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### ADDENDUM

December 14, 2018

#### ADDENDUM # 1 Bid 19C10, Carroll Manor Elementary School Window and Door Replacement - Phase I DUE DATE & TIME: FCPS Main Lobby, Monday, January 7, 2019, prior to and time stamped no later than 2:00 P.M.

This addendum is being issued to provide additions, corrections, clarifications and answers to certain questions raised referencing the original bid packages and any resultant contracts for the above bid.

- 1. This Addendum includes the following attachment(s):
  - a. Revised Division 1 General Requirements Section 01 10 00 Summary (8 pages)
  - b. Specifications: Insert the attached Division 6 in its entirety (14 pages)
  - c. Drawings: Add A1.1 & Replace A2.1 (2 pages)

Thank you for your interest in bidding with Frederick County Public Schools and we apologize for any inconvenience this may have caused.

Sincerely,

### Kim Miskell

Kim Miskell, CSBO, Assistant Purchasing Manager

km/ab

pc: Vernon Beals, Project Manager III, Construction Management BFM Architects, Michael Gehr, Principal

### **DIVISION 1**

### **GENERAL REQUIREMENTS**

BUSHEY FEIGHT MORIN ARCHITECTS INC. 473 NORTH POTOMAC STREET HAGERSTOWN, MARYLAND 21740 301-733-5600 FAX: 301-733-5612

SECTION 01 10 00 - SUMMARY

#### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

- A. Contract description.
- B. Work by Owner.
- C. Owner supplied products to be installed by Contractor.
- D. Contractor's use of site and premises.
- E. Work sequence.
- F. Owner Occupancy.
- G. Description of Base Bid.
- H. Liquidated Damages
- I. Project Manager, Superintendent and Assistant Superintendent.
- J. Permits.

#### 1.2 CONTRACT DESCRIPTION

A. Work for this Project shall include replacement of old windows, doors & select HVAC equipment as identified within the Contract Drawings and Specifications. Demo of the existing windows, panels, doors, framing systems, & unit ventilators will be by the Owners abatement contractor. The Contractor & MEP Contractor are required to attend the abatement pre-construction meeting and share any concerns they may have regarding the upcoming demo operations. The abatement contractor will leave the metal soffit as is, and the existing 1.5 x 1.5 angle shape in place. The angle imbedded in the slab edge will remain as is. Part of the existing wooden window blind pocket will remain in place to attach the temporary wall. The General Contractor is required to complete demo of the window blind assembly and support/terminate the ACT grid into the new top of wall connection. Each new wall, ceiling connection, equipment item, casework and other transition point to adjacent finishes may require a small modification or transition strip to achieve the artistic vision standard. This is included in the contractor's price.

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B. Replacement work includes new exterior walls, siding, windows, doors/hardware, and select HVAC improvements. The owner's abatement contractor will remove hazardous materials impacting the new work and install a temporary exterior wall to protect the campus interiors

from the elements, until removed to install the project permanent walls. The contractor is required to maintain this temporary wall over the project time line until they install the permanent wall assemblies. Maintenance will be performed as a reimbursable expense with compensation not to exceed the current DLLR prevailing wage for the appropriate work category. The Contractor will dispose of this temporary wall when no longer needed. 10% material markup is allowed for this maintenance effort. The GC becomes responsible for interior envelope dust control upon removal of the demo contractors temporary wall. A second containment wall for new work will need to be in place to protect the campus interiors from newly generated construction debris, dust and dirt. To be installed by the project General Contractor. Complete classroom cleaning is a substantial completion requirement.

- C. The Contractor's MEP subcontractor is required to cap, valve off and otherwise make safe for demo all impacted supply, return, waste, vent lines & electrical feeds chased thru the casework and connecting to the projects MEP items. This is a prerequisite to the owner's abatement contractor beginning abatement operations. All utility services into and thru the piping chases and conduits will require temporary and safe terminations. These may become the new tie in points for connecting new work.
- D. The 6 classrooms will receive new classroom unit ventilators, controls, sinks, fixtures, and casework as indicated in the project documents. The contractor is required to coordinate the entire assembly and provide all filler strips, and accessories for a seamless installation. The contractor will modify any existing casework transitions (new to remaining) areas as necessary.
- E. Not all transitions to new materials from existing and for new terminations against dissimilar materials have been shown or detailed. i.e., the top of wall condition in corridor 113 will likely vary from the classroom condition. The contractor is required to submit the proposed connection assembly with the wall shop drawings for approval.

#### 1.3 WORK BY OWNER

- A. Items noted NIC (Not in Contract), will be furnished and installed by Owner or under other contracts unless noted otherwise.
- B. Hazardous material has been identified in the project survey. The Owners abatement contractor will commence abatement operations immediately upon the Contractor making the assemblies MEP connections and feeds safe for demo. FYI: There are mudded ACM elbows above the ceiling and 9x9 VAT classroom flooring/mastic not scheduled for removal for this project. These must not be disturbed under any condition. Inform the owner immediately if encountering hazardous materials.

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#### 1.4 OWNER SUPPLIED PRODUCTS TO BE INSTALLED BY CONTRACTOR

A. Owner's Responsibilities:

- 1. Arrange for and deliver Owner-reviewed Shop Drawings, Product Data, and Samples, to Contractor and Architect.
- 2. Arrange and pay for delivery to site.
- 3. On delivery, inspect products jointly with Contractor.
- 4. Submit claims for transportation damage and replace damaged, defective, or deficient items.
- 5. Arrange for manufacturers' warranties, inspections, and service.
- B. Contractor's Responsibilities:
  - 1. Review and coordination of Owner-reviewed Shop Drawings, Product Data, and Samples.
  - 2. Receive and unload products at site; inspect for completeness or damage jointly with Owner.
  - 3. Handle, store, assemble install and connect products as required.
  - 4. Repair or replace items damaged after receipt.

### 1.5 CONTRACTOR'S USE OF SITE

- A. Limit use of site to allow:
  - 1. Owner occupancy.
  - 2. Work by Others and Work by Owner.
- B. Access to Site: Limited to 6:00 A.M. to 6:00 P.M. Monday through Friday.
  - 1. The Contractor shall be permitted to begin work at 6:00 AM Monday thru Friday provided that any Noise Ordinances are not violated. Any off hours work will be reviewed and approved as necessary. FCPS may elect to use a compressed weekday schedule for the summer months, to be decided sometime in May of 2019. The contractor is advised that Friday/weekend work, may need to be scheduled on a weekly basis if the Owner uses the M-Thurs. weekly schedule.

C. Utility Outages and Shutdown: Provide ten (10) business days written notice prior to shut down.

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- D. Use or possession of alcohol, drugs, tobacco and firearms on site is strictly prohibited.
- E. All persons engaged in the construction of the project, including employees of the general contractor, subcontractors, suppliers and delivery companies working for any of the above, while on the job site, shall conduct themselves in a courteous manner with respect to and when in the presence of staff and students of the School System and the surrounding community. Disrespectful, abusive and/or profane language

and/or gestures, and/or harassment of students, staff, and surrounding community will not be tolerated and shall represent cause for the Owner to direct the Contractor to remove persons committing such acts from the project.

#### 1.6 WORK SEQUENCE

- A. All work shall be performed in accordance with the construction schedule to be prepared by the General Contractor which shall adhere to the milestone completion dates established elsewhere in the specifications.
- B. The contractor shall mobilize initially to cap and make safe the assemblies' MEP items before the abatement/demo contractor begins abatement operations.
- C. The owner's abatement contractor then removes hazardous materials, affected casework, sinks, fixtures, unit ventilators & installs temporary walls.
- D. The projects containment areas are turned over to the contractor upon receiving safe clearances from the CIH Authority. Sometime around last week in June/first week in July, 2019. The project non containment areas can be made available to the contractor earlier in the project timeline, exact date, TBD.

#### 1.7 OWNER OCCUPANCY

- A. Anticipated start of Contractor MEP disconnection in the abatement areas: June 19, 2019. 2 day completion window. This date may move depending on snow days taken throughout the 2018/2019 winter season. This work item must begin with the last day for teachers, as adjusted in May.
- B. Anticipated start of Abatement operations: June 21, 2019. 8 working day duration.
- C. Anticipated start of Contractor activities: Within containment areas: immediately upon receiving safe clearances from the CIH Authority. Work outside of the containment areas may begin as early as June 19, 2018.
- D. The Substantial Completion and Owner's Use and Occupancy date for the elementary school is August 30, 2019.

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- E. Cooperate with Owner to minimize conflict, and to facilitate Owner's operations.
- F. Schedule the Work to facilitate Owner occupancy.
- 1.8 DESCRIPTION OF BASE BIDS

- A. General: It is the intent of FCPS to award one contract to the General Contractor for the complete project as indicated within the contract drawings, specifications and addenda.
- B. Base Bid Removal of temporary walls and Installation of new permanent wall assemblies as detailed on the construction documents including new windows, doors, hardware, walls, finishes, 4 cabinet unit ventilators with controls and other MEP features as shown on the construction documents for classrooms 109, 110, 111, & 112

#### 1.9 ALTERNATES

- A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option. Accepted Alternates will be identified in Owner-Contractor Agreement.
- B. Coordinate related work and modify surrounding work as required for a complete and total installation.
- C. Indicate variation of Bid Price for Alternates described below and list in Bid Form Document or any supplement to it which requests a difference in Bid price by adding to the Base Bid Price.
- D. Bids will be evaluated on Base Bid Price and any of the alternates that the Owner chooses based on the available funds.
- E. Cost as indicated shall include all material, labor, equipment and all other costs need to perform the work and install in accordance to the drawings, specifications and manufacturer's instructions.
- F. Alternates:

1. Alternate No. 1 – Removal of temporary walls and Installation of new permanent wall assemblies as detailed on the construction documents including new windows, doors, hardware, walls, finishes, 2 cabinet unit ventilators with controls and other MEP features as shown on the construction documents for classrooms 114 & 115.

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2. Alternate No. 2 - Removal of the Corridor 113 temporary wall and installations of the new wall assemblies including windows, siding, doors, hardware, top of wall connections, and wall components as shown on the drawings. This Alternate includes reinstallation of the existing salvaged baseboard heater at its former location for temporary heat until commencement of phase 2. (Unless the Owner selects Alternate #3, ceiling heaters in corridor 113).

- 3. Alternate No. 2A provides for 5 new electric ceiling heaters in Corridor 113. If accepted, the contractor is expected to make any necessary modifications to adjacent equipment, utilities, ACT grid, above ceiling conflicts and impacted finishes to locate the new equipment in the indicated location. Contractor to dispose of the salvaged baseboard heater. Reasonable relocations are permitted with EOR approval.
- 4. Alternate No. 2B Provision of added BAS control points as delineated in the contract documents.

#### 1.10 LIQUIDATED DAMAGES

A. Substantial Completion: Should the Work not be performed on or before the times stated, there will be deducted from the Contract Balance the sum of \$**574.00** per consecutive calendar days, as Liquidated Damages, but not as a penalty, for each day's delay after expiration of such period, and until final completion of the Work and its acceptance by the Owner. In addition, the Contractor will be held responsible for additional extended general conditions, consumables, and direct labor costs to the Third Party Inspectors and the Architect for work and re-inspections required until the Contract Work is determined to be acceptable by the Owner.

#### 1.11 PROJECT MANAGER AND SUPERINTENDENT

- A. The General Contractor shall assign a full time project manager and full time superintendent for the complete duration of the project.
- B. The Project Manager and Superintendent shall be satisfactory to the Owner in all respects, and the Owner shall have the right to require Contractor to dismiss from the project any Project Manager and/or Superintendent with personnel satisfactory to Owner, at no additional cost. The Contractor shall not replace the Project Manager and/or Superintendent without the consent of the Owner except with personnel satisfactory to the Owner in all respects.

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- A. The Owner shall obtain and pay for the Building Permit. The Contractor shall obtain and pay for all other permits and inspections required by law for the execution of this Work. The Contractor is responsible for coordinating scheduling all inspections with the appropriate Frederick County & State Permitting Authority, Health Department and other Agencies having Jurisdiction as necessary to secure all inspections and final approvals for substantial completion and the certificate of occupancy. Provide all permits and inspection certificates to the Owner for their records.
- B. Contractors must be licensed and insured to perform the work of this project.
- C. Perform all work to comply with the rules and the regulations of the governing bodies and state and local laws.
- D. The Contractor is responsible for complying with the applicable requirements of the specific review comments as follows;
- 1. The Frederick County Office of the Life Safety
- 2. Other Agencies as required

#### PART 2 PRODUCTS

(Not Used)

PART 3 EXECUTION

(Not Used)

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#### END OF SECTION

FCPS: Carroll Manor Elem School Window & Door Replacement SUMMARY

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## **DIVISION 6**

### WOOD AND PLASTIC

BUSHEY FEIGHT MORIN ARCHITECTS INC. 473 NORTH POTOMAC STREET HAGERSTOWN, MARYLAND 21740 301-733-5600 FAX: 301-733-5612

- PART 1 GENERAL
- 1.1 SECTION INCLUDES
  - A. Blocking in wall and soffit openings.
  - B. Preservative treatment of wood.

#### 1.2 RELATED SECTIONS

- A. Section 08 41 13 Aluminum-Framed Entrances & Storefronts: Wood bucks.
- B. Section 08 41 14 Aluminum-Framed Window Wall: Wood bucks.

#### 1.3 REFERENCES

- A. ALSC (American Lumber Standards Committee) Softwood Lumber Standards.
- B. APA (American Plywood Association).
- C. AWPA (American Wood Preservers Association) C1 All Timber Products Preservative Treatment by Pressure Process.
- D. AWPA (American Wood Preservers Association) C20 Structural Lumber Fire Retardant Treatment by Pressure Process.
- E. NFPA (National Forest Products Association).
- F. RIS (Redwood Inspection Service).
- G. SPIB (Southern Pine Inspection Bureau).
- H. WCLIB (West Coast Lumber Inspection Bureau).
- I. WWPA (Western Wood Products Association).

#### 1.4 QUALITY ASSURANCE

- A. Perform Work in accordance with the following agencies:
  - 1. Lumber Grading Agency: Certified by ALSC.
  - 2. Plywood Grading Agency: Certified by APA.

#### 1.5 SUBMITTALS

A. Product Data: In accordance with Section 01 33 00, submit manufacturer's certification for pressure-treated and fire-treated lumber.

#### PART 2 PRODUCTS

#### 2.1 MATERIALS

- A. Lumber Grading Rules: WCLIB and WWPA.
- B. Miscellaneous Framing: Stress Group D, S.P.F. species, 19 percent maximum moisture content, pressure preservative treat when wood is in contact with concrete, masonry or metal.
- C. Plywood: APA Grade C-C-X; unsanded.
  - 1. Fire Retardant Treated: Locations as indicated in Drawings or as listed below.
  - 2. Tongue and Groove: As indicated in Drawings.
- D. Particle board: Will not be acceptable.

#### 2.2 ACCESSORIES

- A. Fasteners and Anchors:
  - 1. Fasteners: Hot dipped galvanized steel for high humidity and treated wood locations, unfinished steel elsewhere.
  - 2. Anchors: Toggle bolt type for anchorage to hollow masonry. Expansion shield and lag bolt type for anchorage to solid masonry or concrete. Bolt or ballistic fastener for anchorages to steel.

#### 2.3 FACTORY WOOD TREATMENT

- A. Wood Preservative (Pressure Treatment) EPA Approved: AWPA Treatment C1 using water borne preservative with 0.060 L.I.S. CF retainage.
  - 1. Products treated with "CCA" (chromated copper arsenate) will not be permitted.
  - 2. "ACQ" (amine copper qust) or "CBA" (copper baron azole) treated products will be acceptable.

#### PART 3 EXECUTION

#### 3.1 FRAMING

- A. Set members level and plumb, in correct position.
- B. Place horizontal members, crown side up.
- C. Construct curb members of single pieces.
- D. Space framing and furring 16 inches oc.
- E. Curb roof openings except where prefabricated curbs are provided. Form corners by alternating lapping side members.
- F. Coordinate curb installation with installation of decking and support of deck openings, and parapet construction.

### END OF SECTION

#### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

- A. Finish carpentry items, including finish trim and aprons. Note that all window sills are solid surface as detailed and specified in Section 06 41 00.
- B. Hardware and attachment accessories.

#### 1.2 RELATED SECTIONS

- A. Section 06 11 40 Wood Blocking and Curbing: Grounds and support framing.
- B. Section 06 41 00 Custom Casework: Shop fabricated custom cabinet work.
- C. Section 08 80 00 Glazing: Glass and glazing of wood partitions screens.
- D. Section 09 90 00 Painting: Painting and finishing of finish carpentry items.

#### 1.3 REFERENCES

- A. ASTM E84 Test Method for Surface Burning Characteristics of Building Materials.
- B. AWI Quality Standards.
- C. AWPA (American Wood Preservers Association) C2 Lumber, Timbers, Bridge Ties and Mine Ties Preservative Treatment by Pressure Processes.
- D. AWPA (American Wood Preservers Association) C20 Structural Lumber Fire Retardant Treatment by Pressure Process.
- E. BHMA A156.9 Cabinet Hardware.
- F. FS MMM-A-130 Adhesive, Contact.
- G. HPMA (Hardwood Plywood Manufacturer's Association) HP American Standard for Hardwood and Decorative Plywood.
- H. NEMA (National Electric Manufacturers Association) LD3 High Pressure Decorative Laminates.
- I. NHLA (National Hardwood Lumber Association).
- J. NWWDA (National Wood Window and Door Association) I.S.4 Water Repellent Preservative Treatment for Millwork.
- K. PS 1 Construction and Industrial Plywood.
- L. PS 20 American Softwood Lumber Standard.

#### 1.4 SUBMITTALS

A. Submit under provisions of Section 01 33 00.

- B. Shop Drawings: Indicate materials, component profiles, fastening methods, jointing details, and accessories, to a minimum scale of 1-1/2 inch to 1 ft.
- C. Provide instructions for attachment hardware.
- D. Samples: Submit two samples of ballet bar, 12 inch in size illustrating wood grain and specified finish.
- E. Submit two samples of wood trim six (6) inches long.
- 1.5 QUALITY ASSURANCE
  - A. Perform work in accordance with AWI Premium Custom Economy quality. NHLA.
- 1.6 QUALIFICATIONS
  - A. Fabricator: Company specializing in fabricating the products specified in this section with minimum five (5) years documented experience.
- 1.7 DELIVERY, STORAGE, AND HANDLING
  - A. Deliver, store, protect and handle products to site under provisions of Section 01 60 00.
  - B. Protect work from moisture damage.

#### 1.8 FIELD MEASUREMENTS

A. Verify that field measurements are as indicated on shop drawings.

#### 1.9 COORDINATION

A. Coordinate work under provisions of Section 01 31 00.

#### PART 2 PRODUCTS

#### 2.1 LUMBER MATERIALS

- A Softwood Lumber: PS 20; Graded in accordance with AWI Custom; white pine species, maximum moisture content of 6 percent; with vertical grain, of quality suitable for transparent finish.
- B. Hardwood Lumber: Graded in accordance with AWI Custom Premium; White Birch species, maximum moisture content of 6 percent; with vertical grain, of quality suitable for transparent finish.

#### 2.2 SHEET MATERIALS

- A. Softwood Plywood: PS 1 Grade C-D; Graded in accordance with AWI Custom; veneer lumber core; White Pine species, cut.
- B. Wood Particleboard: Will not be allowed.
- 2.3 FASTENERS

- A. Fasteners: Of size and type to suit application; galvanized finish in concealed locations and stainless steel finish in exposed locations.
- B. Concealed Joint Fasteners: Threaded steel.

#### 2.4 ACCESSORIES

- A. Lumber for Shimming: Softwood lumber of cedar species.
- B. Primer: Alkyd primer sealer type.
- C. Wood Filler: Solvent Oil base, tinted to match surface finish color.

#### 2.5 FABRICATION

- A. Fabricate to AWI Custom standards.
- B. Shop assemble work for delivery to site, permitting passage through building openings.
- C. Fit exposed sheet material edges with 3/8 inch (9.5 mm) matching hardwood veneer or plastic laminate edging matching adjacent surface. Use one piece for full length only.
- D. When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide trim for scribing and site cutting.

#### PART 3 EXECUTION

#### 3.1 EXAMINATION

- A. Verify adequacy of backing and support framing.
- B. Verify mechanical, electrical, and building items affecting work of this section are placed and ready to receive this work.

#### 3.2 INSTALLATION

- A. Install work in accordance with AWI Custom Quality Standard.
- B. Set and secure materials and components in place, plumb and level.
- C. Carefully scribe work abutting other components, with maximum gaps of 1/32 inch. Do not use additional overlay trim to conceal larger gaps.
- D. Install components and trim with nails, screws, or bolts with blind fasteners at 16 inch on center.
- F. Install hardware in accordance with manufacturer's instructions.
- 3.3 ERECTION TOLERANCES
  - A. Maximum Variation from True Position: 1/16 inch.
  - B. Maximum Offset from True Alignment with Abutting Materials: 1/32 inch.

#### END OF SECTION

#### PART 1 GENERAL

#### 1.1 SUMMARY

- A. Section includes custom-fabricated cabinet units at the Information Counter; wood paneling; counter tops; cabinet hardware; preparation for installing utilities in cabinets; and shop finishing.
- B. Bullet-Resistant Fiberglass Sheet.
- C. Related Sections:
  - 1. Section 06 20 00 Finish Carpentry: Related trim not specified in this section.
  - 2. Section 09 90 00 Painting: Site finishing of cabinet exterior and interior.
  - 3. Electrical Refer to drawings.

#### 1.2 REFERENCES

- A. American National Standards Institute:
  - 1. ANSI A156.9 Cabinet Hardware.
  - 2. ANSI A208.1 Mat-Formed Wood Particleboard.
- B. Architectural Woodwork Institute:
  - 1. AWI Quality Standards Illustrated.
- C. ASTM International:
  - 1. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials.
- D. Federal Specification Unit:
  1. FS A-A-1936 Adhesive, Contact, Neoprene Rubber.
- E. Hardwood Plywood and Veneer Association:
  - 1. HPVÁ HP-1 American National Standard for Hardwood and Decorative Plywood.
- F. National Electrical Manufacturers Association:
  - 1. NEMA LD 3 High Pressure Decorative Laminates.
- G. National Fire Protection Association:
  - 1. NFPA 255 Standard Method of Test of Surface Burning Characteristics of Building Materials.
  - 2. NFPA 286 Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth.
- H. Underwriters Laboratories Inc.:
  - 1. UL 723 Tests for Surface Burning Characteristics of Building Materials.
- I. Woodwork Institute:
  - 1. WI Manual of Millwork.

#### 1.3 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Submittal procedures.

- B. Shop Drawings: Indicate materials, component profiles and elevations, assembly methods, joint details, fastening methods, accessory listings, hardware location and schedule of finishes.
- C. Product Data: Submit data for hardware accessories.
- D. Samples:
  - 1. Submit three, 8 x 10 inch size samples, illustrating cabinet veneer and finish.
  - 2. Submit three, 8 x 10 inch size samples, illustrating counter top finish edge detail.
  - 3. Submit three samples of drawer pulls, hinges, and drawer glass, illustrating hardware finish and function.
- E. Certification: Submit copy of fabricator's AWI Quality Certification Program license and Project specific letters.
- 1.4 QUALITY ASSURANCE
  - A. Perform work in accordance with AWI (Architectural Woodwork Institute) Architectural Woodwork Quality Standards Illustrated, Premium Grade.
  - B. Surface Burning Characteristics: Maximum 25/450 flame spread/smoke developed index when tested in accordance with ASTM E84.
  - C. Surface Burning Characteristics: Comply with the following when tested in accordance with NFPA 286.
    - 1. During 40 kW Exposure: No flame spread to ceiling.
    - 2. During 160 kW Exposure: No flame spread to perimeter of tested sample and no flashover.
    - 3. Total Smoke Release: Maximum 1,000 cu m.
  - D. Perform Work in accordance with State of Maryland standards.
- 1.5 QUALIFICATIONS
  - A. Fabricator: Licensed by AWI Quality Certification Program.
- 1.6 MOCKUP
  - A. Section 01 40 00 Quality Requirements: Mockup requirements.
  - B. Mock-ups of Base Cabinet and Front:
    - Full size mock-up built accurately to scale for the purpose to study sight lines, testing, display, material, and methods approval and final approval.
       a. Provide submittals and all labor, materials, equipment and services
      - Provide submittals and all labor, materials, equipment and services required for approval of samples. Mock-up construction and removal of work at the end of the project and after final approval at no additional cost to the Owner.
- 1.7 PRE-INSTALLATION MEETINGS
  - A. Convene minimum two weeks prior to commencing work of this section.
- 1.8 DELIVERY, STORAGE, AND HANDLING
  - A. Product storage and handling requirements in accordance with manufacturer's written instructions.
- 06 41 00 2

- B. Protect units from moisture damage.
- C. Do not deliver woodwork until painting and similar operations that could damage woodwork have been completed in installation areas.

#### 1.9 ENVIRONMENTAL REQUIREMENTS

A. During and after installation of Work of this section, maintain same temperature and humidity conditions in building spaces as will occur after occupancy.

#### 1.10 FIELD MEASUREMENTS

- A. Verify field measurements prior to fabrication.
- B. Locate concealed framing, blocking, and reinforcements that support woodwork by field measurements before enclosed and indicate measurements on shop drawings.

#### PART 2 PRODUCTS

#### 2.1 CUSTOM CABINETS

- A. Fabricators:
  - 1. Brunswick Wood Working; Ijamsville, MD (301-874-4905)
  - 2. Cabinet Max Corp.; Baltimore, MD (410-265-9026)
  - 3. Cavetown Planning; Smithsburg, MD (301-733-7940)
  - 4. Cherryworks, LTD; Kingsville, MD (410-592-5977)
  - 5. Substitutions: Under provisions of the General Conditions.

#### 2.2 COMPONENTS

- A. Hardwood Lumber: AWI Grade A; Premium Grade; maximum moisture content of 6-8 percent; and the following:
  - 1. Species of Wood: Walnut
  - 2. Cut or Slicing of Wood: Plain cut
  - 3. Matching of Individual Leaves to Each Other: Book end matching.

## B. Hardwood Plywood: AWI Grade A veneer; Premium veneer; HPVA Grade A; with lumber core; type of glue recommended for application; and the following:

- 1. Species of Veneer: Walnut
- 2. Cut or Slicing of Veneer: Quarter
- 3. Matching of Individual Leaves to Each Other: Book end matching
- 4. Matching Across the Panel Face: running matching.
- 5. Matching or Relationship of Panels to Each Other: sequence matched uniform size sets matching.
- C. Wood Particleboard: Not permitted.
- D. Bullet Resistant Fiberglass Sheet: Equal to Armortex Opaque Fiberglass; Ballastic Level UL 2 in accordance with UL 752.
   1. Nominal Thickness: 3/8 inch
- E. Countertop: Granite 1. Color: ST-3
- F. Veneer: Equal to M. Bhike Veneer Walnut, Plain Slide Flitch No. 1584131A, A Grade, Book Match, End Match.

#### 2.3 ACCESSORIES

- A. Fasteners and Anchors:
  - 1. Fasteners: Hot dipped or Electro galvanized steel for high humidity and treated wood locations, unfinished steel elsewhere.
  - 2. Nails and Staples: ASTM F1667.
- B. Bolts, Nuts, Washers, Lags, Pins, and Screws: Of size and type to suit application; standard finish in concealed locations and premium finish in exposed locations.
- C. Concealed Joint Fasteners: Threaded steel.
- D. Grommets: Metal material for cut-outs.
- E. Shelf Standards and Rests: Formed steel channels and rests, cut for fitted rests spaced at 1 inch centers; satin finish.
- F. Shelf Brackets: Formed steel brackets, formed for attachment with lugs; satin.
- G. Drawer and Door Pulls: Hardwood as detailed.
- H. Concealed Joint Fasteners: Threaded steel.
- I. Grommet: Doug Mockett # XG 3" flip top.
- J. Wire Manager: Doug Mockett WM-4
- K. Self-Closing Drawer Slide: Haffle 422.97 Series, Accuride 3832HDSC with 100 lb/ pair capacity.
- L. Pulls: Hafele 106.11.901 Silver Aluminum
- M. Hinges: Haffle 354.65.410
- N. Cabinet Locks: Haffle 232.18 Series
- O. Stone (ST-3) Granite slab, 1" thick with polished finish and round over edge.

#### 2.4 FABRICATION

- A. Shop assemble casework for delivery to site in units easily handled and to permit passage through building openings.
- B. Fit shelves, doors, and exposed edges with matching veneer edging. Use one piece for full length only.
- C. Cap exposed high pressure decorative laminate finish edges with material of same finish and pattern.
- D. Door and Drawer Fronts: 3/4 inch thick; flush style.
- E. When necessary to cut and fit on site, fabricate materials with ample allowance for cutting. Furnish trim for scribing and site cutting.
- F. Apply high pressure decorative laminate finish in full uninterrupted sheets consistent with manufactured sizes. Fit corners and joints hairline; secure with concealed fasteners.

- G. Apply wood laminate by grain matching adjacent sheets to slip matching.
- H. Apply laminate backing sheet to reverse side of wood laminate finished surfaces.
- I. Mechanically fasten back splash to counter tops with steel brackets at 16 inches on center.

#### 2.5 SHOP FINISHING

- A. Sand work smooth and set exposed nails and screws.
- B. Apply wood filler in exposed nail and screw indentations.
- C. On items to receive transparent finishes, use wood filler matching surrounding surfaces and of types recommended for applied finishes.
- D. Finish work in accordance with AWI Section 1500 Factory Finishing; Premium Quality; Clear Transparent Type:
  - 1. Nitrocellulose Lacquer.
  - 2. Precatalyzed Lacquer.
  - 3. Postcatalyzed Lacquer.
  - 4. CAB & Water Acrylic Lacquer.
  - 5. Conversion Varnish.
  - 6. Synthetic Penetrating and Simulated Oil.
  - 7. Catalyzed Vinyl.
  - 8. Catalyzed Polyurethane.
  - 9. Polyester.
  - 10. UV Cured Epoxy, Polyester, Urethane.

#### 2.6 SOURCE QUALITY CONTROL AND TESTS

- A. When fabricator is approved by authority having jurisdiction, submit certificate of compliance indicating Work performed at fabricator's facility conforms to Contract Documents.
  - 1. Specified shop tests are not required for Work performed by approved fabricator.

#### PART 3 EXECUTION

#### 3.1 EXAMINATION

- A. Verify adequacy of backing and support framing.
- B. Verify location and sizes of utility rough-in associated with work of this section.
- 3.2 INSTALLATION
  - A. Set and secure casework in place; rigid, plumb, and level.
  - B. Use fixture attachments in concealed locations for wall mounted components.
  - C. Use concealed joint fasteners to align and secure adjoining cabinet units and counter tops.
  - D. Carefully scribe casework abutting other components, with maximum gaps of 1/32 inch. Do not use additional overlay trim for this purpose.

- E. Secure cabinet and counter bases to floor using appropriate angles and anchorages.
- F. Countersink anchorage devices at exposed locations. Conceal with solid wood plugs of species to match surrounding wood; finish flush with surrounding surfaces.

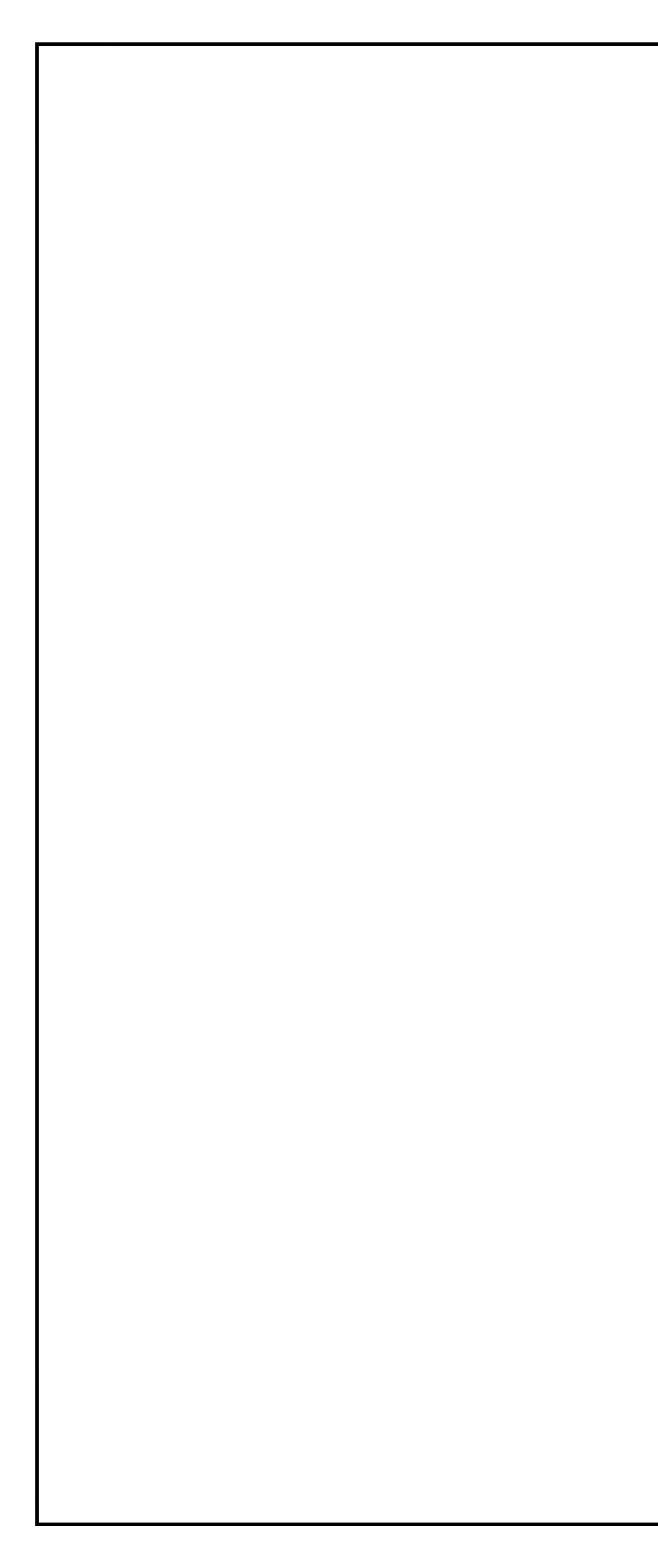
#### 3.3 ADJUSTING

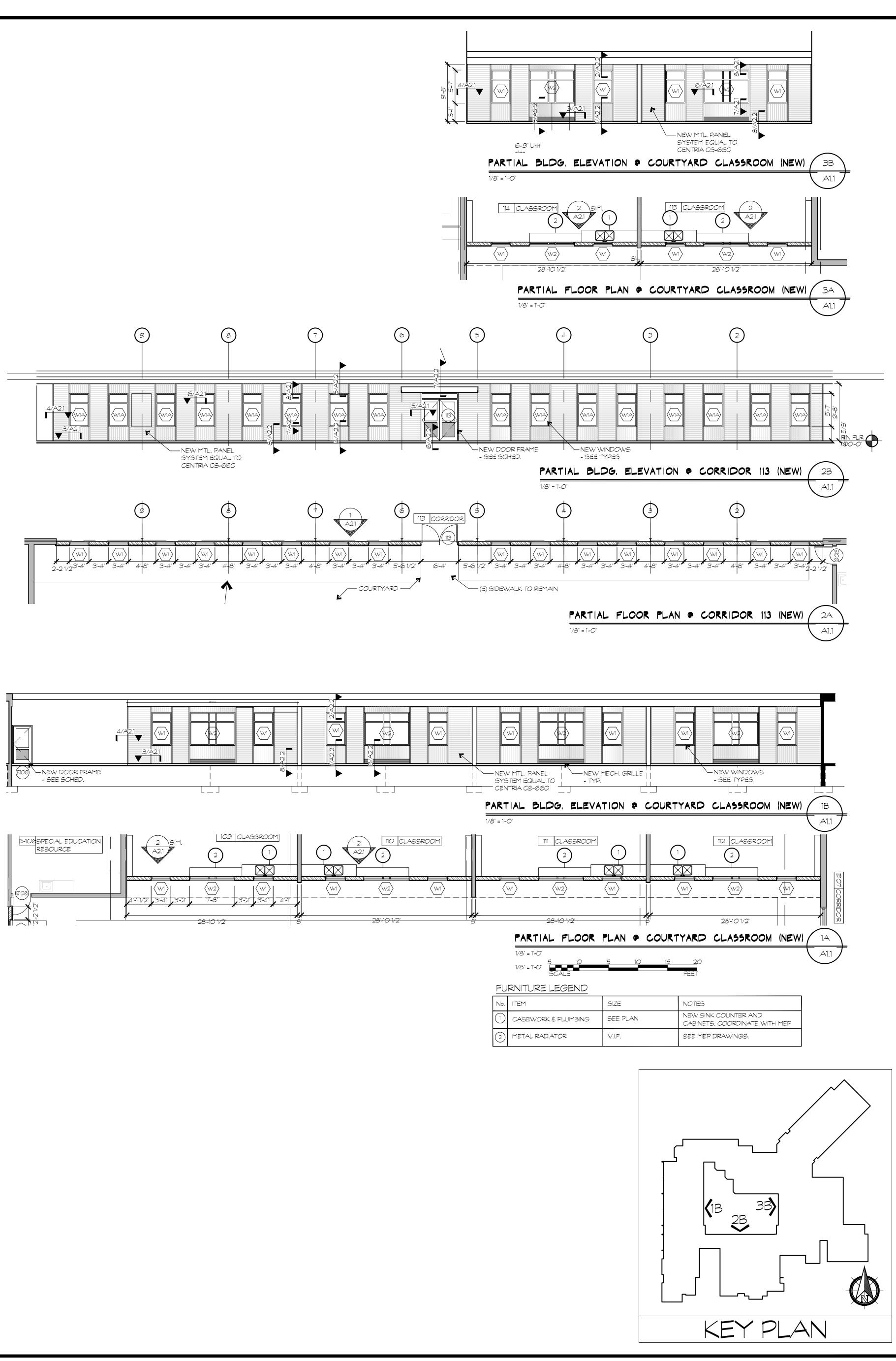
A. Adjust moving or operating parts to function smoothly and correctly.

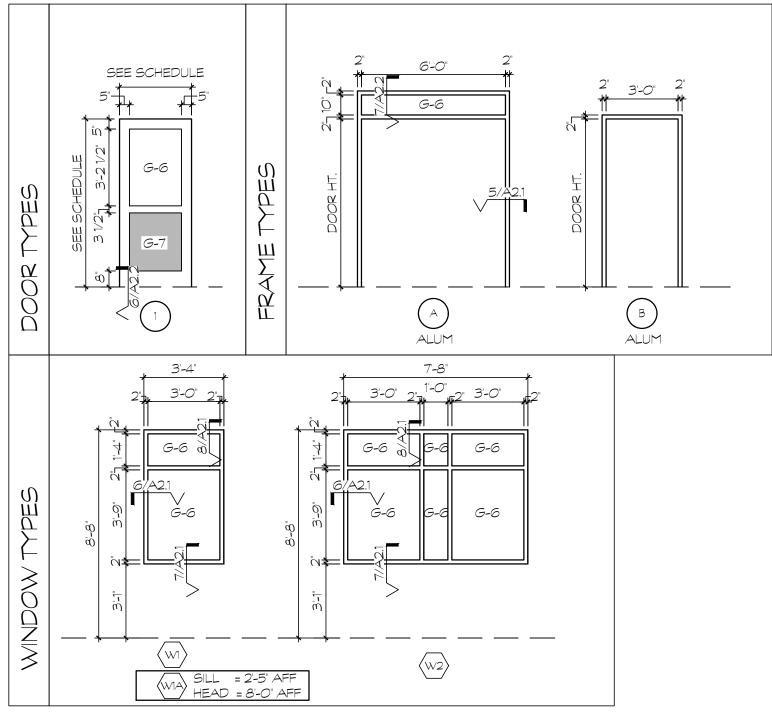
#### 3.4 CLEANING

- A. Section 01 73 00 Execution Requirements: Final cleaning.
- B. Clean casework, counters, shelves, hardware, fittings, and fixtures.

#### END OF SECTION







	DOOR				FRAME				DETAILS SEE TYPES ABOVE							
NO	ROOM LOCATION	SIZE	TYPE	MATL.	GLAZ	TYPE	MAT'L.	WIDTH	GLAZ	JAMB	HEAD	THRS	HARD- WARE	SIGNAGE (BY OWNER)	LABEL	REMARKS
113	CORRIDOR	(2) 3'-0" × 7'-0"	1	ALUM	G6 - G7	A	ALUM	1	1	-	-	14	1	-	-	
E106	SPECIAL EDUCATION RESOURCE	3'-0" × 6'-4"	1	ALUM	G6 - G7	В	ALUM	-	-	-	-	14	2	-	-	VERIFY DIMENSIONS IN FIELD
GLAZING LEGEND																
TYPE I	DESCRIPTION															
G-6 1	" INSULATED GLASS UNITS- TINTED															
G-7	NSULATED ALUMINUM PANEL															

