This Addendum is issued to all registered plan holders pursuant to the Instructions to Bidders and Conditions of the Contract. This Addendum serves to clarify, revise, and supersede information in the Project Manual, Drawings, and previously issued Addenda. Portions of the Addendum affecting the Contract Documents will be incorporated into the Contract by enumeration of the Addendum in the Owner/Contractor Agreement.

The Bidder shall acknowledge receipt of this Addendum in the appropriate space on the Bid Form.

A. CONSTRUCTION MANAGER’S FRONT END MANUAL

1. Bid Scopes of Work
   a. 02-4100 – Selective Demo
   b. 03-3000 – Building Concrete
   c. 03-4000 – Precast Concrete
   d. 04-2000 – Masonry
   e. 05-1000 – Structural and Misc. Steel
   f. 06-1000 – General Trades
   g. 07-1000 – Joint Sealants & Waterproofing
   h. 07-5000 – Roofing and Sheetmetal
   i. 07-8400 – Firestopping
   j. 08-8000 – Glazing
   k. 09-2000 – Framing and Drywall
   l. 09-3000 – Tile
   m. 09-6000 – Resilient, Carpet, & Athletic Flooring
   n. 09-6500 – Wood Flooring
   o. 09-6700 – Resinous Flooring
   p. 09-9000 – Painting
   q. 11-4000 – Food Service Equipment
   r. 11-6000 – Theater
   s. 11-6600 – Athletic Equipment
   t. 21-1000 – Fire Suppression
   u. 22-1000 – Plumbing
   v. 23-0900 – HVAC Controls Scope A
   w. 23-0900 – HVAC Controls Scope B
   x. 23-3000 – HVAC
   y. 26-1000 – Electrical
   z. 31-1000 - Earthwork
   aa. 32-1000 – Asphalt Paving
   bb. 32-3100 – Fencing and Gates
B. OTHER

NA

C. SPECIFICATIONS

1. Please reference the attached Addendum No. 002 issued by Hollis + Miller dated September 21, 2023, for updates to Specifications.

D. DRAWINGS

NA

Please direct any questions regarding the information in this addenda and the project to Newkirk Novak Construction Partners.
SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the Selective Demolition Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

BUILDING DEMOLITION - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements
- 024119 – Selective Demolition

This Work specifically includes, but is not limited to:

JOB SPECIFIC SCOPE INCLUDES (but is not limited to):

1. All items per Master Scope of Work.
2. All demo work includes hauling demoed material to dumpster.
3. Dumpsters for demo work to be provided by demo contractor.
4. Salvage items noted for reinstallation. Coordinate with construction manager to store in a secure location.
5. This contractor shall cover all demo notes as shown on the architectural drawings. Unless specifically excluded.
6. Concrete Sawcut and Removal
   a.) Remove existing concrete slab as required for new construction.
   b.) Sawcut concrete and removal for any underground MEP items as shown on MEP demo drawings
   c.) Sawcut and removal of concrete slab for new MEP underground as shown on MEP drawings. Coordinate layout with MEP contractor.
   d.) X-ray and mapping of existing underground electrical & plumbing is required.
7. For wall demo coordinate with electrical and plumbing contractor to ensure outlets and piping are made safe for demo.
   a.) Electrical contractor will remove all wall devices, associated conduit and wiring.
8. For ceiling demo coordinate with MEP contractors to ensure outlets and piping are made safe for demo.
   a.) Electrical contractor will make safe all ceiling devices and light fixtures, demo contractor will remove.
9. Demo associated with exiting entry vestibules.
The following work is excluded:

1. Plumbing fixtures will be demoed by plumbing contractor.
2. Electrical devices, conduit, and wiring, will be demoed by the electrical contractor.
3. Mechanical contractor will demo work noted on mechanical demo drawings. This includes all duct, grilles, diffusurers, RTUs, etc.
4. Mason will tooth in new openings.
5. Building demolition at Eklund Stadium by Earthwork Contractor.
6. All demolition on civil sheets

End of Scope of Work – BUILDING DEMOLITION
LPS – Storm Shelter Additions
03-3000 – Concrete

SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the Concrete Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

BUILDING AND TILT CONCRETE - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements
- 033000 Cast-in-Place Concrete
- 321313 Concrete Paving

This Work specifically includes, but is not limited to:

1. All items per Master Scope of Work.
2. Provide all labor, materials, equipment, accessories, reinforcing steel, tie wire, and material for concrete foundations, grade beams, footings, spread footings, slabs, concrete toppings, retaining walls or low walls, elevated slabs over metal deck, vapor barriers (locations as shown on drawings), foundation insulation, granular fill, backfill, slabs on grade with rock base, concrete ramps, trash enclosure. This Work includes all excavation, forming, chamfer, placing, and finishing. Slab elevation at all floor drains, floor sinks, etc. shall be coordinated and finished to provide a flush joint between finished floor surface and the drains and ensure proper slope to drains.
3. All site concrete, including but not limited to, sidewalks, sidewalk ramps, steps, paving, curb & gutter, flumes, light poles bases, trash enclosure footings, bollards, handrails,
4. Provide all hoisting and rigging of items installed under this Scope of Work.
5. Install of coil rods at precast walls for SOG tie-in.
6. Athletic wood flooring slab tolerances shall be less than 1/8” in 10 feet in all directions.
7. Polished concrete per the Contract Documents.
8. This Contractor to provide and remove a wash out pit for their concrete.
9. Provide and install all measures to get water, grout, mud, etc. to centralized location to be removed by Earthwork Contractor. Footings need to be clean of water, grout, mud, etc. after this Contractor is finished with their Scope of Work.
10. Spoils generated by this Scope of Work to be stored at onsite locations approved by Construction Manager. Spoil removal to be by Earthwork Contractor.
11. Provide all materials, equipment, labor, accessories, etc. required to install all reinforcing rebar/steel including dowels for concrete.
12. Provide vertical dowels out of footing for Masonry Contractor.
13. Provide all housekeeping and equipment pads inside the Building footprint (reference all MEP and Pool Drawings).
14. This Contractor is responsible for all layouts and surveying associated with the installation of their Work from existing control points.
15. Contractor to anticipate under slab electrical rough-in and should include measures to install rock to avoid damage which includes hand work, tele-beling, etc.

16. Install expansion joints and controls joints/contraction joints, including performed/isolation joint filler where required. Provide a joint plan for engineer approval prior to performing slab on grade activities.

17. Provide all column block outs as required. Infill column block outs with concrete/non-shrink grout as required. Reference structural details.

18. This package is to grout all column base plates.

19. Include excavation for structural concrete. Spoils to be stockpiled on site at location approved by Construction Manager. Spoils will be removed from approved stockpile location by Earthwork Contractor.
   a) Backfill at all concrete walls and foundations to be provided by this Scope of Work
   b) This Contractor is responsible to repair and replace damaged building pad and surrounding subgrade. All soils, including low volume materials, are to be reinstalled and re-compact to their original state if damaged during the concrete installation.
   c) This Contractor is responsible for all low volume material placement as required to perform subsequent grading operations as stated above.

20. Provide all admixtures, grout, grout protection, cement, centralizers and spaces, plates, and shapes, and reinforcing bars for a complete drilled pier installation.

21. Granular fill as required under all Building Concrete.

22. Slope concrete to drains where required.

23. All footing and underslab insulation shall be by this Scope of Work, including interior foundation wall insulation.

24. Provide insulation and 2x material under kitchen cooler and freezer.

25. Winter/Summer protection, provisions as required to maintain the project schedule including but not limited to:
   a) Hotwater/Ice,
   b) Winter concrete surchages including heated water and admixtures.

26. Include $75,000 allowance for Work directed by the Contraction Manager. Any unused portion will be returned to the Owner at the completion of the project.

The following Work is excluded:
1. Concrete paving markings – By Asphalt Contractor.
2. Concrete joint sealants – By Sealants Contractor

End of Scope of Work – BUILDING AND TILT CONCRETE
SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the Precast Concrete Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

PRECAST CONCRETE - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements
- 034100 – Precast Structural Concrete
- 099723 Concrete and Masonry Coatings (As it Applies)

This Work specifically includes, but is not limited to:

1. All items per Master Scope of Work.
2. This Contractor should carefully review the documents and specifications and shall include all the necessary materials, labor, equipment, forms, mixing, placing, reinforcement, finishing, and misc accessories required for the complete installation of all precast concrete.
3. All precast design, detailing, and connections shall be by this package. Calculations shall be prepared and submitted along with the shop drawings for review. All calculations shall be signed and sealed by a registered professional engineer licensed in the state of the project. Calculations need to be well organized and indexed for easy review.
4. Provide all connection materials, anchors, accessories, hardware, clips, etc.
5. Rough-in for electrical conduits will be installed by this package. Electrical Contractor will provide layout drawings and electrical boxes.
6. Furnish embed layout drawings and embeds for install by other Contractors.
7. Erect all precast. Include hoisting, grouting and misc materials/labor to provide a complete installation.
8. Design all required bracing & anchor points
9. Provide survey of all embeds min 2 weeks prior to precast erection.
10. Onsite staging is minimal, and panels shall be delivered and installed within 24 hours.
11. Clean all panels after precast erection.
12. Access will be provided per the site logistic plan.

End of Scope of Work – PRECAST CONCRETE
SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the Masonry Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

MASONRY - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements
- 042000 – Unit Masonry

This Work specifically includes, but is not limited to:

1. All items per Master Scope of Work.
2. All masonry including load bearing and non-load bearing concrete masonry units, decorative concrete masonry units, face brick, grout, mortar, installation of embed items, flashing, ties, anchors, reinforcing steel, joint reinforcement, sleeves, flashing, weep holes, vents, control joints, expansion joints, bond breakers, fillers, lintels, dowels, drilling, grouting of all door/window frames and security frames located in masonry wall assemblies, accessories, etc for a complete installation per the Contract Documents.
3. Provide blockouts and openings as required by other trades. Sleeves required for penetrations and openings will be furnished by others and installed by this Contractor. Coordination and layout drawings will be furnished by applicable Contractor. In-fill openings in masonry walls around penetrations where necessary. Soaping and infill around structural steel will be required after the structural steel has been completed.
4. At thickened slabs this Contractor to provide and install vertical dowels, drill and epoxy per Contract Documents.
5. Miscellaneous masonry accessories, clips, shims, fasteners, anchors, accessories, welding, etc required for a complete installation.
6. Includes installation of loose steel lintels, anchor bolts, sleeves, access panels and misc. embedded items furnished by others.
7. This Contractor to include provisions for hot and cold weather practices as required to meet the schedule.
8. This Contractor will be responsible for limited weather protection including tarps for top of wall and store material protection from water.
9. All masonry cavity wall insulation and insulation located behind masonry to be provided and installed by this Scope of Work.
10. This Contractor shall furnish, install, design and remove all wall bracing and shoring as required to complete this Scope of Work. Contractor to include installation and removal of “deadmen” for bracing as required. Submit an engineered bracing plan prior to starting masonry installation.
11. Scaffolding. This Contractor will be required to submit a detailed scaffolding plan to the Construction Manager. The plan should show the scaffold type and tie back details. The scaffold plan shall be sealed by an Engineer, in the state of the jobsite, if the height exceeds OSHA regulations.
12. Lull traffic will not be allowed on slab on grade. Provide adequate light weight fork lifts as required.
13. Clean-up of site staging area following masonry work, including grout/mortar area. This Scope of Work to clean/haul off all debris following demobilization.
14. Grout at structural steel locations shall be by this Contractor.
15. This Contractor shall provide masonry sealers for all masonry as indicated in the Contract Documents.
16. Final cleaning of all masonry installed by this Contractor once Work is complete.
17. Include $50,000 allowance for Work directed by the Contraction Manager. Any unused portion will be returned to the Owner at the completion of the project.

The following Work is excluded:

1. Steel Lintels & Anchor Bolt materials – By Structural Steel Contractor
2. Top of wall seismic angles/clips – By Structural Steel Contractor
3. Joint Sealants

End of Scope of Work – MASONRY
LPS – Storm Shelter Additions  
05-1000 – Structural & Misc. Steel Scope of Work

SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the **Structural & Misc. Steel** Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

**STRUCTURAL & MISC. STEEL** - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements
- 051200 Structural Steel Framing
- 052100 Steel Joist Framing
- 053100 Steel Decking
- 055000 Metal Fabrications
- 055100 Metal Stairs
- 055213 Pipe and Tube Railings

**This Work specifically includes, but is not limited to:**

1. All items per Master Scope of Work.
2. Provide all structural and miscellaneous steel items and accessories. Including, but not limited to, joists, beams, roof screen framing, channels, steel lintels, angles, tubes, ladders, steel stairs, decking, base plates, steel clips, bent plates, anchor bolts, full moment connections, column braces, bent plates, edge angles, joist girders, joist reinforcement, joist seats, decking bracing tubes, channels, smoke vents, gaurdrails, handrails, bench and countertop framing.
3. This Contractor shall be responsible for reviewing all plans, not just structural for steel items included in this Scope of Work. This Contractor shall include all steel members, framing, pieces, beams, columns, tubes, channels, decking, railings, tension grid and all other items shown on all plans. If there are steel shapes which are shown, but not sized, this Contractor shall include reasonable provisions for those items in the bid.
4. Furnish all required embeds, anchor bolts, baseplates, leveling pads, etc, required to complete this Scope of Work, to the appropriate Contractors for installation. Provide setting diagrams, sheet metal templates, instructions, and directions for installation as indicated in the Contract Documents.
5. This Contractor to include support steel for all roof and floor penetrations (roof top units, fans, roof hatches, etc.) as shown
6. This Contractor to survey embedded items and anchor bolt installation and submit findings two (2) weeks prior to mobilizing for start of steel erection. Notify Construction Manager immediately of any discrepancies between the anchor bolt installation and the Contract Documents.
7. This Contractor shall provide all erection necessary to complete this Scope of Work. This Contractor to submit a site specific erection plan per the project schedule. Submit 4 weeks prior to the start of steel activities.
8. Provide steel connection design stamped by a professional engineer in the jurisdiction of the project for review and approval per the Contract Documents.

9. CMU wall seismic wall bracing including anchors. Steel bracing of walls and partitions including seismic clip angles including additional mobilization as required to perform work after installation of walls and partitions by other trades.

10. All guard rail, handrail, wall rail and stairs, including design and code compliance, per the contract documents. Provide sleeves for guard rail to the appropriate trades during wall installation or core drill as needed.

11. Temporary bracing, guys, and shoring of this Contractors Scope of Work as required for stability during construction.

12. Coordinate with architectural, mechanical, electrical, security drawings for size and locations of all openings, sleeves, curbs, pads, inserts, etc. and all mechanical and electrical equipment requirements

13. Provide loose steel lintels at masonry. Installation to be by Masonry Contractor.

14. Fire extinguishers, fire watch and burn permits for welding and cutting as required for Work performed by this Contractor.

15. This Contractor shall provide removal of all mill scale, mud and other debris from all materials installed under this scope prior to field painting.

16. This Contractor shall provide coordination with millwork subcontractor for a complete installation of the bench framing and countertop supports if applicable.

17. This Contractor shall provide all railings at interior and exterior complete as shown. Include core drilling and grouting as needed/required. Include coordination as necessary with other trades for their shops and installation.

18. This Contractor shall provide pipe penetration protection at ICC 500 shelter per Contract Documents.

19. This Contractor shall provide high wind roof penetration grating and angle framing at ICC 500 shelter per Contract Documents.

20. This Contractor shall provide sump pit grates (if applicable).

21. This Contractor shall provide floor angles as necessary for elevator shaft openings.

22. This Contractor shall provide priming and field touchup after installation of all steel, including coordination with painting subcontractor to install primers that are compatible with specified paint products. Field spot paint all welds and bare spots as required at prefinished/pre-primed steel

23. This Contractor to include certified crane operator, rigger, signal person, forklift operator certifications/qualifications.

24. This Contractor shall include provisions for hot and cold weather practices as required to meet the schedule.

25. Include $25,000 allowance for structural and misc. steel work as directed by the Construction Manager. Any unused portion to be returned to the Owner at the completion of the project.

The following Work is excluded:

End of Scope of Work – STRUCTURAL & MISC. STEEL
SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the General Trades Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

GENERAL TRADES - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements
- 061000 Rough Carpentry
- 061600 Sheathing
- 064023 Interior Architectural Woodwork (As it applies)
- 081113 Hollow Metal Doors and Frames
- 081416 Flush Wood Doors
- 087100 Door Hardware (As it Applies)
- 097723 Fabric-Wrapped Panels
- 098433 Acoustical Wall Units
- 098436 Acoustical Ceiling Units
- 101100 Visual Display Units
- 101400 Signage
- 101423 ADA and Code Signage
- 102113 Toilet Compartments
- 102238 Operable Panel Partitions
- 102600 Wall and Door Protection
- 102800 Toilet, Bath & Laundry Accessories
- 104300 Emergency Aid Specialties
- 104413 Fire Extinguisher Cabinets
- 104416 Fire Extinguishers
- 122413 Roller Window Shades
- 123200 Manufactured Wood Casework
- 123666 Solid Surfacing Countertops

This Work specifically includes, but is not limited to:

1. All items per Master Scope of Work.
2. Install all items noted to be provided by the owner.
3. Provide all casework, and countertops.
4. Provide all wood blocking and nailers, wood sheathing, and plywood backing panels. Includes all roof
5. All in-wall and above ceiling blocking or support at all required locations per the Contract Documents. Blocking for AV equipment. This includes In-wall blocking required by future Owner provided items. Coordination required between individual Contractors.

6. Provide joint sealants at casework and countertops as required for a complete installation.

7. This Contractor is to provide and install all fabric wrapped panels and FRP panels. Provide and install any blocking, clips, insulation, etc. required for a complete installation.

8. Provide all wall & door protection as noted on the Contract Documents.

9. Provide all non aluminum frames regardless of door type.

10. Provide all non aluminum doors regardless of frame type.

11. Provide finish hardware, cores, and cylinders at all doors by this Scope of Work. Coordinate keying with owner, Construction Manager, and other Contractors providing hardware. This Contractor to provide the glazing Contractor all lock cores for all aluminum doors.

12. Provide pathway and pull strings in doors/frames where access controls are required.

13. Provide doors that require electric operators with a single point of connection for Electrical Contractor to connect to. If doors require to be tied into Fire Alarm System that also will be a single point of connection for electrician.

   a) Internal power and fire alarm wiring from single point of connection would be by this package.

   b) Provide magnetic hold opens, and other control devices as required. Include layout so electrician can rough in back boxes.

14. Access doors per the plans

15. This Contractor is to provide and install complete all visual display surfaces, signage, toilet compartments and accessories, shower and dressing compartments, emergency aid specialties, plastic lockers, flagpoles, fire extinguishers and cabinets. Install any blocking required for such. Coordinate with CM, framing Contractor, and mason for rough openings required.

16. Provide all room signage, building signage, and specialty graphics. This includes any backing, z-clips, fasteners, etc. as required for a complete installation.

17. Provide all sheathing and 2x4s that is covered or in conjunction with solid surface, plastic-laminate-clad countertops and panels, or casework. (ie. Reception desks)

18. Provide temporary exterior doors at all exterior openings with necessary hardware and construction cores and locks.

19. Provide all framing necessary to support elements under this Scope of Work.

20. Site visits are required to verify building conditions, dimensions, locations, etc.

21. Include $50,000 allowance for work directed by the Construction Manager. Any unused portion will be returned to the Owner.

The following Work is excluded:

1. Aluminum doors, frames and hardware – By Glazing Contractor

2. Glass doors, shelves, glass shelving system, and associated hardware – By Glazing Contractor

End of Scope of Work – GENERAL TRADES
LPS – Storm Shelter Additions
07-1000 Joint Sealants & Waterproofing Scope of Work

SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the Joint Sealants & Waterproofing Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

JOINT SEALANTS & WATERPROOFING - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements
- 071326 Self-Adhering Sheet Waterproofing
- 071416 Cold Fluid Applied Waterproofing
- 072726 Fluid-Applied Membrane Air Barrier
- 079200 Joint Sealants
- 079500 Expansion Control (As it Applies)
- 321373 Concrete Paving Joint Sealants

This Work specifically includes, but is not limited to:

1. All items per Master Scope of Work.
2. Joint Sealants, including but not limited to:
   a) Concrete paving, sidewalk, and miscellaneous sitework structures.
   b) Building slab on grade joints.
   c) Interior and exterior, perimeter of windows, entrances, and storefront systems
   d) Cosmetic filling of interior joint locations around door and window frames, lintels and all places where dissimilar materials join together to form clean, sharp corners for paint applications to frames and walls.
   e) All masonry, tilt wall panel, and precast horizontal and vertical joints.
   f) Backer rods and required materials to complete all caulking.
   g) All auxiliary material listed in the Contract Documents.
3. Waterproofing, and air barrier systems.
4. Preparation and verification of substrate.
5. Water repellents at concrete and all locations shown.
6. The Concrete Contractor will provide the underslab and interior face of footing insulation and vapor barrier only. This Contractor to provide wall other waterproofing, drainage mat, vapor barrier, thermal insulation etc. for a complete system at all other exterior concrete foundation wall work.
7. Provide and install all exterior wall expansions joints
8. Provide and install all interior non-metallic expansion joints

The following Work is excluded:

1. Sealants at plumbing fixtures – By Plumbing Subcontractor
2. Sealants within Glazing Systems – By Glazing Subcontractor
3. Expansion joints at sheetrock / plaster walls – By Framing, Drywall and Ceilings Subcontractor
4. Expansion joints within roofing system – By Roofing Contractor

End of Scope of Work – JOINT SEALANTS & WATERPROOFING
SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the **Membrane Roofing** Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

MEMBRANE ROOFING - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements
- 072100 Thermal Insulation (as it pertains to this Scope of Work)
- 074213 Formed Metal Wall and Soffit Panels
- 074243 Metal Composite Material Wall Panels
- 074800 Rainscreen Furring System
- 075216 Modified Bituminous Membrane Roofing
- 075423 Thermoplastic Polyolefin (TPO) Roofing
- 076200 Sheet Metal Flashing and Trim
- 077200 Roof Accessories
- 079200 Joint Sealants (as it pertains to this Scope of Work)

This Work specifically includes, but is not limited to:

1. All items per Master Scope of Work.
2. Roofing systems complete per the Contract documents, including, but not limited to, roof insulation, substrate board, coated metal edge flashing, coated metal sheets, roof expansion joint assemblies, termination bar, walkway roll for a complete and watertight installation.
3. Sheet metal flashings and counter flashings at all locations shown in the contract documents including but not limited to: Roof curbs, roof vents MEP equipment & devices and counter-flashings. This applies to all areas outside of the metal panel systems. Provide all concealed, exposed, and adjacent joint sealants complete for the building components within this Scope of Work. Sealants must be compatible with adjacent perimeter joint sealants.
4. Provide sealants / backer rod, flexible flashing, or strip roofing membrane that is approved by roofing manufacturer at all precast double tee and parapet wall panel joints that are under roofing membrane.
5. Seal ends of roofing at end of each day.
6. Provide metal wall panels, and soffit panels as a complete watertight system as shown in the Contract Documents, including but not limited to, all associated system specific support framing, clip angles, z-furring, concealed fasteners, rigid insulation, joint sealants, rubber gaskets, closure pieces and associated flashing.
7. Provide all pre-finished sheet metal flashing and trim, including but not limited to, perimeter coping cap at all locations, exterior rain screen paneling, rooftop equipment screening, gutters, and downspouts. The Roofing Contractor is responsible to properly tie-in and terminate roofing materials at these locations to ensure a watertight system.
8. Provide all concealed, exposed, and adjacent joint sealants complete for the building components within this Scope of Work. Sealants must be compatible with adjacent perimeter joint sealants.

9. Seal all penetrations through air barrier system.

10. Flashing and counterflashing at the entire perimeter of all openings. Include end dams for head and sill flashing. Include sealant / mastic beds for flashing installation.

11. Specific coordination with other exterior building components such as Mechanical, Electrical & Plumbing (MEP) & Security devices to insure a weather & watertight building envelope.

12. Provide cutting, patching, pitch pans, flashing, trim and sealants for all penetrations within this system including but not limited to MEP & Security devices such as lights, speakers, horns, cameras, antennas, vents, pipe penetrations, lighting protection, structural steel, handrails and misc. metal components.

13. Provide tie in at roof curbs.

14. If additional blocking is required for this work other than what is indicated on the contract documents this Contractor to identify and notify Construction Manager during submittal process.

15. Provide access to roof Work.

16. Provide insulation in between flexible membrane closures and roof to roof expansion joint covers.

17. Control Joints and walkway pads where indicated or required.

18. Coordinate with electrical on lightning protection and provide any further roof protection to maintain warranty. It is this scopes responsibility to address any potential warranty concerns at time of bid.

19. Provide joint sealants at this packages work and as required to provide watertight systems.

20. Provide safety equipment for own Scope of Work.

21. Contractor shall carry a $20,000 allowance for work directed by the Construction Manager. Any unused portion will be returned to the Owner.

The following Work is excluded:

1. Exterior wall sheathing
2. Air barrier

End of Scope of Work – MEMBRANE ROOFING
SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the Firestopping Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

FIRESTOPPING - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements
- 078413 - Penetration Firestopping
- 078446 - Fire-Resistive Joint Systems

This Work specifically includes, but is not limited to:

1. All items per Master Scope of Work.
2. Penetration Firestopping per specifications.
   a. Mechanical, electrical, plumbing, tele-data, and structural steel penetrations, as required by the City or designated code drawings through or in walls.
   b. Other penetrations in fire rated walls as required by the City or designated code drawings through or in walls.
   a. Firestopping between existing structures and floors as required by the City or designated code drawings.
4. Cleaning of substrate and surface preparation to a level acceptable for installation of materials provided under this Scope.
5. Primers, adhesives, mastics, reinforcing sheets, and any special coatings to span cracks in surfaces to receive materials provided under this Scope of Work.
6. Any testing required for moisture content, concrete alkalinity, etc. that may be required.
7. Ensure compatibility of materials provided under this scope of work with sealers, curing compounds, etc. used on substrates for which material will be installed.
8. Provide UL labeling of all rated penetration assemblies with UL System information.
9. Provide all UL assembly information and Engineering Judgements to the third-party inspector for preliminary review and verification of code compliance.
10. Provide UL rated putty pads as required for electrical boxes in rated walls.
11. Fire rated sealants at expansion joints and joints between dissimilar materials including, but not limited to masonry, precast, punched window frames, metal panels, drywall, etc.
12. Provide temporary protection of all equipment and finished surfaces as required.
13. Inspection and verification of subsurface prior to commencement of work. Notify Construction Manager immediately if subsurface is found to be unacceptable for this Work.
14. Schedule all third-party inspections as required by code with the Owner selected testing agency.
15. Contractor shall obtain all permits required to complete this work, except for the general building permit.
The following Work is excluded:

1. Joint Sealant Scope of Work

End of Scope of Work – FIRESTOPPING
SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the Glazing Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

GLAZING - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements
- 064023 Interior Architectural Woodwork (As it applies)
- 079200 – Joint Sealants (as it pertains to this Scope of Work)
- 084113 Aluminum Framed Entrances and Storefronts
- 087100 Door Hardware
- 088000 Glazing

This Work specifically includes, but is not limited to:

1. All items per Master Scope of Work.
2. Provide all aluminum framed entrances & storefront, aluminum doors and frames, transaction windows, wind and impact security windows, automatic doors, glass and glazing, skylights, security glazing films, caulking, and locksets for aluminum storefront doors Work as indicated on the project documents per the Contract Documents.
3. Provide all window flashing at aluminum windows or storefront systems, break metal, aluminum, metal trim, supports, embedded items in concrete/masonry, frames, brackets, clips, anchors, fasteners, etc. needed for this Scope of Work as shown on Contract Documents, or required by the manufacturer.
4. All joint sealants required within the glazing systems.
5. Provide all finish hardware, door operators, push buttons, key switches, etc., for the aluminum doors included in this Scope of Work. This includes any electric hardware as specified. Electrical power connection shall be made by the Electrical Contractor.
6. Provide all glass doors, shelves, glass shelving system, and associated hardware and framing.
7. Coordinate final electrical and security connections with corresponding trades.
8. Temporary construction cores for all hardware installed by this Scope of Work during construction and removed as directed by Construction Manager.
9. All openings to be field verified by this Scope of Work.
10. Weeps at the head and sill of all windows. Inspect all weeps after sealants are installed to ensure they are free of excess sealants, mortar, debris and functioning properly.
11. Remove all labels from glass.
12. Closure pieces at frame throats as required for Joint Sealant Contractor to provide a proper joint.
13. Provide pathway and pull strings in doors/frames where access controls are required.
14. Provide doors that require electric operators with a single point of connection for Electrical Contractor to connect to. If doors require to be tied into Fire Alarm System that also will be a single point of connection for electrician.
   a) Internal power and fire alarm wiring from single point of connection would be by this package.
15. Provide glass and glazing at hollow metal doors, borrow lites, wood doors in accordance with the Construction Documents.

The following Work is excluded:
1. Framed mirrors – By General Trades Contractor

End of Scope of Work – GLAZING
SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the Framing & Drywall Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

FRAMING & DRYWALL - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements
- 054000 Cold-Formed Metal Framing
- 072100 Thermal Insulation (As it Applies)
- 074400 Concrete Faced Rigid Insulation
- 078100 Applied Fireproofing
- 079500 Expansion Control (As it Applies)
- 092116 Non-Structural Metal Framing
- 092900 Gypsum Board
- 095113 Acoustical Panel Ceilings

This Work specifically includes, but is not limited to:

1. All items per Master Scope of Work.
2. Gypsum wallboard assemblies including but not limited to metal stud framing, furring channels, bracing, slip track, acoustical sealants, concealed sealants, insulation, and drywall.
3. Provide glass-matt gypsum wall sheathing where it covers metal framing.
4. Upon completion of drywall work all excess sheet rock mud must be removed from floors. All floors to be swept with a dust collecting compound.
5. Acoustical ceiling system including but not limited to, suspension system including hangers and wire, metal grid system, acoustical ceiling tile, seismic wiring for lighting, vertical closures where ceilings do not terminate at walls, expansion / control joints, trim, additional ceiling supports, clips, shims, fasteners, anchors, and accessories.
6. Building expansion joint assemblies for all interior horizontal and vertical sheetrock expansion joints related to this scope of work. Includes floor and ceiling expansion joints. Includes interior fire-rated expansion joint assemblies.
7. Provide all interior expansion joint cover plates as shown in Contract Documents.
8. Coordinate all ceiling work with all mechanical, plumbing, and electrical trade penetrations. The Contractor will include all additional tees, runners, hangers, tie wires, and filler tiles for the installation of light fixtures, sprinkler heads, diffusers, grilles, etc
9. All cold formed metal framing, including soffit framing
10. Metal stud kickers and structural stud support.
11. Deflection track at interior and exterior walls.
12. Framing/block outs for through-wall penetrations.
13. Drywall ceiling suspension, framing, trim, and miscellaneous hangers as required for an acceptable installation. Include additional framing as maybe required for fixtures.
14. Acoustical sealants and sealants at tops of walls as required for non-fire rated acoustical applications.
15. Coordinate bulkhead details and interfacing sheetrock ceilings with acoustical ceilings.
16. Provide and install all mineral wool insulation where stud wall abuts metal deck and insulation between metal studs.
17. Provide all level 5 finishes for graphics as shown and or specified.
18. Any drywall, plaster or ceiling patch back required that is specifically called out in Contract Documents. MEP patch back that is not location specific is to be patched via allowance below.
19. Provide all mineral wool insulation at wall termination at roof deck as shown
20. Provide light gauge angle/ bent plate enclosers at top of all walls as shown.
21. Include $25,000 allowance for work directed by the Construction Manager. Any unused portion will be returned to the Owner.

The following Work is excluded:
1. Expansion joints in precast / masonry walls.

End of Scope of Work – FRAMING & DRYWALL
LPS – Storm Shelter Additions
09-3000 Tile Scope of Work

SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the Tile Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

TILE - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements
- 093000 – Tiling

This Work specifically includes, but is not limited to:

1. All items per Master Scope of Work.
2. Provide all tile, mortar, grout, accessories. and misc. materials for a complete installation per the Contract Documents.
3. Joint sealants in expansion, contraction, control and isolation joints in tile surfaces.
4. Caulking of inside corners in lieu of grout.
5. Wall preparation, wall sanding, edge and reducer strips, metal termination strips between wall materials, primers, adhesives, setting mortar, and other miscellaneous items required. The Work includes any wall fill or leveling compound required at all wall joints.
6. Field cuts as necessary to fit between the countertop, bar top and cabinets.
7. Polished cuts and cores required to allow for receptacles, switches, plumbing fixtures, and penetrations.
8. Final clean of all surfaces installed by this Scope of Work upon completion of installation.
9. Provide task specific lighting as necessary.

The following Work is excluded:

1. Joint sealants provided in other Scopes of Work
2. Cementitious backer board
3. Sealant Work for fixtures and accessories installed after tile installation

End of Scope of Work – TILE
LPS – Storm Shelter Additions
09-6000 Resilient, Carpet, & Athletic Flooring Scope of Work

SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the Resilient, Carpet, & Athletic Flooring Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

RESILIENT, CARPET, & ATHLETIC FLOORING - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements
- 096513 Resilient Base and Accessories
- 096566 Resilient Athletic Flooring
- 096813 Tile Carpeting

This Work specifically includes, but is not limited to:

1. All items per Master Scope of Work.
2. Perform proper testing to ensure product manufacturer requirements are met before proceeding with installation.
3. Provide all floor and wall preparation as required for a complete installation.
4. Resilient base, resilient sheet flooring, resilient athletic flooring, and all accessories for a complete installation.
5. All carpet per the Contract Documents.
6. Clean concrete floor (as required for acceptable substrate) prior to installation of all types of flooring.
7. Floor preparation as required to complete the Scope of Work. Floor leveling as required of floors within construction tolerances. Floor preparation includes concrete joints, repair of chips or dings, and any deviation in elevation outside the specified levels. Floor preparation includes transitions between rooms, doorways, and transitions from new to existing, etc.
8. Edge/transition/reducer strips, metal termination strips between flooring materials, primers, adhesives, and other miscellaneous items required for a complete installation. This scope also includes any Portland based floor fill or leveling compound required at all floor joints.
9. Cut all flooring materials to fit tightly to vertical surfaces, permanent fixtures and built-in furniture including cabinets, pipes, outlets, edgings, thresholds and nosings. Bind or seal cut edges as recommended by all flooring manufacturers.
10. Coordinate with the concrete subcontractor to ensure the curing compounds used on the concrete slabs are compatible with flooring adhesives used in this Scope of Work.
11. Coordinate with Construction Manager regarding any recesses required for finish flooring transitions required in concrete floors.
12. At doorways, center seams shall be placed under the door when in the closed position.
13. Final cleaning of flooring upon completion of installation.
14. Include $20,000 allowance for work directed by the Construction Manager. Any unused portion will be
returned to the Owner.

The following Work is excluded:
1. Resinous Flooring – Resinous Flooring Contractor
2. Wood Flooring – General Trades Contractor

End of Scope of Work – RESILIENT, CARPET, & ATHLETIC FLOORING
SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the Wood Flooring Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

WOOD FLOORING - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements
- 096466 Wood Athletic and Stage Flooring

This Work specifically includes, but is not limited to:

1. All items per Master Scope of Work.
2. Perform proper testing to ensure product manufacturer requirements are met before proceeding with installation.
3. All preparation as required for a complete installation.
4. All wood flooring, wood cove basing, poly vapor barrier, thresholds, underlayment, resilient pads, vent cove base, striping and accessories per the Contract Documents.
5. Clean concrete floor and substrate (as required for acceptable substrate) prior to installation of all types of flooring.
6. Floor preparation as required to complete the scope of work. Floor leveling as required of floors within construction tolerances. Floor preparation includes concrete joints, repair of chips or dings, and any deviation in elevation outside the specified levels. Floor preparation includes transitions between rooms, doorways, and transitions from new to existing, etc.
7. Edge/transition/reducer strips, metal termination strips between flooring materials, primers, adhesives and other miscellaneous items required for a complete installation. This scope also includes any Portland based floor fill or leveling compound required at all floor joints.
8. Cut all flooring materials to fit tightly to vertical surfaces, permanent fixtures and built-in furniture including cabinets, pipes, outlets, edgings, thresholds and nosings. This includes cutting and coordination for all sleeves, floor boxes, etc. within the wood flooring.
9. Provide all graphics, logos, lines, infill, paint and any other markings shown or required shall be by this scope of work.
10. Coordinate with the Concrete Contractor to ensure the curing compounds used on the concrete slabs are compatible with flooring products and accessories used in this scope of work.
11. Coordinate with Construction Manager regarding any recesses required for finish flooring transitions required in concrete floors.
12. Final cleaning of flooring upon completion of installation.

The following Work is excluded:
End of Scope of Work – WOOD FLOORING
SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the Resinous Flooring Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

RESINOUS FLOORING - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements
- 096723 - Resinous Flooring

This Work specifically includes, but is not limited to:

1. All items per Master Scope of Work.
2. Provide all resinous floor, integral cove base, and accessories for a complete installation per the Contract Documents.
3. Perform proper testing of substrate to ensure product manufacture requirements are met before proceeding with installation.
4. All floor preparation as required for a complete installation. Floor preparation, including, troweable underlayment’s and patching compounds, at all variations less than ¼”. This includes concrete joints, repair of minor chips or dings, transitions between rooms and doorways, and any deviation in elevation outside the specified levels. Excludes grinding and leveling or deep fill.
5. This Contractor is responsible for verifying substrate is suitable to receive coatings prior to installation of the work. Notify the Construction Manager of any unsuitable substrate PRIOR to application. Installation of this Scope of Work indicates acceptance of substate by this Contractor.
6. Provide transition strips at all dissimilar materials.
7. Joint sealants as needed to complete this Scope of Work.
8. Final clean of all surfaces installed by this Scope of Work upon completion of installation.
9. Protection of existing items to remain and other trade’s work, including adjacent materials and/or work in place; and provide dust control.

The following Work is excluded:

1. Concrete polishing system
2. Concrete floor sealer
3. Resilient base
4. Carpet tile flooring
5. Ceramic tile

Alternates: Not applicable

End of Scope of Work – RESINOUS FLOORING
LPS – Storm Shelter Additions
09-9000 Painting Scope of Work

SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the Painting Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

PAINTING - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements
- Division 03 – Concrete (as it pertains to Scope of Work)
- Division 04 – Masonry (as it pertains to Scope of Work)
- Division 05 – Metals (as it pertains to Scope of Work)
- Division 08 – Doors & Windows (as it pertains to Scope of Work)
- 097253 Digital Wall Coverings
- 099113 Exterior Painting
- 099123 Interior Painting
- 099600 High-Performance Coatings

This Work specifically includes, but is not limited to:

1. All items per Master Scope of Work.
2. Painting including, but not limited to surface preparation, priming, and finish coats to surfaces indicated. All surfaces exposed to view shall be painted, except as noted, including access panels, surfaces of mechanical and electrical equipment that do not have factory applied finishes, as shown in the Contract Documents.
3. Interior painting of all mechanical and electrical rooms as scheduled.
4. Painting of metal beams, columns, lintels, joists, handrail, metal conduit, pipe hangers and supports, plastic conduit, tanks that do not have factory applied final finishes and any other exposed miscellaneous steel per the Contract Documents.
5. Painting of exterior railings, bollards, gates, guards, door/window frames, roof ladders and all other exterior painted items as indicated on the Contract Documents.
6. Provide all painted graphics.
7. Detail caulking as required.
8. All sealed concrete finished floor are by this Scope of Work.
9. Includes stain of all exterior and interior substrates indicated on the Contract Documents.
10. This Contractor responsible for verifying substrate is suitable to receive paint/coatings prior to installation of the work. The Construction Manager shall be notified of any unsuitable substrate PRIOR to painting. The application of the coating indicates acceptance of surfaces and conditions by this Contractor.
11. Paint all flashing and sheet metal materials not specified to be prefinished.
12. Masking at all labels on mechanical equipment prior to painting.
13. All cleaning and surface preparation required for the coating
14. Painting of all interior and exterior items per the Contract Documents.
15. High performance coatings as specified and indicated on the drawings, including but not limited to exterior structural steel and exterior steel fabrications, etc.
16. Include touch-up painting for punch list items and trade damage. At completion of construction activities by other trades, touch up and restore damaged or defaced painted surfaces. Change orders will not be written for touch up.
17. Paint, ductwork, piping, fire suppression piping and electrical items where exposed to view except as specifically excluded.
18. Painting of natural gas piping and uninsulated plastic piping. This includes gas lines and PVC condensate lines on the roof.
19. Provide protection of concrete and finished flooring from paint overspray. Remove any overspray onto concrete floors is required prior to installation of flooring material.
20. Provide and install all custom digital wall coverings.
21. Include $25,000 allowance for work directed by the Construction Manager. Any unused portion will be returned to the Owner.

The following Work is excluded:

End of Scope of Work – PAINTING
SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the Food Service Equipment Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

FOOD SERVICE EQUIPMENT - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements
- 114000 - Food Service Equipment

This Work specifically includes, but is not limited to:

1. All items per Master Scope of Work.
2. Provide all food service equipment in its entirety. This includes all equipment items, misc items, brackets, shelves, tops, etc. as necessary to complete the food service equipment.
3. Equipment must comply with applicable codes and ordinances.
4. Site visits are required to verify building conditions, dimensions, wall locations, etc.
5. Coordination with other trades as required for a complete & proper installation.
6. Wall backing will be installed by the General Trades package. This Contractor is responsible for accurate layout and locations.
7. If this Scope of Work has penetrations, then this Contractor is responsible for providing and coordinating with the roofer. For Any CMU penetrations this package must coordinate with the masonry contractor. If this package fails to coordinate, then this contractor will provide all core drilling and patch back as necessary.
8. If equipment in this Scope of Work is required to be plugged in to an outlet (not hard wired) then whips are to be provided and installed by this Contractor regardless if notes on the drawings says by Electrical Contractor. Plugging in and turning on of equipment is by this Contractor during startup.
9. All foodservice equipment per equipment schedules are by this Contractor unless noted by others.
10. Provide all stainless steel splashes, wall panels, guards, sneeze guards, covers, etc. as required.
11. Provide caulking as related to this Scope of Work.
12. Provide temporary protection for all installed equipment. Do not remove plastic, coverings, etc. until directed by the Construction Manager.

The following Work is excluded:

End of Scope of Work – FOOD SERVICE EQUIPMENT
LPS – Storm Shelter Additions  
11-6000 Theater Scope of Work

SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the Theater Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

STAGE EQUIPMENT - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements
- 116100 Theatrical Lighting Equipment
- 116133 Theatrical Rigging and Curtains (Discovery and South Valley Middle School)
- 116143 Stage Curtains (EPIC Elementary School)

This Work specifically includes, but is not limited to:

1. All items per Master Scope of Work.
2. Provide all theatrical lighting and equipment
3. Provide all theatrical rigging and curtains
4. Provide all stage rigging and curtains

The following Work is excluded:

End of Scope of Work – THEATER SEATING
LPS – Storm Shelter Additions
11-6600 Athletic Equipment Scope of Work

SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the Athletic Equipment Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

ATHLETIC EQUIPMENT - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements
- 116623 - Gymnasium Equipment
- 116653 - Gymnasium Dividers

This Work specifically includes, but is not limited to:

1. All items per Master Scope of Work.
2. Provide all items listed in the Specifications above and Contract Documents including all accessories for a complete system.
3. All gymnasium equipment and all associated accessories for a complete system. Coordination with the Structural Steel, Precast, MEP, Wood Flooring, and all other Contractors will be required to determine specific locations for installation. This project will be BIM coordinate and information by this Scope of Work will be required early in the project to help coordinate the BIM model and surround systems.
4. This Scope of Work will be responsible to provide layout for the athletic striping to the Wood Flooring Contractor.
5. The Electrical Contractor will provide power as shown in the Contract Documents. This Scope of Work is responsible for taking power for the locations shown in the Contract Documents to your equipment. Any additional power requirements will be the responsibility of this Contractor.
6. Provide all temporary protection of wood flooring and surrounding work during the entire installation of this Scope of Work.
7. Provide volleyball sleeves.

The following Work is excluded:

End of Scope of Work – ATHLETIC EQUIPMENT
LPS – Storm Shelter Additions
21-1000 Fire Suppression Scope of Work

SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the Fire Suppression Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

FIRE SUPPRESSION - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements
- 210500 Common Work Results for Fire Suppression
- 211200 Fire-Suppression Standpipes
- 211313 Wet-Pipe Sprinkler Systems

This Work specifically includes, but is not limited to:

1. All items per Master Scope of Work.
2. Design and provide a fire suppression system complete with all piping, pipe fittings, flow alarms, tamper switches, valves, hangers, anchors, control and flow devices, permits, fire department valves and connections as indicated in the Contract Documents.
3. Seismic bracing, hangers, stands, plates, anchors, inserts, miscellaneous metals, blocking, supplementary steel support, channels, unistruts, hanger rods, guy wires, and all other support framing and materials required for this Scope of Work.
4. This Contractor to furnish shop drawings and system calculations within 30 days of Contract Award, or as the Project Schedule requires (whichever is the most stringent).
5. This Contractor shall provide all design services required to completely design a fully code compliant and coordinated fire protection system in accordance with the Construction Documents and all federal, state and local requirements.
6. This Contractor shall include all provisions, design information, labor, etc. necessary to complete testing, inspections, and commissioning on the Fire Suppression System, and shall provide a legal means of evacuation and drainage of all water used in this process.
7. Any access door related to this Scope of Work not shown on the Contract Documents, shall be provided by this Contractor to the Drywall Contractor for install.
8. The Site Utility Contractor to bring the fire line to flange inside of building. This Contractor to make tie-in and complete system in the building.
9. This Contractor shall tag, identify, and log all valves and components of the Fire Protection System.
10. This Contractor shall furnish and install Post Indicator Valve if indicated.

The following Work is excluded:

1. Fire Alarm System – By Electrical Contractor
End of Scope of Work – FIRE SUPPRESSION
SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the Plumbing Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

PLUMBING - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements
  - 220500 Common Work Results for Plumbing
  - 220513 Common Motor Requirements for Plumbing Equipment
  - 220516 Expansion Fittings and Loops for Plumbing Piping
  - 220517 Sleeves and Sleeve Seals for Plumbing Piping
  - 220518 Escutcheons for Plumbing Piping
  - 220519 Meters and Gauges for Plumbing Piping
  - 220523 General Duty Valves for Plumbing Piping
  - 220529 Hangers and Supports for Plumbing Piping and Equipment
  - 220553 Identification for Plumbing Piping and Equipment
  - 220719 Plumbing Piping Insulation
  - 221116 Domestic Water Piping
  - 221119 Domestic Water Piping Specialties
  - 221123 Domestic Water Pumps
  - 221316 Sanitary Waste and Vent Piping
  - 221319 Sanitary Waste Piping Specialties
  - 221413 Storm Drainage Piping
  - 221423 Storm Drainage Piping Specialties
  - 223300 Electric, Domestic-Water Heaters
  - 224000 Plumbing Fixtures
  - 224700 Drinking Fountain and Water Coolers
  - 334600 Subdrainage (As it applies)

This Work specifically includes, but is not limited to:

1. All items per Master Scope of Work.
2. Provide complete plumbing system including, but not limited to, water piping, waste, vent and drain piping, valves, plumbing fixtures and trim, domestic water heaters, expansion tanks, domestic water heat exchangers, backflow preventers, pressure reduction stations, hammer arrestors, water softeners, recirculation pumps, domestic booster pump, air compressor, emergency eye wash stations and showers, lab faucets, acid neutralization tanks, pipes and fittings, sewage ejector, grease interceptors and traps, and piping/plumbing components insulation as indicated on the Contract Documents.
3. Provide foundation drains, filter fabric, and connections to 5’ outside building.
4. This Contractor shall include all permitting costs associated with this Scope of Work in their base bid.
5. Excavation, gravel bedding, and approved backfill as required to complete this Scope of Work.
6. Spoils to be stored at a location approved by Contractor. Spoils will be removed from site by the Earthwork Contractor.
7. Sanitary waste and vent, including but not limited to:
   o Site utility contractor will provide sanitary lines 5’ from building. This contractor will make tie in to new lines. Provide and install all exterior cleanouts as shown on Contract Documents.
8. Roof Drainage, including but not limited to
   o Connect building storm lines to site storm lines within 5’ of building.
   o Provide and install downspout boots.
   o Temporary roof drain system. Immediately upon completion of roofing operation in each area. This Scope of Work to temporarily connect all roof drains and direct water outside of building until final roof drain connections are complete. Include maintenance.
   o Rain Guards at roof pipe penetrations.
9. Provide all regulators, equipment, materials, labor, etc. necessary for the complete installation of the gas piping per the Contract Documents.
10. This Contractor shall install a complete lab gas system, including all components, certifications and inspections necessary for a complete installation.
11. Provide all plumbing fixtures as noted on the fixture schedule in the Contract Documents.
12. Caulking of all plumbing fixtures.
13. Power supply box, wiring harness for all plumbing fixtures as required. Final wiring connections to be by Electrical Contractor.
14. All supports, anchors, guides, misc metal supports, penetrations, sleeves, blocking, and equipment supports required for the proper installation.
15. Drip pans as required.
16. This Contractor shall provide all sump pumps and associated piping outlined in the Contract Documents. Pump floats and accessories shall be mounted by this Contractor, and will be wired by the Electrical Contractor.
17. Connections to all equipment within other sections or furnished by Owner.
18. Provide final cleaning and testing of the plumbing system by area or partial zones as directed by the Construction Manager to allow installation of Work by other trades. Include temporary valves, caps or plugs as necessary to accomplish testing by area. All water used for testing shall be drained into connected sewer lines. If required, this Contractor to use temporary piping, pumps, or other methods to remove water at no additional cost to the Owner or Construction Manager.
19. Piping of condensate drains for equipment provided under the HVAC Scope of Work per the details, specifications, and manufacturers requirements. Work to include all piping, fittings, traps, insulation supports, roof support blocks, etc. Coordinate with the HVAC Contractor.
20. This Contractor shall be responsible for protection of all floor drains, floor sinks, and cleanout covers until project completion.
21. Access doors required by this Scope of Work, not shown in the Contract Documents are to be provided to the Drywall Contractor by this Scope of Work. Lockable and rated where required.
22. Provide plumbing rough-in and final hookup for appliances.
23. Food Service Equipment connections and coordinate floor sink locations with kitchen equipment shop drawings.
24. All insulation at it relates to this Scope of Work.
25. All gas piping and connections to required equipment.
26. All piping indicated to be painted should be cleaned and prepared by this Contractor and painted by others.
27. Connection, piping, insulation, and all accessories from the building to grease interceptor will be by this Scope of Work. The grease interceptor is by the Site Utilities Contractor.
28. Include $20,000 allowance for Work directed by the Contraction Manager. Any unused portion will be returned to the Owner at the completion of the project.

The following Work is excluded:

End of Scope of Work – PLUMBING
LPS – Storm Shelter Additions
23-0900 HVAC Controls Scope A (South Valley Middle School) - Scope of Work

SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the HVAC Controls Scope A Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

HVAC - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements
- 230500 Common Work Results for HVAC (As it applies)
- 230593 Testing, Adjusting, and Balancing for HVAC (As it applies)
- 230900 Instrumentation and Control for HVAC

This Work specifically includes, but is not limited to:

1. All items per Master Scope of Work.
2. This scope is for work associated at South Valley Middle School only.
3. This Contractor shall provide all layout required for this Scope of Work, including all block-outs required/necessary in concrete, masonry, precast and drywall. Coordinate wall penetrations with others. If this Contractor fails to coordinate opening, they will be required to core drill, saw cut, etc. and patch back missed openings.
4. Provide a complete HVAC Controls System (BAS) per the Contract Documents, including but not limited to:
   a) Provide all control devices and sensors as required.
   b) Provide special back boxes if required.
   c) Provide all BAS panels as required.
   d) Adjustments to all mechanical systems during and after fire alarm systems testing.
   e) Low voltage control and interlock wiring, devices, software, and programming per the sequence of operations in the Contract Documents.
   f) Electrical Contractor to provide conduit and raceway per contract documents. Any additional conduit and raceway needed would be by this scope of work.
   g) All control dampers / actuators
   h) All sensors, stats
   i) All control cable and wire as required for controls system.
5. Install duct detectors furnished by the Electrical Contractor. The Electrical Contractor is responsible for final connections of these devices.
6. This Contractor shall be responsible for any permits required for its Scope of Work and shall coordinate all associated inspections.

The following Work is excluded:

1. Furnishing Duct Smoke Detectors – By Electrical Contractor
2. Work at Epic and Discovery Middle School

End of Scope of Work – HVAC Controls Scope A
PROJECT NUMBER: N3-0641  
COST CODE: 23-0900

LPS – Storm Shelter Additions  
23-0900 HVAC Controls Scope B (Epic Elementary and Discovery Middle School) - Scope of Work

SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the HVAC Controls Scope B Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

HVAC - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements
- 230500 Common Work Results for HVAC (As it applies)
- 230593 Testing, Adjusting, and Balancing for HVAC (As it applies)
- 230900 Instrumentation and Control for HVAC

This Work specifically includes, but is not limited to:

1. All items per Master Scope of Work.
2. This scope is for work associated at Epic Elementary School and Discovery Middle School Only.
3. This Contractor shall provide all layout required for this Scope of Work, including all block-outs required/necessary in concrete, masonry, precast and drywall. Coordinate wall penetrations with others. If this Contractor fails to coordinate opening, they will be required to core drill, saw cut, etc. and patch back missed openings.
4. Provide a complete HVAC Controls System (BAS) per the Contract Documents, including but not limited to:
   a) Provide all control devices and sensors as required.
   b) Provide special back boxes if required.
   c) Provide all BAS panels as required.
   d) Adjustments to all mechanical systems during and after fire alarm systems testing.
   e) Low voltage control and interlock wiring, devices, software, and programming per the sequence of operations in the Contract Documents.
   f) Electrical Contractor to provide conduit and raceway per contract documents. Any additional conduit and raceway needed would be by this scope of work.
   g) All control dampers / actuators
   h) All sensors, stats
   i) All control cable and wire as required for controls system.
5. Install duct detectors furnished by the Electrical Contractor. The Electrical Contractor is responsible for final connections of these devices.
6. This Contractor shall be responsible for any permits required for its Scope of Work and shall coordinate all associated inspections.

The following Work is excluded:

1. Furnishing Duct Smoke Detectors – By Electrical Contractor
2. Work at South Valley Middle School

End of Scope of Work – HVAC Controls Scope B
SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the HVAC Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

HVAC - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements
- 230500 Common Work Results for HVAC
- 230513 Common Motors Requirements for HVAC Equipment
- 230525 Equipment Screening for HVAC
- 230548 Vibration Controls for HVAC
- 230553 HVAC System Identification
- 230593 Testing, Adjusting, and Balancing for HVAC
- 230713 Duct Insulation
- 230719 HVAC Piping Insulation
- 230900 Instrumentation and Control for HVAC
- 231123 Facility Natural-Gas Piping
- 232300 Refrigerant Piping
- 233113 Metal Ducts
- 233300 Duct Accessories
- 233416 Centrifugal HVAC Fans
- 233713 Diffusers, Registers, and Grilles
- 237416 11 Packaged, Small-Capacity, Rooftop Air-Conditioning Units
- 237416 13 Packaged, Large-Capacity, Rooftop Air-Conditioning Units
- 238239 Cabinet Unit Heaters

This Work specifically includes, but is not limited to:

1. All items per Master Scope of Work.
2. Provide a complete HVAC system per the Contract Documents, including but not limited to:
   a) Rooftop Units (RTU’s)
   b) Dedicated Outdoor Air System (DOAS)
   c) Heat and Energy Recovery Wheels/Devices
   d) Dehumidification Units
   e) Fluid Cooler
   f) Make-Up Air Unit(s)
   g) Cabinet Unit Heaters
h) Louvers, Grilles, Registers and Diffusers
i) Hot Water Boiler
j) Water Pumps
k) Air Separator
l) Expansion Loop
m) Mini-Split Outdoor and Indoor Units
n) Baseboard Heaters
o) Expansion Tank
p) Roof Hoods
q) Dust Collector
r) Duct Silencers
s) Variable Air Volume Terminals (VAV’s)
t) Unit Heater(s)
u) Exhaust Fans, In-Line Fans, Kitchen Exhaust Fans, Lab/Utility Exhaust Fans
v) Hydronic Heating Coils
w) Heat Pump Condensing Units
x) Heat Pump Fan Coil Units
y) HVAC Piping for all systems
z) Ductwork for all systems
aa) Duct security bars
bb) Return air boots
cc) Insulation as it relates to this Scope of Work.

3. This Contractor shall provide all layout required for this Scope of Work, including all block-outs required/necessary in concrete, masonry, precast and drywall. Coordinate wall penetrations with others. If this Contractor fails to coordinate opening, they will be required to core drill, saw cut, etc. and patch back missed openings.

4. This Contractor shall provide a detailed layout of all rooftop equipment requiring openings, including dimensions and weight, requirements for ductwork, etc. This information should be provided to the Construction Manager within 20 calendar days of notice to proceed, or as required by the Project Schedule.

5. Units located on the roof will be set after structure is complete. This Contractor is responsible for hoisting units on the roof, size crane accordingly.

6. Coordinate roof opening locations and supports.

7. Provide curbs, bases, insulation, and sound deadening material, vibration isolators, equipment anchors and equipment support, sealants required for all equipment included in this Scope of Work.

8. This Contractor is responsible to provide leveling and buildup of roof curbs as necessary after insulation is installed and as necessary to maintain proper clearance for roofing warranty.

9. Fall protection at roof openings.

10. Temporary weather protection at roof openings until openings are fully covered and protected by equipment.

11. Cutting and removal of roof decking. Provide leading edge protection if items are not installed immediately after cutting openings.

12. Pipe roof penetration enclosures and pipe support rails per the Contract Documents.

13. Provide a complete HVAC Controls System (BAS) per the Contract Documents, including but not limited to:
   a) Provide all control devices and sensors as required.
   b) Provide special back boxes if required.
   c) Provide all BAS panels as required.
   d) Adjustments to all mechanical systems during and after fire alarm systems testing.
   e) Low voltage control and interlock wiring, devices, software, and programming per the sequence of operations in the Contract Documents.
   f) Electrical Contractor to provide conduit and raceway.
14. Permanent HVAC Equipment will be used for temporary conditioning during construction, including but not limited to:
   a) Multiple startups
   b) This Scope of Work shall be responsible for providing temporary monitoring and alert system for the temporary conditioning of the building.
   c) Temporary construction thermostats and controls. Provide temporary emergency dialer for notification.
   d) Devices/Sensors for monitoring and operational safety shutdowns for hi/low temperature, pressure, and smoke.
   e) Filter changes and cleaning as required, minimum every month.
   f) Provide final filter changes and cleaning at completion.
   g) Complete warranty starting at Substantial Completion date of project.
   h) Include extended warranty as required for operating during construction. Final warranty to start at substantial completion.
   i) Permanent units shall be operational for temporary conditioning per the dates listed on the project schedule. If not operational by the date above the HVAC contractor shall provide temporary units.

15. This Contractor shall provide all flume piping for mechanical and plumbing equipment in accordance with the construction documents.

16. Provide dryer exhaust vent(s) per the Contract Documents.

17. This Contractor shall provide all condensate drain piping necessary to reach drainage system in accordance with the construction documents and applicable codes.

18. This Contractor shall provide all equipment overflow drain pans.

19. This Contractor to take note of any expansion joints to ensure that all provisions are taken to accommodate these in all new installations.

20. This Contractor shall provide all elevator shaft vents as outlined in the Contract Documents, or as required by the Elevator manufacturer or other governing regulation.

21. This Contractor shall provide any backflow preventers, regulators, or pressure reduction equipment required for this Scope of Work.

22. Provide start-up, testing, adjusting, and balancing for all systems and equipment included in this Scope of Work per the Contract Documents.

23. Furnish variable frequency controllers/variable frequency drives as required for equipment in this Scope of Work. Coordinate with Electrical Contractor for final connections and install.

24. Install duct detectors furnished by the Electrical Contractor. The Electrical Contractor is responsible for final connections of these devices.

25. All exterior louvers, outside control dampers, include associated flashing for this Scope of Work.

26. This Contractor shall provide all dampers (fire, control, motorized, or non-motorized), control valves, or any other component integral to the HVAC or mechanical piping system. Final connections to the respective systems (auto controls, fire alarm, etc.) will be the responsibility of the System Contractor.

27. Provide all miscellaneous structural supports for all suspended or supported systems equipment, which includes but is not limited to, hangers, support steel, fasteners, etc. beyond what is included in the Contract Documents for the installation of this Scope of Work.

28. Prior to installation of any pipe hangers or supports, this Contractor must verify with the Structural Engineer that the loads imposed on the building’s structural component shall not exceed that for which the structural component was designed.

29. Any additional access doors required by this Scope of Work but not shown in the Contract Documents shall be furnished by this Scope of Work for install by others. Lockable and rated where required.

30. All HVAC system components scheduled to be painted shall be cleaned and prepared by this Contractor and painted by others.
31. Kitchen equipment exhaust systems, including fans, ductwork, controls switches, hangers, supports for a complete installation and integration.
32. Provide a complete grease duct installation, including but not limited to, grease duct reservoir, grease duct cleanout access and grease duct fire wrap insulation per the Contract Documents.
33. Coordinate the Mechanical requirements for the Food Service Equipment with the Food Service Contractor. Work includes but is not limited to, duct connections to fume hoods and other pieces of equipment needing exhaust or supply connections.
34. Connections to all equipment within other sections or furnished by Owner.
35. This Contractor shall be responsible for any permits required for its Scope of Work and shall coordinate all associated inspections.
36. Include $50,000 allowance for Work directed by the Contraction Manager. Any unused portion will be returned to the Owner at the completion of the project.

The following Work is excluded:
1. Furnishing Duct Smoke Detectors – By Electrical Contractor

End of Scope of Work – HVAC
SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the Electrical Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

ELECTRICAL - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements
- 260500 Common Work Results for Electrical
- 260519 Low-Voltage Electrical Power Conductors and Cables
- 260523 Control-Voltage Electrical Power Cables
- 260526 Grounding and Bonding for Electrical Systems
- 260529 Hangers and Supports for Electrical Systems
- 260533 Raceway and Boxes for Electrical Systems
- 260535 Identification for Electrical Systems
- 260923 Lighting Control Devices
- 260943 Distributed Digital Lighting Control System
- 262200 Transformers
- 262416 Panelboards
- 262726 Wiring Devices
- 262813 Fuses
- 262816 Enclosed Switches and Circuit Breakers
- 263323 Central Battery Equipment for Emergency Lighting
- 264113 Lightning Protection for Structures
- 265119 LED Interior Lighting
- 265219 Emergency and Exit Lighting
- 265500 Theatrical Equipment Hook-Up
- 265619 LED Exterior Lighting
- 270000 District Cabling Specifications (LPS Standard)
- 270500 Common Work Results for Communications
- 270526 Grounding and Bonding for Communications
- 270536 Cable Trays for Communications Systems
- 274116 Audio Video Systems
- 275116 Public Address Systems
- 275145 Two-Way Emergency Responder Radio System
- 280500 Common Work Results for Electronic Safety and Security
- 280513 Conductors and Cables for Electronic Safety and Security
- 283111 Digital, Addressable Fire-Alarm System
This Work specifically includes, but is not limited to:

1. All items per Master Scope of Work.
2. Provide a complete Electrical and Lighting System per the Contract Documents, including but not limited to:
   a) Light Fixtures
   b) Lighting Control system, including but not limited to, panels, devices, inverters, occupancy sensors, programming, and testing.
   c) Electrical Panelboards / Power Distribution
   d) Conduit, Wiring and Wireway
   e) Cable Trays
   f) Boxes and Covers
   g) Switchgear
   h) Transformers
   i) Electrical Devices
   j) Cord Reels
   k) Grounding and Bonding
   l) Seismic Controls
   m) Testing
3. Provide all Site Electrical Work. Coordinate with civil and landscaping drawings. Furnish light pole anchor bolts to Site Concrete Contractor for installation. Include conduit for utility feeders and coordination for primary/secondary transformer hook-ups.
4. Spoils generated by this Scope of Work to be stored at onsite locations approved by Construction Manager. Spoil removal to be by Earthwork Contractor. There will be no additional compensation for unclassified or unsuitable soils. If the existing soils are determined to be unacceptable by the Geotechnical Engineer for use, this Contractor will be responsible to import appropriate material.
5. This Contractor to install all secondary conduit, secondary feeders, and switchgear pads. Evergy will be responsible for pulling/terminating primary feeders and setting equipment. Coordinate with Evergy on permanent service requirements. This Scope is to cover everything after Evergy to the building.
6. This Contractor is to provide all fixtures, devices, raceway, unistrut etc. needed for exterior and interior lighting and any Site Electrical Work.
7. Provide utility kills for existing school demo and new schoolwork as required, including any fees associated. Provide coordination with Evergy.
8. Provide power and final electrical hookup as needed for appliances. Provide any safety kill switches.
9. Provide power and final hook up of indicated, or not indicated – handicap assist auto door operators, magnetic hold-open devices, all disconnects, food service/kitchen equipment, coiling/overhead door operators, automatic flush-valves, motion-sensor faucets, motorized shades, electric heaters, projection screen, display cases, shop equipment, exhaust hoods, electric door controls, smoke/fire dampers or Classroom Hoods & Equipment, elevators and controls, sump pumps and alarms, athletic equipment, and other power operated devices furnished by the Others.
10. This Contractor shall supply power to all Automatic Door Openers and Hardware Power Supplies. Connections between the power supply and hardware shall be completed by the Auto Opener installer.
11. Provide motor starters and disconnect switches for HVAC and plumbing equipment as required for mechanical and plumbing equipment (reference mechanical and plumbing schedules).
12. Provide a complete Lightening Protection System as required.
13. Provide a complete Fire Alarm System per the Contract Documents, including but not limited to:
   a) Design services required to completely design a fully code compliant and coordinated Fire Alarm System, in accordance with the construction documents and all federal, state, and local requirements
   b) Conduit, Wire, and Wireway
   c) Boxes and Covers
d) Fire Alarm Devices  
e) Fire Alarm Panels  
f) Smoke Detection Devices  
g) Audible/Visual Alarms/Devices  
h) Strobe Devices  
i) Cabling for Fire Protection components  
j) Furnish of duct detectors. Include final connection and testing. Installation to be by Mechanical Contractor.  
k) System shall interface with security electronics systems. Provide fire alarm system programming and auxiliary contracts as required to allow for fire alarm annunciation/control from the security electronics control panels as specified.  
l) Provide input and output modules for all equipment that must be monitored/controlled for the purpose of smoke evacuation/pressurization.  
m) Provide all fire alarm wiring including control and monitoring wire from each input/output module to its corresponding piece of smoke evacuation equipment.  
n) Provide all wiring and interface required to monitor all Ansul Systems installed by others  
o) Start-up, Adjusting and Testing for fire alarm system in conjunction with HVAC Contractor, and Construction Manager to verify accurate function of smoke evacuation/pressurization systems.  
p) Provide magnetic door holds devices.

14. Provide a complete Telecommunications and AV System per the Contract Documents, including but not limited to:
   a) Cable Tray  
   b) Sleeves & sleeve seals  
   c) Enclosures for underground data transition  
   d) Floor Boxes, Wall/Ceiling Boxes and Conduit  
   e) Cabling and Wire  
   f) Outlets, Devices and Speakers  
   g) Racks  
   h) Projectors  
   i) Intercommunications and Program Systems  
   j) Rescue Assistance Signal Systems  
   k) Clock System  
   l) Bonding  

15. Provide a complete Security System per the Contract Documents, including but not limited to:
    a) Cable Tray  
    b) Sleeves & sleeve seals  
    c) Boxes and Conduit  
    d) Cabling and Wire  
    e) Cameras, Card Readers, Door Position Switches, Door Monitoring Sensors, Request to Exit Device, Video Intercom, Panic Button, any other devices required for a complete system.  
    f) Security Panels

16. Provide conduit raceways and sleeves for the following systems, including but not limited to:
   a) Temperature Control  
   b) Building Automation System

17. Electrical service to other MEPT systems, including but not limited to:
    a) Line voltage interlock wiring for mechanical system  
    b) Starters and disconnect switches  
    c) Unit heaters  
    d) Plumbing fixtures  
    e) Duct detectors
f) Pre action system

g) Variable frequency drives and/or controllers furnished by Others, include service and final connection.

18. This Contractor shall provide all layout required for this Scope of Work, including all block-out required/necessary in concrete, masonry, precast and drywall. Coordinate wall penetrations with others. If this Contractor fails to coordinate opening, they will be required to core drill, saw cut, etc. and patch back missed openings. There is to be no wall mounted conduit unless specifically noted.

19. This Contractor is to provide any sleeves required for in-wall or under slab work.

20. Provide and set all roof penetrations as required for this Scope of Work. Penetrations will be flashed in and made weather tight by Roofing Contractor.

21. Provide all miscellaneous structural supports for all suspended or supported electrical systems equipment, including but not limited to: hangers, support steel, steel framing, seismic restraints, fasteners, etc. beyond what is indicated on the Contract Documents for the installation of this Scope of Work. Seismic restraints shall be designed, furnished, and installed by this Contractor as required.

22. Coordinate all items and functions required to tie-in with the Elevator Contractor Scope as required to integrate with items included in this Scope of Work.

23. This Contractor shall be responsible for any permits required for its Scope of Work and shall coordinate all associated inspections.

24. Any additional access doors required by this Scope of Work but not shown in the Contract Documents shall be furnished by this Scope of Work for install by others. Lockable and rated where required.

25. All equipment indicated to be painted shall be cleaned and prepared by this Contractor and painted by others (unless Contract Documents call for painting by manufacturer).

26. This Contractor to take note of any expansion joints in the building and make provisions in the conduit and wiring to accommodate these joints.

27. This Contractor shall provide final cleaning of all fixtures prior to Owner acceptance.

28. Provide all system identification tags, conduit tagging, panel and system identification, markers, ID plates, etc. as indicated on the Contract Documents.

29. Guarantees and warranties shall commence at Owner acceptance of all equipment and installations. Use of equipment prior to acceptance is permitted. This Contractor shall retain and include in their bid, the necessary warranty/guarantee extensions to accommodate this extended use.

30. Provide BIM Modeling and coordination with other trades, including but not limited to, seismic and structural framing, plumbing, mechanical, and fire protection.

31. Provide all necessary start-ups, adjustments and testing prior to Owner occupancy and use of all systems included in this Scope of Work.

32. Contractor is to facilitate an Owner Training session to instruct the Owner and Owner’s staff of the proper use, operation, maintenance, and function of the Systems included in this Scope of Work. Equipment training to be done by a Factory Rep.

33. Provide temporary electrical services to the Project, including but not limited to
   a) Provide connections to Construction Managers trailers per site logistics sheets.
   b) An adequate number of temporary power centers shall be provided inside the building footprint to allow usage at any point (per floor) with a 100’ power cord. Each power center shall have no less than four (4) grounded 120-volt 20-amp capacity outlets and one (1) 220-volt outlet.
   c) Provide temp lighting in building spaces until permanent lighting is installed.
   d) Dismantle and remove all temporary services when no longer required.

34. Include a $50,000 allowance for rough-in not shown in the Contract Documents. Allowance to be used as directed by the Construction Manager, any unused portion will be returned to the Owner.

The following Work is excluded:

End of Scope of Work – ELECTRICAL
LPS – Storm Shelter Additions  
31-1000 Earthwork Scope of Work

SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the Earthwork Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

EARTHWORK - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements
- 024119 - Selective Demolition (As it applies)
- 311000 Site Clearing
- 312000 Earth Moving

This Work specifically includes, but is not limited to:

1. All items per Master Scope of Work.
2. Site clearing, grubbing and site demolition as indicated. Protect existing improvements, structures, and vegetation scheduled to remain.
3. Site demolition includes, but is not limited to saw cutting of concrete paving, asphalt paving, sidewalks, walkways, safety surfacing, retaining walls, curbs, pavers, trash enclosures, gates, fences, trees, landscaping, light poles and other related structures as indicated on the drawings and verified in the field.
4. Removal and haul-off of all demolition trash, debris and spoils generated by this Scope of Work.
5. Provide and maintain erosion control for the entire project, for the duration of the project. Erosion control measures shall be provided in accordance with information contained in the SWPP and details shown on the drawings. Maintain SWPP including daily reporting for the duration of the project.
6. Provide and maintain the project gravel access roads and parking lot as required for the entire duration of the project. This contractor will be responsible for removing temporary site roads and lots prior final pavement being placed. Reference Construction Manager Site Logistics Plan 00 30 01 for specific details.
7. Location of existing utilities as required for this Scope of Work.
8. Controlled low volume fill material. Building pad low volume material must be per geo report. Building pad to be AB3 material.
9. Provide granular fill under all site concrete, asphalt, and curbs except for the asphalt at the track area. Concrete sidewalk at track is included in this Scope of Work.
10. Establish final subgrade elevations to +/- 1/10 foot of all curbs, sidewalks, concrete or asphalt paving, approaches, ramps, turf areas, or any other exterior concrete surface. Fine grading at these locations to be completed by corresponding Contractor.
   a) The granular basecourse and grading at all concrete curb, concrete paving, and asphalt paving shall be by this Scope of Work.
11. Geotechnical report to be reviewed and all recommendations by the geotechnical engineer to be implemented by this Contractor.
12. Site dust control to be provided by this Scope of Work.
13. Provide daily street cleaning for the duration of time this Scope of Work is on-site.
14. This Contractor will be responsible for relocation of spoils generated by this Scope of Work and other Scopes of Work. Other Contractors to stockpile spoils for daily removal by this Contractor. Spoils to be utilized on-site for fill as allowed by the grading plan and approved by the civil and geotechnical engineer. Spoils above and beyond available fill requirements or unacceptable to the engineers to be removed from site by this Contractor.
15. Placement of topsoil at all disturbed areas to be included in this scope. Landscaping will be by Landscaping Contractor.
16. Excavation at all BMP areas by this Scope of Work.
17. Include safety warning line and barriers at all excavations, including the former building open excavation as required until grading and slopes are in place.
18. Provide tree protection per the Contract Documents
19. Provide all soil surcharge at Epic Elementary to complete the consolidation settlement process as described by KTI in Addendum 01. Soils to be removed and benched back after settlement period to allow for concrete footings and foundation walls to be constructed, and precast to be erected. Once Precast Concrete is erected this contractor to backfill gym and stairs back to -10” below FF with ¾” clean rock and filter fabric as called out. Vibration compaction will be needed as rock is brought up to reduce settlement.
20. Include $100,000 allowance for work directed by the Construction Manager. Any unused portion will be returned to the Owner.

The following Work is excluded:

End of Scope of Work – EARTHWORK
SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the Asphalt Paving Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

ASPHALT PAVING - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements
- 321216 - Asphalt Paving Sports

This Work specifically includes, but is not limited to:

1. All items per Master Scope of Work.
2. Hot-Mix Asphalt, including but not limited to the following:
   a) Saw cutting of asphalt to provide a clean edge where base course stops.
   b) Complete all tack coats as required.
   c) Fine grading/hand grading
   d) Asphalt patching
   e) Include all pavement and curb markings and paint.
3. All traffic and handicap signage and posts per the contract documents (including concrete bases where required). Include Coring, drilling, and/or saw cutting necessary for sign posts foundations.
4. Fine grading of subgrade at all associated asphalt Scope of Work. The Earthwork Contractor will be responsible for rough-grade at asphalt paving areas to within +/- 1/10 foot. Any additional fine grading shall be by this Scope of Work.
5. All pavement markings, including any on concrete paving.
6. Wheel stops.
7. Include all protection, barricades, etc. to protect pavement from traffic until asphalt has been compacted, cooled, and hardened.
8. Base bid to be based on installing asphalt per the project schedule and Contract Documents. Bidder to provide Liquid Tonnage Price based on September 2023 pricing. If this value fluctuates prior to installation of the asphalt, a credit or extra cost will be issued based on the Liquid Ton Price at the time of installation. This scope of work to verify Liquid Tonnage Pricing by providing appropriate documentation. Provide the following information at time of bid:
   a) Liquid Tonnage Price (as of September 2023) $_______________
   b) Asphalt quantities and cost
9. Include an allowance of $50,000 for use per the written direction of the construction manager. Any unused portion of the allowance will be returned to the Owner.

The following work is excluded:
1. Rock base under asphalt – By Earthwork Contractor

End of Scope of Work – ASPHALT PAVING
SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the Fencing & Gates Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

FENCING & GATES - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements
- 323113 Chain Link Fences and Gates

This Work specifically includes, but is not limited to:

1. All items per Master Scope of Work.
2. Provide all chain link, decorative metal, fences and gates including all accessories for a complete installation per the Contract Documents.
3. Include all excavation, anchors, core drill, grout, concrete, and drilling for a complete installation.

The following Work is excluded:

End of Scope of Work – FENCING & GATES
LPS – Storm Shelter Additions
32-9000 Landscaping Scope of Work

SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the Landscaping Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

LANDSCAPING - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements

This Work specifically includes, but is not limited to:

1. All items per Master Scope of Work.
2. Provide all landscaping per the specifications listed above, landscape drawings, and other Contract Documents including all accessories for a complete installation.
3. Provide temporary water and maintenance to all areas that receive landscaping to establish growth. This includes providing hoses, sprinklers, temp irrigation system, if necessary, water trucks etc.
4. Provide all excavation and backfill as required to complete this Scope of Work.
5. This Contractor will be responsible for daily stockpiling of soils generated by this Scope for removal by Earthwork Contractor.
6. All disturbed areas not called to be sodded shall be seeded per project documents.
7. This Contractor is to verify the location of all underground utilities prior to installation of plant material.
8. This Contractor is to restore finish grades in all planting areas (per grading plans) which may have been disturbed during planting operations.
9. This Contractor shall be responsible for the collection, removal, and proper disposal of any and all debris generated during the installation of the landscape construction.
10. This Contractor shall provide all maintenance, including regular mowing, temp watering, etc. throughout the installation and establishment of landscaping up to substantial completion of the project.
11. Remove weeds, roots, plants, stones, clay lumps and other extraneous material prior to sodding and planting.
12. Earthwork Contractor will provide rough grade with topsoil at grass areas to +/−1/10’. This Contractor shall provide fine grading prior to seed/sod.
13. Provide any soil amendments per the Contract Documents.
14. This Contractor is responsible for any erosion control blankets, accessories, sod pins, etc. at sloped areas that receive sod or seed as required to obtain establishment.
15. This Work will take place in multiple phases. Reference the project schedule for install timelines.

The following Work is excluded:

End of Scope of Work – LANDSCAPING
LPS – Storm Shelter Additions
33-1000 Site Utilities Scope of Work

SCOPE OF WORK:

Provide all required labor, material, equipment, permits, freight, superintendence, applicable taxes, and other items required and necessary to complete the Site Utilities Scope of Work as set forth in the Epic Elementary, Discovery Middle School, and South Valley Middle School drawings and specifications by Hollis + Miller Architects dated August 31, 2023 and all other applicable sections of the project manual and all other Contract Documents identified.

SITE UTILITIES - Including but not limited to, Specification Sections:

- DIVISION 00 – Procurement and Contracting Requirements
- DIVISION 01 – General Requirements
- 333100 Sanitary Utility Sewerage Piping
- 334100 Storm Utility Drainage Piping
- 334600 Subdrainage

This Work specifically includes, but is not limited to:

1. All items per Master Scope of Work.
2. Demolition of existing site utility lines. Capping of existing lines as required. Demolition will require coordination with local utility providers to ensure portions of work are performed per required guidelines including utilizing an approved Contractor if necessary.
3. Storm lines and sanitary lines, and domestic water line including but not limited to, connection to existing lines, piping and all associated appurtenances and structures for a complete system. Piping to be extended within 5'-0" of building structure unless otherwise noted.
4. Storm tie-ins including, but not limited to, roof drains, BMPs and subdrainage. Actual connections, including necessary materials, by this Contractor
5. Provide and install all public water distribution and fire protection line piping, including but not limited to, connections to existing lines, piping, and all associated appurtenances for a complete system.
   a) Bring fire line into building and stubbed up 2' above SOG to the flange. Flange is to be installed by this Contractor. Fire Suppression Contractor will take it from the flange.
   b) Include all water/flow meters, backflow preventers, hydrants, testing, tees, valves, sleeves, blocks, air release, encasements, embedment, bedding, etc. for a complete installation.
   c) Include all connections, tap fees, permits, etc. as necessary and required.
6. This Contractor will be responsible for daily stockpiling of spoils generated by this Scope of Work for relocation or removal by the Earthwork Contractor. Coordination of location and accessibility to stockpiles will be required.
7. Include sanitary line tie in that crosses existing parking and drive lanes during school off time. This contractor to patch back.
8. Include and allowance of $25,000 to be used at the direction of the Construction Manager. Any unused portions will be returned to the owner.

The following Work is excluded:
End of Scope of Work – SITE UTILITIES
ADDENDUM NO. 02

Issued: 09/21/2023

Project:
23018 - Discovery Middle School, 800 Midjay Drive, Liberty, Missouri 64068
23019 - South Valley Middle School, 1000 Midjay Drive, Liberty, Missouri 64068
23020 - EPiC Elementary School, 650 Conister Street, Liberty, Missouri 64068

Owner: Liberty Public Schools
8 Victory Lane
Liberty, MO 64068

Bidding Documents Issued: 08.31.2023

This Addendum includes these 2 pages and the following attachments:

Supplemental Information:
Refer to Newkirk Novak Construction Partners Description Narrative.

Project Manual:
Reissued Section 000105 “Certifications Page” consisting of 2 pages.
Reissued Section 000110 “Table of Contents” consisting of 6 pages.
New Geotechnical Report Addendum #2 for Section 003132 “Geotechnical Data” consisting of 2 pages (Stamped Cover Only).
Refer to Smith & Boucher, MEP Addendum No. 2.
Refer to Peerbolte Theatrical Addendum No. 2.

Drawings:
23018 - Discovery Middle School
Revised Sheets: None

23019 – South Valley Middle School
Revised Sheets: None

23020 – EPiC Elementary School
Revised Sheets: None
PROJECT MANUAL REVISIONS

A1  SECTION 000005 – CERTIFICATIONS PAGE
    A1.1  REPLACE existing Section 000005 “Certifications Page” with the attached revised Section 000005 “Certifications Page”, dated September 22, 2023.

A2  SECTION 000110 - TABLE OF CONTENTS
    A2.1  REPLACE existing Section 000110 “Table of Contents” with the attached revised Section 000110 “Table of Contents”, dated September 22, 2023.

A3  SECTION 003132 - GEOTECHNICAL DATA
    A3.1  INSERT New Geotechnical Report Addendum #2 stamped cover at the end of existing Section 003132 “Geotechnical Data”, dated September 14, 2023.

E1  REFERENCE ATTACHED MEP ADDENDUM NO. 2

TH1  REFERENCE ATTACHED THEATER ADDENDUM NO. 2

END OF ADDENDUM NO. 02
MEP ENGINEER

I HEREBY, PURSUANT TO RSMO 327.411, STATE THAT THE SPECIFICATIONS INTENDED TO BE AUTHENTICATED BY MY SEAL ARE LIMITED TO SPECIFICATIONS LISTED BELOW:

<table>
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<tr>
<th>DIVISION 21 SECTIONS:</th>
<th>210500, 211200, 211313</th>
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<td>DIVISION 28 SECTIONS</td>
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</table>

I HEREBY DISCLAIM ANY RESPONSIBILITY FOR ALL OTHER SPECIFICATIONS, DRAWINGS, ESTIMATES, REPORTS, OR OTHER DOCUMENTS OR INSTRUMENTS RELATING TO OR INTENDED TO BE USED FOR ANY PART OR PARTS OF THE ARCHITECTURAL OR ENGINEERING PROJECT OR SURVEY.

RYAN J. DIEDIKER, PE, RCDD, LEED AP           09.21.2023_________   DATE
INTRODUCTORY INFORMATION
000101 Project Team Directory 08.31.2023
000105 Certifications and Seals 08.31.2023
000110 Table of Contents 08.31.2023

BIDDING REQUIREMENTS
(Refer to Construction Manager's Front End Manual for additional Bidding Requirements)
BIDDING REQUIREMENTS
003132 Geotechnical Data 09.21.2023 08.31.2023

CONTRACTING REQUIREMENTS
(Refer to Construction Manager's Front End Manual for additional Contracting Requirements)

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011000 Summary 08.31.2023
012100 Allowances 08.31.2023
012200 Unit Prices 08.31.2023
012300 Alternates 08.31.2023
012500 Substitution Procedures 08.31.2023
013100 Project Management and Coordination 08.31.2023
013200 Construction Progress Documentation 08.31.2023
013233 Photographic Documentation 08.31.2023
014000 Quality Requirements 08.31.2023
014200 References 08.31.2023
014529 Testing and Inspections 08.31.2023
016000 Product Requirements 08.31.2023
017419 Construction Waste Management & Disposal 08.31.2023
017700 Closeout Procedures 08.31.2023
017823 Operation and Maintenance Data 08.31.2023
017839 Project Record Documents 08.31.2023
017900 Demonstration and Training 08.31.2023

DIVISION 2 – EXISTING CONDITIONS
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DIVISION 3 – CONCRETE
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034100 Precast Structural Concrete 08.31.2023

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September 18, 2023

Ms. Emily Scaduto, NCIDQ, LEED GA
Hollis & Miller Architects
1828 Walnut Street, Suite 200
Kansas City, MO 64108

Re: KTI Project No. 223118G Addendum #2
EPiC Elementary School Storm Shelter Addition
Liberty, Missouri

Dear Ms. Scaduto:

Kruger Technologies, Inc. (KTI) completed a subsurface exploration and geotechnical report for the above referenced project with the results and subsequent recommendations submitted in our report titled Report of Geotechnical Exploration –EPiC Elementary School Storm Shelter Addition dated June 27, 2023. Per request from the project team, we have added a description of settlement monitoring recommendations to be considered for building pad and general site development fills for the project: This Addendum #2 is being issued to correct an administrative issue with Addendum #1 and rescinds and completely replaces Addendum #1 with this document.

Consolidation Settlement

We understand that fills up to approximately 16 feet will be placed within the addition site. The greatest thickness of fill will be placed in the area corresponding to B-2. Placement of this fill will initiate time-dependent consolidation settlements within the underlying clay soils which could result in producing a potential for differential settlement of the foundations of the addition building.

The existing soil below the embankment settles over time when a heavy embankment is constructed. Therefore, settlement control is necessary to measure the settlement and to ensure that the settlement has slowed to an acceptable rate. We recommend placing one steel settlement plate (2 ft by 2 ft by ¾”) prior to the beginning of embankment operations near the Boring B-2 and at the area of greatest fill. A second shallow monument should be placed near this location at the surface of the fill immediately after fill placement completion. Care should be taken by the contractor to avoid causing damage to the settlement monitoring apparatus. Fill lifts placed around the settlement apparatuses should be fairly level so that there will be no displacement of the apparatuses during fill placement operations. Survey readings should be taken once a week during and after the embankment is constructed to subgrade elevation. Survey readings should continue until the settlement rate is ¼ inch or less for three consecutive weekly readings.

An example of a monitoring device has been included with this addendum. KTI would provide and install the monitoring devices and evaluate the weekly survey readings provided by others. We anticipate that consolidation and settlement would reach acceptable levels within 60 days of fill completion.
These recommendations should be used in conjunction with the original KTI Geotechnical Report No. 223118G dated June 27, 2023.

We thank you for the opportunity to work with Hollis & Miller Architects. If you have any questions, please contact us at 913.498.1114.

Respectfully submitted,
Kruger Technologies, Inc.

Otto J. Kruger, Jr., P.E.
Missouri P.E.: 23994

[Signature]

STATE OF MISSOURI
PROFESSIONAL ENGINEER

[Seal]
ADDENUM No. 2

Liberty Discovery Middle School Storm Shelter Addition
Smith & Boucher Project No. 2314702

Liberty South Valley Middle School Storm Shelter Addition
Smith & Boucher Project No. 2314703

Liberty Epic Elementary School Lighting Storm Shelter Addition
Smith & Boucher Project No. 2314704

09/21/2023

To Documents Titled: See titles above.
Architect-of-Record: Hollis and Miller
08/31/2023
1828 Walnut Street Suite 922
Kansas City, MO 64108

The Contract Documents for the above referenced project and the Work covered thereby are modified as described herein.

SPECIFICATIONS
1. Section 264113 – Lightning Protection For Structures

Attachments
• See specifications above.

END OF MEP ITEMS FOR ADDENDUM NO. 2
Specification 116133 for this Addendum #2 is being issued to correct an administrative issue with Addendum #1. Please change in its entirety.
SECTION 116133 - THEATRICAL RIGGING AND CURTAINS

PART 1 - GENERAL

1.1 REQUIREMENTS

A. As set forth in the headings of Division 0 and Division 1, General Conditions and General Requirements shall apply to this branch of the Work.

1.2 SUMMARY

A. This section includes the fabrication, furnishing, delivery and installation of the following stage equipment:
   1. Acceptable Manufacturers
   2. Dead Hung Stage Rigging
   3. Stage Curtains and Tracks

B. Related work in other sections:
   1. Theatrical Lighting Equipment; Section 116100
   2. Stage Curtains for EPIC Elementary School; Section 116143

1.3 SUBMITTALS

A. Comply with the requirements of Liberty School District and submit listed action submittals in accordance with contract conditions.

B. Product Data: Submit manufacturer's material specifications with quantities on bill of materials and installation instructions. Include instruction for handling, storage, protection, and maintenance.

C. Shop Drawings: Show system layouts, electrical requirements, construction methods, material types and thicknesses, hardware and fittings.

D. Submittals: Show equipment, and complete bill of materials. Cut sheets will not be considered submittals and will be returned unread.

E. Samples: If requested, submit samples of any equipment, hardware, fabric or finishes.

1.4 QUALITY ASSURANCE

A. Theatrical Rigging Contractor: All items of work included in this specification shall be furnished and installed by experienced stage technicians in the employ of a single contractor so that there will be no division of responsibility for the proper operation of the equipment after installation.
   1. Each Theatrical Contractor must furnish a written listing of at least five installations that are equal to or surpass the scope of this project and that have been installed within the last five years.

B. The contractor shall employ an Entertainment Technician Certification Program (ETCP) Certified Theatre Rigger. The Certified Theatre Rigger shall be either the project manager or site foreman and be responsible for the overall project including the layout, inspection and training.
   1. A copy of the Certified Theatre Rigger's credentials shall be included with the bid documents.

1.5 DELIVERY, STORAGE AND HANDLING

A. Coordinate storage of all equipment, hardware, and accessories with owner to assure that storage does not inhibit the work of other contractors.

B. The Theatrical Contractor shall be responsible for the handling of all equipment, hardware and accessories, including unloading and transport to the designated storage area.

C. Deliver all hardware components and equipment and their accessories to the job site no sooner than two weeks prior to their installation in order to limit possible damage to the equipment while being stored.
   1. Deliver materials in manufacturer's original undamaged containers with identification labels intact.
   2. Remove packaging materials from site and dispose of at appropriate recycling facilities

D. Deliver curtains to the job site no sooner than two days prior to installation to prevent damage while being stored.
1.6 SCOPE

A. The theatre rigging contractor will be responsible for installing all of the new theatrical rigging and curtain equipment outlined in this specification and accompanying documents as well as coordinating with the electrical contractor for the electrical materials and hook-up. All dimensions must be field-verified by the theatrical rigging contractor. Field conditions which may not be covered in the specifications, shall determine actual equipment needs. The intention of the specification and drawings is to furnish and safely install new equipment and components that conform to building conditions and the intent of the bid documents. Install unistrut where needed to support all new rigging.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

A. It is the intention of this specification to provide a fully functioning dead hung stage rigging system with on-stage and FOH lighting positions. Actual equipment and components must reflect building conditions and approved shop drawings. All dimensions must be field-verified by the theatrical rigging contractor. Conditions detailed in the drawings, which may not be covered in the specifications, shall determine actual equipment needs.

B. The rigging equipment shall be manufactured by one of the following:
   1. H & H Specialties
   2. J. R. Clancy, Inc.
   3. Thern

C. The curtain track equipment shall be manufactured by one of the following:
   1. Automatic Devices Company
   2. H & H Specialties
   3. Hall Stage

D. Pipe and Drape
   1. Rose Brand
   2. Pipe and Drape USA

E. Requests for substitution of other components shall include pertinent performance data; charts and drawings showing in what respect the system will function in accordance with the specifications. This information shall be mandatory as a basis for determining the intent in meeting the full requirements of the specification including time schedule.

F. If required by the Owner, provide working samples of substitute equipment, including all necessary accessories, to be delivered as requested for the examination by the Consultant. Handling, shipping, delivery or removal of the samples shall be at the cost of the manufacturer. Substitutions will be accepted only by written addendum prior to the bid date.

G. It shall be understood that the cost of any additions or revisions required by the use of substitute equipment shall be the responsibility of the bidder making the substitution.

2.2 DEAD HUNG STAGE RIGGING

A. Provide dead hung battens and tracks per school; Discovery and South Valley. Refer to “TH” drawings for reference.
   1. Provide Twenty-one (21) dead hung battens and tracks:
      a. Provide and install lightweight framing (Unistrut or similar) to overhead structure as needed to support new dead hung battens and tracks.

B. Fabricate, deliver and install in accordance with the following specification schedules.

C. Properly adjust and trim all sets as indicated on “TH” drawings and the Rigging Schedule.

D. All dead hung battens and tracks will be hung with ¼" 7 X 19 galvanized aircraft cable or 3/16" proof coil chain. Hanging points will be a maximum of 10' 0" on center. All cable termination points shall be finished with ¼" thimbles and a copper nicropress sleeve. On the pipe end of the cable a 30" trim chain fabricated from 3/16" proof coil chain and fastened with a forged screw pin shackle, with safety wire. The trim chain shall be wrapped 1 ½ times around the pipe and fasten back to the eye of the cable. The rigging may only be attached to the support steel overhead. Provide all hardware as required to attach to or wrap around the overhead supports. Any materials
required to bridle or span between structural members is the responsibility of the theatrical rigging contractor. Properly adjust and trim all sets, tracks, and curtains.

E. All dead hung battens shall be constructed of 1-1/2” schedule 40 black iron pipe. Joints shall be kept to a minimum and shall be accomplished by use of an internal pipe sleeve at least 18” long. One end of the sleeve shall be plug welded to the batten. The other end of the sleeve shall be drilled with two holes on the same axis for field connection using grade 5 bolts. Battens shall be thoroughly cleaned to remove grease and oil and shall have yellow end caps. The yellow end caps shall be labeled with the line set number and the batten capacity.

F. All cables, fittings, sleeves and clips shall conform to the wire rope manufacturer’s recommendations as to size, number and method of installation.
   1. Provide a “Go-No Go Gauge” that conforms to the Compression tool at time of commissioning for consultant use.

G. Provide Operating and Warning sign that is in compliance with ANSI Z535 indicating safe methods of operation of the rigging equipment. Mount to wall in a visible area approved by the owner. All signage must include the load limits of all line sets and electrics.

H. Provide an Operations Manual for the rigging equipment including safe procedures and recommended operational practices for the installed system.

I. Remove all debris from the site. Leave floors broom clean.

2.3 STAGE CURTAINS AND TRACKS

A. Fabricate, deliver and install stage draperies, curtains and tracks in accordance with the following specification schedules. Refer to “TH” drawings for reference.

B. Properly adjust and trim all sets, tracks, draperies and curtains.

C. Flame Retardant: All fabrics utilized for the curtains hereafter specified shall be durably flame retardant to conform to all applicable building and safety codes. The specified velours shall be durably flame retardant to the extent that the curtain will withstand cleanings without being affected. Prior to final approval, the Contractor shall provide two original signed and notarized Flameproofing certificates stating the process used, the method of Flame Retardant utilized, the fabric, the color and the yardage. All certificates shall be originated by the firm having done the flameproofing and not by the Theatrical Contractor.

D. Materials provided:
   1. Forestage (Grand Drapery, Grand Valance), Color to be selected by Architect shall be manufactured using one of the following fabrics, or approved equal.
      a. 62” Da Vinci Velvet Plus synthetic velour, 21 ounces per linear yard as manufactured by Dazian.
      b. 54” Prestige synthetic velour, 22 ounces per linear yard as manufactured by KM Fabrics, Inc.
      c. 54” Crescent synthetic velour, 20 ounces per linear yard as manufactured by Rose Brand.
   2. Mid and Up-Stage Travelers, Masking (Leg and Border Masking) Curtains, Color: Black.
      a. 62” Milano Velvet Plus synthetic velour, 16 ounces per linear yard as manufactured by Dazian.
      b. 54” Plateau synthetic velour, 13 ounces per linear yard as manufactured by KM Fabrics, Inc.
      c. 54” Apollo synthetic velour, 13 ounces per linear yard as manufactured by Rose Brand.
   3. Stage Curtain Bags
      a. 68” canvas, 15 ounce per linear yard as manufactured by Rose Brand.
      b. 64” Ranger, 16 ounces per linear yard as manufactured by KM Fabric, Inc.
   4. Curtain tracks and hardware,
      a. Automatic Devices Company, Model 280 Silent Steel
      b. H&H Specialties, 400 Series Heavy-Duty Straight Track
      c. Hall Stage, T70 Curtain track

E. Fabrication of all panels shall be a single piece for the entire height of the curtain. No splicing of fabric to achieve a desired length will be acceptable.

F. The tread shall be the Tex 40 spun polyester for the synthetic fabric curtains and shall be the color of the fabric on which it is used, both in the needle and in the bobbin. The thread shall not be lighter than #16 in size.

G. Bad stitching, missed stitching, puckered seams, hems, etc., shall not be acceptable. All seams shall be sewn in straight and even lines.
H. Forestage Grand Valance shall be fabricated to finish with 75% sewn in fullness with box pleats, 12" on center. The top shall have 3" poly webbing double stitched to the back. The curtain shall be stapled to the proscenium wall. The sides shall finish with a 2" turned back hem. The bottom shall finish with a 4" hem which shall contain #8 plated jack chain the entire length of the curtain.

I. Forestage Grand Drapery shall be fabricated with 75% sewn in fullness with box pleats every 12" on center. The top shall have 3" poly webbing double stitched to the back. It shall have #3 brass grommets at the center of each pleat, placed 1" from the top. A CCF-2 fastener shall be used at every grommet to attach curtain to the track. The sides shall be finished with a 2" turned back hem. The bottom shall finish with a 6" hem, weighted with #8 plated jack chain the entire length.

J. Mid and Up-Stage Traveler Curtains shall be fabricated with 50% sewn in fullness with box pleats, 12" on center. The top shall have 3" poly webbing double stitched to the back. It shall have #3 brass grommets at the center of each pleat, placed 1" from the top. A CCF-2 fastener shall be used at every grommet to attach curtain to the track. Both the on and off stage sides shall be finished with a full 10" turned back hem. The bottom shall be finished with a full 6" hem, weighted with #8 plated jack chain the entire length.

K. Border and Leg Masking curtains shall be fabricated to finish with 50% sewn in fullness with box pleats, 12" on center. The top shall have 3" poly webbing double stitched to the back. It shall have #3 brass grommets at the center of each pleat, placed 1" from the top. The sides shall finish with a 2" turned back hem. The bottom shall finish with a 4" hem which shall contain #8 plated jack chain the entire length of the curtain.

L. Curtain Bags shall be fabricated from canvas with a 3" poly webbing double stitched to the top. Four (4) #3 brass grommets shall be installed equally spaced 1" from the top of the bag. The bag shall have a solid canvas bottom double stitched to the sides for the full circumference. The grommets shall be used to attach the bag to the suspension cords, listed below, to protect the stage curtains.

M. Provide the following Curtains and Track Schedule at Discovery and South Valley:

1. Provide One (1) Grand Valance, One (1) section total. Finish with 50% fullness, Prestige velour, color to be determined by architect. Finish 510" wide x 40" high, install on pipe batten. Install at location 1 on the drawings.

2. Provide One (1), Forestage (Grand) Drapery finished in two (2) sections total. Finish each section 260" wide x 220" high, 50% fullness, Prestige velour, color to be determined by the Architect Installed on two lengths of #280 curtain track, each length to be 335" and 348" with a total track span of 663". Provided with all necessary hardware for endless line bi-parting operation with rear fold guides and an adjustable 5" floor pulley with detachable floor mount kit. Install at location 2 on the drawings.

3. Provide One (1), Full stage, Mid Stage Traveler Curtain, finished in two (2) sections, total. Finish each section 260" wide x 220" high, 50% fullness, Plateau velour. Color black. Installed on two lengths of #280 curtain track, each length to be 335" and 348" with a total track span of 663". The track shall be provided with all necessary hardware for endless line bi-parting operation with rear fold guides and an adjustable 5" floor pulley with detachable floor mount kit. Install at location 11 on the drawings.

4. Provide One (1), Full stage, Up Stage Traveler Curtain, finished in two (2) sections total. Finish each section 260" wide x 220" high, 50% fullness, Plateau velour. Color black installed on two lengths of #280 curtain track, each length to be 335" and 348" with a total track span of 663". The track shall be provided with all necessary hardware for endless line bi-parting operation with rear fold guides and an adjustable 5" floor pulley with detachable floor mount kit. Install at location 20 on the drawings.

5. Provide Four (4) pair, Eight (8) sections total, masking legs. Finish each section 100" wide x 230" high, 50% fullness, Plateau velour, color black. Modify existing tracks to correct length and location. Provide new carriers and haul line. The track shall be provided with all necessary hardware for endless line one way operation and an adjustable 5" floor pulley. Install at locations 4, 9, 13 and 16 on the drawings.

6. Provide Two (2) masking borders, Two (2) section total. Finish with 50% fullness, Plateau velour, color black. Finish 474" wide x 50" high, tied to batten. Install at locations 4 and 5 on the drawings.

7. Provide Three (3) masking borders, Three (3) section total. Finish with 50% fullness, Plateau velour, color black. Finish 474" wide x 60" high, tied to batten. Install at locations 8, 12 and 14 on the drawings.

8. Provide One (1), seamless Muslin drop finished 510" wide x 220" high, no fullness. Color grey, installed with 1" bottom pipe in 10"sections that are coupled. Hang on Track at location 21 on the drawings.

9. Provide Five (5) 583" scenery tracks. Each continuous 280 track complete with four (4) ADC 2861 Door Carriers. Hang on Track at locations 6, 13, 17, 18 and 20 on the drawings.

10. Provide Seven (7) Curtain bags. Each bag shall be 36" in diameter x 80" tall. Two (2) ADC 1150 cords with a D ring on one end shall be hung from curtain tracks in line set numbers 2, 10, 19, and 21. The cords shall hang from the curtain track down to 84" AFF. Each D-ring shall have a CCF-2 fastener to connect the cord to the scenery bags.

11. Provide Eight (8) Curtain bags. Each bag will 24" in diameter x 80" tall. The Two (2) ADC 1150 cords with a D ring on one end shall be hung from curtain tracks in line set numbers 5, 8, 13, and 16. The cords shall...
hang from the curtain track down to 8'4" AFF. Each D-ring shall have a CCF-2 fastener to connect the cord to the scenery bags.

N. Provide the following for the Scoreboard at Discovery and South Valley:
1. Scoreboard Drapery finished in two (2) sections total. Finish each section 4'6" wide x 5'0" high, 0% fullness, Banjo Cloth, Color to be determined by the Architect. Provide One (1) length of ADC Specfine Model 113, length to be 13'8". Wall mount track 3" above scoreboard. Provide with all necessary hardware for endless line bi-parting operation with an adjustable 7" floor pulley mounted to wall 10’0’’ AFF.

O. Provide the following at Discovery and South Valley:
1. Provide 60'-0" of Rose Brand Pipe and Base 2.0 curtain supports.
   a. Provide Seven (7) Uprights. The uprights shall be adjustable in height from 9-23’ in three sections.
   b. Provide Six (6) horizontals. The horizontals shall be adjustable from 6’ to 10’
   c. Provide Seven (7) Bases. Bases shall be 24 x 24 x 63#.
2. Provide (6) 20'-0" tall and 10'-0" wide Synthetic velour panels
3. Rolling storage cart for pipe and bases

P. Provide the following for the FOH position at Discovery and South Valley:
1. Two (2) 8'-0" 1-½″schedule 40 black iron pipe hung with an ETC #21 bracket
2. One (1) 16'-0" 1-½″schedule 40 black iron pipe hung with an ETC #21 Bracket.
3. Hang in location as indicated on TH drawing.

Q. Upon completion of the installation, clean the fabric of all dust, lint and loose threads. Adjust for proper fit and operation.

PART 3 - EXECUTION

3.1 PREPARATION

A. Inspect the areas and conditions where theatrical equipment will be installed. Notify the architect of any conditions that would adversely affect the installation or subsequent utilization of the equipment. Do not proceed with the installation until unsatisfactory conditions are corrected.
1. Coordinate work and work schedule with related work in other sections. Provide items to be installed by others in sufficient time to prevent delays.

3.2 GENERAL INSTALLATION

A. Install all theatrical equipment, hardware and accessories at locations indicated in the drawings utilizing qualified stage technicians.
1. Provide all tools, accessories, connecting and attaching devices as required for a complete and properly functioning installation.

B. Install equipment true, plumb and securely anchor in place in accordance with the manufacture's recommendations.

C. Properly test and demonstrate all curtain equipment after installation for the owner's representative.
1. Furnish three sets of closeout documents in both printed and electronic (PDF) format. The document should include but not limited to; system layouts, maintenance procedures, operation, and tutorials.
2. Training and maintenance for the rigging and curtain systems shall be provided by the rigging contractor; training not to exceed two hours.

D. The curtain systems, tracks and rigging shall be guaranteed against defects in material and workmanship for two years from date of substantial completion. The warranty shall be on a factory exchange or repair basis. No equipment having a shorter warranty will be considered and all equipment provided shall be covered by this warranty. The Theatrical Rigging Contractor shall assume all responsibility for workmanship of the installation. Unspecified length warranty will not be acceptable.

3.3 CLEANUP

A. Upon completion of installation, remove all debris from the site.

B. Leave work areas broom clean and ready for use.
END OF SECTION 116133
SECTION 264113 - LIGHTNING PROTECTION FOR STRUCTURES

PART 1 - GENERAL

1.1 SUMMARY
A. Section includes lightning protection for structures.
B. Scope of Work: Furnish and install a complete lightning protection system for the Liberty Discovery Middle School, South Valley Middle School and EPiC elementary school additions, that extends to the existing perimeter lightning protection systems. Field verify connection points and existing conditions. System to fully cover the expanded building footprint perimeter.

1.2 SUBMITTALS
A. Product Data: For each type of product indicated.
B. Shop Drawings: For air terminals and mounting accessories.
   1. Layout of the lightning protection system, along with details of the components to be used in the installation.
   2. Include indications for use of raceway, data on how concealment requirements will be met, and calculations required by NFPA 780 for bonding of grounded and isolated metal bodies.
C. Field quality-control reports.

1.3 QUALITY ASSURANCE
A. Installer Qualifications: Certified by UL and LPI as a Master Installer/Designer, trained and approved for installation of units required for this Project.
B. System Certificate:
   1. UL Master Label.
   2. LPI System Certificate.
C. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 780, "Definitions" Article.

PART 2 - PRODUCTS

2.1 LIGHTNING PROTECTION SYSTEM COMPONENTS
A. Comply with UL 96 and NFPA 780.
B. Roof-Mounted Air Terminals: NFPA 780, Class I, aluminum unless otherwise indicated.
   1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
      a. East Coast Lightning Equipment Inc.
      b. ERICO International Corporation.
      c. Harger.
      d. Heary Bros. Lightning Protection Co. Inc.
      e. Independent Protection Co.
      f. Preferred Lightning Protection.
      g. Robbins Lightning, Inc.
      h. Thompson Lightning Protection, Inc.
   2. Air Terminals More than 24 Inches Long: With brace attached to the terminal at not less than half the height of the terminal.
C. Main and Bonding Conductors: Aluminum.
D. Ground Loop Conductor: The same size and type as the main conductor except tinned.
E. Ground Rods: Copper-clad steel; 3/4 inch in diameter by 10 feet long.
PART 3 - EXECUTION

3.1 INSTALLATION

A. Install lightning protection components and systems according to UL 96A and NFPA 780.

B. Conceal the following conductors:
1. System conductors.
2. Down conductors.
3. Interior conductors.
4. Conductors within normal view of exterior locations at grade within 200 feet of building.

C. Cable Connections: Use crimped or bolted connections for all conductor splices and connections between conductors and other components. Use exothermic-welded connections in underground portions of the system.

D. Cable Connections: Use exothermic-welded connections for all conductor splices and connections between conductors and other components.
1. Exception: In single-ply membrane roofing, exothermic-welded connections may be used only below the roof level.

E. Air Terminals on Single-Ply Membrane Roofing: Comply with roofing membrane and adhesive manufacturer's written instructions.

F. Bond extremities of vertical metal bodies exceeding 60 feet in length to lightning protection components.

G. Ground Loop: Install ground-level, potential equalization conductor and extend around the perimeter of structure.
1. Bury ground ring not less than 24 inches from building foundation.
2. Bond ground terminals to the ground loop.
3. Bond grounded building systems to the ground loop conductor within 12 feet of grade level.

H. Bond lightning protection components with intermediate-level interconnection loop conductors to grounded metal bodies of building at 60-foot intervals.

3.2 CORROSION PROTECTION

A. Do not combine materials that can form an electrolytic couple that will accelerate corrosion in the presence of moisture unless moisture is permanently excluded from junction of such materials.

B. Use conductors with protective coatings where conditions cause deterioration or corrosion of conductors.

3.3 FIELD QUALITY CONTROL

A. Notify Architect at least 48 hours in advance of inspection before concealing lightning protection components.

B. UL Inspection: Meet requirements to obtain a UL Master Label for system.

C. LPI System Inspection: Meet requirements to obtain an LPI System Certificate.

END OF SECTION 264113