HUGHES ASSOCIATES
ARCHITECTS & ENGINEERS

ADDENDUM 003

DATE: April 29, 2026
COMM NO: 25038
PROJECT: Additions & Alterations – Williamson Road Laundromat

TO: All Bidders of Record
FROM: Earle Shumate
RE: Responses to Questions Received During Bidding

The following clarifications, additions and/or changes shall be incorporated into the bidding documents, consisting of bidding requirements, conditions of the contract, drawings and specifications, dated April 7, 2026. Insert this addendum number on the bid form for this project, under addenda received.

CONTACT INFORMATION

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QUESTIONS

1. Sheet I-1 has two corner guards in the lower plan left labeled “CG”, are these GC-1?
    a. **Provide CG-2 at this location. See revised Sheet I-1.**
2. Sheet I-1 Finish Schedule shows WP-2 and WP-3 on accent walls in rooms 105, 107, 108. I do not see finish specifications for WP-2 and WP-3 nor do I see these designations on the floor plan. Please advise.
    a. **Delete references to WP-2 and WP-3. See revised Sheet I-1**
3. The glazing specifications are different than the drawings on sheet A2-2, can you please clarify?
    a. **See revised Sheet A2-2 and revised Specification Section 08 8000 - Glazing**
4. Door hardware for aluminum doors-1-3/4” thick, door numbers 105 and 106 is this correct? Please advise.
    a. **Yes. Hardware for aluminum storefront doors is indicated in Section 08 4313 – Aluminum Storefronts in Para. 2.08 and 2.09.**
5. Please confirm that there is no work (other than relocating the tankless water heaters) required in the areas 115, 113, and 116.
    a. **There is not work anticipated in these areas, other than infills at walls where intake pipes are removed and replaced with louvers and change machines are removed – see revised AD sheets.**
6. Demo note 17 refers to “see detail sheet AD-1”. No detail exists on sheet AD-1, please advise.
    a. **Note deleted.**

7. Sheet AD-5 has several demo note tags at the right of the plan. These demo note tags are not associated with items on the drawing. Please advise.
    a. **Notes have been deleted and revised. See revised AD sheets.**
8. The demolition notes list several that are not tied to an item within the associated demo sheets. Do these not apply? (D3, 4, 8, 9,10,12,13,14, 15, 17)
    a. **Notes have been deleted and revised. See revised AD sheets.**
9. Detail A7-1.8 refers to a bollard cover, please provide specification. This detail does not match the one on C-800. Please advise.
    a. **Detail A7-1.8 has been deleted. See revised sheet A7-1. Provide bollards as shown on C-800.**
10. Please confirm temporary construction utilities available and who is responsible for cost. (015000/1.02A and B)
    a. **Owner will provide water. Contractor is responsible for temporary electricity.**
11. Please provide product specifications for metal panel at entrance soffits.
    a. **See added Specification Section 07 4113 – Metal Soffit and Ceiling Panels.**
12. Toilet accessory schedule on Sheet A6-1 has slightly different model numbers for the following pieces than specifications list, please advise:
    a. Grab bars
       Provide products from ASI Series 3500 1-1/2" Dia. Exposed Mount
    b. Toilet Tissue Dispenser
       Provide ASI Tissue Dispenser 0042 – Single 10" Roll
    c. Feminine Hygiene Disposals
       Provide ASI 0473-1A – Sanitary Napkin disposal with Lock – Surface Mounted.
13. Please confirm that there are (1) of each accessory in each restroom location. There are discrepancies between the elevation and plan views on A6-1
    a. **There is only one of each accessory in each restroom.**
14. Roof Rake Detail on A7-2 shows vinyl soffit. Please provide specification.
    a. **Delete reference to vinyl soffit. Provide Nichiha Nichisoffit fastened to bottom of SIPS panel**
15. Roof Edge Detail on A7-1 shows fiber cement soffit. Please provide specification.
    a. **See revised specification Section 07 4243 Composite Wall Panels Para. 2.02 D.**
16. Expansion Joint @ existing A7-1.7/A1-1 shows a 1" expansion joint with a stabilizer. Please provide specification.
    a. **Prosoco; Expansion Joint Stabilizer: www.prosoco.com. See revised specification Section 04 2000.**
17. What to the ends of the W8x24 over the entrances bear on (S1-2)?
    a. **Provide a bearing plate and fully grouted cmu wall at these locations. See revised Sheet S1-2.**
18. Is the total length of the HSS6x2x1/2 (LSH) shown in S1-2.5/S1-2 from the corner at column line 1 to the intersection of column line A on S1-2?
    a. **Provide this detail at perimeter walls clockwise from A-2 to A-1. See revised Sheets A1-1 and A2-3 (Wall types X5S and X6)**
19. Doors 108 and 107 on sheet A6-1 have a note saying "sign & card reader". Is signage also needed for rooms 105 Storage and 106 Childs Play? If so, what are the specs?
    a. **No other door signs are required. See Section 10 1423 – Panel Signage.**
20. What is the width of the tactile exit signs as shown on the life safety plan?
    a. **As required to fit the word "EXIT" and braille.**
21. For the storefront HSS posts on A2-2, how are they mounted? On concrete slab with baseplates or somehow into the brick wall?
    a. **Extend columns to footing. See revised Sheets S1-0, S-1, and S-2.**
22. The Privacy Fence and Privacy Fence Gate details on Sheet C-800 references "prefinished metal siding to match building" please provide product specification. Note 3 in this detail lists an option to use wood stockage fence in lieu of metal panels. Please advise as to which material is to be used. Also please confirm height, as multiple are listed. The detail shows 10' max post spacing. The dumpster fencing is shown as 12' x 12' on C-400. Do you want a post at each end of the 12' and one in the middle on the left, right, and back sides??
    a. **Provide vinyl fencing. See revised Sheet C-800 for details.**
23. Sheet AD-1 has a dashed line running plan east west just above the 42'2" dimension line. It doesn't have an ID tag. Is this line meant to show the extent of the existing slab demo?
    a. **Yes. The location is approximate and will be determined in the field during demolition.**

24. Sheet A3-1 Rear elevation shows 3 louvers. Sheet M1-1 shows 2. Please advise.
    a. **Provide 2 louvers as indicated on M1-1. Sheet A3-1 has been revised.**
25. The note pointing to the site light fixture on C-400 refers to an electrical site plan. One line Notes 1 and 4 on Sheet E1-3 refer to the underground electrical service being replaced. Please provide the electrical site plan.
    a. **See route on revised Sheet C-600**
26. The Sheet List on the Cover Sheet doesn't list the following pages that are included in the set: C-401, C-803, C-900 ED1-1, E-3, E1-4, E1-5
    a. **See revised Sheet T-1**
27. Is there a specific control system in mind regarding the fresh air louvers?
    a. **There is not a specific integrated control system specified. The theory of operation for the motorized dampers is that an AC current sensor will be provided at each dryer connection/receptacle. When a dryer is turned on and begins to draw current, the sensor will send a signal to a relay tied to the motorized damper.**
28. Are there specs/submittals to view for the dryers to see if they have relays built in for fresh air louvers?
    a. **Relays are external to dryers, see response at 27.**
29. We see 4 new, 3 relocated. But the plans show 5 installed on pages P1-2, P2-1 with 2 "future" IWHs. We want to clarify the qty of new vs relocated. It appears that we will purchase 4 new, 2 of which will be set aside for the future. We also want to clarify what is needed for the future IWHs, if anything.
    a. **Provide 2 new IWHs and re-locate the three existing units. Locate water supply at location shown to facilitate future installations. Future units will be purchased and installed by the Owner if necessary.**
30. Please confirm the full scope of the lighting control system (RAB Lightcloud), including required devices, wiring requirements, system layout, and whether programming/commissioning is to be included in the electrical contractor's scope.
    a. **The lighting control system has been deleted from the project. Provide time clock to control interior and exterior lighting. See revised Sheet E1-5**
31. Specifications indicate certain equipment (washers, dryers, etc.) will be owner-furnished. Please confirm the extent of the electrical contractor's responsibility for connections to owner-furnished equipment, including whether final terminations are required.
    a. **Owner will provide installation and connections to all equipment.**
32. Section 01 1000 indicates low voltage systems (security cameras, etc.) are by Owner. Please confirm whether the electrical contractor is expected to provide power, junction boxes, or pathways to these systems (not seeing layout for this).
    a. **Provide box and 1" blank conduit with pull wire and sweep 90 into ceiling at each location.**
33. Page E1-1 shows Light "E" to be a wallpack and sometimes it is a strip light. I don't see light "D" anywhere on the layout. Are those strip lights designated "E" supposed to be designated "D"?
    a. **See revised drawing Sheet E1-1.**
34. Is it possible to receive the Civil CAD file for estimation purposes?
    a. **CAD file has been added to the Bid Documents folder (same location as CD's and Addenda).**
35. On Sheet E1-1:
    The B type fixture in the waiting area - do they need to be the same heights as all other areas?
    a. **Type B fixtures are surface mounted to ceiling.**
    The B lights that are in the waiting areas are they to be suspended, or attached to truss?
    a. **Type B fixtures are surface mounted to ceiling.**
    Is there a pole base drawing for the light pole?
    a. **See revised drawing Sheet**
    Can the feed conduits for panels 1 2 3 4 5 be exposed conduit or will there be a chase to conceal them?
    a. **Conceal wiring in walls or chase columns.**
    Mounting heights for outside lights.
    a. **Refer to Light Fixture Schedule on sheet E1-4**
36. On Sheet E1-2:
    SN6 calls for 15-amp in the panel it is on 20-amp can we switch to 20 amp? (bathrooms 107 & 108) existing.
    a. **No.**

Housekeeping has 15-amp breakers can we switch this to 20-amp as well?

a. **No.**

SN7 talks about power to dampers, to look on M2-1 for more details. M2-1 talks about transformers. Who is responsible for the transformers and if electrical what size the transformers need to be?

a. **See response at Item 27. On Sheet M2-1 – Dryer and Makeup Air Damper Controls Sequence of Operation, change the wording to: "The MOD at the makeup air louver shall open only when one or more of the interlocked dryers is operating. Coordinate with the electrical contractor *and owner's installer* for installation of *current sensors* at each dryer receptacle/connection."**

37. On Sheet E1-3:

Can we use aluminum feeders for MDP and new panels?

a. **No**

Can we install new C.T. and meter behind the MDP so that power and down time is less?

a. **No. There is no clearance on the rear of the mechanical addition at the driveway.**

There is no grounding for MDP, is there a diagram for this?

a. **See SN13 on Sheet E1-3.**

38. On Sheet E1-4:

Do all the new washer and dryers need to be GFCI protected as per new code?

a. **Washer circuits are furnished with the laundry equipment bulkhead.**

39. Sheet C-600 references WVWA W-4 details, those are not for traffic bearing, need correct reference.

a. **Sheet C-600 revised to reference WVWA Detail W-9.**

40. Structural - need masonry header detailing in load bearing exterior walls, typical

a. **See Lintel Schedule on Sheet S1-0**

41. Structural- need exterior light gauge detailing/ sizing for exterior walls of new addition (not tower, which seems to be only thing provided)

a. **See Section S1-2.5. Studs shall be 600S162-54 at 1'-4" o.c.**

42. Interior bulkhead/ drop center framing- need type/ size

a. **Studs shall be 362S162-30. Use slotted track where head is fastened to trusses.**

43. Light gauge exterior cornice overbuilding- need size/ type

a. **See Section A4-21. Stud sizes are as indicated. Studs shall be 600S162-54, 162S162-54, and 362S162-54**

44. Siding fastening/ rain screen/ furring- need exact system specified

a. **See specifications Section 07 4243 – Composite Wall Panels Para 2.03 Components.**

45. New electrical service underground – confirm new goes x back to transformer, if so, most likely will be outside of work limits shown on plans

a. **Route of new UGE now shown on C-600. Sheets C-300, C-400, and C-700 revised accordingly, for limits of demolition, limits of new pavement/overlay and limit of disturbance, respectively.**

46. I see Air Barrier on the plans, but I did not see an Air Barrier spec section.

a. **Provide wall sheathing with integral water-resistive and air barrier. See Section 06 1000 – Rough Carpentry Para. 2.03 and revised Detail A7-1.1. Separate air/WRB is not required.**

47. Electrical circuits not shown for washers.

a. **Washers will connect to pre-wired receptacles which are circuited through the panels in the laundry equipment bulkheads (PNL1 and 2)**

48. Indicate the proposed types/capacities of washers and dryers on the plan for reference.

a. **See revised Sheet A1-1 with appliances labelled. Products are manufactured by Dexter Laundry Equipment: www.dexter.com.**

49. Will a thickened slab be required below the washers and dryers?

a. **Yes. An 8 inch slab is required below washers and dryers. See revised Sheets S1-1 and A7-1.**

50. A lint interceptor for discharged water into the sanitary system is not shown.

a. **The lint interceptor is built into the laundry equipment bulkhead unit. An external lint interceptor is not required.**

ATTACHMENTS:

Revised Specifications:

04 2000 – Unit Masonry

07 4113 – Metal Soffit and Ceiling Panels

07 4243 - Composite Wall Panels

LINKS TO REVISED DRAWINGS AND DOCUMENTS

Williamson Road Laundry Bidding

SECTION 04 2000
UNIT MASONRY

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Concrete block.

B. Concrete facing brick.

C. Clay facing brick.

D. Common brick.

E. Mortar and grout.

F. Reinforcement and anchorage.

G. Flashings.

H. Lintels.

I. Accessories.

1.02 RELATED REQUIREMENTS

A. Section 05 5000 - Metal Fabrications: Loose steel lintels.

B. Section 06 1000 - Rough Carpentry: Nailing strips built into masonry.

C. Section 07 2100 - Thermal Insulation: Insulation for cavity spaces.

D. Section 07 2123 - Loose-Fill Insulation: Granular insulation for masonry unit cores.

E. Section 07 2500 - Weather Barriers: Water-resistive barriers applied to exterior face of backing sheathing or unit masonry substrate.

F. Section 07 6200 - Sheet Metal Flashing and Trim: Through-wall masonry flashings.

G. Section 07 9200 - Joint Sealants: Sealing control and expansion joints.

1.03 ADMINISTRATIVE REQUIREMENTS

A. Preinstallation Meeting: Convene a preinstallation meeting one week before starting work of this section; require attendance by all relevant installers.

1.04 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements for submittal procedures.

B. Product Data: Provide data for ground face masonry units, fabricated wire reinforcement, mortar, and masonry accessories.

C. Samples: Submit two samples of decorative block units to illustrate color, texture, and extremes of color range.

D. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
   1. See Section 01 6000 - Product Requirements, for additional provisions.
   2. Extra Ground-faced Concrete Brick: 150
   3. Extra Brick Units: 700

1.05 MOCK-UPS

A. Construct a masonry wall as a mock-up panel sized 8 feet long by 6 feet high; include mortar, accessories, and structural backup in mock-up. Include brick, ground face and split face block.

B. Locate where directed.

C. Mock-up may not remain as part of work.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver, handle, and store masonry units by means that will prevent mechanical damage and contamination by other materials.

PART 2 PRODUCTS

2.01 CONCRETE MASONRY UNITS

A. Concrete Block: Comply with referenced standards and as follows:
   1. Size: Standard units with nominal face dimensions of 16 by 8 inches and nominal depths as indicated on drawings for specific locations.
   2. Special Shapes: Provide nonstandard blocks configured for corners.
   3. Load-Bearing Units: ASTM C90, normal weight.
      a. Both hollow and solid block, as indicated.
      b. Exposed Faces: Manufacturer's standard color and texture at interior walls and masonry back-up.
   4. Standard Units with Factory-Installed Insulation Inserts: ASTM C90, normal weight.
      a. Size: Standard units with nominal face dimensions of 16 by 8 inches and nominal depth of 8 inches.
      b. Insulation Type: Manufacturer's standard expanded polystyrene (XPS).

B. Concrete Brick:
   1. Size: As indicated on drawings.
   2. Concrete Facing Brick: ASTM C1634; solid, lightweight; for architectural and below grade use.
      a. Exposed Faces, Color and Texture: Ground and split face at locations indicated on drawings.
      b. Manufacturers:
         1) Echelon, An Oldcastle Company.
         2) Substitutions: See Section 01 6000 - Product Requirements.

2.02 BRICK UNITS

A. Manufacturers:
   1. Belden Brick: www.beldenbrick.com/#sle.
   2. General Shale Brick: www.generalshale.com/#sle.
   3. Pine Hall Brick: www.pinehallbrick.com
   4. Substitutions: See section 01 6000 - Product Requirements.

B. Facing Brick: ASTM C216, Type FBS Smooth, Grade SW.
   1. Color and texture: Match existing as closely as possible.
   2. Nominal size: Modular.
   3. Special shapes: Molded units as required by conditions indicated, unless standard units can be sawn to produce equivalent effect.

2.03 MORTAR AND GROUT MATERIALS

A. Masonry Cement: ASTM C91/C91M, Type N.
   1. Colored Mortar: Premixed cement as required to match existing.brick and as selected by Architect for ground face block.

B. Portland Cement: ASTM C150/C150M, Type I; color as required to produce approved color sample.

C. Hydrated Lime: ASTM C207, Type S.

D. Mortar Aggregate: ASTM C144.

E. Grout Aggregate: ASTM C404.

F. Water: Clean and potable.

G. Accelerating Admixture: Nonchloride type for use in cold weather.

H. Packaged Dry Material for Mortar for Unit Masonry: Premixed Portland cement, hydrated lime, and sand; complying with ASTM C1714/C1714M and capable of producing mortar of the specified strength in accordance with ASTM C270 with the addition of water only.
   1. Color: Mineral pigments added as required to produce approved color sample.

2.04 REINFORCEMENT AND ANCHORAGE

A. Joint Reinforcement: Use ladder type joint reinforcement where vertical reinforcement is involved and truss type elsewhere, unless otherwise indicated.

B. Single Wythe Joint Reinforcement: ASTM A951/A951M.
   1. Type: Truss or ladder.
   2. Material: ASTM A1064/A1064M steel wire, mill galvanized to ASTM A641/A641M Class 3.
   3. Size: 0.1483 inch side rods with 0.1483 inch cross rods; width as required to provide not less than 5/8 inch of mortar coverage on each exposure.

C. Adjustable Multiple Wythe Joint Reinforcement: ASTM A951/A951M.
   1. Type: Truss, ladder, or tab, with adjustable ties or tabs spaced at 16 in on center.
   2. Material: ASTM A1064/A1064M steel wire, hot dip galvanized after fabrication to ASTM A153/A153M Class B.
   3. Size: 0.1875 inch side rods with 0.1483 inch cross rods and adjustable components of 0.1875 inchwire, width of components as required to provide not less than 5/8 inch of mortar coverage from each masonry face.
   4. Insulation Clips: Provide clips at tabs or ties designed to secure insulation against outer face of inner wythe of masonry.

D. Flexible Anchors: 2-piece anchors that permit differential movement between masonry and building frame, sized to provide not less than 5/8 inch of mortar coverage from masonry face.
   1. Steel frame: Crimped wire anchors for welding to frame, 0.25 inch thick, with trapezoidal wire ties 0.1875 inch thick, hot dip galvanized to ASTM A 153/A 153M, Class B.

E. Expansion Joint Stabilizers: Single piece adjustable device that bridges vertical expansion joints and provides collateral stability of adjoining walls while providing longitudinal freedom for in-plane expansion movement.
   1. Product: Prosoco; Expansion Joint Stabilizer: www.prosoco.com.

F. Masonry Veneer Anchors: 2-piece anchors that permit differential movement between masonry veneer and structural backup, hot dip galvanized to ASTM A 153/A 153M, Class B.
   1. Anchor plates: Not less than 0.075 inch thick, designed for fastening to structural backup through sheathing by two fasteners; provide design with legs that penetrate sheathing and insulation to provide positive anchorage.
   2. Wire ties: Manufacturer's standard shape, 0.1875 inch thick.
   3. Vertical adjustment: Not less than 3-1/2 inches.

2.05 FLASHINGS

A. Metal Flashing Materials:

B. Combination Non-Asphaltic Flashing Materials - Stainless Steel:
   1. Stainless Steel Flashing - Self-adhering: ASTM A240/A240M; 2 mil type 304 stainless steel sheet with 8 mil of butyl adhesive and a removable release liner.
      a. Manufacturers:
         1) 3GEN Masonry Products; GENFLASH SS SA: www.3genmp.com/#sle.
         2) WIRE-BOND; BOND-N-FLASH S.A.: www.wirebond.com/#sle.
         3) York Flashings; York 304: www.yorkflashings.com/#sle.
         4) Substitutions: See Section 01 6000 - Product Requirements.

C. Termination Bars: Stainless steel; compatible with membrane and adhesives.

D. Drip Edge: Stainless steel; angled drip with hemmed edge; compatible with membrane and adhesives.

2.06 ACCESSORIES

A. Preformed Control Joints: Rubber material. Provide with corner and tee accessories, fused joints.

B. Joint Filler: Closed cell polyvinyl chloride; oversized 50 percent to joint width; self expanding; in maximum lengths available.

C. Cavity Mortar Control: Semi-rigid polyethylene or polyester mesh panels, sized to thickness of wall cavity, and designed to prevent mortar droppings from clogging weeps and cavity vents and allow proper cavity drainage.
   1. Full-Height Airspace Maintenance and Drainage Material: Mesh panels fitted between masonry ties.
      a. Drainage Material Thickness: 3/8 inch.
      b. Manufacturers:
         1) CavClear, a Division of Archovations Inc; CavClear Masonry Mat: www.cavclear.com/#sle.

D. Nailing Strips: Softwood lumber, preservative treated for moisture resistance, dovetail shape, sized to masonry joints.

E. Weeps:
   1. Type: Molded PVC grilles, insect resistant.
   2. Color(s): As selected by Architect from manufacturer's full range.

F. Cavity Vents:
   1. Type: Molded PVC grilles, insect resistant.
   2. Color(s): As selected by Architect from manufacturer's full range.

G. Cleaning Solution: Non-acidic, not harmful to masonry work or adjacent materials.

2.07 MORTAR AND GROUT MIXING

A. Mortar for Unit Masonry: ASTM C270, using the Proportion Specification.
   1. Masonry below grade and in contact with earth: Type S.
   2. Exterior, loadbearing masonry: Type N.
   3. Exterior, non-loadbearing masonry: Type N.
   4. Interior, loadbearing masonry: Type N.

B. Grout: ASTM C476; consistency required to fill completely volumes indicated for grouting; fine grout for spaces with smallest horizontal dimension of 2 inches or less; coarse grout for spaces with smallest horizontal dimension greater than 2 inches.

C. Admixtures: Add to mixture at manufacturer's recommended rate and in accordance with manufacturer's instructions; mix uniformly.

D. Mixing: Use mechanical batch mixer and comply with referenced standards.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that field conditions are acceptable and are ready to receive masonry.

B. Verify that related items provided under other sections are properly sized and located.

C. Verify that built-in items are in proper location, and ready for roughing into masonry work.

3.02 PREPARATION

A. Direct and coordinate placement of metal anchors supplied for installation under other sections.

3.03 COLD AND HOT WEATHER REQUIREMENTS

A. Comply with requirements of TMS 402/602 or applicable building code, whichever is more stringent.

3.04 COURSING

A. Establish lines, levels, and coursing indicated. Protect from displacement.

B. Maintain masonry courses to uniform dimension. Form vertical and horizontal joints of uniform thickness.

C. Follow special coursing patterns where indicated on drawings.

D. Concrete Masonry Units:
   1. Bond: Running.
   2. Coursing: One unit and one mortar joint to equal 8 inches.
   3. Mortar Joints: Concave.

E. Concrete Bricks:
   1. Bond: Stacked.
   2. Coursing: One unit and one mortar joint to equal 8 inches.
   3. Mortar Joints: Concave.

F. Brick Units:
   1. Bond: Running.
   2. Coursing: Three units and three mortar joints to equal 8 inches.
   3. Mortar Joints: Concave.

3.05 PLACING AND BONDING

A. Lay solid masonry units in full bed of mortar, with full head joints, uniformly jointed with other work.

B. Lay hollow masonry units with face shell bedding on head and bed joints.

C. Buttering corners of joints or excessive furrowing of mortar joints is not permitted.

D. Remove excess mortar and mortar smears as work progresses.

E. Interlock intersections and external corners, except for units laid in stack bond.

F. Do not shift or tap masonry units after mortar has achieved initial set. Where adjustment must be made, remove mortar and replace.

G. Perform job site cutting of masonry units with proper tools to provide straight, clean, unchipped edges. Prevent broken masonry unit corners or edges.

H. Cut mortar joints flush where cement parging is required, resilient base is scheduled, cavity insulation vapor barrier adhesive is applied, or bitumen dampproofing is applied.

3.06 WEEPS/CAVITY VENTS

A. Install weeps in veneer and cavity walls at 24 inches on center horizontally on top of through-wall flashing above shelf angles and lintels and at bottom of walls.

B. Install cavity vents in veneer and cavity walls at 32 inches on center horizontally below shelf angles and lintels and near top of walls.

3.07 CAVITY MORTAR CONTROL

A. Do not permit mortar to drop or accumulate into cavity air space or to plug weep/cavity vents.

B. For cavity walls, build inner wythe ahead of outer wythe to accommodate accessories.

C. Install cavity mortar control panels continuously throughout full height of exterior masonry cavities during construction of exterior wythe, complying with manufacturer's installation instructions.
   1. Verify that airspace width is no more than 3/8 inch greater than panel thickness, except where indicated on drawings.
   2. Install horizontally between joint reinforcement.
   3. Stagger end joints in adjacent rows.
   4. Fit to perimeter construction and penetrations without voids.

D. Install cavity mortar diverter at base of cavity and at other flashing locations as recommended by manufacturer to prevent mortar droppings from blocking weep/cavity vents.

3.08 REINFORCEMENT AND ANCHORAGE - GENERAL, SINGLE WYTHE MASONRY, AND CAVITY WALL MASONRY

A. Unless otherwise indicated on drawings or specified under specific wall type, install horizontal joint reinforcement 16 inches on center.

B. Place masonry joint reinforcement in first and second horizontal joints above and below openings. Extend minimum 16 inches each side of opening.

C. Place continuous joint reinforcement in first and second joint below top of walls.

D. Embed longitudinal wires of joint reinforcement in mortar joint with at least 5/8 inch mortar cover on each side.

E. Lap joint reinforcement ends minimum 6 inches.

F. Reinforce stack bonded unit joint corners and intersections with strap anchors 16 inches on center.

G. Fasten anchors to structural framing and embed in masonry joints as masonry is laid. Unless otherwise indicated on drawings or closer spacing is indicated under specific wall type, space anchors at maximum of 36 inches horizontally and 24 inches vertically.

3.09 REINFORCEMENT AND ANCHORAGE - MASONRY VENEER

A. Masonry Back-Up: Embed anchors to bond veneer at maximum 16 inches on center vertically and 36 inches on center horizontally. Place additional anchors at perimeter of openings and ends of panels, so maximum spacing of anchors is 8 inches on center.

B. Stud Back-Up: Secure veneer anchors to stud framed back-up and embed into masonry veneer at maximum 16 inches on center vertically and 24 inches on center horizontally. Place additional anchors at perimeter of openings and ends of panels, so maximum spacing of anchors is 8 inches on center.

3.10 MASONRY FLASHINGS

A. Whether or not specifically indicated, install masonry flashing to divert water to exterior at all locations where downward flow of water will be interrupted.
   1. Extend flashings full width at such interruptions and at least 6 inches, minimum, into adjacent masonry or turn up flashing ends at least 1 inch, minimum, to form watertight pan at nonmasonry construction.
   2. Remove or cover protrusions or sharp edges that could puncture flashings.
   3. Seal lapped ends and penetrations of flashing before covering with mortar.

B. Terminate flashing up 8 inches minimum on vertical surface of backing:
   1. Install vertical leg of flashing over fluid-applied or self-adhered air/vapor barriers over backing or per manufacturer’s directions.
   2. Anchor vertical leg of flashing into backing with a termination bar and sealant.
   3. Apply cap bead of sealant on top edge of self-adhered flashing.

C. Install flashing in accordance with manufacturer's instructions and BIA Technical Notes No. 7.

D. Extend metal flashings through exterior face of masonry and terminate in an angled drip with hemmed edge. Install joint sealer below drip edge to prevent moisture migration under flashing.

E. Support flexible flashings across gaps and openings.

F. Lap end joints of flashings at least 6 inches, minimum, and seal watertight with flashing sealant/adhesive.

3.11 LINTELS

A. Install loose steel lintels over openings.

3.12 GROUTED COMPONENTS

A. Support and secure reinforcing bars from displacement. Maintain position within 1/2 inch of dimensioned position.

B. Place and consolidate grout fill without displacing reinforcing.

C. At bearing locations, fill masonry cores with grout for a minimum 12 inches either side of opening.

3.13 CONTROL AND EXPANSION JOINTS

A. Do not continue horizontal joint reinforcement through control or expansion joints.

B. Install preformed control joint device in continuous lengths. Seal butt and corner joints in accordance with manufacturer's instructions.

C. Size control joints as indicated on drawings; if not indicated, 3/4 inch wide and deep.

3.14 BUILT-IN WORK

A. As work progresses, install built-in metal door frames and other items to be built into the work and furnished under other sections.

B. Install built-in items plumb, level, and true to line.

C. Bed anchors of metal door frames in adjacent mortar joints. Fill frame voids solid with grout.

3.15 TOLERANCES

A. Install masonry within the site tolerances found in TMS 402/602.

3.16 CUTTING AND FITTING

A. Cut and fit for chases, pipes, conduit, and sleeves. Coordinate with other sections of work to provide correct size, shape, and location.

3.17 CLEANING

A. Remove excess mortar and mortar droppings.

B. Replace defective mortar. Match adjacent work.

C. Clean soiled surfaces with cleaning solution.

D. Use non-metallic tools in cleaning operations.

3.18 PROTECTION

A. Without damaging completed work, provide protective boards at exposed external corners that are subject to damage by construction activities.

END OF SECTION

SECTION 07 4113
METAL SOFFIT AND CEILING PANELS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Metal soffit and ceiling panel system of preformed aluminum panels.

1.02 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements for submittal procedures.

B. Product Data: Manufacturer's data sheets on each product to be used, including:
   1. Storage and handling requirements and recommendations.
   2. Installation methods.

1.03 DELIVERY, STORAGE, AND HANDLING

A. Provide strippable plastic protection on prefinished panels for removal after installation.

B. Store panels on project site as recommended by manufacturer to minimize damage to panels prior to installation.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Metal Soffit Panels Manufacturers:
   1. Englert, Inc; E-375, Vented: www.englertinc.com/#sle.
   2. Fabral; Quad-4 Fully Vented: www.fabral.com/#sle.
   3. McElroy Metal; Matrix, Vented: www.mcelroymetal.com/#sle.
   4. Substitutions: See Section 01 6000 - Product Requirements.

2.02 METALPANELS

A. Metal Soffit Panels:
   1. Profile: Style as indicated, with venting provided.
   2. Material: Precoated aluminum sheet, 20 gauge, 0.032 inch minimum thickness.
   3. Color: As selected by Architect from manufacturer's standard line.

2.03 ATTACHMENT SYSTEM

A. Concealed System: Provide manufacturer's standard nylon-coated aluminum concealed anchor clips designed for specific roofing system and engineered to meet performance requirements, including anticipated thermal movement.

2.04 SECONDARY FRAMING

A. Miscellaneous Secondary Framing: Light gauge steel framing incidental to structural supports; fabricated from steel sheet.

B. Framing Material: ASTM A1011/A1011M Designation SS steel sheet.
   1. Profile: Manufacturer's standard cee, zee, asymmetrical zee, hat channel, plain channel, double slope eave strut, and angle.
   2. Thickness: 12 gauge, 0.1046 inch.
   3. Finish: Galvanized per ASTM A653/A653M, G90.

C. Framing Connectors: Factory-made formed steel sheet, ASTM A653/A653M SS Grade 50, with G60/Z180 hot dipped galvanized coating and factory punched holes.

2.05 FABRICATION

A. Panels: Provide factory or field fabricated panels with applied finish and accessory items, using manufacturer's standard processes as required to achieve specified appearance and performance requirements.

2.06 FINISHES

A. Fluoropolymer Coil Coating System: Polyvinylidene fluoride (PVDF) multi-coat superior performing organic coatings system complying with AAMA 2605, including at least 70 percent PVDF resin, and at least 80 percent of coil coated metal surfaces having minimum total dry film thickness (DFT) of 0.9 mil, 0.0009 inch; color and gloss as selected by Architect from manufacturer's standard line.

2.07 ACCESSORIES

A. Sealants:
   1. Exposed Sealant: Elastomeric; silicone, polyurethane, or silyl-terminated polyether/polyurethane.
   2. Concealed Sealant: Non-curing butyl sealant or tape sealant.

PART 3 EXECUTION

3.01 PREPARATION

A. Remove protective film from surface of roof panels immediately prior to installation; strip film carefully to avoid damage to prefinished surfaces.

B. Separate dissimilar metals by applying a bituminous coating, self-adhering rubberized asphalt sheet, or other permanent method approved by metal roof panel manufacturer.

C. At locations where metal will be in contact with wood or other absorbent material subject to wetting, seal joints with sealing compound and apply one coat of heavy-bodied bituminous paint.

3.02 INSTALLATION

A. Overall: Install soffit system in accordance with metal roof panel manufacturer's instructions and recommendations, as applicable to specific project conditions; securely anchor components of roofing system in place allowing for thermal and structural movement.
   1. Install system with concealed clips and fasteners, except as otherwise recommended by manufacturer for specific circumstances.
   2. Minimize field cutting of panels. Where field cutting is required, use methods that will not distort panel profiles. Use of torches for field cutting is prohibited.

B. Accessories: Install necessary components that are required for complete assembly, including flashings, trim, moldings, closure strips, and similar roof accessory items.

C. Soffit Panels: Install metal soffit panels in accordance with manufacturer's installation instructions, minimizing transverse joints except at junction with penetrations.

3.03 CLEANING

A. Clean exposed sheet metal work at completion of installation. Remove grease and oil films, excess joint sealer, handling marks, and debris from installation, leaving the work clean and unmarked, free from dents, creases, waves, scratch marks, or other damage to the finish.

END OF SECTION

SECTION 07 4243
COMPOSITE WALL PANELS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Fiber-cement siding and trim..

1.02 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements for submittal procedures.

B. Product Data: Characteristics and storage and handling requirements.

C. Manufacturer's Instructions: Indicate installation.

1.03 MOCK-UPS

A. See Section 01 4000 - Quality Requirements for additional requirements.

B. Construct mock-up of each siding type, 3 by 3 feet. Include siding, associated weather barriers, attachments, flashings, insulation, joints, and sealant.

C. Locate where directed by Architect Construct in conjunction with masonry wall mock-up.

D. Mock-up may not remain as part of work.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Deliver and store materials in manufacturer's unopened packaging with labels intact.

B. Store materials under dry and waterproof cover, in ventilated area, and elevated above grade on flat surface.

1.05 FIELD CONDITIONS

A. Do not install panels when air temperature or relative humidity are outside manufacturer's limits.

1.06 WARRANTY

A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.

B. Manufacturer Warranty: Provide 15-year manufacturer warranty for siding panels. Complete forms in Owner's name and register with manufacturer.

C. Finish Warranty: Provide 15-year manufacturer warranty against excessive finish degradation. Include provision for replacing units with excessive fading, chalking, or flaking. Complete forms in Owner's name and register with warrantor.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Nichiha USA, Inc: www.nichiha.com/#sle.

B. Substitutions: Not permitted.

2.02 FIBER-CEMENT SIDING

A. Description: Factory-fabricated, drained and back-ventilated (D/BV) rainscreen siding system, site assembled; comply with AAMA 509.

B. Performance Requirements:
   1. Siding Density: Comply with ASTM C1186, Type A, Grade II.
   2. Structural Performance:
      a. Comply with ASTM E330/E330M, using test pressure 1.5 times design wind pressure, with 10-second maximum load duration.
      b. Maximum Allowable Deflection of Panel: L/180 for length (L) of span.

C. Designer Series Siding: Satin; surfaces factory sealed.
   1. Size: 17-7/8 by 71-9/16 inches.

2. Thickness: 5/8 inch.
3. Corners: Manufacturer's standard premanufactured corners; match panel finish.
4. Orientation: Horizontal.
5. Finish: As selected by Architect from manufacturer's custom range.
6. Products: Nichiha USA, Inc; Illumination.

D. Soffit Panels: Smooth with high gloss; surfaces factory sealed.
1. Thickness: 1/4 inch.
2. Orientation: Horizontal.
3. Finish: Cotton.
4. Finish: As selected by Architect from manufacturer's full range.
5. Products: Nichiha USA, Inc; Nichisoffit.

2.03 COMPONENTS

A. Thermal Clip and Rail:
1. Thermal Clips: JEL 778, zinc-aluminum-magnesium alloy-coated steel.
2. Corner Clips: JE 777C, zinc-aluminum-magnesium alloy-coated steel.
3. Horizontal Panel Supports: FA 700, aluminum-zinc alloy-coated steel.
4. Single Flange Sealant Backer: FHK 1015R, aluminum-zinc alloy-coated steel with fluorine coating.
5. Double Flange Sealant Backer: FH 1015R, aluminum-zinc alloy-coated steel with fluorine coating.
6. Corrugated Spacer: FS 1005.

2.04 ACCESSORIES

A. Trim: Aluminum.
1. Profiles: Provide compression joint, corner key, H-mold, inside corner, and J-mold trim.
2. Finish: Clear anodized.
a. Class I Clear Anodized Finish: AAMA 611 AA-M12C22A41, clear anodic coating, minimum 0.7 mil, 0.007 inch thick.

B. Furring Strips: Galvanized metal channels.

C. Flashing: Manufacturer's recommended material.
1. Starter Profiles: Main segments, inside corners, and outside corners.
2. Overhang Profiles: Main segments, inside corners, outside corners, and joint clips.
3. Finish: Matte black.

D. Fasteners: Galvanized or corrosion resistant; length as required to penetrate fastened surface, minimum 1-1/4 inches.

E. Sealants: As recommended by manufacturer.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify support structure meets manufacturer's requirments to receive siding.

3.02 PREPARATION

A. Protect surrounding areas and adjacent surfaces from damage during execution of work.

3.03 INSTALLATION

A. Install siding and support structure in accordance with manufacturer's instructions.

B. Install flashing in accordance with manufacturer's instructions.

3.04 REPAIR

A. Touch up, repair, or replace damaged products before substantial completion.

3.05 CLEANING

A. See Section 01 7000 - Execution and Closeout Requirements for additional requirements.

B. Clean siding in accordance with manufacturer’s instructions.

3.06 PROTECTION

A. Protect installed siding from subsequent construction operations.