

ADDENDUM NUMBER FOUR

February 4, 2022

Project: Lawrence Fire Station #38

Construction Manager: Garmong Construction Services

TO ALL BIDDERS:

This addendum forms part of the Contract Documents and modifies the project manual and/or drawings. Acknowledging receipt of this addendum in your proposal is required.

The following items refer to changes and/or additions to the documents issued by Garmong Construction Services.

Bid Date - February 8, 2022, at 2:00 PM

ITEM 1 – BIDDER'S Q&A (Bold is added or revised)

RFI #1 Q: The plumbing and fire protection drawings indicate a 6" underground main into the building and a 4" main to the FDC. The site utility plan C400 indicate a 4" main into the building. 6" is required. Please clarify.

A: Civil will update C400 as part of an Addendum to reflect a 6" line to match plumbing. C400 should match the plumbing and fire protection drawings. C400 to be revised to show a 6" fire protection service line into the building, and a 4" pipe to the FDC.

RFI #2 Q: Fire protection drawings indicate a dry system is to be installed in the garage. The garage is heated, could it be protected with the wet system? This would save costs.

A: During design we inquired about the two systems and the thought is that if one or more of the doors get left open in the middle of winter, the heating system, being radiant and below the sprinklers, might not be able to keep the pipes from freezing, hence the two systems.

RFI #3 Q: Drawing E201 Notes 5 & 6. Can you please clarify light fixture types?

A: See E201 in Addendum 01

RFI #4 Q: Alternate #6 refers to salvaging the existing generator and Switch. Who is the manufacturer and what is the model number of the existing generator and switch?

A: The generator is a Generac SG0065. See attached picture of the generator nameplate. The Transfer switch is Generac. See attached picture of the switch nameplate.1-

RFI #5 Q: Is the remaining fuel left for the generator to be disposed of by the demolition contractor and who is responsible for the storage of the generator and switch until it would be reinstalled?

A: The existing generator is natural gas. Electrical contractor is responsible for the storage of the generator and switch.

RFI #6 Q: Sheet E602 Light Fixture Schedule states the mounting of the F18 Flagpole fixture is to be on a "concrete pad 16' AFG". Is the mounting to say "concrete pad 6" AFG?

A: See E201 in Addendum 01

RFI #7 Q: E602, Light Fixture Schedule for the F14 and F15 does not state which has the camera mounted on the pole. Which light pole has the camera's mounted on them and what is the pole length?

A: See E602 in Addendum 01

RFI #8 Q: Sheet E302A / Plan note #17 states to provide a NEMA Size 2 combo starter. There doesn't appear to be a plan note #17 on sheet A302A. Neither the Mechanical nor the plumbing prints show the location of the air compressor. Please advise on location.

A: Note should point to AC-1 in room ABSORBANT STORAGE 112

RFI #9 Q: Spec Section 015113.3.1.C states to provide (3) 200A, 120/240V, 1 phase panels for temporary power. Spec Section 002413.11 states to provide (1) 400A panel w/GFCI breakers, one at every permanent electric room including the Accessory Building. Which is correct?

A: Spec Section 002413.11 is correct. Section 015113.3.1.C will be revised in Addendum #1.

RFI #10 Q: Sheet E301A, plan note #9 states to provide fan box mounted to the ceiling and install architectural fan.... Can you please provide and manufacturer and model number? Who is providing the ceiling fans?

A: ~~See E301A in Addendum 02.~~ See E301A in Addendum 03. Electrical contractor to provide.

RFI #11 Q: See attached Substitution Request for Bi-Fold Doors.

A: While functionally this appears to be an alternate, we do have concerns about the aesthetics (these doors look more industrial) and the ability to meet the glass configuration shown in the drawings. However, we are fine with them being an approved alternate knowing that they need to meet the intent of the design to a point to satisfy DELV to be incorporated into the project.

RFI #12 Q: I am reaching out in regards to the 07 42 64 Roof Screen on the Lawrence Fire Station project. The specification calls for American Warming and Vent Model LS-57 which appears to be a 2" blade system according to the AMV website. The Fabrication description is calling for a 4" depth system. I would like to submit a substitution request from Construction Specialties for a system similar to the AMV model, however I need to identify what model we should be submitting for approval. Could you help me identify what AMV system they would like pricing for?

Since this is a time sensitive situation I've attached Construction Specialties 4" depth model and our 2" depth model information for consideration.

- VAC-301
 - 4" Blade Depth
 - 6 3/4" between blades
- VAC-201
 - 1 7/8" Blade Depth
 - 2" between blades

A: On Addendum 02, we will revise Spec 074265 Roof Screens section 2.1 line A to read as "Contract Documents are based on Model LS-47 by AWW". VAV-301 can be submitted as equal.

RFI #13 Q: What type of partition is to be used on this project. The Finish Schedule calls out a Bobrick – Phenolic Series, while the specification calls out for HDPE material. These are 2 different material types, and the conflict should be clarified.

A: Partitions are to be HDPE material. Will make clarification on drawing A800 for Addendum 02.

RFI #14 Q: 1) The specification mentions voice capability. Please confirm that you want a voice fire alarm system.
2) If it is voice is providing redundant microphones, and amplifiers?
3) The spec lists both single and double action pull stations. Please advise as to which you want.
4) The specification mentions unlocking doors on alarm. Please advise what doors are to be controlled by the fire alarm system.
5) The specification includes both horns and chimes. Please advise which you want.
6) The specification lists an annual service testing agreement. Please advise if it is to be included or provide pricing to Owner at time of completion.

A: 1) Voice functionality is not required
2) System will be standard horn/strobe notification devices
3) Single action pull stations
4) Door holders and/or door control is not required
5) Service/Testing agreement is not required in bid. Provide quote to Owner at time of completion.

RFI #15 Q: Atlas would like to bid on the Steel Doors and Frames (081113) for the project referenced above. Please see the attached Request for Manufacturer Substitution for our preferred manufacturers, along with product data and a project resume. If you need any additional information, please let me know.

A: This substitution request is approved.

RFI #16 Q: Weight RM
Should have ONE tv
No drop ceiling here

Day RM
Should have one projector type tv
Please advise if 2nd TV is needed.
What is height of the drop ceiling?
Please confirm the location of the projector screen.

A: Fitness 122 has three (3) TV locations per Sheet E302A, and no drop ceiling. Dayroom 124 has a projector screen recessed into the ceiling, and a wall mounted white marker board. The drop ceiling is at 10'-0" height.

RFI #17 Q: Is the \$25,000 allowance in BC-01 for the Construction Entrance shown on C100 Note 1?

A: Construction Entrance is by BC-01. This Allowance is above and beyond the Construction Entrance.

RFI #18 Q: On Drawing C600 under Plan Notes there are site furnishings listed. Are these to be included in BC-01?

A: Site Furnishings are by owner.

RFI #19 Q: Which BC provides the Baby Box? Can you please provide a spec for Baby Box?

A: BC-02 General Trades to include costs to install the Baby Box. Installation instructions are included in this addendum. BC-02 to include a \$15,000 allowance to provide the Baby Box. The Baby box comes from Safe Haven who is the provider. However, the process for obtaining one would need to be initiated by the Lawrence Fire Department who would put in a request, be approved, be evaluated based on any subsidies the State of Indiana might provide and only then would one be put into production (4-6 weeks). Our drawings do show an opening in the wall, with lintel for the brick, as well as power and data to the unit.

RFI #20 Q: The Geotechnical Report section 4.2 Aggregate Columns appears to recommend the use of aggregate columns in lieu of unsuitable soil replacement. However, no information is provided on the structural drawings regarding aggregate columns. Please confirm if aggregate columns should be part of BC-01.

A: Aggregate columns are NOT included as part of this project. Structural design considered native soil characteristics. Any undercutting required would be an additional cost to BC-01.

RFI #21 Q: Are the OSHA required temporary fire extinguishers (1 fire extinguisher per 3000 SF) by CM or one of the bid packages?

A: CM to provide the temporary fire extinguishers.

RFI #22 Q: Is temporary fencing by CM or one of the bid packages?

A: The temporary fence is by the Construction Manager.

RFI #23 Q: Who provides final cleaning of the buildings?

A: The Construction Manager will provide final cleaning of the buildings.

RFI #24 Q: What Bid Category is responsible for the concrete foundation and concrete slabs associated with the Post Frame Building? Is there a specification for the Post Framed Building?

A: BC-01 is responsible for the slabs at the Accessory Building. See Addendum #2 for further clarifications.

RFI #25 Q: Please provide a detail or narrative for what the temporary construction entrance is comprised of.

A: See Detail 2 on C111.

RFI #26 Q: The equipment schedule on Drawing A-120A indicates that the recessed project screen is owner furnished, owner installed. Can you please verify this is correct?

A: The screen should be contractor furnished and contractor installed. Addendum 02 will show this update.

RFI #27 Q: The drawings, Div. 6 Millwork and Div. 12 Casework and countertops, call for painted steel countertops. Div. 11 Kitchen Equipment calls for stainless steel. Please clarify which is correct or if Div 11 even applies to the other specs and drawings.

A: Div. 6 Millwork only speaks to plastic laminate casework and Div. 12 Casework only speaks to painted metal cabinetry, both of which are provided on this project. Div. 11 refers specifically to Kitchen Equipment, which sometimes comes with its own integral base cabinets and/or tops. Sheets A800 and A801 clearly identify countertop and cabinets materials for all casework which will generally tie back to Div. 6 and 12. The drawings and specs are complementary documents and are to be used together.

RFI #28 Q: Please see attached substitution request on resinous flooring.

A: ~~Waiting on Architects response.~~ The substitution is not approved as it doesn't meet performance or aesthetic requirements.

RFI #29 Q: Will we receive a specification for the type of operator and equipment for the access controls for the sliding gate (note 16/C500)?

A: For access control detail, see plan note 16 on E200 in addendum 02. Style and type of slide gate will be clarified on C500.

RFI #30 Q: Fencing is not mentioned in either BC-01 or BC-02. Which package should it be included in?

A: Fencing is in BC-02. See BC-02 Scope of Work, Line Item 32.

RFI #31 Q: Will we be given a fence spec for the fence (note 14/C500)?

A: No spec will be given for the fencing. Note 14 will be revised in the upcoming addendum to specify the manufacturer of the fence. Fence should be installed per manufacturer recommendations.

RFI #32 Q: Can we get some information on what is required for the dumpster gate?

A: The following note will be added to A120A to clarify the gate specification. "GATE TO BE BASTEEL DOUBLE SWING INFINITY GATE W/ DOUBLE-SEALED BALL BEARING HINGES, 1" STAINLESS STEEL CANE RODS, AND 1" DIAMETER SOLID STAINLESS STEEL SLIDE BOLT. KYNAR 500 FINISH, COLOR TO BE SELECTED BY ARCHITECT FROM MANUFACTURERS FULL RANGE OF COLORS."

RFI #33 Q: Details 3 and 6 on C510 reference asphalt pavement. Do these details apply to this project?

A: Details do not apply and will be removed from drawings in the forthcoming addendum.

RFI #34 Q: Detail 5/A312 references the structural drawings for the dumpster enclosure foundations. The structural drawings do not show these foundations. Can we get foundation information for the dumpster enclosure?

A: Refer to detail 12 on sheet S300.

RFI #35 Q: Equipment E18 (A120A) is a 12'x4' white markerboard that is contractor furnished and installed. Will we get a spec?

A: A Remark will be added in the Equipment Schedule for E18, to read as follows, "PROVIDE CLARIDGE SERIES 2000 PORCELAIN ENAMEL STEEL MARKERBOARD IN WHITE WITH ALUMINUM TRIM."

RFI #36 Q: Equipment E13 (A120A) is a digital dashboard that is contractor furnished and installed. Can you please provide a spec for this?

A: E13 will be owner furnished and installed. Contractor to provide blocking, power and data as noted in the drawings.

RFI #37 Q: For the ACT1 and 2 there are many different options that fall under these categories that have a wide range of cost. Please have the architect supply a product number for basis of design.

A: The specifications have been noted on the Finish Specifications A800 and will be clouded on the forthcoming addendum.

RFI #38 Q: Roof Plan Keynote 6 on A140A mentions a radio antenna. Is this supplied and installed by the Owner?

A: The locution antenna will be provided by others. E502 Det. 1 shows the roof penetration and termination for the antenna weather head. E401 Det. 2 plan note 16 shows the point of origin for the 2" RGS from the IT room as well as the location of the Locution Rack.

RFI #39 Q: Elevation Keynote 28 mentions exterior vinyl signage. Is this to be furnished and installed in BC-02? If so, will we receive a spec?

A: Exterior Signage will be by OFOI.

RFI #40 Q: Does only one wall of the Fitness Gym get AWP1 acoustical wall panels per 17/A600?

A: Yes, only wall to have the acoustic panels is that shown in elevation 17 / A600. This is also noted as Finish Plan Keynote 8.

RFI #41 Q: HKS1 on A800 mentions the door hooks are to be installed "on the back of all patient doors". What does that mean? Where are these to be provided and installed?

A: This note will be removed in the forthcoming Addendum. Disregard General Note and refer to Finish Plan Keynote 1 and clouding for door hook locations.

RFI #42 Q: Plan Note 20 on C500 says to "refer to Architectural drawings" for the basketball goal. I don't see any mention of that goal on the architectural drawings. Is this supposed to be furnished and installed in BC-02 or BC-01? Will a spec or basis of design be provided?

A: Basketball Goal is OFOI.

RFI #43 Q: Can we get more information on alternate #4? There is a plan view on page A140A and an elevation on A200A, but no good details. Plus, there are no details in the structural drawings. I assume there are foundations for the pergola posts? Can you confirm the Mapes canopy will not be installed if the alternate is accepted?

A: Additional details, both architectural and structural, were included in Addendum 02. The Mapes canopy will not be installed if the alternate is accepted.

RFI #44 Q: Can you please provide more details on the aluminum welded bar grating (elevation keynote 23 on A200A)?

A: Refer to Specification 055300 Metal Gratings, Section 2.1 for more information on Aluminum Welded Bar Grating and Accessories. Bearing Bars to be in vertical orientation. Type CB Saddle Clips to be thru bolted to steel frame. Anchor each panel to all four horizontal steel tube members, space anchors as directed by manufacturer. Orient finished heads facing entry walk. Install in accordance with manufacturer's instructions.

All exterior steel to be galvanized per Structural and painted per Specification 099600 High Performance Coatings. Color to be selected by Architect.

RFI #45 Q: Is the sealed concrete finish scope is BC-01 or BC-02?

A: The sealed concrete per A801 – Interior Finish Plan is by BC-02 General Trades. This application will be done after all work is complete.

RFI #46 Q: Can you provide a spec for the sealed concrete on A801 – Interior Finish Plan?

A: Please refer to section 2.20.A.1 of 099000 PAINTING AND COATING where we call out concrete floor sealers. We have updated this spec to also include H&C Sharkgrip Slip Resistant Additive from Sherwin Williams. This additive should be used at exposed concrete flooring and has been noted and tagged on the Finish Plan A801 for this coming addendum. See revisions in BC-02 Scope of Work attached to this addendum for additional clarifications.

RFI #47 Q: RFI #26 on Addendum 2 mentions that the projector screen will be changed to CFCI on the equipment schedule on A120A. It was not, however note E21 "Equip. Projector Ceiling Mounted" WAS changed to CFCI and no basis of design was given. Was the wrong line changed to CFCI?

A: The projector (E21) was mistakenly changed to CFCI as opposed to the Screen (E22). E21 is OFOI and E22 is CFCI.

RFI #48 Q: I cannot find any access doors (spec 083113) on the drawings. Does that scope apply to this project?

A: There are no access doors currently documented in the plan.

RFI #49 Q: Under section 002413 Bid Category BC-01 line 8 states "This Bid package shall include the cost to sweep the streets daily for the duration of the project." Is it the intent for this contractor to stop by at least once a day and clean the street for the 8+/- months after the majority of their scope is finished and before they have to complete their scope?

A: The BC-01 contractor is expected to provide and operate the equipment for street cleaning for the duration of their scope of work. At the conclusion of their scope of work they are to provide a street sweeper for the duration of the project for use by others.

RFI #50 Q: Under section 002413 Bid Category BC-01 line 47 states "Furnish and install below grade waterproofing..." and yet spec 071113 is listed under Bid Category BC-02. Can you confirm what spec 071113 falls under?

A: Specification 071113 will be added to the BC-01 SOW to align with the written scope of work.

RFI #51 Q: Under section 002413 Bid Category BC-02 line 18 states "Furnish and install all requirements of applied fireproofing.." and yet there is not a fire proofing spec. Is there any fireproofing required on this project?

A: There is no applied fireproofing. Structural accounts for that load in case the building were to be repurposed and potentially require it in the future.

RFI #52 Q: Under section 002413 Bid Category BC-02 line 19a states "Provide all fire stopping and fire safing scope of work..." and yet there is not a fire stopping spec. or any mention of fire stopping on the life safety plan. Is there any fire stopping required on this project?

A: There is no firestopping needed at this time.

RFI #53 Q: Could you please confirm the Accessory Building is to be bid to the general contractors and is not to be included in our prime bid?

A: The Accessory Building is in BC-02 General Trades scope of work. Mechanical, Plumbing and Electrical for the Accessory Building is by BC-03 and BC-05.

RFI #54 Q: Please review the Lockers and Toilet Partition Substitution Request sent by Scranton Products.

A: This substitution is accepted for the toilet partitions, but not the lockers.

RFI #55 Q: What type of foundations will be required for the Post Framed Building?

A: The foundations for the Post Framed Building will be Perma-Columns installed by the Post Frame Building contractor (included in BC-02 General Trades). Please see attached details for Alternate foundation plan. This alternate will be added to the bid form.

RFI #56 Q: See attached substitution request for Roof Top Screening from Engineered Facades.

A: This substitution is accepted.

RFI #57 Q: Not used

A: Not Used

RFI #58 Q: Can you please provide a spec or detail on the oil & water Separator?

A: Oil water separator to be Proceptor OMC 100 manufactured by Zurn.

RFI #59 Q: Is the mechanical contractor supposed to install the kitchen equipment contractor's MAU and its curb?

A: The kitchen equipment installation including the MAU & curb is by BC-02.

RFI #60 Q: I did not see any make safe notes on the drawings. I don't have any monies included for this as I don't know exactly what to carry. Can you comment on this?

A: The kitchen equipment installation including the MAU & curb is by BC-02.

RFI #61 Q: There is no BIM coordination correct?

A: BIM coordination is not required for this project.

RFI #62 Q: The General Trades is handling all temp heating/cooling equipment and maintenance for this project correct?

A: Please review Spec Section 015123 "Temporary Heating, Ventilation & Cooling". It designates temporary heat as the responsibility of the mechanical bid package. The enclosure is the responsibility of BC-02

RFI #63 Q: Will there be a site Fork Truck for all trades to use for material off loading/relocating during the project?

A: Site equipment will not be provided for the purposes of taking delivery. All subcontractors are to coordinate means of receiving their own deliveries.

RFI #64 Q: Do the exposed ceilings at Fire Station Apparatus Bay and the Accessory Building Garage receive paint on: deck, exposed steel, exposed piping, conduit, ducts, etc.?

A: Any exposed deck in the Fire Station, including the apparatus bay, gets PT6. The inside of the accessory building does not get painted except for the restroom/storage room section.

RFI #65 Q: Drawing A120A indicates kitchen equipment to be OFOI. The Food Service drawings appear to show equipment to be by KEC and be part of BC-02. Can you confirm who is providing kitchen equipment?

A: BC-02 General Trades to provide the Kitchen Equipment. See BC-02 Scopes of Work for additional information. See Bid Category Scopes of Work, 00 24 13.3.1.D for additional information on precedence.

RFI #66 Q: See substitution request for Walkway Covers from Peachtree Protective Covers.

A: This substitution request has been approved

RFI #67 Q: See substitution request for sunscreens from Peachtree Protective Covers.

A: This substitution request has been approved

ITEM 2 – FRONT END SPECIFICATION CHANGES

1. 00 24 13 BID CATEGORY SCOPE OF WORK
 - a. Revised Bid Category BC 02 – General Trades
 - b. Revised Bid Category BC 04 – Mechanical and Plumbing
 - c. Revised Bid Category BC 05 – Electrical

ITEM 3 – DRAWING CHANGES

1. See attached Drawing A120A from DELV Design.

ITEM 4 - MISCELANEOUS ITEMS / ADDITIONAL ATTACHEMENTS

1. Revised Bid Category BC 02 – General Trades
2. Revised Bid Category BC 04 – Mechanical and Plumbing
3. Revised Bid Category BC 05 – Electrical

END OF ADDENDUM

EQUIPMENT SCHEDULE

MARK	TAC/DIV	NAME	FURN / INSTL	BASIS OF DESIGN	MODEL	REMARKS
E01	GEAR WASHER	O.F.O.I.	ZORO 3G852361	MFR #:	HWB-3672-95	SUPER HEAVY DUTY BENCH, STEEL, 72"W x 34"H, STRAIGHT
E02	CASCADE	O.F.O.I.	DEXTER LAUNDRY	T-650		
E03	FILLER	O.F.O.I.	EAGLE AIR RAVEN			REFER TO MEP
E04	COMPRESSOR	O.F.O.I.	EAGLE AIR RAVEN			REFER TO MEP
E05	TOOL BOX	O.F.O.I.				
E06	PARTS WASHER	O.F.O.I.				
E07	RACK STORAGE	O.F.O.I.				
E08	FLAMMABLE LIQUIDS CABINET	O.F.O.I.				
E09	PPE DRYING RACKS	O.F.O.I.	WILLIAMS DIRECT DRYERS	WS4		REFER TO MEP
E10	AEI	O.F.C.I.				
E11	02 BOTTLE STORAGE CRATE	O.F.O.I.				
E12	BACK-BOARD STORAGE RACK	O.F.O.I.				
E13	DIGITAL DASHBOARD	O.F.O.I.	NA			PROVIDE BLOCKING IN WALL AS REQUIRED, COORDINATE WITH MONITOR SIZE/MOUNT
E14	WALL MOUNTED PARTS BIN	O.F.O.I.				
E15	24" WIDE, TWO TIER, WALL MOUNTED, SECURED PPE STORAGE RACKS	C.F.C.I.	GEAR GRID CORP.			W/ DOOR, 24" X 20" X 86" (43" EACH)
E16	LAUNDRY WASHING MACHINE	O.F.O.I.				REFER TO MEP
E17	LAUNDRY DRYER	O.F.O.I.				REFER TO MEP
E18	WHITE MARKERBOARD WITH SHELF - 12"x4"	C.F.C.I.				PROVIDE CLARIDGE SERIES 2000 PORCELAIN ENAMEL STEEL MARKERBOARD IN WHITE WITH ALUMINUM TRIM ANCHOR TO FLOOR OR WALL
E19	HEAVY DUTY STORAGE SELVING	O.F.O.I.				
E20	80" TV	O.F.O.I.	NA			PROVIDE BLOCKING IN WALL AS REQUIRED, COORDINATE WITH MONITOR SIZE/MOUNT
E21	EQUIP. PROJECTOR CEILING MOUNTED	O.F.O.I.				
E22	PROJECTOR SCREEN 69" H x 110" W CEILING RECESSED	C.F.C.I.	Da-Lite Screen Company	14780L		Tensioned Advantage Electrol-69x110-Da-Mat
E23	TAC/DIV	O.F.O.I.	ZORO 3G852361	MFR #:	HWB-3672-95	SUPER HEAVY DUTY BENCH, STEEL, 72"W x 34"H, STRAIGHT
F01	TREADMILL	O.F.O.I.				
F02	ELLIPTICAL	O.F.O.I.				
F03	CLIMBMILL	O.F.O.I.				
F04	EXERCISE BIKE	O.F.O.I.				
F05	ROWER	O.F.O.I.				
F06	LEG EXTENSION CURL	O.F.O.I.				
F07	LAT PULLDOWN/SEATED ROW	O.F.O.I.				
F08	ASST CHIN DIP	O.F.O.I.				
F09	AURA FUNCTIONAL TRAINER	O.F.O.I.				
F10	ADJUSTABLE DECLINE BENCH	O.F.O.I.				
F11	HAIF RACK	O.F.O.I.				
F12	ADJUSTABLE DECLINE BENCH	O.F.O.I.				
F13	EQUIP-FIT-DUMBBELL RACK-LARGE PARAMETRIC	O.F.O.I.				
F14	DUMBBELL RACK	O.F.O.I.				
F15	ACC. STORAGE TOWER	O.F.O.I.				
F16	STANDING ARM CURL	O.F.O.I.				
F17	LEG PRESS	O.F.O.I.				
F18	SEATED CALF RAISE	O.F.O.I.				
F19	WEIGHT TREE W/BARR HOLDERS	O.F.O.I.				
F20	UTILITY BENCH	O.F.O.I.				
K01	RANGE	C.F.C.I.	SOUTHBEND			REFER TO FOOD SERVICE EQUIP.
K02	DISHWASHER	C.F.C.I.	HOBART			REFER TO FOOD SERVICE EQUIP.
K03	REFRIGERATOR	C.F.C.I.	TRUE FOOD SERVICE			REFER TO FOOD SERVICE EQUIP.
K04	ICE MACHINE	C.F.C.I.	SCOTSMAN ICE			REFER TO FOOD SERVICE EQUIP.
K05	COFFEE MAKER	C.F.C.I.	BUNN-C-MATIC			REFER TO FOOD SERVICE EQUIP.
K06	REFRIGERATOR R7100, 50 Cubic Feet	C.F.C.I.	TRUE MANUFACTURING			REFER TO FOOD SERVICE EQUIP.
K07	MICROWAVE 30" x 16" x 18"	C.F.C.I.	PANASONIC			REFER TO FOOD SERVICE EQUIP.

GENERAL ARCH. NOTES

- A. THESE GENERAL NOTES APPLY TO ARCHITECTURAL DRAWINGS.
- B. WORK SHOWN IN THE DRAWINGS SHALL BE BASE BID UNLESS SPECIFICALLY NOTED TO BE BY ALTERNATE BID.
- C. DOOR AND FRAME NUMBERS CORRESPOND TO RESPECTIVE ROOM NUMBERS. IN ROOMS WITH MULTIPLE OPENINGS, A SUFFIX HAS BEEN ADDED TO DOOR NUMBERS, (E.g., 101B).
- D. COORDINATE EQUIPMENT WORK WITH MANUFACTURERS AND SUPPLIERS TO INSURE PROPER ROUGH-IN CLEARANCES FOR INSTALLATION. USE AND MAINTENANCE. NOTIFY ARCHITECT IF CLEARANCES FOR SELECTED EQUIPMENT DO NOT HAVE THE MINIMUM REQUIRED CLEARANCES.
- E. PROVIDE CONTROL JOINTS (C.J.) IN GYPSUM BOARD WALL CONSTRUCTION AS INDICATED. WHERE NOT SHOWN, PROVIDE MAXIMUM SPACING BETWEEN JOINTS OF 30'-0". VERIFY FINAL CONTROL JOINT LOCATIONS, WHETHER OR NOT INDICATED ON THE DRAWINGS, WITH ARCHITECT PRIOR TO STARTING WORK.
- F. PROVIDE CONTROL JOINTS (C.J.) AT DOOR FRAME HEADS ON STRIKE JAMBS FULL HEIGHT ON BOTH SIDE OF WALL.
- G. PROVIDE WATER-RESISTANT GYPSUM BOARD ON WALLS WITH OPERABLE PLUMBING FIXTURES AND WITHIN 4'-0" OF DRINKING FOUNTAINS OR WATER COOLERS.
- H. PROVIDE FRP PANELS AND/OR ACRYLIC PANELS 2" PAST THE EDGE OF ALL MOP SINKS AND TO A HEIGHT OF 4". CAULK ALL EDGES.
- I. VERIFY MOUNTING HEIGHTS OF ACCESSORIES, EQUIPMENT, DOOR HARDWARE, CASEWORK, ETC., AND PROVIDE SOLID BLOCKING BEHIND ITEMS REQUIRING ANCHORAGE. PROVIDE FIRE TREATED WOOD BLOCKING OR METAL STRAPS BETWEEN FRAMING MEMBERS AS REQUIRED TO SUPPORT WEIGHT AND USE OF ITEMS TO BE SUPPORTED. WHERE MOUNTING HEIGHTS ARE NOT INDICATED, MOUNT ITEMS IN ACCORDANCE WITH RECOGNIZED INDUSTRY STANDARDS. COORDINATE LOCATIONS WITH MANUFACTURER OR SUPPLIER AND REFER MOUNTING HEIGHT QUESTIONS TO ARCHITECT FOR INTERPRETATION.
- J. PROVIDE SEALANT BETWEEN HOLLOW METAL FRAME PERIMETERS AND SURROUNDING WALL CONSTRUCTION UNLESS OTHERWISE INDICATED.
- K. PROVIDE SEALANT BETWEEN INTERIOR AND EXTERIOR WINDOW AND STOREFRONT FRAME PERIMETERS AND SURROUNDING CONSTRUCTION UNLESS OTHERWISE INDICATED.
- L. PROVIDE SEALANT BETWEEN DISSIMILAR MATERIALS SUCH AS GYPSUM BOARD AND MASONRY, MASONRY AND CONCRETE, COUNTERTOPS AND WALLS, ETC.
- M. PROVIDE BUTYL TAPE BETWEEN DISSIMILAR METALS TO PREVENT GALVANIC ACTION.
- N. DO NOT BEGIN WORK THAT MAY REQUIRE COORDINATION, SUCH AS CEILING INSTALLATION, PRIOR TO FINAL SUBMITTAL OF MECHANICAL AND ELECTRICAL COORDINATION DRAWINGS TO ARCHITECT NOR PRIOR TO RESOLUTION AND APPROVAL OF COORDINATION ISSUES.
- O. COORDINATE BLOCKING AND MEP CONNECTIONS AS REQUIRED FOR NOTED EQUIPMENT.
- P. WHERE A DRYWALL WALL SYSTEM IS INSTALLED OVER A CMU WALL, MAKE SURE A DRYWALL CONTROL JOINT EXISTS IN LINE WITH ANY MASONRY CONTROL JOINTS.



CITY OF LAWRENCE

FIRE STATION 38

ARCHITECT

DELV Design
212 W 10th St, STE F125
Indianapolis, IN 46202
(317) 296-7400

MEP

Applied Engineering Services
5975 Castle Creek Pkwy N Dr #300
Indianapolis, IN 46250
(317) 810-4141

STRUCTURAL

JPS Consulting Engineers
9365 Counselors Row, STE 116
Indianapolis, IN 46240
(317) 617-4270

CIVIL/LANDSCAPE

JPS Consulting Engineers
9365 Counselors Row, STE 116
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CONSTRUCTION MANAGER

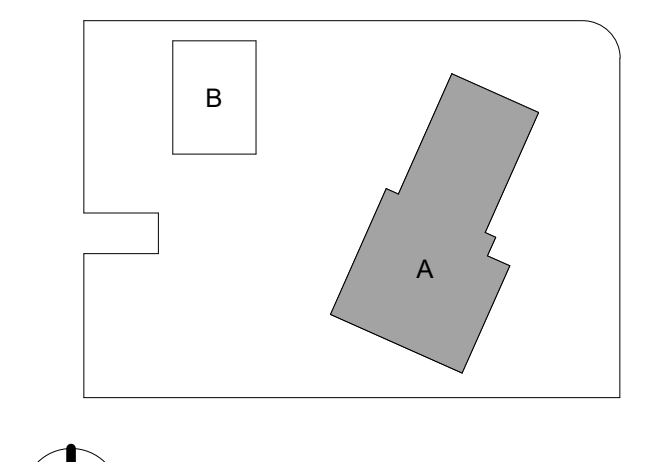
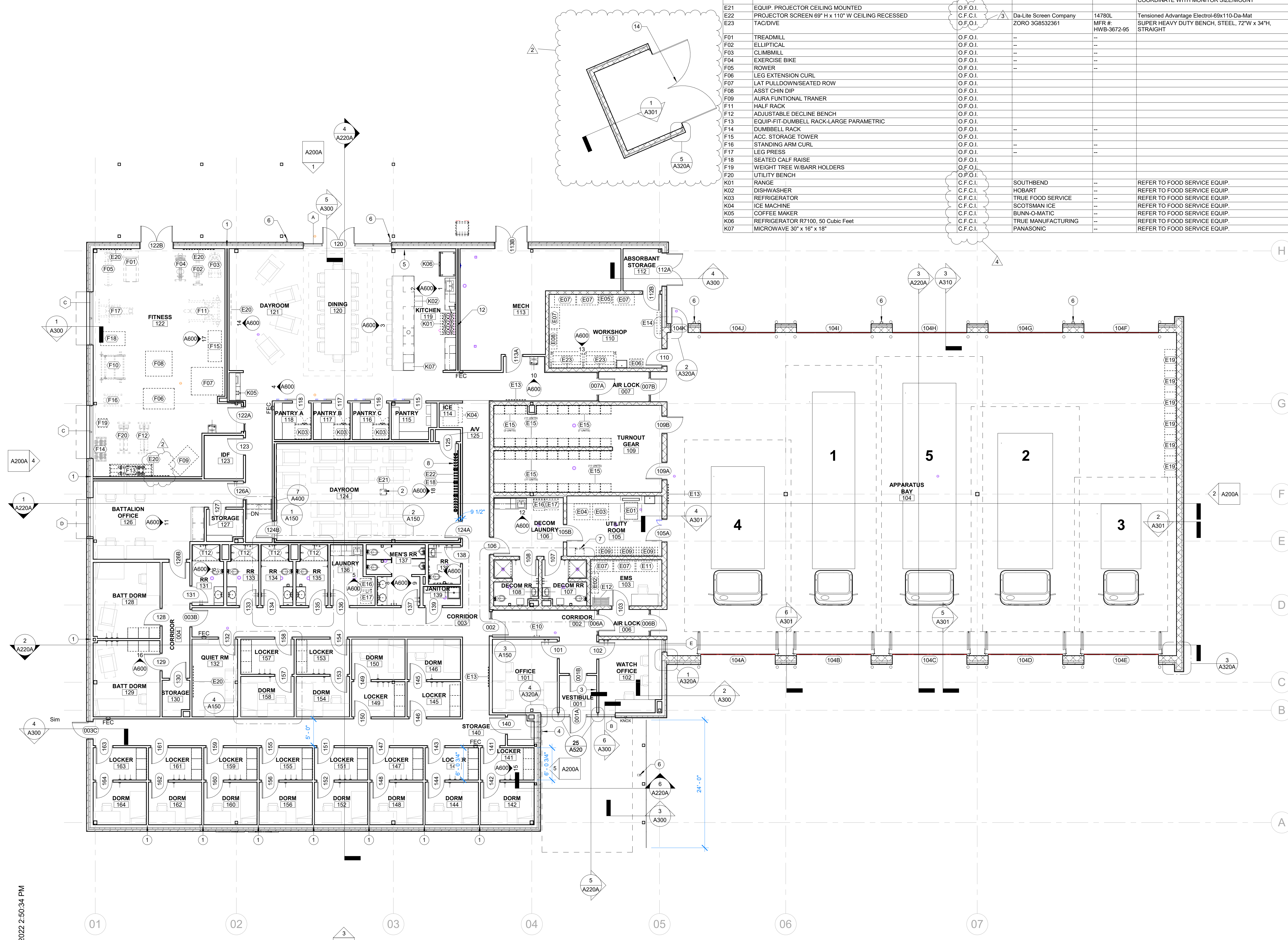
Gamong Construction
5988 N Michigan Rd
Indianapolis, IN 46228
(317) 682-1001

APPARATUS VEHICLE LIST

- (APPROXIMATE DIMENSIONS)
1. LADDER TRUCK, 41'-8" L, 10'-0" W, 11'-8" H
 2. TACTICAL TRUCK, 32'-3" L, 10'-4" W, 9'-9" H
 3. BATTALION TRUCK, 19'-0" L, 7'-6" W, 6'-8" H
 4. EMS AMBULANCE, 26'-0" L, 10'-0" W, 9'-8" H
 5. FUTURE ENGINE, 45'-0" L, MAX.

ARCH PLAN KEYNOTES

1. FILL EXTERIOR STUD CAVITY WITH BATT INSULATION (Z-07) CENTERED ON WALL INTERSECTION FOR ACOUSTIC SEPARATION
2. CONTRACTOR TO PROVIDE MOUNTING ROD FOR PROJECTOR ANCHORED TO DECK. PROVIDE CHIEF-SYSAUW SUSPENDED CEILING PROJECTOR SYSTEM.
3. DOORBELL, REFER TO MEP DRAWINGS
4. SAFE HAVEN BABY BOX, REFER TO DETAILS
5. PROVIDE GAS CUT OFF BUTTON. REFER TO MEP
6. DOWNSPOUTS, CONNECT TO BOOT AND STORMWATER SYSTEM. REFER TO CIVIL
7. ROOF ACCESS LADDER 13'-8" HEIGHT
8. COORDINATE ALL LIGHT SWITCHES SO THEY ARE LOCATED EITHER BETWEEN SCREENS OR ADJACENT TO SCREEN(S) WHEN THE SCREENS ARE IN THE DOWN POSITION. BOTTOM OF SCREEN VIEWING SURFACE TO BE LOCATED +42" AFF.
9. FIBERGLASS SHOWER INSERT
10. SC FLOORS, REFER TO STRUCTURAL PLAN NOTE 4 AT S110 FOUNDATION PLAN.
11. 1" METAL PANEL ON BOTSIDES OF WALL
12. FRAME RECESSED OPENING FOR GAS CONNECTION, OPENING TO BE 36" TALL, STARTING AT FINISH FLOOR, BY 36" WIDE AND 6" DEEP. RECESS BACK INTO STUD SPACE OF EXTERIOR WALL AND FINISH WITH GYPSUM BOARD AND PAINT, REFER TO PLUMBING FOR MORE INFO.
13. PT2 WALLS, VINYL WALL BASE W/1, SC FLOORS
14. GATE TO BE BASTEEL DOUBLE SWING INFINITY GATE W/ DOUBLE-SEALED BALL BEARING HINGES, 1" STAINLESS STEEL CANE RODS, AND 1" DIAMETER SOLID STAINLESS STEEL SLIDE BALL. KYMAR 600 FINISH, COLOR TO BE SELECTED BY ARCHITECT FROM MANUFACTURERS FULL RANGE OF COLORS



1ST FLOOR KEY PLAN

CONSTRUCTION DOCUMENTS



Christopher W. Lake

No.	Description	Date
2	ADDENDUM 02	01/28/22
3	ADDENDUM 03	02/02/22
4	ADDENDUM 04	02/04/22

PROJECT #: 21-036
ISSUE DATE: 12/28/2021
DRW: MM | CHK: CL

ARCHITECTURAL PLAN

A120A

SECTION 002413 – BID CATEGORY BC-02 GENERAL TRADES SCOPE OF WORK

This Scope of Work is to include, but is not limited to, the following Specification Sections:

<u>Section</u>	<u>Description</u>
DIVISION 00	PROCUREMENT AND CONTRACTING REQUIREMENTS
DIVISION 01	GENERAL REQUIREMENTS
03 60 01	GROUTING
04 05 15	MASONRY MORTARING AND GROUTING
04 21 14	ANCHORED BRICK VENEER MASONRY
04 22 00	CONCRETE UNIT MASONRY
05 12 00	STRUCTURAL STEEL FRAMING
05 31 23	STEEL ROOF DECKING
05 50 00	METAL FABRICATIONS
05 53 00	METAL GRATINGS
06 10 53	MISCELLANEOUS ROUGH CARPENTRY
06 40 23	INTERIOR ARCHITECTURAL WOODWORK
07 11 13	BITUMINOUS DAMPROOFING
07 21 00	ULTRA WALL INSULATION AND AIR BARRIER SYSTEM WITH ULTRA SL
07 21 13.13	FOAM BOARD INSULATION
07 21 16	BATT AND BLANKET INSULATION
07 21 19	FOAMED-IN-PLACE INSULATION
07 42 33	EXTERIOR SOLID PHENOLIC RAINSCREEN PANELS
07 42 65	ROOF SCREENS
07 54 23	THERMOPLASTIC POLYOLEFIN (TPO) ROOFING
07 62 00	SHEET METAL FLASHING AND TRIM
07 72 13	MANUFACTURED CURBS
07 72 33	ROOF HATCHES
07 92 00	JOINT SEALANTS
07 92 19	ACOUSTICAL JOINT SEALANTS
08 11 13	STEEL DOORS AND FRAMES
08 14 16	FLUSH WOOD DOORS
08 31 13	ACCESS DOORS AND FRAMES
08 35 19	FOUR-FOLD DOOR SYSTEMS
08 36 13	SECTIONAL OVERHEAD DOORS
08 41 13	ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS
08 80 00	GLAZING
08 83 00	MIRROR GLASS
09 22 16	NON-STRUCTURAL METAL FRAMING
09 29 00	GYPSON BOARD
09 30 13	TILING
09 51 13	LAY-IN ACOUSTICAL PANEL CEILINGS
09 53 00	ACOUSTICAL CEILING SUSPENSION SYSTEMS

09 65 13	RESILIENT BASE AND ACCESSORIES
09 65 19	RESILIENT TILE FLOORING
09 67 23	RESINOUS FLOORING
09 68 13	TILE CARPETING
09 84 34	ACOUSTICAL CEMENTITIOUS WOOD FIBER PANELS
09 90 00	PAINTING AND COATING
09 96 00	HIGH PERFORMANCE COATINGS
10 21 13	TOILET COMPARTMENTS
10 28 13	TOILET ACCESSORIES
10 44 13	FIRE PROTECTION CABINETS
10 44 16	FIRE EXTINGUISHERS
10 71 13	EXTERIOR SUN CONTROL DEVICES
10 73 13.13	METAL AWNINGS
11 40 00	KITCHEN EQUIPMENT
12 24 13	ROLLER WINDOW SHADES
12 35 57	METAL CASEWORK
12 36 00	COUNTERTOPS
12 36 16	METAL COUNTERTOPS

This Bid Category Scope of Work describes and assigns Work to this Bid Category as designated by the Construction Manager. Successful bidder will cooperate and coordinate with all future Bid Category Subcontractors for proper and expedient completion of the Work in this Project. This summary should in no way be construed as being all inclusive. It is issued as a guide to aid in the assignment of Work and is intended to clarify and/or further define the Scope of Work included in the Bid Documents. All work described or indicated in the respective Specifications Sections or Divisions listed above shall be included, except as specifically excluded herein.

1. Provide all labor, material, equipment, and supervision to complete the general trades scope of work. All items in this scope are to be furnished and installed unless noted otherwise.
2. This Subcontractor will be responsible for receiving, offloading, inventorying, installing, all materials associated with the performance of this scope of work. This Subcontractor is also responsible for verifying all quantities delivered to site and the timely delivery of said quantities. Garmong will not be responsible for incomplete deliveries or lost/misplaced material.
3. This scope of work acknowledges the multi-phased approach of this project.
4. Patch, repair or replace defective work immediately as directed by Architect/Engineer and Garmong. Subcontractor will be responsible for repairs resulting from defective workmanship and shall be required to achieve the specified tolerances.
5. Subcontractor is required to cut and patch all openings missed per the Contract Documents.
6. The Subcontractor is responsible for the removal of mud, loose fill and debris as necessary to allow placement of their work.

7. Subcontractor will be responsible for providing any necessary traffic control, for the Work, including flagmen, (if required) to assure an orderly flow of traffic in the area. The Subcontractor is responsible to clean streets of any debris or spillage of material as a result of and during the performance of its work.
8. The Subcontractor is responsible for any lighting or power requirements to support their work prior to temporary power availability.
9. This subcontractor is responsible for providing enclosures in support of temporary climate control for the mechanical contractor's temporary climate control required by specification 015123.
10. This scope of work is responsible for installing and coordinating the installation of access doors not shown on the drawings but required and provided by the MEP contractors. This contractor shall furnish and install all access doors shown on the drawings.
11. Masonry
 - a. Provide all labor, material, equipment and supervision to complete the Masonry scope of work.
 - b. All exposed block shall be struck.
 - c. Provide casual pumping and removal of water, resulting from rainfall interfering with your work.
 - d. The Scope of Work includes furnishing and installing allgrout for masonry.
 - e. The Scope of Work includes all cell insulation if required by the contract documents.
 - f. The Scope includes furnishing and installing all bond beams and precast lintels.
 - g. Through wall flashing shall be provided with end dams, porous fill on top of flashing, and weep holes to allow moisture to exit the cavity. All cavities below grade shall be filled solid, with weep relief provided at the bottom of the cavity at the top of the masonry stem wall above the footing. Mockups shall be built at the Jobsite to show all conditions of all materials.
 - h. Masonry reinforcing steel and joint reinforcing will be furnished and installed by this Subcontractor.
 - i. Coordination, unloading, distribution, and verifying of quantities of masonry reinforcing are the responsibility of this Subcontractor.
 - j. Assume that no CMU walls receive wall base, therefore wall to floor corner shall be neat and straight.
 - k. All control joints to be neat and clean ready for joint sealant application upon completion of the masonry contractor's work.
 - l. The Scope of Work includes laying to all hollow metal frames in masonry wall construction. Frames will be furnished and set by this bid package. Bituminous coating, where required, is included in this scope of work. This subcontractor shall ensure frames are plumb, level, and square before, during and after installation of work.
 - m. Subcontractor will remove all mortar and grout from hollow metal frames upon completion of work.
 - n. Subcontractor shall protect the inside of all masonry hollow metal frames at the hinges and strikes to keep out mortar and grout.
 - o. Grout and mortar testing will be by others. Testing shall be schedule with Garmong 24 hours in advance. All cost associated with a failed test will be the responsibility of this Subcontractor.
 - p. Provide in place mock-up as required by Garmong and the owner. Mock-ups shall include the specified mortar and accessories.

- q. Subcontractor shall saw cut masonry units to provide clean, sharp, unchipped edges and minimal dust.
- r. This subcontractor shall be responsible for any additives, heating of materials, and covering of work in place for cold weather conditions. All winter conditions shall be included for the completion of this scope of work.
- s. Clean up of mortar droppings and masonry debris from masonry operation shall be performed continuously and immediately following the laying of the work and the area shall be left broom clean.
- t. Subcontractor shall rub and patch all exposed lintels.
- u. All masonry walls installed directly on concrete slabs shall have masonry dowels drilled and epoxy installed by this subcontractor after the completion of the floor slab.
- v. Subcontractor shall fill all masonry cavities as required.
- w. Subcontractor shall point and patch all exposed masonry units.
- x. This subcontractor will employ a competent scaffold erector with OSHA certification, who will supervise and monitor all scaffolding work and will be onsite when all scaffolding work is in progress or being used. A tagging system must be used to identify out of service and in service scaffolding. The tagging system will be per OSHA requirements.
- y. Subcontractor shall install rebar caps (OSHA Approved) on all reinforcing and maintain on a daily basis.
- z. In the event that the toilet accessories, fire extinguisher cabinets, valve cabinets, electrical panels, etc. are not delivered in time, provide block outs for these items as per submittal data.
- aa. Provide washout of excess concrete associated with masonry work to be performed into dumpsters provided by this scope of work. Clean up of this area will be performed by masonry contractor weekly.
- bb. Provide miscellaneous steel which is not otherwise shown on the drawings as required for a complete installation.
- cc. Care should be taken to ensure masonry walls are flat and acceptable to receive required finish.
- dd. Provide safety rails required for the protection of others as required for this scope of work.
- ee. Provide all field cutting and block outs as required for mechanical, plumbing, and electrical penetrations.
- ff. The Subcontractor shall coordinate with Garmong and other trades, and install sleeves and embedded items built into masonry walls, i.e. expansion joints, metal embeds, etc.
- gg. This Subcontractor is responsible to furnish, install, and remove any necessary temporary wall bracing to prevent failure due to wind, etc.
- hh. This Subcontractor shall provide all scaffolding required for the performance of this subcontract.
- ii. Cleaning the foundations, if required, prior to the start of work shall be included as part of this scope of work
- jj. All door/window jambs, sills, and exposed outside corner CMU to receive bullnose block.
- kk. This scope of work shall include all site walls including, but not limited to the dumpster enclosure.

- ll. Include final washing of the brick.
- mm. Site Seat walls to be included in this scope

12. Steel

- a. Provide all labor, material, layout, equipment and supervision to complete the Steel scope of work.
- b. Subcontractor agrees to furnish all scaffolding, associated rigging, hoisting (crane), unloading, handling, unpacking, and services necessary for erection and delivery into the premises of all necessary equipment and apparatus. Subcontractor agrees to remove it from premises when no longer required for the performance of this work.
- c. Furnish and install all structural steel, structural steel shapes, steel connections, welding, shop primer, steel preparations, shop painting, field painted touch-ups and steel fabrication as required.
- d. All submittals and shop drawings must be submitted no later than 20 days after notice to proceed.
- e. The Subcontractor will furnish F.O.B. jobsite all embeds for cast in place concrete and masonry anchor bolts for structural steel and special metal fabrications that are required or shown to be cast in concrete or masonry. All embeds will have holes drilled for attachment to formwork.
- f. Coordinate all installations and provide detailed shop drawings indicating exact locations of all embeds and anchor bolts.
- g. Provide identification tags for all embeds.
- h. Provide all necessary fasteners, clips, inserts, embeds, templates, accessories, hanger rods, pre-punched holes, etc. to furnish and install all structural steel as required.
- i. Provide certificates for all welders, prior to start of work.
- j. Include touch up (chipping, grinding and prime painting) of all structural steel and field welds. All embeds are to be prime painted on all surfaces.
- k. Cleaning of all steel and decking after erection of steel is complete.
- l. Furnish and install complete all steel roof decking, misc. materials, fabrications and touch-up painting as required. Provide all ledge angles necessary to support the metal deck.
- m. Furnish and install all temporary and permanent cross bracing, wind bracing and misc. bracing as required.
- n. Furnish all steel lintels and brick relieving angles as required. Subcontractor shall provide all necessary anchors to attach these members
- o. Provide all painting, touch-up painting, bituminous coatings and galvanizing as required.
- p. In the event of mis-fabrication or design error, the supplier will submit, within 24 hours, an engineered solution. Upon acceptance, Subcontractor will immediately correct the problem as necessary not to interfere with the job progress.
- q. No cutting or drilling of holes in structural members will be permitted unless written permission from the Design Team is obtained.
- r. Special attention is to be made to all OSHA and Garmong Safety Requirements, especially to TYING OFF. Scaffolds, ladders, hard hats, safety glasses, fire

extinguishers and flash arrestors will be used. Ladders must be tied off. All personnel setting "leading edge" work will be tied off, NO EXCEPTIONS. This Subcontractor shall design and install any necessary safety cable system required to achieve compliance. The company safety director prior to use will review all systems. 100% fall protection above 6' will be strictly enforced.

- s. All welders are to be gas or diesel powered.
- t. Provide all handrails.
- u. All welds in galvanized decks will be touched up with galvanized primer.
- v. This Subcontractor is responsible for any lost or misplaced materials intended for this scope of work.
- w. Furnish and install all permanent roof access ladders.
- x. This scope shall include cleaning the top of foundations, if required, to start work.
- y. Anchor bolt survey to be performed 2 weeks prior to the start of the schedule steel erection.
- z. All Miscellaneous Metals are included in this scope.
- aa. Furnish and install Dumpster Gate

13. Misc Metals

- a. Furnish and install complete all stair and railing systems as required.
- b. This Subcontractor will field measure all handrails and railings.
- c. Provide all necessary touch-up paint.
- d. Provide written confirmation of delivery date of railings one week after receipt of approved shop drawings.
- e. Provide written verification that all handrails meet code.
- f. Core drilling, setting and grouting will be by this Subcontractor.
- g. Furnish and install all requirements of metal bar gratings. Furnish items to be embedded in concrete to Contractor Subcontractor for installation.

14. Wood Blocking

- a. Provide in wall blocking as shown and required
- b. Provide all requirements of wood sheathing
- c. Includes all blocking on the roof as necessary

15. Casework

- a. Include all blocking required for the casework
- b. Subcontractor shall furnish and install all fasteners, anchors, and miscellaneous accessories as required for the complete installation of the work of this scope.
- c. Subcontractor shall verify all field conditions and take all appropriate field measurements prior to fabrication to assure proper fit. Subcontractor shall be responsible for the coordination, in conjunction with Garmong, of all opening sizes and shall field verify all openings to receive the work of this scope prior to fabrication. No on-site modifications shall be made without the express written approval of Garmong, which modifications, if approved, will be performed at no additional cost to the contract.
- d. Subcontractor shall provide all additional stiffeners as may be required for the proper performance of the work.

- e. Subcontractor shall include coordination and cutouts for all penetrations of cabinets, tops, back splashes, etc. including, but not necessarily limited to, mechanical, electrical, plumbing, communication, computer, toilet accessories, and fixture cutouts. Coordinate the installation of cabinets, casework, panels and counters with electrical and mechanical trades.
 - f. Subcontractor shall include final adjustments of all drawers, doors, and other hardware as may be required by the Architect and/or Garmong.
 - g. Subcontractor shall remove, as part of this scope, all manufacturers' labels, stickers, etc. at the conclusion of the contract. Final cleaning of all Subcontractor's work is included in this scope.
 - h. All millwork details and returns shall be as per architectural details unless mutually agreed to and approved on shop drawing submissions.
 - i. Subcontractor is aware that variations in plumb and levelness may occur during the framing and forming of openings to receive the scope of this work and shall include shimming and make other provisions to overcome any variations within pre-agreed tolerances.
 - j. Subcontractor shall examine all substrates and adjoining construction and conditions under which the work of this scope is to be installed prior to the installation of this work, and shall immediately report to Garmong any areas deemed to be unsatisfactory. Subcontractor shall not proceed until unsatisfactory conditions detrimental to the proper and timely completion of the work have been completed. Subcontractor shall perform such inspections in sufficient advance, to allow for any corrective work as may be required by others, so as to assure conformance with the project schedule and an expeditious and uninterrupted flow of work in any given area.
 - k. Subcontractor shall not install any members that are warped, racked, bowed, deformed, or otherwise damaged or defaced to such an extent as to impair strength or appearance. Subcontractor shall further remove and replace any materials damaged in the process of installation.
 - l. Furnish and install all shelving.
 - m. Provide cardboard protection on all horizontal surfaces.
 - n. Subcontractor shall furnish and install all standing and running trim.
 - o. Furnish and install all vanity and Kitchen countertops as required.
 - p. Sink and faucet cutouts will be coordinated with the plumbing subcontractor. This Subcontractor will perform the cutout work unless determined otherwise.
 - q. All shimming, blocking and bracing required for a plumb, level and secure installation is required by this Subcontractor.
 - r. Provide sealants at joints between all cabinetwork, casework, millwork or miscellaneous woodwork and adjacent surfaces.
 - s. Provide all required filler pieces.
 - t. Indicate all handicapped casework on shop drawings.
 - u. Installation will require multiple mobilizations.
16. Provide all labor, material, equipment and supervision to complete the Kitchen Equipment scope of work.
- a. Provide coordination with mechanical and electrical subcontractors for connections

to equipment. This subcontractor will be responsible for all interconnect wiring and controls wiring required for a complete operational system acceptable to owner, AE, and Construction Manager. Utility connections will be provided by others to the extent indicated on the plumbing, mechanical, and electrical drawings. This subcontractor will be required to coordinate utility connections with these drawings from the construction set and will bear any costs associated with modifications to these requirements as a result of not matching these drawings.

- b. This subcontractor will be responsible for installation of refrigeration line sets and condensate drains associated with the cooler/freezer including roof curbs, equipment supports and penetrations.
 - c. Provide all anchor bolts, seismic restraints and anchoring of equipment. Where anchors are to be embedded in masonry or concrete, furnish only to the Masonry or Concrete subcontractors prior to installation of masonry or concrete. Not furnishing these items prior to the installation of these systems will require post installation by this subcontractor.
 - d. Furnish all light fixtures integral to items installed by this scope of work, installation of light fixtures by Electrical subcontractor.
 - e. Provide all wall, floor, and roof penetrations required to complete this scope of work. Provide infill of openings with sealants or escutcheons. Maintain all rated assemblies.
 - f. Provide sealants as specified to seal abutting surfaces that produce airtight, watertight and sanitary joints.
 - g. Provide cardboard protection for all stainless-steel surfaces during construction, remove before final cleaning.
 - h. Furnish and install kitchen exhaust hoods and fans. Furnish and install all closure pieces, duct, and trim as necessary for a complete installation.
 - i. Furnish and install hood fire suppression system. Furnish only gas shut off valve for installation by the plumbing contractor. Provide contactor/hood control panel to allow for interface to the fire alarm system (connection by Electrical Contractor), BAS (connection by Mechanical Contractor), and shut down of electrical power to kitchen equipment where indicated. Provide kitchen temperature sensor for wire connections by Electrical Contractor.
 - j. Provide all required plan review, permits and fees associated with work of this category, specifically coordination with the authorities having jurisdiction and health department.
 - k. Provide field start-up of all equipment furnished or installed under this scope of work.
 - l. This contractor shall be responsible for notifying Garmong prior the start of above grade masonry if there are any pieces of equipment that are not capable of fitting through planned door openings.
17. Scope includes all weather barrier
 18. Scope includes all requirements of thermal insulation
 19. Furnish and install all requirements of applied fireproofing as dictated by the contract documents. This shall include any auxiliary materials, primers, bonding agents, metal lath, reinforcing fabrics, etc. to ensure a complete fireproofing scope of work.
 20. Joint Sealants

- a. Provide all fire stopping and fire safing scope of work per the life safety drawings and the wall/floor ratings and wall types on the architectural Floor Plans including:
 - i. Top and bottom of wall construction to structure
 - ii. At rated wall or rated ceiling intersections to maintain NFPA and UL requirements and ratings
 - iii. Fire protection, plumbing, piping, ductwork and conduit (MEP) through wall penetrations
 - iv. Fire protection, plumbing, piping, ductwork and conduit (MEP) through floor penetrations
 - b. Furnish and install all joint sealants as specified including but not limited to:
 - i. Exposed concrete slab-on-grade joints
 - ii. Louver perimeters
 - iii. Aluminum frame perimeters
 - iv. Hollow metal frame perimeters
 - v. CMU control joints
 - vi. Steel column covers to CMU
 - vii. Drywall to masonry vertical joints and ceiling/bulkhead perimeters
 - viii. Joint sealants for plumbing fixtures
 - ix. Casework/countertops to walls
 - x. Bottom of CMU walls as detailed
21. Furnish and install all access panels shown on the drawings.
22. Doors/Frames/Hardware
- a. Furnish and Install all doors, frames, & hardware
 - b. All doors and frames to receive glazing shall be provided with glazing stops beads or wood molding.
 - c. Subcontractor agrees to prepare, machine and reinforce any and all materials furnished under this scope for complete installation of door hardware as required by hardware suppliers.
 - d. Hollow metal frames will be fully assembled and welded.
 - e. Subcontractor shall machine doorframes and doors. Furnish anchors as necessary to soundly fasten to wall type as required.
 - f. Door silencers are included in this scope.
 - g. Subcontractor shall provide all astragals and door undercuts as required. Undercuts for all doors furnished by this Subcontractor shall be noted on shop drawings and submitted for approval.
 - h. Provide removable spreader bar across bottom of frames tack welded to jamb and mullions.
 - i. This Subcontractor shall meet with Garmong, Architect and Owner Representatives to finalize keying requirements.
 - j. Hollow metal frames and doors will be shipped with shop-applied primer that is compatible with the finish paint specifications. A letter of compatibility must accompany the shop drawings.
 - k. The Subcontractor shall provide all required door louvers and light frames as required.
 - l. Provide construction cores, permanent cores and keys per approved schedule.

- m. All wood doors to be poly-bagged.
- n. Subcontractor shall receive, unload, inventory and store all steel doors, wood doors and finish hardware.
- o. Subcontractor shall distribute and install all steel doors, wood doors and finish hardware.
- p. Subcontractor shall include all required drill bits, fasteners, screws, taps, bolts and any other items necessary for a complete turnkey installation.
- q. All required final hardware adjustments and punching out of the work as required for a properly functioning system at the time of substantial completion and owner acceptance is included.
- r. This scope includes multiple mobilizations to complete this scope of work within delivery schedules, project schedules and construction sequencing so as to not damage this work, impede work by others, or cause individual or overall deadlines to be missed.
- s. Subcontractor shall be responsible for protection of all hardware and wood doors until installed and accepted by Garmong. Removal of shipping protection materials and depositing in the job site dumpsters is included in this scope of work.

23. Overhead Doors

- a. Furnish and install all requirements of overhead doors.
- b. Includes controls and operators.
- c. Include wiring of door controls less than 120V
- d. Provide Alt. 3 pricing for fourfold garage doors in lieu of standard overhead doors

24. Glass and Glazing

- a. Provide temporary protection of window, glazing, frames, doors, and storefronts. This Subcontractor is responsible for all protection of this work. Provide blue max film on windows as a minimum and maintain as needed, interior and exterior.
- b. This Subcontractor shall remove all dirt, grease, stickers, glue, and markings when directed by the Garmong prior to turnover to Owner.
- c. This Subcontractor shall provide equipment to offload the windows and storefronts and ensure that protective coverings are used to protect windows against dirt and damage.
- d. All glass and glazing including glazing of wood and hollow metal doors, frames and windows.
- e. Provide all entrance doors, frames, vision panels, sidelights, transom panels, aluminum framing panels, and storefront type.
- f. Furnish and install manufactures hardware including offset pivots, closers, standard locks, custom push/pull and thresholds as shown on contract documents. Subcontractor shall reinforce all door and frame components as required to receive and support the hardware application as specified.
- g. Field touch up of finishes as required.
- h. Provide all anchors, fasteners, shims and related accessories for this work.
- i. Automatic entrances as indicated.
- j. Subcontractor shall be responsible for providing any and all additional supports not shown on the drawings to meet requirements of the work.
- k. If glazing system is late for any reason associated with the performance of this Subcontractor's scope, this Subcontractor shall be responsible for "temporary"

conditions to meet weather-tight and waterproofing conditions. This shall be done with plywood.

- l. Subcontractor will initiate and maintain protection or other precautions required through the construction period to ensure that, except for normal weathering, all material supplied by Subcontractor will be free of deterioration at the time of substantial completion.
 - m. Subcontractor shall be responsible for separating dissimilar materials with sealants, bituminous coatings or other acceptable products to eliminate the potential for corrosion.
 - n. It is the responsibility of this Subcontractor to coordinate all rough openings with other trades.
 - o. Shop drawings will show opening dimensions for preparation by the other trades. This Subcontractor shall include a system to accommodate the standard industry tolerances for these abutting trades.
 - p. Should any portion of the system not pass any test, this Subcontractor shall at his own expense, make the necessary corrections to bring the system up to a satisfactory function. At such time this Subcontractor shall retest the system at their own expense.
 - q. Notify Garmong 48 hours prior to any water test or other test so that the Project team can coordinate witness of the test.
 - r. Prior to furnishing glass, take field measurements of framed openings to verify glass dimensions prior to installation. Wrong size glass will be the responsibility of this Subcontractor and shall be replaced at its expense.
 - s. Final adjustments of all doors and windows will be after the HVAC system Test & Balance has been completed.
 - t. This Subcontractor is to thoroughly final clean all glazing both inside and out, include glass and frames, etc., prior to acceptance of work, including all mirrors. Garmong will be final judge of acceptance of work.
 - u. Provide Alt. 2 pricing for laminated glass at front entry windows and doors
25. Studs / Drywall
- a. Furnish and install all metal stud and gypsum board walls, ceiling/soffits and suspension system, rated and non-rated shaft wall and chase wall systems, including all bracing, fasteners, shimming, accessories, etc. required for a complete and structurally sound installation as required.
 - b. Subcontractor shall provide additional bracing and/or backing required to adequately support all wall hung fixtures and equipment (cabinets, furniture, toilet accessories, tack boards, handrails, fire extinguisher cabinets etc.). Comply with stud manufacturers recommendations and industry standards in each case considering weight or load resulting from item supported. This Subcontractor will meet with each related subcontractor and Garmong to coordinate blocking and backing work. Prior to covering a wall or ceiling, the Subcontractor will obtain a sign off of blocking and backing from Garmong.
 - c. Subcontractor shall furnish and install all acoustical sealants required.
 - d. Furnish and install all fire safing and fire stopping which occurs within Subcontractor's walls and ceilings.

- e. Subcontractor shall tape, float and finish all drywall partitions as required. Floors shall be scraped clean of drywall mud on a daily basis.
 - f. Subcontractor shall stencil and identify all fire rated and smoke partitions as required.
 - g. Subcontractor shall protect storefront, hollow metal work, aluminum work, glass etc. as required to prevent damage by Subcontractor's work.
 - h. Subcontractor shall leave walls scheduled to receive tile in a condition suitable for tile application.
 - i. Perform all mud bedding, taping, finishing, texturing, fire taping and blowout patches for the complete and functional performance of this work.
 - j. Finish wallboard surfaces at all joints, fastener heads, trim accessories, flanges and surface defects. Fill with joint compound and finish for a smooth flush surface, free of defects.
 - k. Coordinate penetrations in drywall with appropriate trades. Ensure that drywall is cut $\frac{1}{4}$ " to $\frac{1}{2}$ " between through wall penetrations. Seal joint with acoustical sealant or fire caulking. All penetrations shall be constructed in accordance with UL and NFPA requirements.
 - l. Other subcontractors shall furnish access panels for components within their scope of work. This Subcontractor is responsible for the complete installation of these access panels into partitions and walls constructed by this Subcontractor.
 - m. All drywall is to be finished to the floor to allow for the proper installation of base.
 - n. Provide cut outs necessary for framing at all electrical outlets, switches, HVAC, fire sprinkler and plumbing openings and all other trades where required. Verify height with plans, specifications, codes, subcontractors and contractor.
 - o. Provide coordination with the work of other trades and specifically participate in the ongoing coordination of MEP trades.
26. Ceilings
- a. Provide all acoustical ceiling work including framing, attic stock, grid, supports etc. for a complete installation.
 - b. Provide and install a complete suspension system to support all ceiling systems, including grid, tile, light fixtures etc. as required.
 - c. Unless otherwise indicated, ceilings should be laid-out symmetrical in each space.
 - d. Coordinate with electrical and mechanical trades, the location of, the suspension reinforcement for, fixtures and/or mechanical grilles, etc. to coordinate with the ceiling suspension pattern. Provide additional ceiling supports and cut outs where necessary to support light fixtures, speakers and other ceiling mounted equipment
 - e. Coordinate the location of hangers with other work. Ensure the layout of hangers and carrying channels are installed to accommodate fittings and units of equipment that are placed after the installation of the ceiling grid system.
 - f. Where ducts and or other equipment prevent the regular spacing of hangers, reinforce the nearest and adjacent hangers and related carrying channels as required to span the distance.
 - g. Provide coordination with all other trade work above, below or penetrating the ceiling system.

- h. Subcontractor shall install and cut all ceiling tile required with the exception of the fire sprinkler cutouts in tile.
- i. Provide all cleaning, touch-up, final adjustments, and replacements required to properly complete the installation prior to owner's acceptance.
- j. If ceiling height discrepancies exist, this Subcontractor shall notify Garmong immediately. This Subcontractor shall not make any ceiling height changes without approval of Garmong.

27. Flooring

- a. This scope includes all flooring including but not limited to carpet, ceramic wall tile, rubber stair treads, vinyl wall base, walk off carpet, and resinous flooring.
- b. Provide floor and wall floating as required to repair minor substrate defects to ensure finish product is plumb and true. Repair work at cracks in concrete slab is included. Include all leveling and patching compounds as recommended and approved by the flooring manufacturer.
- c. Final clean all material to remove all grout haze. Clean tile / stone in a manner acceptable to the tile / stone and grout manufacturer's recommendations.
- d. This Subcontractor shall perform final cleaning and sealing of the ceramic tile and stone.
- e. Remove and clean-up all debris, packaging, etc. on a daily basis. Grout will not be disposed of in any drains.
- f. Examine all walls, floors, surfaces and areas to receive tile material prior to starting work and notify contractor in writing of any unsatisfactory condition. Commencement of work shall constitute acceptance of subsurface by this Subcontractor.
- g. Specific care needs to be given when working around other finished surfaces, especially hollow metal door frames. Subcontractor shall remove grout immediately.
- h. Cuts around fixtures and penetrations shall be neat. Where escutcheons are provided, tile cuts shall be smaller than the escutcheons.
- i. Prior to installing floor system, this Subcontractor will be required to check moisture content of the concrete slabs to be sure they are within the limits.
- j. This scope package includes all moisture protection, moisture block, patching, and repairs to meet the recommendations of the flooring manufacturer.
- k. Install and maintain kraft construction paper on all floors. Subcontractor shall dispose of paper as directed by Garmong.
- l. This Subcontractor is responsible for cleaning of all construction debris prior to installation of the flooring system.
- m. Provide thresholds at all tile to carpet / tile to vct or tile to concrete transitions.
- n. All floor tiles shall have full bed under tile – no hollow tile.
- o. Vinyl repairs and minor carpet repairs are inherent in the construction process and are the responsibility of the Subcontractor to correct.
- p. Subcontractor shall remove interior doors as necessary and properly rehang any doors removed upon completion of work in that area.
- q. Seaming diagrams shall be submitted for approval. Subcontractor shall review seaming diagram with Garmong Logistics and advise if acceptable or if additional carpet is required.

- r. Provide final cleaning of vinyl tile in accordance with the flooring manufacturer's instructions immediately prior to turnover to owner.
- s. Protect vinyl surfaces prior to completion.
- t. Furnish and install transition strips as required.
- u. Glue for the carpet should be per manufacturers recommendations.

28. Painting

- a. Provide block fillers, primer and finish coat material as required.
- b. Subcontractor will be responsible for all surface preparation including, but not limited to, scraping, grinding, sanding, etc., prior to their application. Subcontractor shall notify Garmong in writing, prior to applying finish materials as to any surfaces that are not acceptable. Start of work shall be acceptance of surfaces by this Subcontractor.
- c. On any surface requiring more than one coat, Subcontractor shall not apply second or finish coat until it has received written acceptance of coating from Garmong.
- d. Tint each undercoat a lighter shade when multiple coats of same material are applied. Tint undercoats in the same color range as the finish coat.
- e. Provide samples of each color and material to be applied for approval by A/E on actual substrate prior to any production work, in strict accordance with contract specifications.
- f. All material stored on-site shall be kept dry and protected from the weather. All materials shall be kept in original containers.
- g. Come back work at the building exterior and interior is included at no additional cost.
- h. Subcontractor agrees that, since portions of the Work will be in finished spaces, it will therefore provide all required protection when working in finished areas. Any rework due to damage or negligence by Subcontractor shall be performed at no additional cost. The Subcontractor will clean adjacent surfaces that receive over spray.
- i. Electrical Contractor will provide temporary lighting per OSHA standards only. Subcontractor shall provide all additional lighting required for the proper execution of work.
- j. Finish exterior doors on tops, bottoms and side edges same as exterior faces.
- k. Paint backsides of access panels, removable and hinged covers to match exposed surfaces.
- l. Touch up primer on factory or shop primed metal surfaces required for application of finish painting.
- m. The Subcontractor shall verify compatibility of materials applied to substrates field coated by this Subcontractor so as to not void the warranties of said materials. It is also the responsibility of the Subcontractor to verify compatibility of shop-applied coatings to topcoats applied in the field.
- n. This Subcontractor is responsible for all substrate preparation as required to perform this scope of work. Included is all required masking and protection of adjacent work including hardware, fixtures, millwork, flooring, sprinkler heads, etc.
- o. Subcontractor will not be allowed to clean tools and equipment in permanent plumbing fixtures.
- p. All required cosmetic caulking is included in this scope.
- q. Subcontractor shall provide attic stock as required.

- r. Subcontractor shall be responsible for painting mechanical and electrical work exposed to view in interior occupied spaces and exterior walls and roof.
 - s. The Subcontractor and Garmong will inspect all gypsum wallboard, plaster and block walls after prime painting for surface defects. Re-priming and/or subsequent patchwork if required shall be performed prior to finish painting at no additional cost.
 - t. This Subcontractor is responsible for all sanding and cleaning of surfaces.
 - u. Furnish all applicable primers, acid washes and special preparations for surfaces.
 - v. Provide all exterior and interior paints and sealers as required.
 - w. Paint all exposed piping including conduit as required.
 - x. Subcontractor to prepare concrete per manufacturer's recommendation and apply concrete sealer as specified after bulk construction and notice to proceed is provided by Garmong.
29. Division 10
- a. Subcontractor shall furnish and install all fasteners, anchors, and miscellaneous accessories as required for the complete installation of the work of this scope.
 - b. Subcontractor shall furnish and install all required toilet accessories, wall protection, lockers, mailboxes, operable partitions, Knox boxes, fire extinguishers, cabinets, mirrors, and display surfaces including all required hardware and accessories required for a complete installation.
 - c. Coordinate layout of compartments with location of plumbing fixtures and all applicable codes.
 - d. Install all toilet compartments and urinal screens complete, including hardware, internal hinge system, stops, coat hooks, mounting brackets, leveling devices, pilaster shoes, head rails, vandal resistant options and overhead bracing required.
 - e. All cut outs required in toilet compartments for the installation of toilet accessories are the responsibility of this Subcontractor.
 - f. The removal of protective coverings and the initial cleaning of the toilet compartments is the responsibility of this Subcontractor.
 - g. Subcontractor shall be responsible for providing all required closure plates, closure strips, sealants, gaskets and caulking required to provide a complete installation of this work.
 - h. Subcontractor shall be responsible for receiving and warehousing materials until ready for installation. Subcontractor shall be responsible for the delivery, unloading, uncrating, setting and installation complete, leveling, testing and adjustments in order to ensure proper working order and conditions.
 - i. Provide all toilet and bath accessories for all handicapped and non-handicapped installation.
 - j. Furnish and install all requirements lockers including the bases.
30. Furnish and install all countertops
31. Furnish and install all metal casework and metal countertops.
32. Furnish and install all requirements of window treatments, integral blinds, and roller shades
33. Scope includes all fencing and gates
34. Furnish and install all requirements of ground set flagpoles and bases.
35. Utilities and sitework

- a. All dewatering is included for the installation of work in this Bid Package.
 - b. Includes connections to downspouts on outside of building and to existing piping.
 - c. All necessary traffic control and barricades for the proper and safe execution of the Work shall be furnished and maintained by this Subcontractor.
 - d. All excavation spoils are to be loaded directly onto truck and hauled to an onsite location to avoid contamination of stone. Contractor is responsible for returning the building pad to the condition found at the beginning of this scope of work.
36. Scope includes all site signage include parking signs, ADA signs, post and panel signs, pylon signage, traffic signage, and wayfinding signage.
37. ROOFING
- a. Provide all labor, material, equipment and supervision to complete the roofing scope of work.
 - b. Complete roof system including all adhesives and sealants, sheet metal flashing and trim, bonding adhesives, slip sheets, flat and tapered insulation and insulation accessories as required for a complete and water-tight assembly.
 - c. Coordinate with mechanical and electrical trades for roof installation around roof top units and penetrations.
 - d. This scope shall be responsible flashing all roof curbs provided and installed by the Mechanical Scope.
 - e. Furnish and install all joint sealants as it relates to roofing. These sealants should be utilized to ensure water tightness and included as part of the overall roofing system.
 - f. Coordinate roof penetrations with the appropriate trades and ensure that all penetrations conform with the roof systems installation requirements. Provide all material necessary to seal these penetrations.
 - g. All required roof vents complete with curbs, water seals, gaskets and hardware, flashing and accessories.
 - h. All metal copings, gutters and downspouts are included as part of this scope.
 - i. Includes furnish and installation of skylights and associated curbs
 - j. Provide and install curbs for equipment provided by this bid category
38. Provide all labor, material, equipment and supervision to complete the Post Frame Building scope of work.
- a. The post frame building foundations are to be designed and built as part of the delegated design of the post frame building.
 - b. All permitting and building envelope COMchecks are by the post frame building design build contractor.
 - c. Furnish and install all requirements of post framed building structure including columns, sills, headers, wainscot, wall framing, girts and purlins, mezzanine framing, wall sheathing both interior and exterior, building vapor and weather barriers, door openings, window openings, and louver openings.
 - d. Furnish and install all requirements of thermal insulation contained inside wall, floor, or roof framing.
 - e. Scope includes building supplier's standard details for columns and footings
 - f. Furnish and install all requirements of metal wall and roof panels including trim pieces, caulking where required, jamb and head covers, soffits, facias, gutters and downspouts.

- g. Includes supply and placement of any stone required for backfill of the building foundations.
 - h. This bid package is responsible to repairing ruts caused by the construction of the post frame building
 - i. Includes F&I of snowguard.
 - j. Cutouts as required in the steel liner panel.
 - k. Ceiling & Wall liner panel systems are included.
 - l. Fireblocking to the international building code is included.
 - m. Perma-Column Foundation System is included
 - n. Downspout sizing is to be coordinated with site civil package
39. Provide Alt. 4 pricing for furnish and install of the steel framed pergola with pull up bars and integral canopy over entry in lieu of pre-fabricated canopy.

The Bidder Acknowledges that they accept this Bid Category BC-02 General Trades Scope of Work in its entirety.

(Bidder - Please print full name of your proprietorship, partnership, or corporation)

(Printed Name - Authorized Signing Officer)

(Title – Authorized Signing Officer)

(Signature – Authorized Signing Officer)

(Date)

END OF SECTION 002413 - BID CATEGORY BC-02 GENERAL TRADES SCOPE OF WORK

SECTION 002413 – BID CATEGORY BC-03 MECHANICAL & PLUMBING SCOPE OF WORK

This Scope of Work is to include, but is not limited to, the following Specification Sections:

<u>Section</u>	<u>Description</u>
Division 00	Procurement and Contracting Requirements
Division 01	General Requirements
07 72 13	MANUFACTURED CURBS
22 05 13	Common Motor Requirements for Plumbing Equipment
22 05 17	Sleeves and Sleeve Seals for Plumbing Piping
22 05 18	Escutcheons for Plumbing Piping
22 05 23.12	BALL VALVES FOR PLUMBING PIPING
22 05 23.13	BUTTERFLY VALVES FOR PLUMBING PIPING
22 05 23.14	CHECK VALVES FOR PLUMBING PIPING
22 05 23.15	GATE VALVES FOR PLUMBING PIPING
22 05 29	Hangers and Supports for Plumbing Piping and Equipment
22 05 48	Vibration and Seismic Controls for Plumbing Piping and Equipment
22 05 53	Identification for Plumbing Piping and Equipment
22 07 19	Plumbing Piping Insulation
22 11 16	Domestic Water Piping
22 11 19	Domestic Water Piping Specialties
22 11 23.21	INLINE, Domestic Water Pumps
22 13 16	Sanitary Waste and Vent Piping
22 13 19	Sanitary Waste Piping Specialties
22 13 19.13	SANITARY DRAINS
22 14 13	Facility Storm Drainage Piping
22 14 23	Storm Drainage Piping Specialties
22 15 13	General-Service Compressed-Air Piping
22 15 19	General-Service Packaged Air Compressors and Receivers
22 31 00	Domestic Water Softeners
22 34 00	Fuel-Fired, Domestic-Water Heaters
22 42 13	Commercial Water Closets, Urinals, and Bidets
22 42 13.16	COMMERCIAL URINALS
22 42 16.13	Commercial Lavatories
22 42 16.16	COMMERCIAL SINKS
22 42 23	Commercial Showers
22 47 16	Pressure Water Coolers
23 05 13	Common Motor Requirements for HVAC Equipment
23 05 29	Hangers and Supports for HVAC Piping and Equipment
23 05 53	Identification for HVAC Piping and Equipment
23 05 93	Testing, Adjusting, and Balancing for HVAC
23 07 13	Duct Insulation
23 09 23	Direct Digital Control (DDC) System for HVAC

23 11 23	FACILITY NATURAL-GAS PIPING
23 23 00	Refrigerant Piping
23 31 13	Metal Ducts
23 33 00	Air Duct Accessories
23 33 46	Flexible Ducts
23 34 23	HVAC Power Ventilators
23 36 00	Air Terminal Units
23 37 13.13	AIR DIFFUSERS
23 37 13.23	REGISTERS AND GRILLES
23 74 16.11	PACKAGED, SMALL-CAPACITY, ROOFTOP AIR-CONDITIONING UNITS
23 74 16.13	PACKAGED, LARGE-CAPACITY, ROOFTOP AIR-CONDITIONING UNITS
23 81 26	Split-System Air-Conditioners
23 82 16.14	ELECTRIC RESISTANCE AIR COILS
23 82 39.13	CABINET UNIT HEATERS
23 82 39.16	PROPELLER UNIT HEATERS
23 82 39.19	WALL AND CEILING UNIT HEATERS

This Bid Category Scope of Work describes and assigns Work to this Bid Category as designated by the Construction Manager. Each Subcontractor shall cooperate and coordinate with all other Bid Category Subcontractors for proper and expedient completion of the Work in this Project. This summary should in no way be construed as being all inclusive. It is issued as a guide to aid in the assignment of Work and is intended to clarify and/or further define the Scope of Work included in the Bid Documents. All work described or indicated in the respective Specifications Sections or Divisions listed above shall be included, except as specifically excluded herein.

1. Provide all labor, material, equipment and supervision to complete the MECHANICAL & PLUMBING scope of work.
2. All items within this package are to be furnished and installed unless otherwise noted.
3. This scope of work acknowledges the multi-phased approach of this project.
4. All material handling, rigging, unloading, staging, and storage of all materials.
5. Any and all HVAC related materials are direct responsibility of this Bid Package.
6. This bid package shall provide fulltime onsite supervision and coordination throughout the duration of work associated with this bid package
7. **This contractor is to provide temporary climate control as required by specification 015123. Temporary enclosures in support of temporary climate control are to be by the general trades contractor.**
8. All refrigerant piping for new HVAC equipment.
9. A complete as-built drawing of the HVAC system shall be maintained during and turned over at the end of the project
10. Tagging and labeling of supplied equipment shall be included. Directional air flow shall also be included on associated ductwork.
11. All concealed equipment shall be labeled so that these components are easily found without accessing concealed space.

12. All required core drilling through new walls as required for passage of new materials when a sleeve is missed shall be included by this bid package
13. All sleeves in new masonry walls shall be laid out and provided by this bid package. Coordinate installation of sleeves with Garmong.
14. All fire dampers as required for ductwork to penetrate rated assemblies. This bid package will be required to supply and install the dampers as described by manufacturers standards.
15. A certified lifting plan shall be presented to Garmong prior to any equipment lifts associated with this bid package.
16. Variations of duct routing to accommodate existing building conditions and/or other trades may exist. An above ceiling coordination meeting will be required prior to rough-in.
17. All required insulation associated with this bid package.
18. Any required roof penetrations shall be coordinated with the roofing Subcontractor.
19. It shall be the responsibility of this bid package to provide start up assistance on equipment provided. The equipment manufacturer (when required) shall provide start up support on all equipment.
20. The Subcontractor shall provide all layout, excavation, concrete, backfill, compaction, dewatering, and testing as required by the documents to complete the work. Plumbing work inside or outside the foundation walls to the point of service is to be included. Include all Trench Safety Act requirements applicable to the work. Install suitable, approved, backfill material for all underground lines. Subcontractor shall provide all pumping of water for the work of this Subcontractor. Material soil testing will be completed by others. Any retesting due to non-conforming work shall be the responsibility of this Subcontractor.
21. All excavation spoils are to be loaded directly onto truck and hauled to an onsite location to avoid contamination of stone. Backfill of trenches after pipe bedding are to be #53 stone. Contractors is responsible for returning the building pad to the condition found at the beginning of this scope of work.
22. This Subcontractor shall provide own temporary power (i.e. generators, etc.) until (permanent) temporary power is provided.
23. This Subcontractor shall be aware of and maintain all minimum height and clearance requirements required by code and/or the contract documents.
24. Furnish and install a complete and operating plumbing system as shown and specified, in accordance with all plumbing requirements and in full compliance with all codes, ordinances, rules, regulations, etc. issued by agencies having jurisdiction.
25. All fees and permits required by the performance of this work.
26. All offsets and/or coordination required to insure proper fit of other work.
27. Provide all required sleeving for walls and slab.
28. Work to remain exposed until required tests are completed per the contract documents.
29. All work must be performed in accordance with all local building codes including but not limited to OSHA.
30. Subcontractor will provide all labels and identification required.
31. All material and equipment shall be installed in a manner that will not overload the structural elements of the building. Should additional supports be required to distribute loads over more than one structural element, the same should be included by the Subcontractor.

32. The Subcontractor shall provide all miscellaneous metal and structural items for support of Plumbing or Mechanical work such as support stands, wall angles, trapeze hangers, angles, plates, unistrut, bolts, rods and straps including the installation of such items. Exposed items in finished areas shall be painted to match surrounding areas. **Painting of mechanical and electrical work exposed to view in interior occupied spaces and exterior walls and roof is by the general trades contractor.**
33. All drawings are diagrammatic. Variations in piping, duct runs and equipment locations may exist. No change orders will be entertained for such variations.
34. All plumbing material and equipment will be unloaded, stored and distributed by this Subcontractor. Inside storage will be coordinated with Garmong. The Subcontractor shall store material in a storage trailer provided by this Subcontractor with all material protected from the elements.
35. Provide all motor starters and relays as required.
36. All piping will be hydrostatically tested as required per applicable codes and standards.
37. Provide all piping identification for a complete system.
38. Furnish and install complete domestic water, gas, sanitary and storm systems as required. Each system will be installed, tested, located, capped and sealed, staked to within five feet outside of building. All connection to sitework piping is the responsibility of this Subcontractor. It is the intent of this scope of work to convey to the Subcontractor that they are responsible for ALL items necessary to provide a complete plumbing system.
39. All equipment and accessories shall have factory standard finish color. Repair all damaged or scratched surfaces to like new condition and turn over all exposed material and equipment wiped down, free of debris. Provide all touch up painting and/or painting of exposed material and equipment where not included in the painting specification section.
40. Provide millwork subcontractor with templates to be used in cutting countertops. Coordinate rough-in information with various trades.
41. Furnish and install all concrete pads that are related to this scope of work that are not shown on the drawings.
42. This Subcontractor is responsible for furnishing any temporary valves, pumps gauges etc. to complete the work as required and scheduled.
43. This Subcontractor acknowledges that equipment for portions of this work will be started, tested, run and otherwise utilized prior to the start of the warranty period. Subcontractor shall incur all cost required to ensure that all warranty periods commence at the start of substantial completion.
44. Provide signage, labeling, tagging and otherwise all identification as required.
45. The plumbing hook-up to equipment requiring water or air is included in this scope.
46. Flush all systems prior to final testing. All testing and disinfections shall be in accordance with the all-applicable health codes.
47. Furnish and install all escutcheon plates necessary to insure a neat, clean and tightly sealed finished product.
48. Seal and provide protection of all drains for concrete and debris during duration of entire construction operation.
49. All drain line piping and vents as required from applicable equipment to the nearest drain or to another location if otherwise directed by Garmong.

50. Subcontractor shall furnish and install all gas piping required to coordinate with local utilities. This includes all piping and valves required in the commons building and all excavation and backfill required to complete this scope. All piping and shut off valves as required. Final connection will be by this Subcontractor.
- a. The gas shutoff valve for the kitchen equipment will be supplied by the General Trades Contractor
51. Grade beams, footings, pilings, piling caps and foundation walls will be installed prior to the commencement of electrical work. This Subcontractor is to, depending on required elevation, core, foundation walls, or excavate under grade beams as necessary for the installation of the underground work. Special care is to be taken during excavation to avoid the undermining of any footings and to meet all specified backfill requirements. All excavation and backfill is the responsibility of this Subcontractor. Coordinate with the Concrete Contractor, and pay for the cost of, any waterproofing repairs required due to this work.
52. This Subcontractor shall provide access doors required for the installation, operation, and maintenance of its work. All access doors must meet or exceed the fire rating of contiguous construction and must be consistent with the architectural finish of the area in which they are installed. The locations of access doors must be approved prior to installation.
53. All identification of piping and equipment as specified.
54. Coordinate all blocking requirements, including but not limited to toilet accessories, wall hung plumbing fixtures, etc., are to be coordinated with the General Trades contractor.
55. Include electric unit heaters. Electrical connections to be included in Electrical scope of work.
56. This scope shall include all requirements of temperature controls including raceways, wiring, devices, and connections.
57. Include furnishing and installation of all equipment and accessories found on the mechanical and plumbing schedules unless otherwise noted.
58. Furnish and install louvers, mechanical and architectural, including joint sealants to make watertight.
59. Scope includes all curbs & roof flashings for equipment associated with this scope.
60. Includes compressed air piping, couplings, and equipment.
61. Includes all requirements of testing and balancing of all systems includes in this scope per the contract documents prior and completed per the construction schedule.
62. Subcontractor shall cut all ceiling tile required for installation of this scope.
63. Provide deduct alternate pricing to provide all PVC in lieu of ductile iron piping

The Bidder Acknowledges that they accept this Bid Category BC-03 MECHANICAL Scope of Work in its entirety.

(Bidder - Please print full name of your proprietorship, partnership, or corporation)

(Printed Name - Authorized Signing Officer)

(Title – Authorized Signing Officer)

(Signature – Authorized Signing Officer)

(Date)

END OF SECTION 002413 - BID CATEGORY BC-03 MECHANICAL & PLUMBING SCOPE OF WORK

SECTION 002413 – BID CATEGORY BC-05 ELECTRICAL SCOPE OF WORK

This Scope of Work is to include, but is not limited to, the following Specification Sections:

<u>Section</u>	<u>Description</u>
Division 00	Procurement and Contracting Requirements
Division 01	General Requirements
26 05 00	Common Work Results for Electrical
26 05 19	Low-Voltage Electrical Power Conductors and Cables
26 05 26	Grounding and Bonding for Electrical Systems
26 05 29	Hangers and Supports for Electrical Systems
26 05 33	Raceways and Boxes for Electrical Systems
26 05 43	Underground Ducts and Raceways for Electrical Systems
26 05 44	Sleeves and Sleeve Seals for Electrical Raceways and Cabling
26 05 53	Identification for Electrical Systems
26 05 73.13	SHORT-CIRCUIT STUDIES
26 05 73.16	COORDINATION STUDIES
26 05 73.19	ARC-FLASH HAZARD ANALYSIS
26 09 23	Lighting Control Devices
26 24 13	Switchboards
26 24 16	Panelboards
26 27 26	Wiring Devices
26 28 13	Fuses
26 28 16	Switches and Circuit Breakers
26 29 13.03	MANUAL AND MAGNETIC MOTOR CONTROLLERS
26 29 23	Variable-Frequency Motor Controllers
26 32 13.16	GASEOUS EMERGENCY ENGINE GENERATORS
26 33 23.11	CENTRAL BATTERY EQUIPMENT FOR EMERGENCY LIGHTING
26 36 00	Transfer Switches
26 41 13	Lightning Protection for Structures
26 43 13	Surge Protection for Low-Voltage Electrical Power Circuits
26 51 19	Led Interior Lighting
26 52 13	Emergency and Exit Lighting
26 56 13	Lighting Poles and Standards
26 56 19	Led Exterior Lighting
27 15 00	Communications Horizontal Cabling
28 46 21.11	ADDRESSABLE FIRE-ALARM SYSTEMS

This Bid Category Scope of Work describes and assigns Work to this Bid Category as designated by the Construction Manager. Each Subcontractor shall cooperate and coordinate with all other Bid Category Subcontractors for proper and expedient completion of the Work in this Project. This summary should in no way be construed as being all inclusive. It is issued as a guide to aid in the assignment of Work and is intended to clarify and/or further define the Scope of Work included in the Bid Documents. All work

described or indicated in the respective Specifications Sections or Divisions listed above shall be included, except as specifically excluded herein.

1. Provide all labor, material, equipment and supervision to complete the ELECTRICAL scope of work.
2. All items within this package are to be furnished and installed unless otherwise noted.
3. This scope of work acknowledges the multi-phased approach of this project.
4. All material handling, rigging, unloading, staging, and storage of all materials.
5. Any and all Electrical related materials are direct responsibility of this Bid Package.
6. This bid package shall provide fulltime onsite supervision and coordination throughout the duration of work associated with this bid package.
7. **This contractor is responsible for all electrical safe-off.**
8. All required core drilling through existing walls as required for passage of new materials related to this bid package.
9. All sleeves in new masonry walls shall be laid out and provided by this bid package. Coordinate installation of sleeves with Garmong.
10. The electrical contractor shall assume all costs to install temporary power to the Garmong's onsite job trailer.
11. This Subcontractor shall provide own temporary power (i.e. generators, etc.) until (permanent) temporary power is provided.
12. This subcontractor shall be responsible for coordinating and providing temporary power to power the accessory building in support of the project schedule to allow for occupancy prior to construction of the new fire station.
13. Minimum temporary power to be provided prior to steel erection:
 - a. 1ea 400 amp temporary panel with GFI breakers at every permanent electrical room. Including the auxiliary building
 - b. Power to be provided so that all temp power can be reached with a 100' cord.
14. Temporary lighting levels as required by OSHA to be provided and maintained and moved as needed for the construction of the project.
15. Furnish and install all concrete pads that are related to your work that are not shown on the drawings.
16. A complete as-built drawing of the electrical systems shall be maintained during and turned over at the end of the project.
17. All electrical panels shall receive new panel schedules to reflect actual installation.
18. Provide "Fed From" tags on all electrically fed equipment stating which panel and circuit number each piece of equipment is fed from.
19. It shall be the responsibility of this bid package to provide start up assistance on equipment provided. The equipment manufacturer (when required) shall provide start up on all equipment.
20. This bid package shall provide a fully functional fire alarm system including fire alarm devices, duct detectors, horns, strobes, etc.
21. Any roof penetrations shall be coordinated with the roofing contractor.
22. Variations of conduit routing to accommodate existing building conditions and/or other trades may exist. An above ceiling coordination meeting will be required prior to rough-in.
23. Schedule of any required shutdowns shall be coordinated with Garmong Construction superintendent.

- 24. This bid package shall be responsible for all earthwork required to complete this scope.
- 25. All excavation spoils are to be loaded directly onto truck and hauled to an onsite location to avoid contamination of stone. Backfill of trenches after pipe bedding are to be #53 stone. Contractors is responsible for returning the building pad to the condition found at the beginning of this scope of work.
- 26. This scope shall include all locates, both public and private, required for this scope of work.
- 27. This contractor shall be responsible for the electrical service to equipment provided by other bid packages.
- 28. This scope of work includes concrete light pole bases and concrete floodlight bases.
- 29. All spoils shall be removed and disposed of off-site.
- 30. Coordinate work between all bid documents for locations of work provided by this scope including card access, receptacles, low voltage rough-ins, lighting, door controls and auto-operators, etc.
- 31. This scope work is responsible for providing all rough-ins, equipment, installation, and commissioning of the access control, tele/data, TV, and security systems.
- 32. Subcontractor shall cut all ceiling tile required for installation of this scope.
- 33. All dewatering is included for the installation of work in the Bid Package.
- 34. Provide pricing for Alt. 5 feeder conductors from service meter to 1HNMDP change to aluminum. Pricing shall include any required modifications to the feeder, raceway, and 1HNMDP.
- 35. Provide pricing for Alt. 6 to reuse the existing emergency generator and transfer switch. This shall include stress testing, removal, storage, reinstallation, and recertification of the generator.

The Bidder Acknowledges that they accept this Bid Category BC-05 ELECTRICAL Scope of Work in its entirety.

(Bidder - Please print full name of your proprietorship, partnership, or corporation)

(Printed Name - Authorized Signing Officer)

(Title – Authorized Signing Officer)

(Signature – Authorized Signing Officer)

(Date)

END OF SECTION 002413 - BID CATEGORY BC-05 ELECTRICAL SCOPE OF WORK