elevator and stairs.
 5. Locations of temporary partitions and means of egress.
 6. Coordination of Owner's continuing occupancy of portions of existing building and of Owner's partial occupancy of completed Work.
- D. Inventory: After selective demolition is complete, submit a list of items that have been removed and salvaged.
- E. Predemolition Photographs or Videotape: Show existing conditions of adjoining construction and site improvements, including finish surfaces that might be misconstrued as damage caused by selective demolition operations. Submit before Work begins.
- F. Landfill Records: Indicate receipt and acceptance of hazardous wastes by a landfill facility licensed to accept hazardous wastes.

1.5 QUALITY ASSURANCE

- A. Demolition Firm Qualifications: An experienced firm that has specialized in demolition work similar in material and extent to that indicated for this Project.
- B. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction. Comply with applicable regulations, codes and ordinances.
- C. Standards: Comply with ANSI A10.6 and NFPA 241.
- D. Predemolition Conference: Conduct conference at Project site to comply with requirements in Division 01 Section "Project Management and Coordination." Review methods and procedures related to selective demolition including, but not limited to, the following:
1. Inspect and discuss condition of construction to be selectively demolished.
 2. Review structural load limitations of existing structure.
 3. Review and finalize selective demolition schedule.
 4. Review requirements of work performed by other trades that rely on substrates exposed by selective demolition operations.

1.6 PROJECT CONDITIONS

- A. Occupied Buildings:
 - 1. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted. Provide not less than 72 hours' notice to Owner of activities that will affect Owner's operations.
 - 2. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities.
- B. Owner assumes no responsibility for condition of areas to be selectively demolished. Conditions existing at time of inspection for bidding will be maintained by Owner as far as practical.
- C. Hazardous Materials: If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Hazardous materials will be removed by Owner under a separate contract.
- D. Storage or sale of removed items or materials on-site will not be permitted.
- E. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
 - 1. Maintain fire-protection facilities in service during selective demolition operations.

1.7 WARRANTY

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials so as not to void existing warranties.

PART 2 - PRODUCTS

2.1 REPAIR MATERIALS

- A. Use repair materials identical to existing materials.
 - 1. If identical materials are unavailable or cannot be used for exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible.
 - 2. Use materials whose installed performance equals or surpasses that of existing materials.
- B. Comply with material and installation requirements specified in individual sections.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped.
- B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- C. Inventory and record the condition of items to be removed and reinstalled and items to be removed and salvaged.
- D. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to Architect.
- E. Engage a professional engineer to survey condition of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during selective demolition operations.
- F. Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.

3.2 UTILITY SERVICES

- A. Existing Utilities: Maintain services indicated to remain and protect them against damage during selective demolition operations.
- B. Occupied Buildings: Do not interrupt existing utilities serving occupied or operating facilities unless authorized in writing by Owner and authorities having jurisdiction. Provide temporary services during interruptions to existing utilities, as acceptable to Owner and to authorities having jurisdiction.
 - 1. Provide at least 72 hours' notice to Owner if shutdown of service is required during changeover.
- C. Utility Requirements: Locate, identify, disconnect, and seal or cap off indicated utilities serving areas to be selectively demolished.
 - 1. Arrange with Owner to shut off indicated utilities.
 - 2. If utility services are required to be removed, relocated, or abandoned, before proceeding with selective demolition provide temporary utilities that bypass area of selective demolition and that maintain continuity of service to other parts of building.
 - 3. Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit after bypassing.

3.3 PREPARATION

- A. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
1. Do not close or obstruct streets, walks, walkways, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.
 2. Erect temporary protection, such as walks, fences, railings, canopies, and covered passageways, where required by authorities having jurisdiction.
 3. Protect existing site improvements, appurtenances, and landscaping to remain.
- B. Temporary Facilities: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.
 2. Provide temporary weather protection, during interval between selective demolition of existing construction on exterior surfaces and new construction, to prevent water leakage and damage to structure and interior areas.
 3. Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.
 4. Cover and protect furnishings, and equipment that have not been removed.
- C. Temporary Enclosures: Provide temporary enclosures for protection of existing building and construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.
1. Where heating or cooling is needed and permanent enclosure is not complete, provide insulated temporary enclosures. Coordinate enclosure with ventilating and material drying or curing requirements to avoid dangerous conditions and effects.
- D. Temporary Partitions: Erect and maintain dustproof partitions and temporary enclosures to limit dust and dirt migration and to separate areas from fumes and noise.
- E. Temporary Shoring: Provide and maintain shoring, bracing, or structural support to preserve stability and prevent movement, settlement, or collapse of construction to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished. Strengthen or add new supports when required during

progress of selective demolition.

3.4 POLLUTION CONTROLS

- A. Dust Control: Use water mist, temporary enclosures, and other suitable methods to limit spread of dust and dirt. Comply with governing environmental-protection regulations.
 - 1. Do not use water when it may damage existing construction or create hazardous or objectionable conditions, such as ice, flooding, and pollution.
 - 2. Wet mop floors to eliminate trackable dirt and wipe down walls and doors of demolition enclosure. Vacuum carpeted areas.
- B. Disposal: Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
 - 1. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
- C. Cleaning: Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

3.5 SELECTIVE DEMOLITION

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
 - 1. Proceed with selective demolition systematically, from higher to lower level. Complete selective demolition operations above each floor or tier before disturbing supporting members on the next lower level.
 - 2. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction.
 - 3. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.
 - 4. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
 - 5. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, verify condition and contents before starting flame-cutting operations.
 - 6. Maintain portable fire-suppression devices during flame-cutting operations.
 - 7. Maintain adequate ventilation when using cutting torches.
 - 8. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.

9. Remove structural framing members and lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.
 10. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
 11. Dispose of demolished items and materials promptly.
 12. Return elements of construction and surfaces that are to remain to condition existing before selective demolition operations began.
- B. Existing Facilities: Comply with building manager's requirements for using and protecting elevators, stairs, walkways, loading docks, building entries, and other building facilities during selective demolition operations.
- C. Removed and Salvaged Items: Comply with the following:
1. Clean salvaged items.
 2. Pack or crate items after cleaning. Identify contents of containers.
 3. Store items in a secure area until delivery to Owner.
 4. Transport items to Owner's storage area designated by Owner.
 5. Protect items from damage during transport and storage.
- D. Removed and Reinstalled Items: Comply with the following:
1. Clean and repair items to functional condition adequate for intended reuse. Paint equipment to match new equipment.
 2. Pack or crate items after cleaning and repairing. Identify contents of containers.
 3. Protect items from damage during transport and storage.
 4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.
- E. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect, items may be removed to a suitable, protected storage location during selective demolition and reinstalled in their original locations after selective demolition operations are complete.

3.6 PATCHING AND REPAIRS

- A. General: Promptly repair damage to adjacent construction caused by selective demolition operations.
- B. Repairs: Where repairs to existing surfaces are required, patch to produce surfaces suitable for new materials.
1. Completely fill holes and depressions in existing concrete or masonry that are to remain with an approved masonry patching material applied according to

manufacturer's written recommendations.

3.7 DISPOSAL OF DEMOLISHED MATERIALS

- A. General: Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on-site.
- B. Burning: Do not burn demolished materials.
- C. Disposal: Transport demolished materials off Owner's property and legally dispose of them.

3.8 SELECTIVE DEMOLITION SCOPE

- A. Refer to the drawings.

END OF SECTION 02 4119

SECTION 084113.1 - ALUMINUM-FRAMED ENTRANCES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Aluminum Storefront Framing Systems, including perimeter trims, stools, accessories, shims and anchors.
2. Perimeter sealing of aluminum framed systems.

B. Related Sections:

1. 084113.2 – Aluminum Entrance Doors
2. 087100 – Door Hardware

1.2 DEFINITIONS

- A. Definitions: For fenestration industry standard terminology and definitions refer to American Architectural Manufacturers Association (AAMA) – AAMA Glossary (AAMA AG).

1.3 PERFORMANCE REQUIREMENTS

A. Storefront System Performance Requirements:

1. Wind loads: Storefront system; including anchorage, shall be capable of withstanding an ultimate design wind speed of 125 mph, Exposure B.
2. Air Infiltration: The test specimen shall be tested in accordance with ASTM E 283. Air infiltration rate shall not exceed 0.06 cfm/ft² (0.3 l/s · m²) at a static air pressure differential of 6.24 psf (300 Pa).
3. Water Resistance: The test specimen shall be tested in accordance with ASTM E 331. There shall be no leakage at a minimum static air pressure differential of 8 psf (383 Pa) as defined in AAMA 501.
4. Uniform Load: A static air design load of 20 psf (958 Pa) shall be applied in the positive and negative direction in accordance with ASTM E 330. There shall be no deflection in excess of L/175 of the span of any framing member. At a structural test load equal to 1.5 times the specified design load, no glass breakage or permanent set in the framing members in excess of 0.2% of their clear spans shall occur.

1.4 SUBMITTALS

- A. Product Data: Include construction details, material descriptions, dimensions of individual components and profiles, hardware, finishes, and installation instructions for each type of aluminum-framed storefront system indicated.
- B. Shop Drawings: Include plans, elevations, sections, details, hardware, and attachments to other work, operational clearances and installation details.
- C. Samples for Initial Selection: For units with factory-applied color finishes including samples of hardware and accessories involving color selection.
- D. Samples for Verification: For aluminum-framed storefront system and components required.
- E. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency for each type of aluminum-framed storefront.
- F. Warranty: Special warranty specified in this Section.
- G. Fabrication Sample: Of each vertical-to-horizontal intersection of aluminum-framed systems, made from 12" (304.8 mm) lengths of full-size components and showing details of the following:
 - 1. Joinery, including concealed welds.
 - 2. Anchorage.
 - 3. Expansion provisions.
 - 4. Glazing.
 - 5. Flashing and drainage.
- H. Other Action Submittals:
 - 1. Entrance Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing fabrication and assembly of entrance door hardware, as well as procedures and diagrams. Coordinate final entrance door hardware schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of entrance door hardware.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: An installer which has had successful experience with installation of the same or similar units required for the project and other projects of similar size and scope.
- B. Manufacturer Qualifications: A manufacturer capable of providing aluminum-framed storefront system that meet or exceed performance requirements indicated and of documenting this performance by inclusion of test reports, and calculations.

- C. Source Limitations: Obtain aluminum-framed storefront system through one source from a single manufacturer.
- D. Product Options: Drawings indicate size, profiles, and dimensional requirements of aluminum-framed storefront system and are based on the specific system indicated. Refer to Division 01 Section "Product Requirements". Do not modify size and dimensional requirements.
 - 1. Do not modify intended aesthetic effects, as judged solely by Architect, except with Architect's approval. If modifications are proposed, submit comprehensive explanatory data to Architect for review.
- E. Mockups: Build mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
 - 1. Build mockup for type(s) of storefront elevation(s) indicated, in location(s) shown on Drawings.
- F. Pre-installation Conference: Conduct conference at Project site to comply with requirements in Division 01 Section "Project Management and Coordination".
- G. Structural-Sealant Glazing: Comply with ASTM C 1401, "Guide for Structural Sealant Glazing" for design and installation of structural-sealant-glazed systems.
- H. Structural-Sealant Joints: Design reviewed and approved by structural-sealant manufacturer.

1.6 PROJECT CONDITIONS

- A. Field Measurements: Verify actual dimensions of aluminum-framed storefront openings by field measurements before fabrication and indicate field measurements on Shop Drawings.

1.7 WARRANTY

- A. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's warranty.
 - 1. Warranty Period: Ten (10) years from Date of Substantial Completion of the project provided however that the Limited Warranty shall begin in no event later than six months from date of shipment by manufacturer.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Basis-of-Design Product

1. Kawneer Company Inc.
 2. Trifab™ VG 450 Framing System (Non-Thermal)
 3. System Dimensions: 1-3/4" x 4-1/2"
 4. Glass: Center
- B. Subject to compliance with requirements, provide a comparable product by one of the following:
1. EFCO Corporation.
 2. Leed Himmel Industries, Inc.
 3. Vistawall Architectural Products; The Vistawall Group
- C. Substitutions: Refer to Substitutions Section for procedures and submission requirements
1. Pre-Contract (Bidding Period) Substitutions: Submit written requests three (3) days prior to bid date.
 2. Post-Contract (Construction Period) Substitutions: Submit written request in order to prevent installation and construction delays.
 3. Product Literature and Drawings: Submit product literature and drawings modified to suit specific project requirements and job conditions.
 4. Certificates: Submit certificate(s) certifying substitute manufacturer:
 - a. Attesting to adherence to specification requirements for storefront system performance criteria.
 - b. Has been engaged in the design, manufacturer and fabrication of aluminum framed entrances for a period of not less than ten (10) years.
 5. Test Reports: Submit test reports verifying compliance with each test requirement required by the project.
 6. Samples: Provide samples of typical product sections and finish samples in manufacturer's standard sizes.
- D. Substitution Acceptance: Acceptance will be in written form or documented by a formal change order signed by the Owner and Contractor.

2.2 MATERIALS

- A. Aluminum Extrusions: Alloy and temper recommended by aluminum storefront manufacturer for strength, corrosion resistance, and application of required finish and not less than 0.070" (1.8 mm) wall thickness at any location for the main frame and complying with ASTM B 221: 6063-T6 alloy and temper.
- B. Fasteners: Aluminum, nonmagnetic stainless steel or other materials to be non-corrosive and compatible with aluminum framing members, trim hardware, anchors, and other components.
- C. Anchors, Clips, and Accessories: Aluminum, nonmagnetic stainless steel, or zinc-coated steel or iron complying with ASTM B 633 for SC 3 severe service conditions or

other suitable zinc coating; provide sufficient strength to withstand design pressure indicated.

- D. Reinforcing Members: Aluminum, nonmagnetic stainless steel, or nickel/chrome-plated steel complying with ASTM B 456 for Type SC 3 severe service conditions, or zinc-coated steel or iron complying with ASTM B 633 for SC 3 severe service conditions or other suitable zinc coating; provide sufficient strength to withstand design pressure indicated.
- E. Sealant: For sealants required within fabricated storefront system, provide permanently elastic, non-shrinking, and non-migrating type recommended by sealant manufacturer for joint size and movement.
- F. Tolerances: Reference to tolerances for wall thickness and other cross-sectional dimensions of storefront members are nominal and in compliance with AA Aluminum Standards and Data.

2.3 STOREFRONT FRAMING SYSTEM

- A. Brackets and Reinforcements: Manufacturer's standard high-strength aluminum with nonstaining, nonferrous shims for aligning system components.
- B. Fasteners and Accessories: Manufacturer's standard corrosion-resistant, nonstaining, nonbleeding fasteners and accessories compatible with adjacent materials. Where exposes shall be stainless steel.
- C. Perimeter Anchors: When steel anchors are used, provide insulation between steel material and aluminum material to prevent galvanic action
- D. Packing, Shipping, Handling and Unloading: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
- E. Storage and Protection: Store materials protected from exposure to harmful weather conditions. Handle storefront material and components to avoid damage. Protect storefront material against damage from elements, construction activities, and other hazards before, during and after storefront installation.

2.4 GLAZING SYSTEMS

- A. Glazing: As specified in Section 088000 - Glazing.
- B. Glazing Gaskets: Manufacturer's standard compression types; replaceable, extruded EPDM rubber.
- C. Spacers and Setting Blocks: Manufacturer's standard elastomeric type.
- D. Bond-Breaker Tape: Manufacturer's standard TFE-fluorocarbon or polyethylene material to which sealants will not develop adhesion.

2.5 ENTRANCE DOOR SYSTEMS

- A. Entrance Doors: As specified in 084113.2.

2.6 ACCESSORY MATERIALS

- A. Joint Sealant: For installation at perimeter of aluminum-framed systems. Polyurethane; ASTM C920, Grade NS, Class 25; Uses M,G and A; multi-component. Provide one of the following:
 1. "Dynatrol II" by Pecora Corporation
 2. "Dymeric" by Tremco Construction Products
 3. "Sonalastic NP II" by Sonneborn

Sealant Color to match color of aluminum entrance framing system.

- B. Sealant Primer: Non-staining type, recommended by sealant manufacturer to suit application.
- C. Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.
- D. Joint Backing: Expanded open cell polyurethane foam rod compatible with sealant; oversized 30 to 50 percent larger than joint width. Compressible, resilient, and free from contaminant. Open cell urethane foam filler may be substituted if rapid curing of sealant is desirable and so recommended by sealant manufacturer in writing.
- E. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application.
- F. Bituminous Paint: Cold-applied, asphalt-mastic paint complying with SSPC-Paint 12 requirements except containing no asbestos; formulated for 30 mil (0.762 mm) thickness per coat.

2.7 FABRICATION

- A. Framing Members, General: Fabricate components that, when assembled, have the following characteristics:
 1. Profiles that are sharp, straight, and free of defects or deformations.
 2. Accurately fit joints; make joints flush, hairline and weatherproof.
 3. Means to drain water passing joints, condensation within framing members, and moisture migrating within the system to exterior.
 4. Physical and thermal isolation of glazing from framing members.
 5. Accommodations for thermal and mechanical movements of glazing and framing to maintain required glazing edge clearances.
 6. Provisions for field replacement of glazing.

7. Fasteners, anchors, and connection devices that are concealed from view to greatest extent possible.
- B. Storefront Framing: Fabricate components for assembly using manufacturer's standard installation instructions.
- C. After fabrication, clearly mark components to identify their locations in Project according to Shop Drawings.

2.8 ALUMINUM FINISHES

- A. Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes.
- B. Factory Finishing:
 1. Kawneer Permanodic™ AA-M10C21A44 / AA-M45C22A44, AAMA 611, Architectural Class I Color Anodic Coating. Color: Black.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine openings, substrates, structural support, anchorage, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of work. Verify rough opening dimensions, levelness of sill plate and operational clearances. Examine wall flashings, vapor retarders, water and weather barriers, and other built-in components to ensure a coordinated, weather tight aluminum- framed storefront system installation.
 1. Masonry Surfaces: Visibly dry and free of excess mortar, sand, and other construction debris.
 2. Wood Frame Walls: Dry, clean, sound, well nailed, free of voids, and without offsets at joints. Ensure that nail heads are driven flush with surfaces in opening and within 3 inches (76 mm) of opening.
 3. Metal Surfaces: Dry; clean; free of grease, oil, dirt, rust, corrosion, and welding slag; without sharp edges or offsets at joints.
 4. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Comply with Drawings, Shop Drawings, and manufacturer's written instructions for installing aluminum-framed storefront system, accessories, and other components.

- B. Install aluminum-framed storefront system level, plumb, square, true to line, without distortion or impeding thermal movement, anchored securely in place to structural support, and in proper relation to wall flashing and other adjacent construction.
- C. Set sill members in bed of sealant or with gaskets, as indicated, for weather tight construction.
- D. Install aluminum framed storefront system and components to drain condensation, water penetrating joints, and moisture migrating within aluminum-framed storefront system to the exterior.
- E. Separate aluminum and other corrodible surfaces from sources of corrosion or electrolytic action at points of contact with other materials.

3.3 SEALANT PREPARATION AND INSTALLATION

- A. Verify substrate surfaces and joint openings are ready to receive Work. Notify Architect of dimensions and/or conditions which will prevent satisfactory installation and performance of sealant.
- B. Remove loose materials and foreign matter impairing adhesion of sealant.
- C. Clean and prime joints. Exercise care to properly prime porous surfaces.
- D. Perform preparation in accordance with ASTM C1193.
- E. Protect elements surrounding Work of this Section from damage or disfiguration.
- F. Perform installation in accordance with ASTM C1193.
- G. Measure joint dimensions and size joint backers to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by sealant manufacturer.
- H. Roll rod filler into joint. Rod in final position shall be secure and shall not be twisted.
- I. Install bond breaker where there is insufficient space for joint backing.
- J. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.
- K. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.
- L. Tool joints concave. Exercise care not to cause discoloration of sealant during tooling.

3.4 FIELD QUALITY CONTROL

- A. Field Tests: Architect shall select storefront units to be tested as soon as a representative portion of the project has been installed, glazed, perimeter caulked and

cured. Conduct tests for air infiltration and water penetration with manufacturer's representative present. Tests not meeting specified performance requirements and units having deficiencies shall be corrected as part of the contract amount.

1. Testing: Testing shall be performed by a qualified independent testing agency. Refer to Testing Section for payment of testing and testing requirements. Testing Standard per AAMA 503, including reference to ASTM E 783 for Air Infiltration Test and ASTM E 1105 Water Infiltration Test.
 - a. Air Infiltration Tests: Conduct tests in accordance with ASTM E 783. Allowable air infiltration shall not exceed 1.5 times the amount indicated in the performance requirements or 0.09 cfm/ft², whichever is greater.
 - b. Water Infiltration Tests: Conduct tests in accordance with ASTM E 1105. No uncontrolled water leakage is permitted when tested at a static test pressure of two-thirds the specified water penetration pressure but not less than 6.24 psf (300 Pa).
- B. Manufacturer's Field Services: Upon Owner's written request, provide periodic site visit by manufacturer's field service representative.

3.5 ADJUSTING, CLEANING, AND PROTECTION

- A. Clean aluminum surfaces immediately after installing aluminum-framed storefronts. Avoid damaging protective coatings and finishes. Remove excess sealants, glazing materials, dirt, and other substances.
- B. Clean glass immediately after installation. Comply with glass manufacturer's written recommendations for final cleaning and maintenance. Remove nonpermanent labels, and clean surfaces.
- C. Remove and replace glass that has been broken, chipped, cracked, abraded, or damaged during construction period.

END OF SECTION 084113.1

SECTION 084113.2 – ALUMINUM ENTRANCE DOORS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes: Aluminum Entrance doors, glass and glazing, and door hardware and components.
- B. Related Sections:
 - 1. 084113.1 – Aluminum-Framed Entrances
 - 2. 087100 – Door Hardware

1.2 DEFINITIONS

- A. Definitions: For fenestration industry standard terminology and definitions refer to American Architectural Manufacturers Association (AAMA) – AAMA Glossary (AAMA AG).

1.3 PERFORMANCE REQUIREMENTS

- A. General Performance: Aluminum-framed entrance system shall withstand the effects of the following performance requirements without failure due to defective manufacture, fabrication, installation, or other defects in construction.
- B. Aluminum-Framed Entrance Performance Requirements.
 - 1. Wind loads: Aluminum-framed entrance door system; include anchorage, shall be capable of withstanding an ultimate design wind speed of 125 mph, Exposure B.
 - 2. Structural Performance: Corner strength shall be tested per the dual moment load test procedure and certified by an independent testing laboratory to ensure weld compliance and corner integrity.
 - 3. Uniform Load: A static air design load of 85 psf (4070 Pa), (65 psf (3113 Pa) for laminated infill) shall be applied in the positive and negative direction in accordance with Florida Building Code TAS202 and ASTM E 330. There shall be no deflection in excess of $L/180$ of the span of any framing member. At a structural test load equal to 1.5 times the specified design load, no glass breakage shall occur.
 - 4. Windborne-Debris-Impact Resistance Performance: Shall be tested in accordance with ASTM E1886, information in ASTM E1996, and TAS 201/203.

- a. Large-Missile Impact: For aluminum-framed systems located within 30 feet (9.1m) of grade.
5. Blast Mitigation Performance: Shall be tested or proven through analysis to meet ASTM F1642, GSA-TS01, and UFC 04-010.01 performance criteria. To meet UFC 04-010-01, B-3.1 Standard 10 for Windows and Skylights, the following options are available:
 - a. Section B-3.1.1 Dynamic analysis.
 - b. Section B-3.1.2 Testing.
 - c. Section B-3.1.3 ASTM F2248 Design Approach.
6. Forced Entry: Tested in accordance with AAMA 1304.

1.4 SUBMITTALS

- A. Product Data: Include construction details, material descriptions, and fabrication methods, dimensions of individual components and profiles, hardware, finishes, and installation instructions for each type of aluminum-framed entrance door indicated.
- B. Shop Drawings: Include plans, elevations, sections, details, hardware, and attachments to other work, operational clearances and installation details.
- C. Samples for Initial Selection: For units with factory-applied color finishes including samples of hardware and accessories involving color selection.
- D. Samples for Verification: For aluminum-framed entrance door and components required.
- E. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency for each type of aluminum-framed entrance doors.
- F. Fabrication Sample: Corner sample consisting of a door stile and rail, of full-size components and showing details of the following.
 1. Joinery, including welds.
 2. Glazing.
- G. Other Action Submittals.
 1. Entrance Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing fabrication and assembly of entrance door hardware, as well as procedures and diagrams. Coordinate final entrance door hardware schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of entrance door hardware.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: An installer which has had successful experience with installation of the same or similar units required for the project and other projects of similar size and scope.
- B. Manufacturer Qualifications: A manufacturer capable of fabricating aluminum-framed entrance doors and storefronts that meet or exceed performance requirements indicated and of documenting this performance by inclusion of test reports, and calculations.
- C. Source Limitations: Obtain aluminum-framed entrance doors through one source from a single manufacturer.
- D. Product Options: Drawings indicate size, profiles, and dimensional requirements of aluminum-framed entrance doors and are based on the specific system indicated. Refer to Division 01 Section "Product Requirements". Do not modify size and dimensional requirements.
 - 1. Do not modify intended aesthetic effects, as judged solely by Architect, except with Architect's approval. If modifications are proposed, submit comprehensive explanatory data to Architect for review.
- E. Mockups: Build mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
 - 1. Build mockup for type(s) of aluminum-framed entrance entrance door(s) indicated, in location(s) shown on Drawings.
- F. Pre-installation Conference: Conduct conference at Project site to comply with requirements in Division 01 Section "Project Management and Coordination".

1.6 PROJECT CONDITIONS

- A. Field Measurements: Verify actual dimensions of aluminum-framed entrance door openings by field measurements before fabrication and indicate field measurements on Shop Drawings.

1.7 WARRANTY

- A. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's warranty.

1. Warranty Period: Ten (10) years from Date of Substantial Completion of the project provided however that the Limited Warranty shall begin in no event later than six months from date of shipment by manufacturer.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Basis-of-Design Product:

1. Kawneer Company Inc. 500 Heavy Wall Door
2. The door stile and rail face dimensions of the entrance door will be as follows:
 - a. Stile: 5"
 - b. Top Rail: 8"
 - c. Bottom Rail: 10"
3. Major portions of the door members to be 0.188" (5 mm) nominal in thickness and glazing molding to be 0.05" (1.5 mm) thick.
4. Glazing gaskets shall be either EPDM elastomeric extrusions or a thermoplastic elastomer.
5. Provide adjustable glass jacks to help center the glass in the door opening.

B. Subject to compliance with requirements, provide a comparable product by the following.

1. EFCO Corporation.
2. Leed Himmel Industries, Inc
3. Vistawall Architectural Products; The Vistawall Group.

C. Substitutions: Refer to Substitutions Section for procedures and submission requirements

1. Pre-Contract (Bidding Period) Substitutions: Submit written requests three (3) days prior to bid date.
2. Post-Contract (Construction Period) Substitutions: Submit written request in order to prevent installation and construction delays.
3. Product Literature and Drawings: Submit product literature and drawings modified to suit specific project requirements and job conditions.
4. Certificates: Submit certificate(s) certifying substitute manufacturer:
 - a. Attesting to adherence to specification requirements for storefront system performance criteria.
 - b. Has been engaged in the design, manufacturer and fabrication of aluminum entrance doors for a period of not less than ten (10) years.

5. Test Reports: Submit test reports verifying compliance with each test requirement required by the project.
 6. Samples: Provide samples of typical product sections and finish samples in manufacturer's standard sizes.
- B. Substitution Acceptance: Acceptance will be in written form or documented by a formal change order signed by the Owner and Contractor.

2.2 MATERIALS

- A. Aluminum Extrusions: Alloy and temper recommended by aluminum-framed entrance door manufacturer for strength, corrosion resistance, and application of required finish and not less than 0.090" (3 mm) wall thickness at any location for the door leaf members.
- B. Fasteners: Aluminum, nonmagnetic stainless steel or other materials to be non-corrosive and compatible with aluminum-framed entrance door members, trim hardware, anchors, and other components.
- C. Anchors, Clips, and Accessories: Aluminum, nonmagnetic stainless steel, or zinc-coated steel or iron complying with ASTM B 633 for SC 3 severe service conditions or other suitable zinc coating; provide sufficient strength to withstand design pressure indicated.
- D. Reinforcing Members: Aluminum, nonmagnetic stainless steel, or nickel/chrome-plated steel complying with ASTM B 456 for Type SC 3 severe service conditions, or zinc-coated steel or iron complying with ASTM B 633 for SC 3 severe service conditions or other suitable zinc coating; provide sufficient strength to withstand design pressure indicated.
1. Weather Seals: Provide weather stripping with integral barrier fin or fins of semi-rigid, polypropylene sheet or polypropylene-coated material. Comply with AAMA 701/702.

2.3 STOREFRONT FRAMING SYSTEM

- A. Storefront Entrance Framing.
1. Kawneer Trifab™ VG 450. See Section 084113.1

2.4 GLAZING

- A. Insulating Glass as specified in Section 088000 – Glazing.

- B. Glazing Gaskets: Manufacturer's standard compression types; replaceable, extruded EPDM rubber.
- C. Spacers and Setting Blocks: Manufacturer's standard elastomeric type.

2.5 HARDWARE

- A. General: Unless indicated otherwise provide manufacturer's standard hardware fabricated from aluminum, stainless steel, or other corrosion-resistant material compatible with aluminum; designed to smoothly operate, tightly close, and securely lock aluminum-framed entrance doors.
- B. Standard Hardware:
 - 1. Weather-stripping.
 - a. Meeting stiles on pairs of doors shall be equipped with an adjustable astragal utilizing wool pile with polymeric fin.
 - b. The door weathering on a single acting door and frame (single or pairs) shall be comprised of a thermoplastic elastomer weathering on a tubular shape with a semi-rigid polymeric backing.
 - 2. Sill Sweep Strips: EPDM blade gasket sweep strip in a black anodized aluminum extrusion applied to the interior exposed surface of the bottom rail with concealed fasteners (Necessary to meet specified performance tests).
 - 3. Push Bars for interior vestibule doors: Style CP-II. Finish: US 32D
 - 4. Pull Handles for Interior vestibule doors: Style CO-9. Finish: US32D
 - 5. Balance of Hardware: See Section 087100 and Contract Drawings.
- C. Access Control Entrance Hardware.
 - 1. See Section 087100 and Contract Drawings.

2.6 FABRICATION

- A. Fabricate aluminum-framed entrance doors in sizes indicated. Include a complete system for assembling components and anchoring doors.
- B. Fabricate aluminum-framed entrance doors that are reglazable without dismantling perimeter framing.
 - 1. Door corner construction shall consist of mechanical clip fastening, SIGMA deep penetration plug welds and 1-1/8" (29 mm) long fillet welds inside and outside of all

- four corners. Glazing stops shall be hook-in type with EPDM glazing gaskets reinforced with non-stretchable cord.
2. Accurately fit and secure joints and corners. Make joints hairline in appearance.
 3. Prepare components with internal reinforcement for door hardware.
 4. Arrange fasteners and attachments to conceal from view.
- C. Weather-stripping: Provide weather-stripping locked into extruded grooves in door panels or frames as indicated on manufacturer's drawings and details.

2.7 ALUMINUM FINISHES

- A. Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes.
- B. Factory Finishing.
 1. Kawneer Permanodic™ AA-M10C21A44 / AA-M45C22A44, AAMA 611, Architectural Class I Color Anodic Coating (Color #29 Black).

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine openings, substrates, structural support, anchorage, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of work. Verify rough opening dimensions, levelness of sill plate and operational clearances. Examine wall flashings, vapor retarders, water and weather barriers, and other built-in components to ensure a coordinated installation.
 1. Masonry Surfaces: Visibly dry and free of excess mortar, sand, and other construction debris.
 2. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Comply with Drawings, Shop Drawings, and manufacturer's written instructions for installing aluminum-framed entrance doors, hardware, accessories, and other components.
- B. Install aluminum-framed entrance doors level, plumb, square, true to line, without distortion or impeding thermal movement, anchored securely in place to structural support, and in proper relation to wall flashing and other adjacent construction.

- C. Set sill threshold in bed of sealant, for weather tight construction.
- D. Separate aluminum and other corrodible surfaces from sources of corrosion or electrolytic action at points of contact with other materials.

3.3 FIELD QUALITY CONTROL

- A. Manufacturer's Field Services: Upon Owner's written request, provide periodic site visit by manufacturer's field service representative.

3.4 ADJUSTING, CLEANING, AND PROTECTION

- A. Clean aluminum surfaces immediately after installing aluminum-framed entrances. Avoid damaging protective coatings and finishes. Remove excess sealants, glazing materials, dirt, and other substances.
- B. Clean glass immediately after installation. Comply with glass manufacturer's written recommendations for final cleaning and maintenance. Remove nonpermanent labels, and clean surfaces.
- C. Remove and replace glass that has been broken, chipped, cracked, abraded, or damaged during construction period.

END OF SECTION 084113.2

SECTION 087100 – DOOR HARDWARE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes commercial door hardware for the following:
 - 1. Swinging doors.
- B. Door hardware includes, but is not necessarily limited to, the following:
 - 1. Mechanical door hardware.
 - 2. Electromechanical door hardware.
- C. Related Sections:
 - 1. Section 084113.1 Aluminum-Framed Entrances
 - 2. Section 084113.2 Aluminum Entrance Doors
- D. 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. State Building Codes, Local Amendments.
- E. Standards: All hardware specified herein shall comply with the following industry standards:
 - 1. ANSI/BHMA Certified Product Standards - A156 Series
 - 2. UL10C – Positive Pressure Fire Tests of Door Assemblies

1.3 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. Fastenings 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.
- C. Shop Drawings: Details of electrified access control hardware indicating the following:
 - 1. Wiring Diagrams: Upon receipt of approved schedules, submit detailed system wiring diagrams for power, signaling, monitoring, communication, and control of the access control system electrified hardware. Differentiate between manufacturer-installed and field-installed wiring. Include the following:

- a. Elevation diagram of each unique access controlled opening showing location and interconnection of major system components with respect to their placement in the respective door openings.
 - b. Complete (risers, point-to-point) access control system block wiring diagrams.
 - c. Wiring instructions for each electronic component scheduled herein.
2. Electrical Coordination: Coordinate with related sections the voltages and wiring details required at electrically controlled and operated hardware openings.
- D. 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.
- E. Informational Submittals:
1. Product Test Reports: Indicating compliance with cycle testing requirements, based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified independent testing agency.
- F. 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 Submittals.

1.4 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. 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.
- C. 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.

- D. 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.
 2. Provide electromechanical door hardware from the same manufacturer as mechanical door hardware, unless otherwise indicated.
- E. Each unit to bear third party permanent label demonstrating compliance with the referenced standards.
- F. 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.
- G. Pre-Submittal Conference: Conduct coordination conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier(s), Installer(s), and Contractor(s) to review proper methods and the procedures for receiving, handling, and installing door hardware.
1. Prior to installation of door hardware, conduct a project specific training meeting to instruct the installing contractors' personnel on the proper installation and adjustment of their respective products. Product training to be attended by installers of door hardware (including electromechanical hardware) for aluminum, hollow metal and wood doors. Training will include the use of installation manuals, hardware schedules, templates and physical product samples as required.
 2. Inspect and discuss electrical roughing-in, power supply connections, and other preparatory work performed by other trades.
 3. Review sequence of operation narratives for each unique access controlled opening.
 4. Review and finalize construction schedule and verify availability of materials.
 5. Review the required inspecting, testing, commissioning, and demonstration procedures
- H. At completion of installation, provide written documentation that components were applied to manufacturer's instructions and recommendations and according to approved schedule.

1.5 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".

1.6 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 Hardware and Electrical Connections: Coordinate the layout and installation of scheduled electrified door hardware and related access control equipment with required connections to source power junction boxes, low voltage power supplies, detection and monitoring hardware, and fire and detection alarm systems.
- C. 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.

1.7 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: Written warranty, executed by manufacturer(s), agreeing to repair or replace components of standard and electrified door hardware that fails in materials or workmanship within specified warranty period after final acceptance by the Owner. Failures include, but are not limited to, the following:
 - 1. Structural failures including excessive deflection, cracking, or breakage.
 - 2. Faulty operation of the hardware.

3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
 4. Electrical component defects and failures within the systems operation.
- C. Standard Warranty Period: One year from date of Substantial Completion, unless otherwise indicated.
- D. Special Warranty Periods:
1. Five years for exit hardware.
 2. Twenty five years for manual surface door closer bodies.
 3. Five years for motorized electric latch retraction exit devices.
 4. Two years for electromechanical door hardware.

1.8 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 certified continuous geared hinge. with minimum 0.120-inch thick extruded 6060 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.
1. Manufacturers:
 - a. Bommer Industries (BO).
 - b. McKinney Products; ASSA ABLOY Architectural Door Accessories (MK).
 - c. Pemko Products; ASSA ABLOY Architectural Door Accessories (PE).

2.3 POWER TRANSFER DEVICES

- A. Concealed Quick Connect Electric Power Transfers: Provide concealed wiring pathway housing mortised into the door and frame for low voltage electrified door hardware. Furnish with Molex™ standardized plug connectors and sufficient number of concealed wires (up to 12) to accommodate the electrified functions specified in the Door Hardware Sets. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Wire nut connections are not acceptable.
1. Manufacturers:
 - a. Pemko Products; ASSA ABLOY Architectural Door Accessories (PE) – EL-CEPT Series.
 - b. Securitron (SU) - EL-CEPT Series.
 - c. Von Duprin (VD) - EPT-10 Series.
- B. Electric Door Wire Harnesses: Provide electric/data transfer wiring harnesses with standardized plug connectors to accommodate up to twelve (12) wires. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Provide sufficient number and type of concealed wires to accommodate electric function of specified hardware. Provide a connector for through-door electronic locking devices and from hinge to junction box above the opening. Wire nut connections are not acceptable. Determine the length required for each electrified hardware component for the door type, size and construction, minimum of two per electrified opening.
1. Provide one each of the following tools as part of the base bid contract:
 - a. McKinney Products; ASSA ABLOY Architectural Door Accessories (MK) - Electrical Connecting Kit: QC-R001.
 - b. McKinney Products; ASSA ABLOY Architectural Door Accessories (MK) - Connector Hand Tool: QC-R003.

2. Manufacturers:

- a. McKinney Products; ASSA ABLOY Architectural Door Accessories (MK) – QC-C Series.

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. Source Limitations: Obtain each type of keyed cylinder and keys from the same source manufacturer as locksets and exit devices, unless otherwise indicated.
- C. Cylinders: Original manufacturer cylinders complying with the following:
 1. Mortise Type: Threaded cylinders with rings and cams to suit hardware application.
 2. Rim Type: Cylinders with back plate, flat-type vertical or horizontal tailpiece, and raised trim ring.
 3. Bored-Lock Type: Cylinders with tailpieces to suit locks.
 4. 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.
 5. Keyway: Match Facility Standard.
- D. Keying System: Each type of lock and cylinders to be factory keyed.
 1. Conduct specified "Keying Conference" to define and document keying system instructions and requirements.
 2. Furnish factory cut, nickel-silver large bow permanently inscribed with a visual key control number as directed by Owner.
 3. Existing System: Key locks to Owner's existing system.
- E. Key Quantity: Provide the following minimum number of keys:
 1. Change Keys per Cylinder: Three (3).
 2. Master Keys (per Master Key Level/Group): Five (5).
 3. Construction Keys (where required): Ten (10).
- F. Construction Keying: Provide construction master keyed cylinders.
- G. Key Registration List (Bitting List):
 1. Provide keying transcript list to Owner's representative in the proper format for importing into key control software.
 2. Provide transcript list in writing or electronic file as directed by the Owner.

2.5 CONVENTIONAL EXIT DEVICES

- A. General Requirements: All exit devices specified herein shall meet or exceed the following criteria:
1. At doors not requiring a fire rating, provide devices complying with NFPA 101 and listed and labeled for "Panic Hardware" according to UL305. Provide proper fasteners as required by manufacturer including sex nuts and bolts at openings specified in the Hardware Sets.
 2. Where exit devices are required on fire rated doors, provide devices complying with NFPA 80 and with UL labeling indicating "Fire Exit Hardware". Provide devices with the proper fasteners for installation as tested and listed by UL. Consult manufacturer's catalog and template book for specific requirements.
 3. Except on fire rated doors, provide exit devices with hex key dogging device to hold the pushbar and latch in a retracted position. Provide optional keyed cylinder dogging on devices where specified in Hardware Sets.
 4. Devices must fit flat against the door face with no gap that permits unauthorized dogging of the push bar. The addition of filler strips is required in any case where the door light extends behind the device as in a full glass configuration.
 5. Electromechanical Options: Subject to same compliance standards and requirements as mechanical exit devices, electrified devices to be of type and design as specified in hardware sets. Include any specific controllers when conventional power supplies are not sufficient to provide the proper inrush current.
 6. Lever Operating Trim: Where exit devices require lever trim, furnish manufacturer's heavy duty escutcheon trim with threaded studs for thru-bolts.
 - a. Lock Trim Design: As indicated in Hardware Sets, provide finishes and designs to match that of the specified locksets.
 - b. Where function of exit device requires a cylinder, provide a cylinder (Rim or Mortise) as specified in Hardware Sets.
 7. Vertical Rod Exit Devices: Where surface or concealed vertical rod exit devices are used at interior openings, provide as less bottom rod (LBR) unless otherwise indicated. Provide dust proof strikes where thermal pins are required to project into the floor.
 8. Narrow Stile Applications: At doors constructed with narrow stiles, or as specified in Hardware Sets, provide devices designed for maximum 2" wide stiles.
 9. Dummy Push Bar: Nonfunctioning push bar matching functional push bar.
 10. Rail Sizing: Provide exit device rails factory sized for proper door width application.

11. Through Bolt Installation: For exit devices and trim as indicated in Door Hardware Sets.
- B. Conventional Push Rail Exit Devices (Heavy Duty): ANSI/BHMA A156.3, Grade 1 certified panic and fire exit hardware devices furnished in the functions specified in the Hardware Sets. Exit device latch to be stainless steel, pullman type, with deadlock feature.
 1. Manufacturers:
 - a. Corbin Russwin Hardware (RU) - ED4000 / ED5000 Series.
 - b. Sargent Manufacturing (SA) - 80 Series.
 - c. Stanley Precision (PR) - Apex 2000 Series.
- C. Tube Steel Removable Mullions: ANSI/BHMA A156.3 removable steel mullions with malleable-iron top and bottom retainers and a primed paint finish.
 1. Provide keyed removable feature where specified in the Hardware Sets.
 2. Provide stabilizers and mounting brackets as required.
 3. Provide electrical quick connection wiring options as specified in the hardware sets.
 4. Manufacturers:
 - a. Corbin Russwin Hardware (RU) - 700/900 Series.
 - b. Sargent Manufacturing (SA) - 980S Series.
 - c. Stanley Precision (PR) - 822 Series.

2.6 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 including installation and adjusting information on inside of cover.
 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. Cycle Testing: Provide closers which have surpassed 15 million cycles in a test witnessed and verified by UL.
 4. 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 physically handicapped, provide units complying with ANSI ICC/A117.1.

5. Closer Arms: Provide heavy duty, forged steel closer arms unless otherwise indicated in Hardware Sets.
 6. Closers shall not be installed on exterior or corridor side of doors; where possible install closers on door for optimum aesthetics.
 7. Closer Accessories: Provide door closer accessories including custom templates, special mounting brackets, spacers and drop 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 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. Manufacturers:
 - a. Corbin Russwin Hardware (RU) – DC6000 Series.
 - b. LCN Closers (LC) - 4040 Series.
 - c. Sargent Manufacturing (SA) - 351 Series.
 - d. Norton Door Controls (NO) - 7500 Series.

2.7 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. Overhead Door Stops and Holders: ANSI/BHMA A156.6, Grade 1 certified overhead stops and holders to be surface or concealed types as indicated in Hardware Sets. Track, slide, arm and jamb bracket to be constructed of extruded bronze and shock absorber spring of heavy tempered steel. Provide non-handed design with mounting brackets as required for proper operation and function.
 1. Manufacturers:
 - a. Rixson Door Controls (RF).
 - b. Rockwood Products; ASSA ABLOY Architectural Door Accessories (RO).
 - c. Sargent Manufacturing (SA).

2.8 ARCHITECTURAL SEALS

- A. General: Thresholds, weatherstripping, and gasket seals to be of type and design as specified below or in the Hardware Sets. Provide continuous weatherstrip gasketing on exterior doors and provide smoke, light, or sound gasketing on interior doors where indicated. At exterior applications provide non-corrosive fasteners and elsewhere where indicated.
- B. Smoke Labeled Gasketing: Assemblies complying with NFPA 105 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for smoke control ratings indicated, based on testing according to UL 1784.
 - 1. Provide smoke labeled perimeter gasketing at all smoke labeled openings.
- C. Fire Labeled Gasketing: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to UL-10C.
 - 1. Provide intumescent seals as indicated to meet UL10C Standard for Positive Pressure Fire Tests of Door Assemblies, and NPFA 252, Standard Methods of Fire Tests of Door Assemblies.
- D. Sound-Rated Gasketing: Assemblies that are listed and labeled by a testing and inspecting agency, for sound ratings indicated.
- E. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strips are easily replaceable and readily available from stocks maintained by manufacturer.
- F. Manufacturers:
 - 1. National Guard Products (NG).
 - 2. Pemko Products; ASSA ABLOY Architectural Door Accessories (PE).
 - 3. Reese Enterprises, Inc. (RE).

2.9 ELECTRONIC ACCESSORIES

- A. Switching Power Supplies: Provide UL listed or recognized filtered and regulated power supplies. Provide single, dual, or multi-voltage units as shown in the hardware sets. Units must be expandable up to eight Class 2 power limited outputs. Units must include the capability to incorporate a battery backup option with integral battery charging capability in addition to operating the DC load in event of line voltage failure. Provide the least number of units, at the appropriate amperage level, sufficient to exceed the required total draw for the specified electrified hardware and access control equipment.
 - 1. Manufacturers:
 - a. Securitron (SU) - AQ Series.

2.10 FABRICATION

- A. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to manufacturers recognized installation standards for application intended.

2.11 FINISHES

- 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 their 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.

1. 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:
 1. Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
 2. Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."
 3. Where indicated to comply with accessibility requirements, comply with ANSI A117.1 "Accessibility Guidelines for Buildings and Facilities."
 4. Provide blocking in drywall partitions where wall stops or other wall mounted hardware is located.
- 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: Supplier will perform a final inspection of installed door hardware and state in report whether work complies with or deviates from requirements, including whether door hardware is properly installed, operating and adjusted.

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. See the Contract Drawings for hardware sets.

END OF SECTION 087100

SECTION 088000 - GLAZING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Sealed insulating glass units for aluminum doors.

1.2 RELATED SECTIONS

- A. 084113.2 – Aluminum Entrance Doors

1.3 SECTION REQUIREMENTS

- A. Submittals: Product Data and Samples.
- B. Glazing Publications: Comply with published recommendations of glass product manufacturers and organizations below, unless more stringent requirements are indicated.
 - 1. GANA Publications: GANA's "Laminated Glazing Reference Manual" and GANA's "Glazing Manual."
 - 2. AAMA Publications: AAMA GDSG-1, "Glass Design for Sloped Glazing," and AAMA TIR-A7, "Sloped Glazing Guidelines."
 - 3. IGMA Publication for Sloped Glazing: IGMA TB-3001, "Guidelines for Sloped Glazing."
 - 4. IGMA Publication for Insulating Glass: SIGMA TM-3000, "North American Glazing Guidelines for Sealed Insulating Glass Units for Commercial and Residential Use."
- C. Safety Glazing Labeling: Where safety glazing labeling is indicated, permanently mark glazing with certification label of the SGCC or another certification agency acceptable to authorities having jurisdiction or the manufacturer. Label shall indicate manufacturer's name, type of glass, thickness, and safety glazing standard with which glass complies.
- D. Insulating-Glass Certification Program: Permanently marked either on spacers or on at least one component lite of units with appropriate certification label of IGCC.

1.4 WARRANTY

- A. Manufacturer's Special Warranty on Laminated Glass: Manufacturer's standard form in which laminated-glass manufacturer agrees to replace laminated-glass units that deteriorate within specified warranty period. Deterioration of laminated glass is defined

as defects developed from normal use that are not attributed to glass breakage or to maintaining and cleaning laminated glass contrary to manufacturer's written instructions. Defects include edge separation, delamination materially obstructing vision through glass, and blemishes exceeding those allowed by referenced laminated-glass standard.

1. Warranty Period: 10 years from date of Substantial Completion.

B. Manufacturer's Special Warranty on Insulating Glass: Manufacturer's standard form in which insulating-glass manufacturer agrees to replace insulating-glass units that deteriorate within specified warranty period. Deterioration of insulating glass is defined as failure of hermetic seal under normal use that is not attributed to glass breakage or to maintaining and cleaning insulating glass contrary to manufacturer's written instructions. Evidence of failure is the obstruction of vision by dust, moisture, or film on interior surfaces of glass.

1. Warranty Period: 10 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Subject to compliance with specified requirements, provide product by one of the following:

1. Oldcastle BuildingEnvelope.
2. Pilkington North America Inc.
3. PPG Industries, Inc.
4. Saint-Gobain Corporation.
5. Viracon, Inc.

B. Substitutions: Refer to Substitutions Section for procedures and submission requirements.

1. Pre-Contract (Bidding Period) Substitutions: Submit written requests three (3) days prior to bid date.
2. Post-Contract (Construction Period) Substitutions: Submit written request in order to prevent installation and construction delays.
3. Product Literature and Drawings: Submit product literature and drawings modified to suit specific project requirements and job conditions.
4. Certificates: Submit certificate(s) certifying substitute manufacturer:
 - a. Attesting to adherence to specification requirements for storefront system performance criteria.
 - b. Has been engaged in the design, manufacturer and fabrication of aluminum entrance doors for a period of not less than ten (10) years.
5. Test Reports: Submit test reports verifying compliance with each test requirement required by the project.
6. Samples: Provide samples of typical product sections and finish samples in manufacturer's standard sizes.

- C. Substitution Acceptance: Acceptance will be in written form or documented by a formal change order signed by the Owner and Contractor.

2.2 GLASS, GENERAL

- A. Safety Glass: Category II materials complying with testing requirements in 16 CFR 1201. Provide safety glazing labeling where safety glass is indicated.
- B. Windborne-Debris Resistance: Glazing passes basic enhanced-protection testing requirements in ASTM E 1996 for Wind Zone 3 when tested according to ASTM E 1886.

2.3 GLASS PRODUCTS

- A. Tempered Glass: ASTM C 1048, Kind FT (fully tempered), Type II, Class 1 (clear), Form 3; Quality-Q6.
- B. Laminated Glass: ASTM C 1172, and complying with testing requirements in 16 CFR 1201 for Category II materials.
- C. Insulating-Glass Units: Factory-assembled units consisting of sealed lites of glass separated by a dehydrated interspace, qualified according to ASTM E 2190.

2.4 MONOLITHIC GLASS

- A. Clear fully tempered float glass.
 - 1. Thickness: 1/4"

2.5 LAMINATED GLASS

- A. Clear laminated glass with two plies of clear fully tempered float glass.
 - 1. Thickness of Each Glass Ply: 1/8"

2.6 INSULATING-GLASS

- A. Low-e-coated, clear insulating glass.
 - 1. Overall Unit Thickness: 1 inch.
 - 2. Thickness of Each Glass Lite: 1/4"
 - 3. Outdoor Lite: Fully tempered float glass.
 - 4. Interspace Content: Argon.
 - 5. Indoor Lite: Laminated glass.
 - 6. Spacer Color: Black

7. Low-e Coating: Second side.

2.7 GLAZING SEALANTS

- A. Glazing Sealant: Neutral-curing silicone glazing sealant complying with ASTM C 920, Type S, Grade NS, Class 25, Use NT.
 1. Products: Provide glazing sealant meeting specified requirements by one of the following or approved equal subject to compliance with specified requirements:
 - a. Dow Corning Corporation.
 - b. GE Advanced Materials - Silicones
 - c. Tremco Incorporated
- B. Low-Emitting Materials: Sealants shall have a VOC content of not more than 250 g/L.
- C. Low-Emitting Materials: Sealants shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Comply with combined recommendations of manufacturers of glass, sealants, gaskets, and other glazing materials, unless more stringent requirements are contained in GANA's "Glazing Manual."
- B. Set glass lites in each series with uniform pattern, draw, bow, and similar characteristics.
- C. Remove nonpermanent labels, and clean surfaces immediately after installation.

END OF SECTION 088000

TOWN OF HAMDEN

GENERAL BID SPECIFICATIONS -- PART A

Bids shall be made on the bid forms furnished by the Town, without alteration. Bids shall be submitted in a sealed envelope, stating on the outside of the envelope the words "BID DOCUMENTS", the Town's bid number, the title of the Project, the title of the bid package for which a bid is being submitted, and the time and date of the bid opening. All bidders shall provide two copies of their bid, unless otherwise stated.

Bids received after the bid opening deadline shall be rejected. All spaces on the bid form must be filled in with figures and words or the Town, in its sole discretion, may reject the bid as non-responsive. No faxed or emailed bids are allowed.

BID SECURITY: Each bid shall be accompanied by a certified check or bid bond for five percent (5%) of the total bid. The Bid Security will be returned by the Town upon signing of the contract with the successful bidder. Checks or bonds must be made to the order and for the benefit of the "Town of Hamden". Security may be held by the Town of Hamden for a period not to exceed 90 days from the date of the opening of the bids for the purpose of reviewing the bids. Bids shall not be combined, unless otherwise permitted in the Invitation to Bid or Instructions to Bidders. A separate bid surety shall be presented for each bid.

LIQUIDATED DAMAGES: The successful bidder, upon his/her/its failure or refusal to sign the contract within five (5) business days of receipt of the contract from the Town, shall forfeit to the Town as liquidated damages for such failure or refusal an amount equal to the security deposited with his/her bid.

The Town may make such investigations and conduct such scope reviews as deemed necessary by the Town in order for the Town to determine the ability of the bidder to perform the work and the bidder shall promptly, upon the Town's request, furnish to the Town all such data for this purpose. The Town expressly reserves the right to reject a bid if, in the Town's sole discretion, the Town determines that a bid is non-responsive, a bidder is not responsible, a bidder is not qualified to perform the work or the Town otherwise determines that the award of a contract to the bidder is not in the best interest of the Town. Conditional bids will not be accepted.

SUBCONTRACTORS: The bidder is specifically advised that any person, firm or other party to whom bidder intends to award a subcontract or purchase order must be acceptable to the Town and that approval of the proposed subcontract award cannot be sought from the Town unless and until the successful bidder submits all information and evidence to the Town regarding the qualifications, experience and responsibility of the proposed subcontractor. Although the bidder is not required to attach such information to its bid, the bidder is hereby advised of this requirement so that it may plan accordingly and prevent delays.

MODIFICATION: Any bidder may modify his/her/its bid prior to the scheduled deadline for receipt of bids. See paragraph one above. The bidder wishing to modify its bid shall submit such modified bid in accordance with paragraph one above, shall unequivocally indicate that its prior bid is superseded by the modified bid and shall submit its modified bid in an envelope clearly marked "**MODIFIED BID**".

ERRORS: The Town, in its sole discretion, reserves the right to waive typographical or technical defects in the bid, as well as its right to correct an award erroneously made as a result of a clerical error on the part of the Town of Hamden.

Revised November 2, 2016

PERMITS/LICENSES: All applicable permits and licenses shall be obtained at the sole cost of bidders. No permits or permit fees shall be waived by the Town unless otherwise stated in the Town's Invitation to Bid or Instructions to Bidders.

OBLIGATIONS OF BIDDER: Each bidder shall, prior to submitting a bid, familiarize itself with the conditions under which the work will be performed and conduct its own due diligence. Bidders shall be presumed to have read and to be thoroughly familiar with the specifications and all bid documents. The failure of any bidder to request, receive or examine any information or the failure of the bidder to familiarize itself with the conditions relating to the performance and timing of the work shall in no way relieve any bidder from any obligation in respect to the bid and shall not subject the Town to any liability whatsoever.

Furthermore, the bidder is responsible for being aware of and conforming in all respects to all existing Federal, State of Connecticut, and Town of Hamden Statutes, Ordinances, Regulations, laws and other legal applicable legal requirements, regardless of whether any such applicable requirements are specifically identified in the bid documents.

WITHDRAWAL OF BIDS: Bids may be withdrawn prior to the time fixed for opening by submitting written notification of withdrawal to the Town prior to the bid opening deadline.

Negligence or mistake on the part of the bidder in preparing the bid confers no right of withdrawal or modification of the bid after such bid has been opened.

"OR EQUAL" CLAUSE: Whenever a material, article or piece of equipment is identified in the bid document by reference to manufacturers' or vendors' names, trade names, catalog numbers, etc., it is intended to establish a standard, unless otherwise stated; any material, article, or equipment of other manufacturers and vendors which will perform adequately the duties imposed by the general design may be considered equally acceptable if, in the opinion of the Town, the material, article, or equipment so proposed is of equal substance and function. Any substitutions must be approved in writing by the Purchasing Agent or his designee, who shall have sole discretion to determine the acceptability of the proposed substitute.

PATENTS: The contractor shall indemnify, defend and hold harmless the Town and its officers, agents, and employees from and against liability and costs of any nature or kind, including cost and expenses for, or on account of, any patented or unpatented invention, process, article, or appliance manufactured or used in the performance of the contract, including its use by the Town unless otherwise specifically stipulated in the contract or bid documents.

NON-COLLUSIVE BID STATEMENT: All bidders shall be required to sign the non-collusive statement attached.

FUNDING: The municipal non-appropriation clause may be applicable.

Applicable if checked

PERFORMANCE AND **PAYMENT BONDS:** To ensure the delivery of goods and services in conformity with the specifications provided and payment of all subcontractors and suppliers, bidders shall provide payment and performance bonds for any project (1) which is governed by Connecticut's Little Miller Act, C.G.S. §49-41 or (2) for which the Town requires the provision of payment and performance bonds. Successful bidders shall provide the Town with payment and performance bonds, at the bidder's expense, each for the full amount of the contract awarded.

Revised November 2, 2016

The Town shall be the Obligee under each bond and the bonds shall be issued by a company authorized to conduct surety business in the State, listed on the U.S. Department of the Treasury's List of Approved Sureties and subject to approval by the Town.

- INSURANCE:** The contractor will provide adequate proof of insurance to the Town for the types of insurance and limits indicated below, providing for all of its operations performed in compliance with this contract.

The successful bidder shall obtain and pay for the insurance coverage described below with the indicated minimum limits. Bidders agree to furnish Certificates of Insurance to the Town and/or its Board of Education, certifying coverage to be in effect for the term of this contract and that the Town and/or Board of Education will be given sixty (60) days prior written notice of cancellation or non-renewal.

These requirements if checked also apply to any subcontractor or common carrier used by the Bidder.

- I. WORKERS COMPENSATION

Connecticut	Statutory Limits
Applicable Federal	Statutory Limits
Employer's Liability	\$100,000 per Accident
	\$100,000 Disease per Employee
	\$500,000 Policy Limit

- II. COMMERCIAL GENERAL LIABILITY

Each Occurrence	\$1,000,000
Fire Damage	\$ 100,000
Medical Expense	\$ 5,000
Personal Injury/Advertising	\$ 1,000,000
General Aggregate	\$ 3,000,000
Products & Completed Operations Aggregate	\$ 1,000,000
Body Injury and Property Damage	\$ 1,000,000

- III. BUSINESS AUTOMOBILE LIABILITY (including owned, hired & non-owned vehicles)

Liability (Combined Single Limit)	\$1,000,000
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(If hazardous material or potential pollutants are transported, MCS90 – Accidental Pollution coverage is required)

- IV. UMBRELLA/EXCESS LIABILITY (If Required)

Liability Limit – Each Occurrence over primary	<u>\$5,000,000</u>
Self-Insured retention	\$10,000

- V. RAILROAD PROTECTIVE LIABILITY (If Required)

Bodily Injury and Property Damage	\$1,000,000 Each Occurrence
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Revised November 2, 2016

\$1,000,000 Aggregate

VI. POLLUTION LIABILITY (If Required)
Bodily Injury and Property Damage \$1,000,000 Each Occurrence
\$1,000,000 Aggregate

VII. PROFESSIONAL LIABILITY (If Required)
\$3,000,000 Each Occurrence
\$3,000,000 Aggregate

VIII. MONEY & SECURITIES-BROAD FORM
Limit \$(Insert Limit)

IX. The Town of Hamden and/or Hamden Board of Education to be named as additional insured on all insurance policies, except Workers Compensation and Professional Liability.

X. The vendor shall hold the Town of Hamden and/or Hamden Board of Education harmless for and against any and all injuries to persons and/or property resulting out of performance of this contract and resulting from the bidder's negligence.

ITEM IX AND X MUST APPEAR ON THE FACE OF THE INSURANCE CERTIFICATE IN THE SECTION ENTITLED "DESCRIPTION OF OPERATION"

Occupational Safety and Health Administration Requirements; Safety Compliance:
According to Connecticut General Statutes, Section 31-53b (a) each contract entered into on or after July 1, 2007, for the construction, remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public building project by the state or any of its agents, or by a political subdivision of the state or any of its agents, where the total cost of all work to be performed by all contractors and subcontractors in connection with the contract is at least one hundred thousand dollars (\$100,000.00) shall contain a provision requiring that, not later than thirty days after the date such contract is awarded, each contractor furnish proof to the Labor Commissioner that all employees performing manual labor on or in such public building, pursuant to such contract, have completed a course of at least ten hours in duration in construction safety and health approved by the federal Occupational Safety and Health Administration or, in the case of telecommunications employees, have completed at least ten hours of training in accordance with 29 CFR 1910.268. The contractor shall familiarize itself with all aspects of state law and any applicable regulations pertaining to these requirements in order to ensure full compliance. Moreover, contractor shall be solely responsible for full and timely compliance with all federal, state and local safety standards, rules and regulations.

Revised November 2, 2016

INDEMNITY/HOLD HARMLESS: The contractor's insurance policies will be endorsed to provide for the Town of Hamden to be named as an additional insured. The contractor will indemnify and save harmless the Town of Hamden from all suits and actions related to injuries to and/or damage to the property of others as a result of the activities of the contractor, its servants and agencies acting for the contractor.

CERTIFICATE OF INSURANCE: The contractor, prior to the start of any work under this contract, shall provide the Town's Purchasing Office with a certificate of insurance to conform to the following:

- a. Form(s) acceptable to the Town of Hamden.
- b. Insurance provided by insurance companies authorized to write coverage in the State of Connecticut.
- c. Policy dates must cover the term of this contract.
- d. Certificate will provide for at least 30 days' notice to the Town of Hamden prior to cancellation.
- e. All additional insured certificates are to list the Town of Hamden.

Under no circumstances shall the contractor begin work until (1) the contract for same shall have been signed by all parties, (2) the required bonds have been furnished by contractor and approved by the Town, (3) the required certificates of insurance have been filed with and approved by the Town's Purchasing Office and (4) the Contractor has been duly instructed in writing by the Town to proceed with the work. If the contractor commences the work before the provisions referred to in this paragraph are fulfilled, the Town, in its sole option, may cancel or terminate the contract without penalty or liability chargeable to the Town.

LICENSURE: At the time of the bid submissions, bidders shall possess the necessary license(s) to perform the work that is the subject of this invitation to bid.

NON-RESIDENT CONTRACTORS: Out of state contractors must post a bond with the Connecticut Department of Revenue Services. The non-resident contractor must receive a Connecticut tax registration number by completing and submitting form REG-1. Non-resident contractors are directed to familiarize themselves and achieve full compliance with applicable requirements, including Form AU-766.

Non-Discrimination and Affirmative Action: The successful bidder, in performing under this contract, shall not discriminate against any worker, employee or applicant, or any member of the public, because of race, creed, color, age, marital status, sexual orientation, national origin, ancestry, sex, mental retardation or physical disability, including but not limited to blindness, unless it is shown by the contractor that such disability prevents performance of the work involved in any manner prohibited by the laws of the United States or the State of Connecticut, nor otherwise commit an unfair employment practice. The successful bidder further agrees that this article, (and any additional provisions required by law), will be incorporated by such contractor in all contracts entered into in connection with this contract. The following principles and requirements of Equal Opportunity and Affirmative Action, as incorporated herein, will be incorporated into "Equal Opportunity - Non-Discrimination Clause" to be included in all bid documents, purchase orders, leases and contracts. The principles of Affirmative Action are addressed in the 13th, 14th and 15th Amendments of the United States Constitution, Civil Rights Act of 1964, Equal Pay Act of 1963, Title VI and VII of the 1964 United States Civil Rights Act, Presidential Executive Orders 11246, 11375, 11478 (nondiscrimination under federal contracts), Act 1, Section 1 and 20 of the Connecticut Constitution, Governor Grasso's Executive Order Number 11, Governor O'Neill's Executive Order Number 9, the Connecticut Fair Employment Practices Law (Sec. 46a-60-69) of the Connecticut General Statutes, Revised November 2, 2016

Connecticut Code of Fair Practices (46a-70-81), Deprivation of Civil Rights (46a-58 (a)(d)), Public Accommodations Law (46a-63-64), Discrimination against Criminal Offenders (46a-80), definition of blind (46a-51(1)), definition of Physically Disabled (46a-51 (15)), definition of Mentally Retarded (46a-51-13), cooperation with the Commission on Human Rights and Opportunities (46a-77), Sexual Harassment (46a-60 (a)-8), Connecticut Credit Discrimination Law (360436 through 439), Title 1 of the State and the Local Fiscal Assistance Act 1 1972. Every contract to which the State is party must contain the nondiscrimination and affirmative action provisions provided in the Connecticut General Statutes Section 4a-60a. The successful bidder also agrees to comply with all provisions of the Town's Charter and Code of Ordinances –“Town of Hamden, Chapter 110, “Business Transactions with Town”. The contractor shall cooperate fully with the Connecticut Commission on Human Rights and Opportunities (“the Commission”) and shall submit periodic reports of employment and subcontracting practices to the Commission in such a form, in such a manner, and at such time as may be prescribed by the Commission.

Set Asides: If this Project is funded in whole or in part by State of Connecticut funds, Public Act 15-5 (§§58-71 and 88) requires that, effective with all contracts executed after October 1, 2015, all solicitations for municipal public works contracts funded in whole or in part with State funds state in the notice of solicitation that the contract must comply with the set asides mandated by Public Act 15-5. The set aside requirements include a requirement that 25% of the total value of contracts in excess of \$50,000.00 be set aside for exclusive bidding for “small contractors,” as defined by Section 58 (a) (1), and 25% of such amount (that is, 6.25% of the total value), be set aside for “minority business enterprises,” as defined by Section 58(a) (4). For contracts in excess of \$50,000.00, bidders must have obtained Commission approval of their Affirmative Action Plan prior to contract execution. **BIDDERS ARE EXPRESSLY DIRECTED TO REVIEW PUBLIC ACT 15-5, SECTIONS 58-71 AND 88, TO FAMILIARIZE THEMSELVES WITH THE REQUIREMENTS OF SUCH LAWS. BIDDERS SHALL BE DIRECTLY AND SOLELY RESPONSIBLE FOR COMPLIANCE WITH THE REQUIREMENTS OF P.A. 15-5, SECTIONS 58 THROUGH 71 AND 88. THE TOWN ALSO DIRECT BIDDERS' ATTENTION TO THE SECTIONS 63 AND 64 (NON-DISCRIMINATION REQUIREMENTS) AND 66-68 (AFFIRMATIVE ACTION REQUIREMENTS).**

Regardless of whether P.A. 15-5 is applicable to this Project, the contractor shall provide reasonable technical assistance and training to minority business enterprises to whom work is subcontracted to promote the participation of such concerns, to make a good faith effort to award a reasonable proportion of all subcontractors to such enterprises, and undertake such other reasonable activities or efforts as the Commission may prescribe to ensure the participation of minority business enterprises as contractors and subcontractors. The contractor shall include a provision in all subcontracts with minority business enterprises requiring the minority business enterprise to provide the Commission with such information on its structure and operations as the Commission finds necessary to make an informed determination as to whether the minority business enterprise is owned and operated by members of a minority group.

The contractor shall maintain full and accurate data, such as contract monitoring reports, for a period of three (3) years from the date of substantial completion of the project or for such longer period as is required by the law then in effect with regard to records retention. The contractor shall not discharge, discipline, or otherwise discriminate against any person who has filed a complaint, testified, or assisted in any proceeding with the Commission.

The contractor shall make available for inspection and copying any supporting data requested by the Commission and make available for interview any agent, servant, or employee having knowledge of any matter concerning the investigation of a discriminatory practice complaint of any matter relating to a contract compliance review.

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CLAYTON ACT: The contractor or subcontractor offers and agrees to assign to the public purchasing body all right, title and interest in and to all causes of action it may have under Section 4 of the Clayton Act, 15 U.S.C. 15 or under Chapter 624 of the General Statutes of Connecticut arising out of the purchase of services, property or intangibles of any kind pursuant to a public purchase contract or subcontract. This assignment shall be made and become effective at the time the public purchasing body awards or accepts such contract, without further acknowledgment by the parties.

AWARD TO OTHER THAN THE APPARENT LOW BIDDER: The Town of Hamden reserves the right to award the work to a bidder other than the one which submitted the lowest price if it deems such action to be in the best interest of the Town of Hamden.

WAGE RATES: Workers employed in the various occupations on this named project shall be required to receive the minimum rates established by the State of Connecticut Labor Department Division of Regulations of Wages.

PRICES: Prices quoted for merchandise, supplies, or equipment shall be the net prices delivered into the Town of Hamden.

Town of Hamden reserves the right to award separate items to separate bidders. Bidders may indicate exceptions to this.

Bidders must include Federal ID number or Social Security number to be considered for bid approval.

DAVIS-BACON ACT - PREVAILING RATES OF WAGES

If this Project is subject to the Connecticut Prevailing Wage law, C.G.S. §31-53 *et seq.*, the Town of Hamden shall require the contractor to make payment of prevailing rates of wages in accordance with the wage section of the Davis-Bacon Act, Town of Hamden, Hamden Code, S 97.35 and State Statute 31-53, Part III. State Contracts, and shall institute such investigations and periodic monitoring procedures as deemed necessary to determine compliance with labor standard provisions and the Federal requirements of the Act as amended.

AS PER THE TOWN OF HAMDEN AFFIRMATIVE ACTION RESOLUTION:

It is in the best interest of the Town to encourage minority and/or female business enterprise. Where two substantially similar Hamden bids are submitted, preference may be given to the minority and/or female contractor.

RESERVED RIGHTS OF TOWN:

The Town of Hamden reserves the right to accept or reject any or all bids or proposals; to waive any technicality in a bid or proposal or part thereof submitted, and to accept the bid deemed to be in the best interest of the Town of Hamden. Further, the Town reserves the right to split bids and quotations among two or more bidders. The Town reserves the right to reject any bid submitted by a joint venture if the Town determines that any entity to the joint venture fails to satisfy the Town's requirements (i.e., bonding, insurance, qualifications, responsibility).

PREQUALIFICATION REQUIREMENT: The Connecticut Department of Administrative Services' Contractor Prequalification Program (C.G.S §4a-100) requires all contractors to prequalify before they can bid on a contract or perform work pursuant to a contract for the construction, reconstruction, alteration, remodeling, repair or demolition of any public building or any other public work by the state or a municipality, estimated to cost more than \$500,000 and which is

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funded in whole or in part with state funds, If this requirement is applicable to the project that is the subject of this invitation to bid, bidders shall provide their bid update statement with their bid.

TIME OF COMPLETION AND LIQUIDATED DAMAGES

Bidders understand and acknowledge that timely completion of the Project is essential. Failure of the Contractor to achieve substantial completion of the Project within the calendar days stated herein will result in the Owner and the public incurring damages, additional costs and inconveniences that would be impossible or extremely difficult to accurately quantify at the time. Therefore, the bidder and the Town agree that, if the Contractor fails to satisfactorily complete the Project hereunder within the time specified or within any extension of time that may have been allowed, there shall be deducted from any monies due or that may become due the Bidder,

the sum of _____ (\$_____) for each and every calendar day, including Saturdays, Sundays and legal holidays, that the Project remains incomplete. This sum shall not be imposed as a penalty, but as liquidated damages due Owner from Contractor by reason of the damages incurred, inconvenience and additional costs and expenses to the public together with other problems suffered as a result of any such delay thereby occasioned.

DISCREPANCY IN BID FORM:

In the event of any discrepancy between the amount written in numerical figures and the amount stated in written words, the amount written in words will be controlling.

The Town of Hamden hereby notifies all bidders that the Town's contract with the successful bidder shall contain the following provision:

Payment to Vendor shall be withheld by the Town when any real or personal property taxes, sewer assessment fees, sewer use charges, fines, interest, penalties, police or fire extra duty, police vehicle use fees, or lien fees imposed, assessed or otherwise levied by the Town of Hamden and due from/payable by Vendor are delinquent.

For purposes of this Contract, a tax, fee, charge, or fine shall be deemed delinquent if it remains unpaid, in whole or in part, for a period of thirty (30) days following the date upon which payment of such tax, fee, charge, or fine was due, together with any accrued interest and penalties.

The Town expressly reserves the right, in its sole discretion, to set off against its account payable to Vendor and apply any sums due to Vendor by Town pursuant to this Contract to any delinquent real or personal property taxes, sewer assessment fees, sewer use charges, fines, interest, penalties, or lien fees imposed by the Town of Hamden and due from/payable by Vendor

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**TOWN OF HAMDEN
LEGISLATIVE COUNCIL**

PRESENTED BY: _____

ORDINANCE AMENDING CONSTRUCTION CONTRACTS ORDINANCE

WHEREAS, the Town of Hamden adopted a local prevailing wage ordinance requiring contractors working on town public works projects to pay laborers and mechanics wages based upon the wages established by the State of Connecticut Department of Labor to be prevailing for the corresponding classes or laborers and mechanics on projects of a similar character to the contract work in town; and

WHEREAS, the threshold for local public works projects covered by the prevailing wage ordinance has not increased since the adoption of the ordinance; and

WHEREAS, the Town wishes to amend its ordinance so that the Town's threshold for prevailing wages is 90% of that set by the Connecticut General Statutes.

NOW THEREFORE BE IT ORDAINED that Section 97.35 (A) of the Hamden Code of Ordinances is hereby amended and restated as set forth below:

CONSTRUCTION CONTRACTS

97.35: WAGES TO BE STATED IN CONTRACT.

(A) The advertised specification for every public works project by the Town of Hamden that is 90% or more of the amount set forth by the Connecticut General Statutes, as may be amended, for new construction and/or that is 90% or more of the amount set forth by the Connecticut General Statutes, as may be amended, for remodeling, refinishing, refurbishing, rehabilitation, alteration or repair work, and which requires or involves the employment of mechanics, laborers or workmen employed upon the work contracted to be done, shall contain a provision stating the minimum wages to be paid various classes of laborers, mechanics and workman shall be based upon the wages established by the State through its Department of Labor to be prevailing for the corresponding classes of mechanics, laborers or workmen employed on projects of a character similar to the contract work in the town.

(B) Every contract based upon these specifications shall contain a stipulation that the contractor or his subcontractor shall pay all mechanics, laborers or workmen employed directly upon the site of the work, unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account, the full amount accrued at time of payment, computed at wage rates not less than those stated in the advertised specifications, regardless of any contractual relationship which may be alleged to exist between the contractor or subcontractor and such

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laborers, mechanics and workmen, and that the scale of wages to be paid shall be posted by the contractor in a prominent and easily accessible place at the site of the work.

(C) Every contract based upon these specifications shall further stipulate that there may be withheld from the contractor so much of accrued payments as may be considered necessary by the Town to pay to laborers, mechanics and workmen employed by the contractor or any subcontractor on the work difference between the rates of wages required by the contract to be paid laborers, mechanics or workmen on the work and the rates of wages received by such laborers, mechanics or workmen and not refunded to the contractor, subcontractor or other agents.

(D) Every contract based upon these specifications shall contain the further provision that in the event it is found by the Town that any laborer, mechanic or workmen employed by the contractor or any subcontractor directly on the site of the work covered by the contract has been or is being paid a rate of wages less than the rate of wages required by the contract or be paid as aforesaid the Town may, by written notice to the contractor, terminate the contract, terminate the contractor's right to proceed with the work or such part of the work as to which there has been a failure to pay said required wages and to prosecute the work to completion by contract or otherwise, and the contractor and his sureties shall be liable to the town for any excess cost occasioned the town thereby.

MISCELLANEOUS REQUIREMENTS:

Questions/Requests for Information: All Questions shall be submitted in writing only and e-mailed to purchasing@hamden.com at least seven (7) days prior to the bid opening date. Bidders shall not attempt or engage in any ex parte or verbal communications with Town personnel prior to the bid opening deadline.

All Applicable Codes to Be Met: All construction shall meet all applicable Building and Fire Codes, as well as ADA requirements.

Pre-Bid Meeting(s): Failure to attend a mandatory pre-bid meeting may be deemed, by the Town, grounds for rejection of your bid.

Deliveries: All deliveries are inside deliveries.

Provision of Bid Packets, Submission of Bids: Bid packets will be mailed upon request.

Bid packets will not be faxed.

Bid proposals must be mailed back or delivered to:

Hamden Government Center
Finance Department
2750 Dixwell Avenue
Hamden, CT 06518.

Please include one original and three copies of your bid unless otherwise specified.

ALL ENVELOPES MUST BE MARKED PROPERLY WITH BID #, BID DATE, AND BID TITLE ONLY.

Ownership of Documents – All qualification statements, proposals and bids submitted by bidders are to be the sole property of the Town and subject to the provisions of the Connecticut General Statutes (re: Freedom of Information).

Ownership of Subsequent Products – Any work product, whether acceptable or unacceptable, developed under a contract awarded as a result of this invitation to bid is to be the sole property of the Town unless stated otherwise in the invitation to bid or contract.

Timing and Sequence – Timing and sequence of events resulting from this invitation to bid will ultimately be determined by the Town.

No Oral Agreements – The Town, its agencies and employees, shall not be responsible for any alleged oral agreement or arrangement made by a bidder with any agency or employee of the Town or District.

Rejection for Default or Misrepresentation – The Town reserves the right to reject the bid of any bidder that is in default of any prior contract or for misrepresentation.

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Assigning, Transferring of Agreement – Bidders are prohibited from assigning, transferring, conveying, subletting or otherwise disposing of this agreement, their rights, title or interest therein or their power to execute such agreement by any other person, company, or corporation without the prior consent and approval in writing by the Town.

Cost of Preparing Qualification/Proposal Statements – The Town shall not be responsible for any expenses incurred by any bidder in preparing and submitting a bid.

Thank you.

Philip Goodwin
Purchasing Agent

GENERAL BID SPECIFICATIONS - PART B

1. **Nondiscrimination under Title VI of the Civil Rights Act of 1964.** Contractor shall comply with the requirements of Title VI of the Civil Rights Acts of 1964 (PL 88-352), 42 U.S.C. Sec. 2000d et. Seq. and the Fair Housing Act (42 U.S.C. 3601-20) and Executive Order 11063 and the HUD regulations with respect thereto including the regulations under 24 CFR Part I. In the sale, lease, or other transfer of land acquired, cleared or improved with assistance provided under the Agreement, the CONTRACTOR shall cause or require a covenant running with the land to be inserted in the deed or lease or other instrument a restriction prohibiting discrimination with respect to race, color, creed, sex, or national origin, in the sale, lease or rental, or in the use or occupancy of such land or any improvements erected or to be erected thereon and providing that the CONTRACTOR and the United States are beneficiaries of and entitled to enforce such covenant. The CONTRACTOR in undertaking its obligation in carrying out the program assisted hereunder, agrees to take such measures as are necessary to enforce such covenant and will not itself so discriminate.
2. **Fair Housing Opportunities Under Title VIII of the Civil Rights Act of 1968 and Fair Housing Act (42 U.S.C. 3601-20).** Contractor shall comply with the requirements of Title VIII of the Fair Housing Act as amended (PL 90-284). The CONTRACTOR shall provide for fair housing opportunities where possible. The CONTRACTOR is prohibited from discriminating in the sale or rental of housing, the financing of housing, or the provision of brokerage services, including in any way making unavailable or denying a dwelling to any person, because of race, color, religion, sex or national origin. Title VIII further requires programs and activities relating to housing and community development to be administered to affirmatively further fair housing.
3. **Prohibition Against Payments of Bonus or Commission.** The funds paid to Contractor shall not be used in the payment of any bonus or commission for the purpose of obtaining HUD approval of the application for such assistance, or HUD approval of applications for additional assistance, or any other approval or concurrence of HUD required under this AGREEMENT, Title I of the Housing and Community Development Act of 1974, as amended, or HUD regulations with respect thereto; it being understood, however, that reasonable fees or bona fide technical, consultant, managerial or other such services, are not hereby prohibited if otherwise eligible as program costs.
4. **"Section 3" Compliance in the Provision of Training Employment and Business Opportunities.** Every application, recipient, contracting party, contractor, and subcontractor shall incorporate, or cause to be incorporated, in all contracts, the following clause (referred to as a Section 3 clause):
 - a) The work to be performed under this contract is on a project assisted under a program providing direct Federal financial assistance from the Department of Housing and Urban Development and is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u. Section 3 requires that to the greatest extent feasible opportunities for training and employment be given lower income residents of the project area and contracts for work in connection with the project area and contracts for work in connection with the project be awarded to business concerns which are located in or owned in substantial part by persons residing in the area of the project.
 - b) The parties to this contract will comply with the provisions of said Section 3 and the regulations issued pursuant thereto by the Secretary of Housing and Urban Development set forth in 24 CFR Part 135, and all applicable rules and orders of the Department issued thereunder prior to the execution of this Contract. The parties to this contract certify and agree that they are under no contractual or other disability, which would prevent them from complying with these requirements.

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c) The CONTRACTOR will send to each labor organization or representative of workers with which he has a collective bargaining agreement or other contract or understanding, if any, a notice advising the said labor organization or workers' representative of his commitments under this Section 3 clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment or training.

d) The CONTRACTOR will include this Section 3 clause in every subcontract for work in connection with the project and will, at the direction of the applicant for or recipient of Federal financial assistance, take appropriate action pursuant to the subcontract upon a finding that the subcontractor is in violation of regulations issued by the Secretary of Housing and Urban Development, 24 CFR Part 135. The CONTRACTOR will not subcontract with any subcontractor unless the subcontractor has been found in violation of regulations under 24 CFR Part 135 and will not let any subcontract unless the subcontractor has first provided it with a preliminary statement of ability to comply with the requirements of these regulations.

e) Compliance with the provisions of Section 3, the regulations set forth in 24 CFR Part 135, and all applicable rules and orders of the Department issued thereunder prior to the execution of the Contract, shall be a condition of the Federal financial assistance provided to the project, binding upon the applicant or recipient for such assistance, its successors, and assigns. Failure to fulfill these requirements shall subject the applicant or recipient, its contractors and subcontractors, its successors, and assigns to those sanctions specified by the grant or loan agreement or contract through which Federal assistance is provided, and to such sanctions as are specified by 24 CFR Part 135.

5. **Prevailing Salaries.** The CONTRACTOR shall be solely responsible for the determination of staff classifications and employ staff in relation to its personnel practices and salary ranges, including fringe benefits, in accordance with the Agreement.
6. **Anti-Kickback Rules.** Salaries of architects, draftsmen, technical engineers, technicians, laborers and mechanics performing work under this Agreement shall be paid unconditionally, and not less often than once a week, without deductions as are mandatory by law or permitted by the applicable regulations issued by the Secretary of Labor pursuant to the Copeland "Anti-Kickback Act" (18 U.S.C. 874) as supplemented in Department of Labor regulations (29 CFR, Part 3). The CONTRACTOR shall comply with all applicable regulations of said "Anti-Kickback Act" and shall insert appropriate provisions in all subcontracts relative to the work under this Agreement; and CONTRACTOR shall take steps to insure compliance by subcontractors with such regulations at all times. CONTRACTOR shall be responsible for the obtaining and submission of the affidavits of subcontractors required thereunder, except that the Secretary of Labor may specifically provide for variations of, or exemptions from, the requirements thereof.
7. **Non-Discrimination in Employment.** During the performance of this Contract, the CONTRACTOR agrees as follows:
 - a) The CONTRACTOR shall not discriminate against any employee or applicant for employment because of race, creed, color, sex or national origin. The CONTRACTOR shall take affirmative action to insure that applicants are employed and that employees are treated during employment without regard to their race, creed, color, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, transfer, recruiting or recruitment advertising, layoff, termination, rates of pay or other forms of compensation, and selection for training including apprenticeship. The CONTRACTOR agrees to post in conspicuous places available to employees and applicants for employment notices to be provided, setting forth the provisions of this Non-Discrimination in Employment Clause.

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b) The CONTRACTOR shall, in all solicitations or advertisements for employees placed by or in behalf of the CONTRACTOR; state that all qualified applicants will receive consideration for employment without regard to race, creed, color, sex, or national origin.

c) The CONTRACTOR shall comply with all provisions of Executive Order 11246 of September 24, 1965, entitled "Equal Employment Opportunity", as amended by Executive Order 11375 and Executive Order 12086, as supplemented in Department of Labor Regulations (41 CFR, Part 60), and all of the rules, regulations and relevant orders of the President's Committee of Equal Employment Opportunity in effect as of the date of this Agreement; and the CONTRACTOR shall furnish all information and reports required herein, and shall on demand permit access to its books, records, and accounts, in its possession or control, by TOWN and the said Committee for purposes of investigation to ascertain compliance with such rules, regulations and orders.

d) The CONTRACTOR will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided by the Contract Compliance Officer advising the said labor union or workers' representative of the CONTRACTOR'S commitment under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

e) In the event the CONTRACTOR'S noncompliance with the non-discrimination sections of the contract or with any of such rules, regulations, or orders, this contract may be canceled, terminated or suspended in whole or in part and the CONTRACTOR may be declared ineligible for further Government contracts or federally assisted construction contract procedures authorized in Executive Order 11246 of September 4, 1965, or by rule, regulations, or order of the Secretary of Labor, or as otherwise provided by law.

f) The Contractor will include the portion of the sentence immediately preceding paragraph (a) and the provisions of paragraph (a) through (g) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 25, 1965, as amended by Executive Order 11375 and 12086, so that such provisions will be binding upon each subcontractor or vendor. The CONTRACTOR will take such action with respect to any subcontractor or purchase order as the Department may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Department, the contractor may request the United States to enter into such litigation to protect the interest of the United States.

g) The CONTRACTOR further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 or September 24, 1965, as amended by Executive Orders 11375 and 12086, with a subcontractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the executive order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon CONTRACTOR and subcontractors by the Department of the Secretary of Labor pursuant to Part II, subpart D of the Executive Order.

h) No person in the United States shall on the ground of race, color, national origin, or sex be excluded from participation in, be denied the benefits of, or be subjected to the discrimination under any program or activity funded in whole or in part with funds made available under this title. Any prohibition against discrimination on the basis of age under the Age Discrimination Act of 1975, as amended, or with respect to an otherwise qualified handicapped individual as provided in Section 504 of the Rehabilitation Act of 1973, as amended, shall also apply to any such program or activity. Remedies described in Section 109 of the Housing and Community Development Act of 1974, as amended, as the regulations issued pursuant thereto, (24 CFR Section 570.601) shall apply, if failure to comply with this paragraph has been determined.

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8. **Employment of Certain Persons Prohibited.** No person under the age of sixteen years and no person who at the time is serving sentence in a penal or correctional institution shall be employed on the work covered by this Contract.
9. **Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970 and Federal Implementing Regulations.** Contractor and Owners shall to the greatest extent practicable under state law comply with Sections 301 and 302 of Title III, (Uniform Real Property Acquisition Policy) of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and will comply with Sections 303 and 304 of Title III and HUD implementing instructions in 24 CFR Part 42 and 570.602 (b), comply with Title II (Uniform Relocation Assistance) of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and HUD implementing regulations at 24 CFR Part 42 and 570.602 (a).
10. **Political Activity Hatch Act and Section 109 of HCD Act.** CONTRACTOR shall comply with the provisions of the Hatch Act and Section 109 of the Housing and Community Development Act of 1974, as amended, and the regulations pursuant thereto (24 CFR 570.601). Under no circumstances shall the CONTRACTOR and/or other recipients, subcontractors, and sub recipients use TOWN funds or persons employed in administering TOWN programs for the purposes of conducting any political activity.
11. **Executive Orders 11063, 12259, and Title VIII.** CONTRACTOR will comply with Executive Order 11063 as amended by Executive Order 12259 and the implementing regulations in 24 CFR Part 107 and Title VIII of the Civil Rights Act of 1968 (Pub. L.90-284) as amended.
12. **Historic Preservation.** CONTRACTOR will comply with the National Historic Preservation Act of 1966 (PL 89-665), Preservation of Historic and Archaeological Data Act of 1974 (PL 93-291), Procedures for Protection of Historic and Cultural Properties, Advisory Council on Historic Preservation (36 CFR 800), and the HUD regulations with respect thereto.
13. CONTRACTOR will comply with HUD Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794 et. seq.) provides:

No otherwise qualified individual with handicaps . . . shall, solely by reason of his or her handicap be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financing assistance.
14. **No Conflict of Interest:** Bidder certifies, by submitting a bid, that no owner, employee or family member (defined for purposes of this invitation to bid as a spouse, parent, sibling or child) of an owner or employee of bidder is a current or former employee of the Town or its Board of Education.

Bidder further certifies that no owner or employee of bidder has any interest, direct or indirect, which is incompatible with the proper discharge of the proposed duties in the public interest or that would tend to impair Bidder's independent judgment or action in the performance of the proposed duties.

Bidder certifies that it does not have any past, present or currently planned interests which are an actual or potential organizational conflict of interest with respect to performing the work for Town under this invitation to bid.

Bidder hereby covenants and agrees that no employee, elected official or appointed official of the Town or its Board of Education has any interest in this Agreement or will directly or indirectly benefit therefrom.

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15. Compliance with Town Regulations

Bidder shall cause all persons performing work pursuant to the contract between bidder and the Town to comply with all Town and Board of Education requirements, including instructions pertaining to conduct and to building access and related requirements issued by the Town and District, respectively. All personnel shall wear readily visible identification in a form that is satisfactory to the Town. The Town may promulgate and modify from time to time rules and regulations relating to conduct as the Town, in its sole discretion, may determine, and the contractor shall cause all persons performing work to comply with any such requirements.

16. Confidential Information

Bidder shall cause all persons under bidder's control who are providing services or materials under or through bidder's contract with the Town to preserve and protect all information of the Town and Hamden School District to which they may have access during the performance of work as confidential. Bidder expressly acknowledges that if the facilities that are the subject of the Project are school facilities or public buildings, the security and safety of the occupants, users and general public are of paramount importance and bidder shall observe and enforce appropriate security protocol to ensure the safety of users and occupants.

COMPLETE AND RETURN

BID #: 2857
BID TITLE Entrance Vestibule Door
Replacement Ridge Hill School

BID FORM

TO: Purchasing Agent
Hamden Government Center
2750 Dixwell Avenue
Hamden, CT 06518

I have received the bid documents entitled _____
and dated _____.

I have received Addenda dated as follows:

I have considered and included the provisions of the bid documents noted above in my bid. I have examined the bid documents and I submit the following BID:

In submitting this bid, I agree:

1. To hold my bid open until 60 days after the date on which bids are due.
2. To enter into and execute a contract provided by the Town, without alteration by me, if awarded on the basis of this bid, according to the contract form provided by the Town of Hamden.
3. To accomplish the work in accord with the Bid Specifications and Contract Documents and to the extent that there is a conflict between the provisions of any bid documents, the order of precedence shall require me to provide the item or service that is of the greater value or benefit to the Town of Hamden.
4. To begin the work in strict accordance with the project schedule or the Notice to Proceed issued by the Town and to complete the work within _____calendar days following Owner's date of Notice to Proceed.
5. The undersigned submits a bid bond in the sum of _____
_____ dollars (\$ _____) 5% of Base Bid, which sum is agreed shall become the sole and exclusive property of the Owner as liquidated damages to the Owner if the undersigned fails to execute a contract in conformity with the Bid Form and to furnish surety bonds and insurance policies in accordance with the General Conditions after due notification has been given.
6. I acknowledge that the Town of Hamden reserves the right to accept or reject any or all bids, alternates, options, or proposals; to waive any technical defect in a bid or part thereof submitted, and to accept the bid deemed by the Town to be in the best interest of the Town of Hamden.

Name:
Title:

Dated

Contractor Tax ID#

Contractor License #

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COMPLETE AND RETURN

BID #: 2857
BID TITLE: Entrance Vestibule Door
Replacement Ridge Hill School

NON-COLLUSIVE BID STATEMENT

The undersigned bidder, having fully informed itself regarding the accuracy of the statements herein, certifies that:

(1) The bid has been arrived at by the bidder independently and has been submitted without collusion with, and without any agreement, understanding, or planned common course of action with, any other vendor or bidder of materials, supplies, equipment, or services described in the invitation to bid, designed to limit independent bidding or completion, and

(2) The contents of the bid have not been communicated by the bidder or its employees or agents to any person not any employee or agent of the bidder or its surety on any bonds furnished with the bid and will not be communicated to any such person prior to the official opening of the bid.

The undersigned bidder further certifies that this statement is executed for the purposes of inducing the Town of Hamden to consider the bid and make an award in accordance therewith.

Legal Name of Bidder

Business Address

Signature and Title of Person
Authorized to Sign

Printed Name

Date

COMPLETE AND RETURN

BID #: 2857
BID TITLE: Entrance Vestibule Door
Replacement Ridge Hill School

NON-CONFLICT AFFIDAVIT OF RESPONDENTS

No Elected or Appointed Official, SBC member or other officer or employee or person whose salary is payable in whole or in part from the Town of Hamden OR Board of Education, nor any immediate family member thereof, is directly or indirectly interested in the Bid/Proposal, or in the supplies, materials, equipment, work or labor to which it relates, or in any profits thereof.

The undersigned further certifies that this statement is executed for the purpose of inducing the Town of Hamden to consider the statement of qualifications submitted herein.

State of Connecticut S.S.
County of _____

Subscribed and sworn before me this _____ day of _____, 20_____.

Legal Name of Respondent: _____

Business Name: _____
Business Address: _____

Signature and Title of Person

By: _____
Notary Public

My Commission Expires: _____
Date: _____

COMPLETE AND RETURN

BID #2857

You are required to furnish the following information to the Town of Hamden:

Name and address of Company _____
(Print or type) _____

Name and Title of Agent of Company _____
(Print or type)

Signature: _____ Date: _____

Telephone: _____ Email: _____

Fax: _____ Federal I.D. Number: _____

Lump sum price for equipment, material, and labor: \$ _____

\$ _____

WRITTEN AMOUNT

SCHEDULE OF ALTERNATES

Alternate No. 1: Remove existing and install new interior aluminum entrance doors, framing and hardware between Upper Level VESTIBULE A335 and LOBBY A336.

Price _____

Alternate No. 2: Remove existing and install new interior aluminum entrance doors, framing and hardware between Lower Level LOBBY A110 and VESTIBULES A109 and A111.

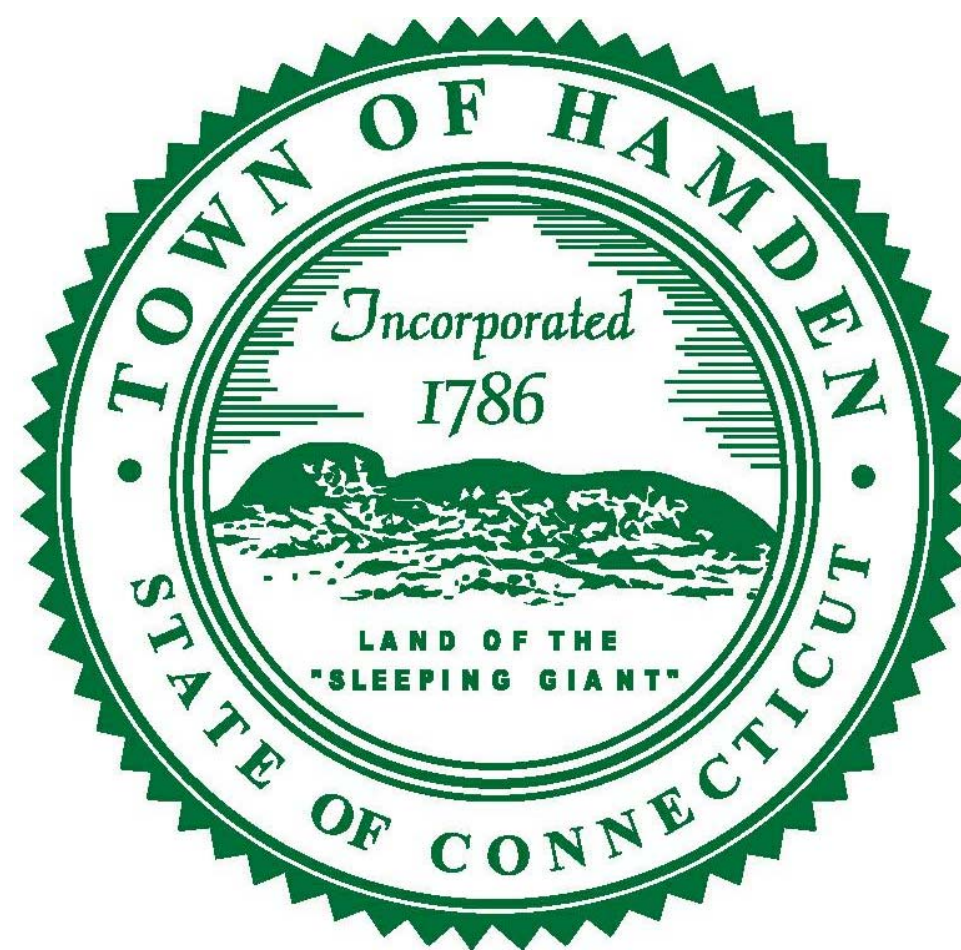
Price _____

Revised October 1, 2015

ENTRY VESTIBULE DOOR REPLACEMENT

RIDGE HILL SCHOOL

120 Carew Road
Hamden, Connecticut 06517



TOWN OF HAMDEN Connecticut

Prepared By:

ARCHITECT



CHRISTOPHER WILLIAMS ARCHITECTS, LLC
85 Willow Street Building 54
New Haven, CT 06511

CWA Project No.: 1809

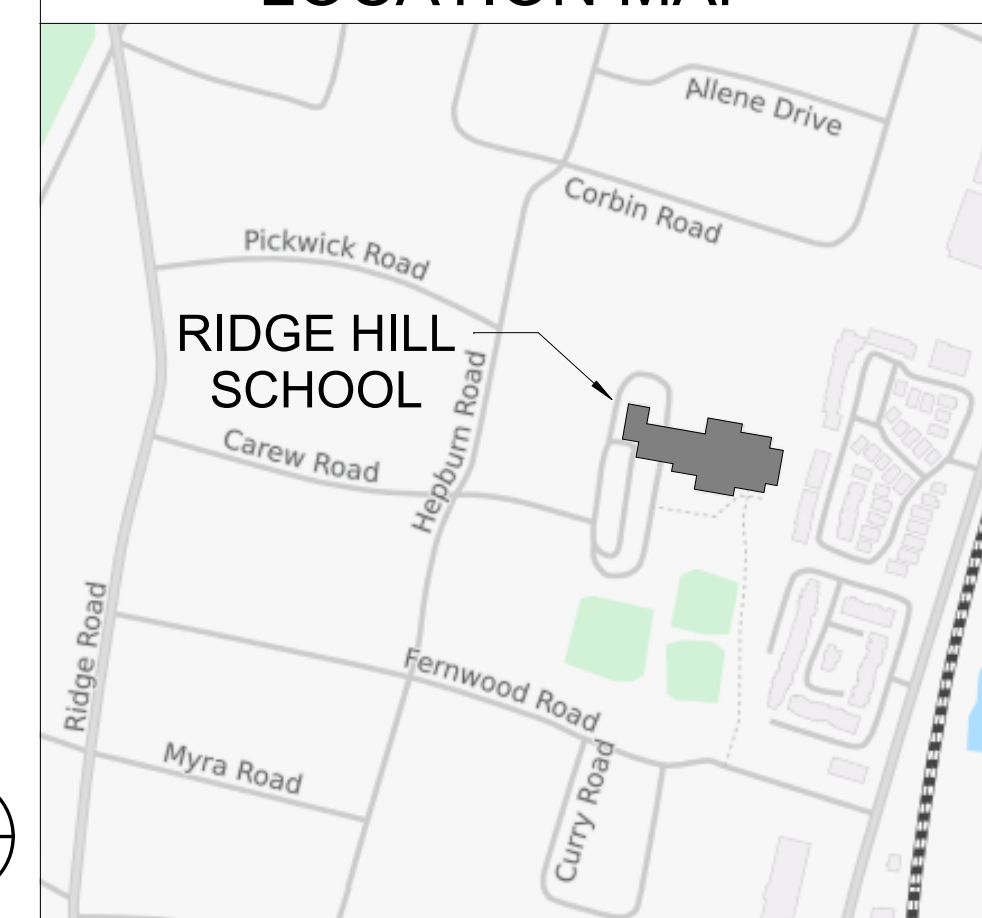
ISSUED FOR BIDDING: 06/04/2018

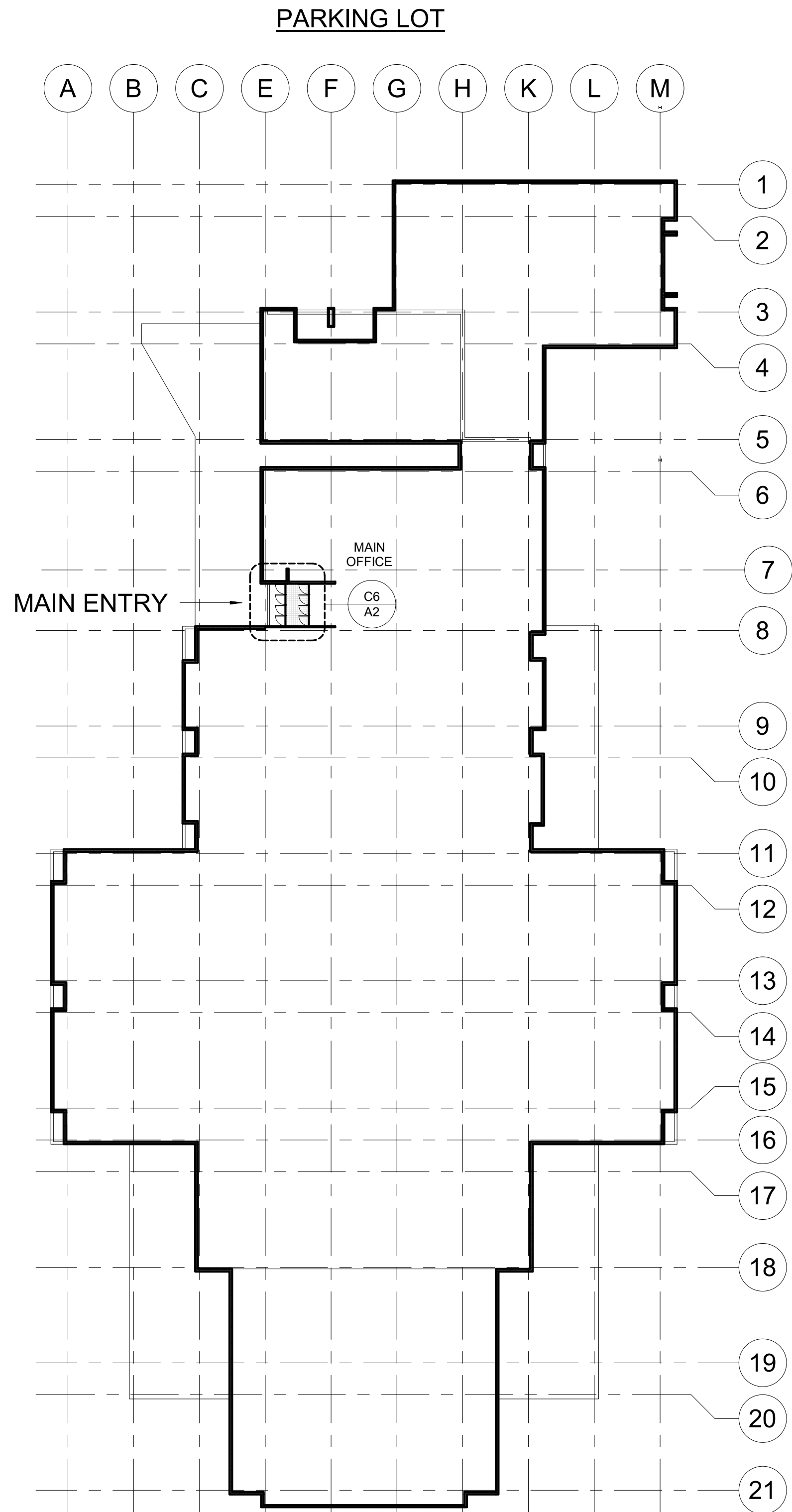
LIST OF DRAWINGS

No.	DRAWING NAME
-	COVER SHEET
A1	OVERALL FLOOR PLANS & NOTES
A2	PART PLANS - DEMO & NEW
A3	DOOR SCHEDULE & DETAILS

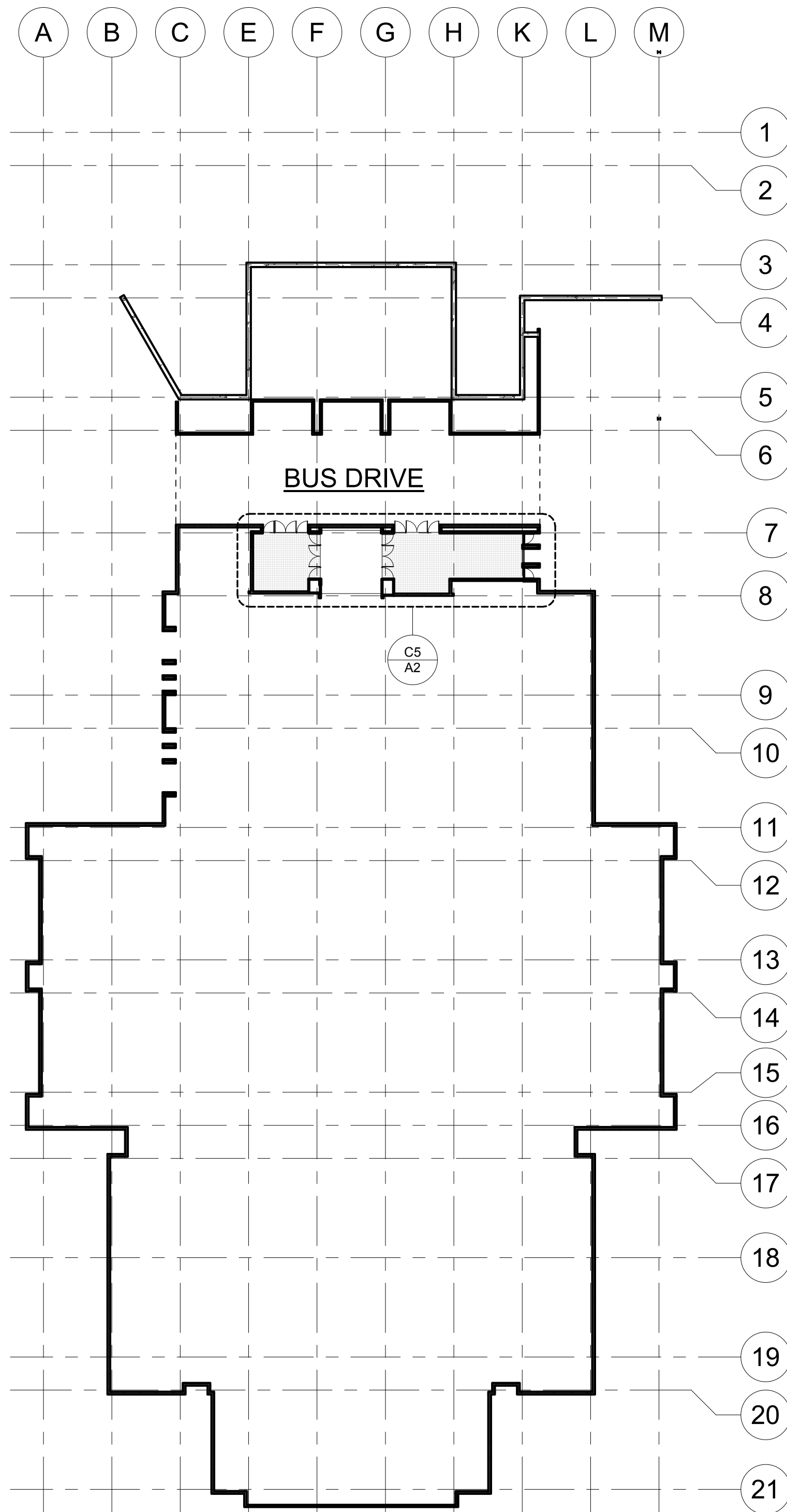
ISSUED FOR BIDDING 06/04/18

LOCATION MAP





A6 OVERALL UPPER LEVEL FLOOR PLAN
 1" = 30'-0"
 0' 15' 30' 60' 90'
 NORTH



A4 OVERALL LOWER LEVEL FLOOR PLAN
 1" = 30'-0"
 0' 15' 30' 60' 90'
 NORTH

PROJECT SCOPE

REMOVAL OF EXISTING AND INSTALLATION OF NEW ALUMINUM ENTRY DOORS, FRAMES AND HARDWARE @ LOWER LEVEL STUDENT BUS-DROP OFF AND ADJACENT STAIR #3 AND UPPER LEVEL MAIN ENTRY VESTIBULE

GENERAL NOTES

- EXERCISE CARE NOT TO DAMAGE EXISTING BUILDING ELEMENTS AND FINISHES TO REMAIN DURING CONSTRUCTION. IN THE EVENT THAT DAMAGE DOES OCCUR PATCH/REPAIR OR REPLACE DAMAGED ELEMENTS OR FINISHES IN KIND AND/OR TO MATCH EXISTING.
- PROVIDE TEMPORARY BARRICADES AND DUST ABATEMENT AS REQUIRED BY OWNER.
- THE PREMISSES SHALL BE KEPT FREE FROM ACCUMULATION OF TRASH AND CONSTRUCTION DEBRIS AT ALL TIMES. DISPOSE OF EXCESS TRASH AND DEBRIS OFF-SITE IN A SAFE, ACCEPTABLE MANNER.
- DIMENSIONS INDICATED ON DRAWINGS ARE TO BE USED FOR CONSTRUCTION. DO NOT SCALE DRAWINGS.
- FIELD VERIFY ALL (±) DIMENSIONS PRIOR TO START OF WORK. REPORT ANY DISCREPANCIES THAT WILL AFFECT NEW WORK TO ARCHITECT PRIOR TO PROCEEDING.
- IF INFORMATION ON DRAWINGS IS UNCLEAR OR ADDITIONAL INFORMATION IS REQUIRED NOTIFY ARCHITECT PRIOR TO PROCEEDING WITH WORK.
- THE TERM "TYPICAL" OR "TYP" INDICATED ON THE CONTRACT DOCUMENTS SHALL MEAN THAT THE CONDITION IS THE SAME OR SIMILAR THROUGHOUT UNLESS OTHERWISE INDICATED.
- ALL WIRING FOR PROXIMITY CARD ACCESS AND COMMUNICATION DEVICES SHALL BE CONCEALED.
- ALL ELECTRICAL WORK SHALL BE PERFORMED TO COMPLY WITH THE 2016 CT STATE BUILDING CODE WHICH REFERENCES THE 2014 NATIONAL ELECTRIC CODE (NFPA 70)
- ALL WORK SHALL BE PERFORMED IN A UNIFORM, ACCURATE MANNER AS REQUIRED TO PROVIDE NEAT, STRAIGHT LINES FREE FROM DEFECTS, OVERLAPS AND IMPERFECTIONS. WORK SHALL BE INSTALLED LEVEL, PLUMB OR FLUSH WITH ADJOINING MATERIALS (WHERE APPLICABLE). WORK OF EACH TRADE SHALL MEET OR EXCEED NATIONALLY RECOGNIZED AND/OR PUBLISHED STANDARDS. WHERE THE CONTRACT DOCUMENTS ARE MORE STRINGENT THAN THE AFOREMENTIONED STANDARDS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SUCH.
- COORDINATE WITH AUTHORITIES HAVING JURISDICTION AND PROVIDE ALL REQUIRED TEMPORARY FIRE AND LIFE SAFETY PROVISIONS DURING CONSTRUCTION.
- PROVIDE PORTABLE FIRE EXTINGUISHERS DURING CONSTRUCTION AS REQUIRED BY CODE AND THE AUTHORITY HAVING JURISDICTION.

DEMOLITION NOTES

- REMOVE EXISTING DOORS FRAMES AND HARDWARE WHERE NEW WORK IS SHOWN OR SCHEDULED. INSPECT WORK AREA TO VERIFY FULL EXTENT OF REQUIRED DEMOLITION PRIOR TO START OF WORK. NOTIFY ARCHITECT OF ANY DISCREPANCIES OR QUESTIONS PRIOR TO PROCEEDING.
- REMOVE EXISTING WORK TO REMAIN AS REQUIRED TO INSTALL NEW WORK. REINSTALL AFTER INSTALLATION OF NEW WORK.
- UNLESS OTHERWISE NOTED ALL ELECTRICAL DEVICES OR CONTROLS TIED TO EXISTING DOORS/HARDWARE SHALL REMAIN AND BE TEMPORARILY DISCONNECTED AND MADE SAFE PRIOR TO REMOVAL OF EXISTING DOORS, FRAMES AND HARDWARE.
- ALL WORK TO BE DEMOLISHED SHALL BE REMOVED IN ITS ENTIRETY, INCLUDING ALL RELATED FASTENERS AND COMPONENTS, AND AS REQUIRED TO PERFORM/INSTALL NEW WORK SHOWN ON THE CONTRACT DOCUMENTS.
- NOTIFY BUILDING OWNER OF ALL MATERIALS OR EQUIPMENT INTACT OR FUNCTIONAL AFTER REMOVAL PRIOR TO DISPOSAL OR REMOVAL FROM SITE. ALL WORK THAT IS REMOVED FROM SITE SHALL BE DISPOSED OF IN A SAFE AND LEGAL MANNER.
- BRACE, SUPPORT AND/OR TEMPORARILY SHORE EXISTING WORK AS REQUIRED PRIOR TO AND DURING DEMOLITION AND INSTALLATION OF NEW WORK.
- PROVIDE TEMPORARY PROTECTION AS REQUIRED AND EXERCISE CARE NOT TO DAMAGE EXISTING BUILDING ELEMENTS AND FINISHES TO REMAIN. IN THE EVENT THAT THIS UNAVOIDABLE ALL EXISTING WORK THAT IS DAMAGED SHALL BE PATCHED/REPAIRED TO MATCH EXISTING IN MATERIAL, FINISH AND COLOR. WORK THAT CANNOT BE PROPERLY PATCHED/REPAIRED SHALL BE REPLACED IN KIND AT THE DISCRETION OF THE ARCHITECT.

CWA
 CHRISTOPHER WILLIAMS ARCHITECTS
 85 Willow Street New Haven, CT 06511
 203 776 0184 cwarehitectsllc.com

OWNER
**TOWN OF HAMDEN
 CONNECTICUT**

CONSULTANT

CONSULTANT

PROJECT NAME
**ENTRY VESTIBULE DOOR
 REPLACEMENT
 RIDGE HILL SCHOOL**
 120 Carew Road
 Hamden, Connecticut
 06517

STAMP

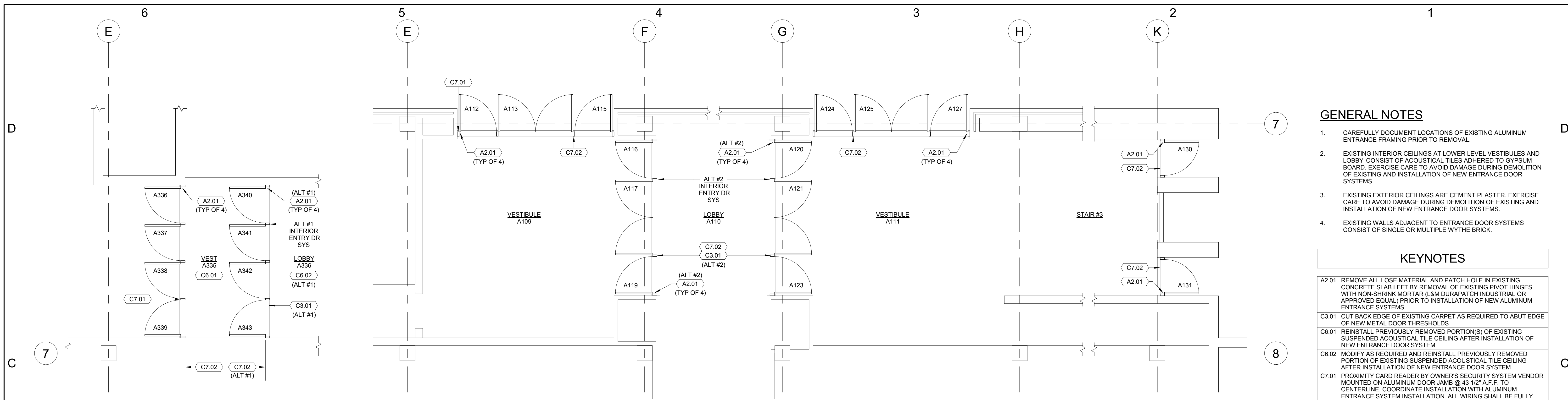
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 Drawings and specifications, as instruments of professional service, are and shall remain the property of the Architect. These documents are not to be used in whole or in part, for any other projects or purposes, or by any other parties, than those properly authorized by contract, without the specific written authorization of Christopher Williams Architects, LLC.

NO.	DATE	ISSUED FOR BIDDING	DESCRIPTION
1	06-04-18	ISSUED FOR BIDDING	
ISSUE/REVISION			

**OVERALL FLOOR PLANS &
 NOTES**

SHEET NUMBER
A1

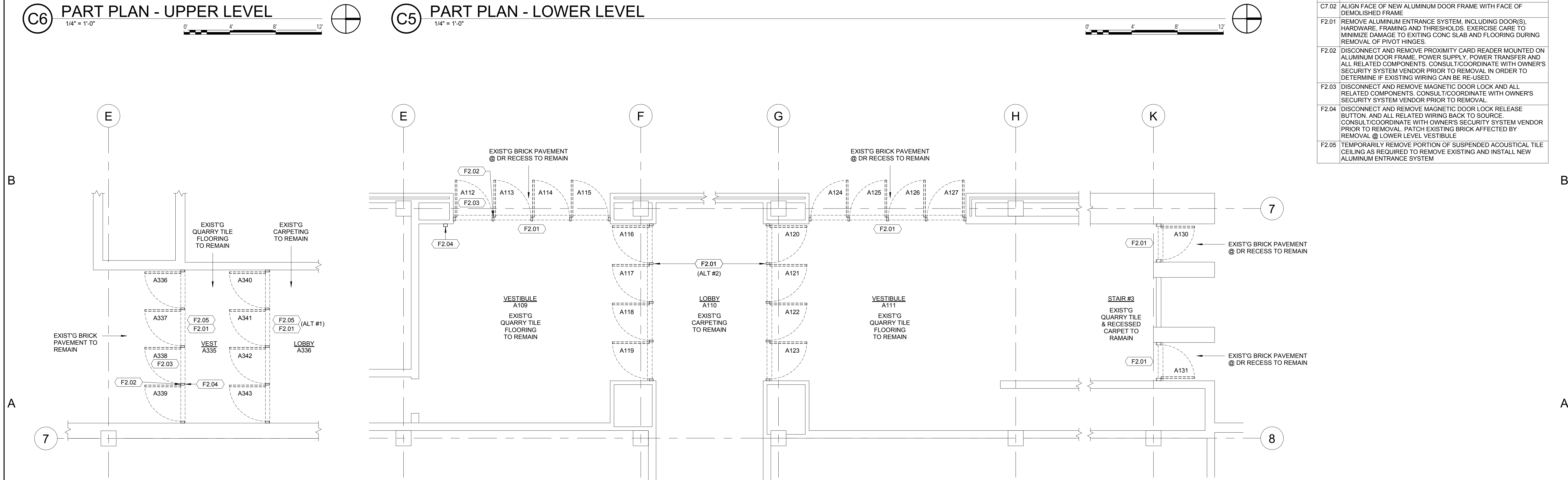
PROJECT NUMBER
 1809



- GENERAL NOTES**
- CAREFULLY DOCUMENT LOCATIONS OF EXISTING ALUMINUM ENTRANCE FRAMING PRIOR TO REMOVAL.
 - EXISTING INTERIOR CEILINGS AT LOWER LEVEL VESTIBULES AND LOBBY CONSIST OF ACOUSTICAL TILES ADHERED TO GYPSUM BOARD. EXERCISE CARE TO AVOID DAMAGE DURING DEMOLITION OF EXISTING AND INSTALLATION OF NEW ENTRANCE DOOR SYSTEMS.
 - EXISTING EXTERIOR CEILINGS ARE CEMENT PLASTER. EXERCISE CARE TO AVOID DAMAGE DURING DEMOLITION OF EXISTING AND INSTALLATION OF NEW ENTRANCE DOOR SYSTEMS.
 - EXISTING WALLS ADJACENT TO ENTRANCE DOOR SYSTEMS CONSIST OF SINGLE OR MULTIPLE WYTHE BRICK.

KEYNOTES

A2.01	REMOVE ALL LOOSE MATERIAL AND PATCH HOLE IN EXISTING CONCRETE SLAB LEFT BY REMOVAL OF EXISTING PIVOT HINGES WITH NON-SHRINK MORTAR (L&M DURAPATCH INDUSTRIAL OR APPROVED EQUAL) PRIOR TO INSTALLATION OF NEW ALUMINUM ENTRANCE SYSTEMS
C3.01	CUT BACK EDGE OF EXISTING CARPET AS REQUIRED TO ABUT EDGE OF NEW METAL DOOR THRESHOLDS
C6.01	REINSTALL PREVIOUSLY REMOVED PORTION(S) OF EXISTING SUSPENDED ACOUSTICAL TILE CEILING AFTER INSTALLATION OF NEW ENTRANCE DOOR SYSTEM
C6.02	MODIFY AS REQUIRED AND REINSTALL PREVIOUSLY REMOVED PORTION OF EXISTING SUSPENDED ACOUSTICAL TILE CEILING AFTER INSTALLATION OF NEW ENTRANCE DOOR SYSTEM
C7.01	PROXIMITY CARD READER BY OWNER'S SECURITY SYSTEM VENDOR MOUNTED ON ALUMINUM DOOR JAMB @ 43 1/2" A.F.F. TO CENTERLINE. COORDINATE INSTALLATION WITH ALUMINUM ENTRANCE SYSTEM INSTALLATION. ALL WIRING SHALL BE FULLY CONCEALED.
C7.02	ALIGN FACE OF NEW ALUMINUM DOOR FRAME WITH FACE OF DEMOLISHED FRAME
F2.01	REMOVE ALUMINUM ENTRANCE SYSTEM, INCLUDING DOOR(S), HARDWARE, FRAMING AND THRESHOLDS. EXERCISE CARE TO MINIMIZE DAMAGE TO EXISTING CONC SLAB AND FLOORING DURING REMOVAL OF PIVOT HINGES.
F2.02	DISCONNECT AND REMOVE PROXIMITY CARD READER MOUNTED ON ALUMINUM DOOR FRAME, POWER SUPPLY, POWER TRANSFER AND ALL RELATED COMPONENTS. CONSULT/COORDINATE WITH OWNER'S SECURITY SYSTEM VENDOR PRIOR TO REMOVAL IN ORDER TO DETERMINE IF EXISTING WIRING CAN BE RE-USED
F2.03	DISCONNECT AND REMOVE MAGNETIC DOOR LOCK AND ALL RELATED COMPONENTS. CONSULT/COORDINATE WITH OWNER'S SECURITY SYSTEM VENDOR PRIOR TO REMOVAL.
F2.04	DISCONNECT AND REMOVE MAGNETIC DOOR LOCK RELEASE BUTTON, AND ALL RELATED WIRING BACK TO SOURCE. CONSULT/COORDINATE WITH OWNER'S SECURITY SYSTEM VENDOR PRIOR TO REMOVAL. PATCH EXISTING BRICK AFFECTED BY REMOVAL @ LOWER LEVEL VESTIBULE
F2.05	TEMPORARILY REMOVE PORTION OF SUSPENDED ACOUSTICAL TILE CEILING AS REQUIRED TO REMOVE EXISTING AND INSTALL NEW ALUMINUM ENTRANCE SYSTEM



A6 DEMO PART PLAN - UPPER LEVEL
1/4" = 1'-0"

A5 DEMO PART PLAN - LOWER LEVEL
1/4" = 1'-0"

<p>CHRISTOPHER WILLIAMS ARCHITECTS 85 Willow Street New Haven, CT 06511 203 776 0184 cwarchitectsllc.com</p>	OWNER	CONSULTANT	CONSULTANT	PROJECT NAME	STAMP	<p>Ownership and use of documents: Drawings and specifications, as instruments of professional service, are and shall remain the property of the Architect. These documents are not to be used in whole or in part, for any other projects or purposes, or by any other parties, than those property authorized by contract, without the specific written authorization of Christopher Williams Architects, LLC.</p>	<table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>ISSUED FOR BIDDING</th> <th>DESCRIPTION</th> </tr> <tr> <td>1</td> <td>06-04-18</td> <td>ISSUED FOR BIDDING</td> <td></td> </tr> </table>	NO.	DATE	ISSUED FOR BIDDING	DESCRIPTION	1	06-04-18	ISSUED FOR BIDDING		<p>DRAWING TITLE PART PLANS - DEMO & NEW</p> <p>SHEET NUMBER A2</p> <p>PROJECT NUMBER 1809</p>
	NO.	DATE	ISSUED FOR BIDDING	DESCRIPTION												
1	06-04-18	ISSUED FOR BIDDING														
TOWN OF HAMDEN CONNECTICUT			ENTRY VESTIBULE DOOR REPLACEMENT RIDGE HILL SCHOOL 120 Carew Road Hamden, Connecticut 06517		ISSUE/REVISION											

