Haralson County High School Weight Room Addition – Haralson County School District: Tallapoosa, GA Detailed Work Package Descriptions

Prepared by: R.K. Redding Construction, Inc.

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Subcontractors & Vendors:

Please carefully review the following detailed work package description as pertaining to your selected bid package.

The work package descriptions are provided to assist subcontractors and vendors in the preparation of their bid by outlining the scope of work required under a particular package.

Your bid submittal will be expected to include the items described in your package as related to the project drawings, specifications and addenda.

Any exceptions, substitutions, qualifications or clarifications contrary to the bid documents may subject the bidder to disqualification.

After bids are received, these package descriptions will be used by RKR for scope review and bid confirmation to determine the level of bid responsiveness.

Subcontractors submitting work package base bids in excess of \$50,000.00 are required to provide a bid bond in the amount of 5% of the bid amount and are also to include the costs associated with providing a 100% Performance and Payment Bonds in the space provided on the Bid Form. Failure to provide this information may subject the bid to disqualification.

Please call me at 770-537-1845 should you have any questions regarding your package description, bid procedures or to notify us of any discrepancies.

Geoff Smith Senior Project Manager, Vice President of Construction R. K. Redding Construction, Inc.

Site Demolition, Site Clearing, Earthwork & Erosion Control, Storm Sewer, & PVC Downspout Piping, and Site Modular Retaining Wall – Package 2-A

Supply and install materials and provide labor, equipment and supervision as required to complete the following: engineer's staking and lay-out work, BMP methods and practices as required, daily project clean-up, unloading and material handling, provisions for material storage and protection, cold/hot weather protection measures, shoring and trench excavation protection per OSHA compliance, product data and submittals, perform field measurements as required for approval and fabrication process, ensure proper fitting of work, provide materials and field installation of all required materials as detailed in the project drawings and as described in the project specifications including the Geotechnical Data section 003132 (Appendix C) – Site Demolition section 024100 – Site Clearing section 311000 - Earth Moving - Classified Rock Excavation section 312000 -Excavation and Fill section 312300 – Rock Removal section 312316 – Trenching and Backfilling section 312333 – Erosion and Sedimentation Control section 312500 – Storm Drainage Utilities Section as shown on Civil Drawings – Base Courses section 321100, strip and stockpile topsoils for re-spread, tree save fencing as required, excavation and backfilling of existing grade to indicated finish grades, cut and fill with materials imported and/or exported to/from on-site, mass grading, excavation and earthwork in right-of-ways related to acceleration and deceleration lanes and road widening(if applicable), site retaining wall backfilling and compaction, placement and compaction of suitable fill material for site modular wall, design and engineering of site modular wall, installation and coordination of site modular wall, ,fill compaction satisfactory to testing agency, backfilling and compaction of building concrete foundation walls and site retaining walls with #57 crushed-stone drainage fill behind walls as indicated (as applicable), moisture control involving wetting and/or drying of fill materials, dewatering, excavation for walks and pavements, fine grading building pad and walk subgrades, final building and walk backfilling and shaping, backfilling curbs, re-spread topsoils in areas to be permanently grassed, complete storm sewage system, piping for storm sewage system, stone pipe bedding (as required), precast concrete structures and manholes, Nyoplast and/or concrete drop inlets with frames and grates, precast headwalls, water quality and channel protection orifice assemblies and end caps. complete PVC downspout piping and rain leader system with adapters, rain leaders from exposed piping and hidden piping(at connector vestibules hidden in brick columns), clean-outs, drop inlets and catch inlets, trench grate systems and covers, hooded curb inlets, frames and grates, coring and grouting at junction box structures, construction exits with stone and fabric and maintenance as required, type C silt fencing and maintenance as required, dust control measures, temporary sediment basins and diversion channels and dikes, inlet sediment traps, check dams as required, erosion control matting and blankets, hay bales as required, disturbed area stabilization, respread topsoils prior to permanent grassing, temporary grassing and mulching and seeding, storm drain outlet protection, retrofit at outlet structure, rip-rap stone, cleaning and/or de-mucking of storm sewage systems and erosion control measures of any accumulated silt and debris until project completion, removal of erosion control measures at project completion and after establishment of permanent grasses, repair of defective or unacceptable materials as required, remove and replace work not in compliance with project specifications.

Site Demolition, Site Clearing, Earthwork & Erosion Control, Storm Sewer, & PVC Downspout Piping, and Site Modular Retaining Wall – Package 2-A: continued

Related work provided and installed under other work packages include: poured retaining walls (if applicable), asphalt paving & base stone, fine grading stone for asphalt paving, concrete curb and gutter, concrete paving and sidewalks, sanitary sewerage and site water service utilities, landscaping and irrigation systems, sodding.

Related work provided and installed under this work package in condition for other work package: (none)

Unit Pricing

I. Graduated Quantity Unit Price Schedule

Alluvial Soil Excavation — Deposited Off-Site (Per CY) 1 to 10 CY
Unsuitable Soils Excavation – Deposited Off-Site (Per CY) 1 to 10 CY \$ / CY 11 to 50 CY \$ / CY 51 to 250 CY \$ / CY 251 to 1,000 CY \$ / CY 1,001 CY & Over\$ / CY
Trench Rock Removal Deposited Off-Site (Per CY) 1 to 10 CY \$ / CY 11 to 50 CY \$ / CY 51 to 250 CY \$ / CY 251 CY & Over \$ / CY
Mass Rock Removal Deposited Off-Site (Per CY) 1 to 10 CY \$ / CY 11 to 50 CY \$ / CY 51 to 250 CY \$ / CY 251 CY & Over \$ / CY
Suitable Soils Excavation, Relocation & Compaction 1 to 10 CY \$ / CY 11 to 50 CY \$ / CY 51 to 250 CY \$ / CY 251 to 1,000 CY \$ / CY 1,001 CY & Over\$ / CY

Selective Interior Demolition – Package 2-B

Supply and install materials and provide labor, equipment and supervision as required to complete the following: daily project clean-up, materials and provisions for protection of existing finishes to remain, provide removal of all structures and building elements indicated to be demolished as outlined in the project drawings including Selective Demolition section 024119 and, at a minimum, the following existing building elements as shown in the project documents: removal of select building structure and structural components, walls etc., doors and frames, removal of existing interior wall finishes, floor tile, carpet, rubber base and glue, acoustical ceiling tile and grid framing, windows, old insulation above ceilings, removal of light fixtures along with the ceiling grid after electrician disconnects lighting, removal of any obsolete low voltage wiring or devices per instruction of the contract documents and/or Owner, proper disposal of light fixtures and ballasts after electrician disconnects lights, removal of existing interior and exterior walls/partial walls as shown on the contract drawings, demolition of existing low voltage or electrical cabling on roof as directed by the Owner and/or contract documents, demolition of existing decorative high hat parapets, removal of demolition debris from site, environmental fees, demolition permits, temporary dust and environmental partitions as required to separate work phase areas, repair of damaged adjacent materials to remain in place.

Related work demolished and removed under other work packages include: Any site demolitions specified to the site contractor, any existing or old HVAC or Plumbing equipment/fixtures shall be demolished or removed under another work package.

Asphalt Paving Patchwork and Striping – Package 2-C

Supply and install materials and provide labor, equipment and supervision as required to complete the following: staking and lay-out work, BMP methods and practices as required, daily project clean-up, unloading and material handling, provisions for material storage and protection, cold/hot weather protection measures, product data and submittals, perform field measurements as required for approval and fabrication process, ensure proper fitting of work, provide materials and field installation of all required materials as detailed in the project drawings and as described in the project specifications including the Geotechnical Data section 003132 (Appendix C) – Base Courses section 321100 – Aggregate Base Courses section 321123 – Flexible Paving section 321200, saw-cut existing pavement as required to install new work, provide traffic control signage and barrels and flagmen as required, fine grade and prepare subgrade soils for GAB stone base materials, place and compact GAB stone base course materials, provide loaded trucks for proof-rolling of prepared sub-base surfaces per testing agency and D.O.T. requirements, spray-apply a prime coat of cut-back asphalt over stone base course, place and compact type "B" asphalt binder course over prepared stone base, spray apply a tack coat of emulsified asphalt over binder courses, place and compact type "E" or "F" asphalt top course over binder courses, compact asphalt according to specifications satisfactory to testing agency, line marking painting, lane markings and curb painting, thermoplastic traffic paint within right-of-ways as required, traffic signage and posts, coring and concrete post set as required, repair of defective or unacceptable materials as required, ensure positive water drainage, clean adjacent concrete curb and sidewalks subsequent to paving operations, remove and replace work not in compliance with project specifications.

Related work provided and installed under other work packages include: storm system drop inlet frames and grates, concrete curb and gutter, concrete paving and sidewalks mountable concrete islands, backfilling edges of new paving.

Concrete Paving and Concrete Sidewalks – Package 2-D

Supply and install materials and provide labor, equipment and supervision as required to complete the following: staking and lay-out work, BMP methods and practices as required, daily project clean-up, unloading and material handling, provisions for material storage and protection, cold/hot weather protection measures, product data and submittals, perform field measurements as required for approval and fabrication process, ensure proper fitting of work, provide materials and field installation of all required materials as detailed in the project drawings and as described in the project specifications including the Geotechnical Data section 003132 (Appendix C) – Base Courses section 321100 – Rigid Paving section 321300 – Curbs, Gutters, Sidewalks, and Driveways (as pertains to sidewalks and concrete paving), provide engineer's staking and layout of walks and paying related to control and finish elevations, fine grade and prepare subgrade for formwork and concrete placement, provide and place stone base under concrete paving and walks as required, install concrete paving and sidewalks, install concrete patios and courtyards, install handicap ramps with ADA pavers (if required), install door pads at exterior of buildings, install concrete transformer pad, install concrete nonstructural walls as provided for on the civil drawings, provide all exterior concrete work not shown on the structural drawings (S sheets), install concrete bollards and steel bollards(provided by package 5A), provide all required materials including: form materials and form release agents, ready-mixed concrete, pumping and conveyance, moisture-retaining covers, evaporation control, bonding agents, bituminous fiber joint fillers, expansion and isolation joints, welded wire mesh and reinforcing steel, repair of defective or unacceptable materials as required, ensure positive water drainage, clean adjacent concrete curb and sidewalks subsequent to finishing operations, remove and replace work not in compliance with project specifications.

Related work provided and installed under other work packages include: building foundations and floor slabs, covered canopy foundations and piers, trench grates and frames provided and set by grading contractor and permanently cast in place under this package as applicable.

Potable Water & Sanitary Sewerage Piping – Package 2-E

Supply and install materials and provide labor, equipment and supervision as required to complete the following: engineer's staking and lay-out work, BMP methods and practices as required, daily project clean-up, unloading and material handling, provisions for material storage and protection, cold/hot weather protection measures, shoring and trench excavation protection per OSHA compliance, product data and submittals, perform field measurements as required for approval and fabrication process, ensure proper fitting of work, provide materials and field installation of all required materials as detailed in the project drawings and as described in the project specifications including Geotechnical Data section 003132 (Appendix C) – Earth Moving section 312000 (as applicable to this package) – Rock Removal section 312316 (as applicable to this package) – Trenching and Backfilling section 312333 (as applicable to this package) – Erosion and Sedimentation Control section 312500 – Manholes and Structures per Civil Drawings – Water Utilities per Civil Drawings – Sanitary Sewerage per Civil Drawings, sanitary sewer piping as indicated on the Civil drawings and related details from five (5) feet outside the building lines, stone pipe bedding (as required), remove or abandon materials that may interfere with building foundations as indicated on drawings, plug existing sanitary sewer line as indicated on drawings, extension and tie-in to existing water services as indicated on drawings, fire water protection underground piping systems installed to 1' above finish floor in riser room, concrete vaults and access hatches(if applicable), meter boxes, fire department connections and post indicator valves, double detector check valves, backflow preventers, road bores and steel casings as required, fire hydrant assemblies and valves, rod anchorages and concrete thrust blocks, domestic water underground piping, gate and check valves, trace tapes, yard hydrants, valve pits, gray-iron and PVC backwater valves and cleanouts, concrete blocks at cleanouts, precast manholes, manhole cover inserts and covers, protective covers, excavation and backfilling, compaction satisfactory to testing agency, coring and grouting at junction box structures, disturbed area stabilization, hydrostatic and air testing of underground piping systems, repair of defective or unacceptable materials as required, remove and replace work not in compliance with project specifications.

Related work provided and installed under this work packages for other trade packages include: layout and cutting of pavement for water tie-in, backfill and compaction subgrade of asphalt paving with proper stone and structural fill, make ready for installation of asphalt paving by others.

Chain Link Fencing and Gates – Package 2-F

Supply and install materials and provide labor, equipment and supervision as required to complete the following: BMP methods and practices as required, daily project clean-up, unloading and material handling, provisions for material storage and protection, cold/hot weather protection measures, product data and submittals, provide materials and field installation of all required materials as detailed in the project drawings and as described in the project specifications including Fences and Gates section 323100, steel fabric, steel framework and fittings, end/corner and pull posts, line posts, gate posts, top rails, tension wires, wire ties, post brace assemblies, post tops, stretcher bars and bands, swing gates and hardware, fasteners, coring and concrete post set as required, ornamental fencing and gates as shown on the contract drawings, disturbed area stabilization, repair of defective or unacceptable materials as required, remove and replace work not in compliance with project specifications.

<u>Cast-in-Place Building Concrete, Termite Treatment, and Concrete Reinforcing – Package 3-A</u>

Supply and install materials and provide labor, equipment and supervision as required to complete the following: foundation and building lay-out work, surveyor's building corner hubs for control, daily project clean-up, debris removal and related dump fees, unloading and material handling, provisions for material storage and protection, cold/hot weather protection measures, scaffolding and temporary platforms per OSHA compliance, product data and submittals, reinforcing steel approval and fabrication drawings, perform field measurements as required for approval and fabrication process, ensure proper fitting of work, provide materials and field installation of all required materials as detailed in the project drawings and as described in the project specifications including Cast-In-Place Concrete section 033000 – Termite Control section 313116 – Vapor Retarders section 072600 (as applicable to concrete foundation work), excavation of foundations and spoil disposal as directed on-site, backfilling and compaction of foundation at interior building areas, temporary shoring and underpinning, welded wire mesh sheets, concrete related reinforcing steel including masonry wall dowels, chairs and supports and rebar positioners, epoxy grout at inserts and dowels as required, metal keyway at construction joints, polyolefin and/or polyethylene vapor barriers with seal at joints, waterstops, bonding agents, pre-molded expansion and isolation joint filler strips at masonry walls, perimeter slab insulation board (if applicable), fine grade soil sub-grade, pre-treat slabs and foundations for termite control, provide and compact stone granular sub-base over sub-grade, fine-grade sub-base stone subsequent to slab rough-in as required, recessed slabs as indicated, formwork of foundations and walls and piers as required, chamfer and rustication strips, form ties, dovetail anchor slots and reglets, grouting and patching of tie holes, rubbing exposed concrete surfaces, ready-mixed concrete, admixtures and plasticizers as required (if allowed), pumps and conveyance of concrete. placing/consolidating and finishing of poured in place concrete foundations and floor slabs, sloped floor slabs at drains as indicated, absorptive and moisture-retaining covers, spray curing compound on slabs, saw-cutting control joints in floor slabs, grout base plates at structural steel columns, pour and finish diamond-outs at columns and piers, concrete fill in masonry cells below finished floor elevation, waterproofing and toe drains for concrete retaining walls (as applicable), bituminous dampproofing on interior side of masonry foundation walls as indicated prior to backfill, concrete housekeeping pads for electrical gear and mechanical equipment as required, concrete locker bases, repair of defective or unacceptable surfaces as required, remove and replace defective concrete or work not in compliance with project specifications.

Materials provided under separate work packages and installed under this work package <u>include</u>: structural steel column anchor bolts, fabricated steel embed angles, drain grate frames, steel pipe bollards, removable railing sleeve inserts.

Related work provided and installed under other work packages include: material testing, foundation unit masonry, concrete sidewalks, concrete door pads, concrete paving, and transformer pads.

<u>Unit Masonry, Masonry Reinforcing, Dampproofing, & Set HM Frames (Labor) – Package 4-A</u>

Supply and install materials and provide labor, equipment and supervision as required to complete the following: foundation masonry and building wall lay-out work, daily project cleanup, debris removal and related dump fees, unloading and material handling, provisions for material storage and protection, cold/hot weather and moisture protection measures, stain prevention measures, scaffolding and temporary platforms per OSHA compliance, product data and color selection samples, reinforcing steel approval and fabrication drawings, perform field measurements as required for approval and fabrication process, ensure proper fitting of work, provide materials and field installation of all required materials as detailed in the project drawings and as described in the project specifications including Unit Masonry section 042000 – Bituminous Dampproofing section 071113 – Thermal Insulation section 072100(as pertains to extruded rigid board insulation for masonry construction) – Weather Barriers section 072500 – Vapor Retarders section 072600 – Hollow Metal Doors and Frames section 081113(as pertains to setting of hollow metal door frames during masonry construction), temporary shoring and bracing of walls and lintels, masonry related reinforcing steel, supports and rebar positioners, set plumb and brace hollow metal door and view window frames located in masonry partitions, wood carpentry related to providing temporary opening templates for exterior windows and other openings, clay unit masonry (brick) and special shapes as required, precast concrete window sills and setting accessories (if applicable), concrete unit masonry (block) and special shapes as required, bull-nose sills/jambs and corner shapes, fire-rated masonry units as required, masonry grout fill, brick and block mortar, masonry sand, mill-galvanized horizontal joint reinforcing at interior walls, hot-dipped horizontal joint and cavity wall reinforcing with hook and eye pintles at exterior cavity walls, hardware cloth and special tees, adjustable screw-on brick anchors over metal stud framing (if applicable), adjustable two-piece weld-on column/beam anchors and straps, anchor welding, channel slots and anchors, bituminous dampproofing exterior masonry foundation and building cavity walls and over metal stud/drywall parapets as indicated to achieve required thickness, rigid extruded polystyrene board insulation and mastic in wall cavities and over metal stud walls, foamed-in-place masonry core fill insulation (if applicable), rubberized-asphalt through-wall masonry flashing embedded in masonry work, stainless sheet metal flashing where indicated over exterior window and door lintels, flashing termination bars, metal expansion joints, premolded control/expansion joints, mortar net/cavity drainage, weeps and vents, sash, brick cleaning and acidic agents, provide and install PVC piping at in wall downspout drains at columns on the pedestrian connector breezeways from above ground termination by grade to aluminum canopy system spout at second floor walkway including the adaptors, rubbing and pointing block for painting, monumental school sign unit masonry and precast concrete copings (if applicable), screen walls at mechanical yards, mock wall construction for approval per specifications, repair of defective or unacceptable surfaces as required, remove and replace defective masonry or work not in compliance with project specifications, remedy hollow metal door frames found to be out of square or plumb due to improper bracing or negligence during masonry work.

Structural Steel, Steel Joists, Steel Deck, Metal Fabrications, Metal Stairs, Pipe & Tube Railings, Metal Building Systems, & Erection & Installation - Package 5-A

Supply and install materials and provide labor, equipment and supervision as required to complete the following: daily project cleanup, unloading and material handling, provisions for material storage and protection, cold/hot weather protection and stain prevention measures, scaffolding and temporary platforms per OSHA compliance, temporary bracing and guying during erection operation as required, develop fall protection plan per OSHA requirements and provide safety equipment as required, provide welding certification and mill reports per specifications, detailed shop drawings and product data and material samples with engineer's certification and connection design for approval of fabrication and erection of materials per specifications, perform field measurements as required for approval and fabrication process, ensure proper fitting of work, provide materials and field erection of all required materials as detailed in the project drawings and as described in the project specifications including Structural Steel Framing section 051200 – Steel Joist Framing section 052100 – Steel Decking section 053100 - Metal Fabrications section 055000 - Steel Tube Railings section 055113 -Metal Building System section 133419, provide and install all structural steel components, all metal building system components, galvanized zinc coating for loose bearing plates and masonry lintels and metal at exterior of building or non-conditioned spaces as indicated on the drawings or specified, ladders, miscellaneous framing and supports for equipment, field welding of connections as required for erection and installation of metal fabrications and stairs and pipe/tube railings, grinding and filling and dressing of exposed fillet welds to smooth profile, touch-up of steel primer subsequent to field welding and grinding, bolts and fasteners and accessories, anchor rods, bridging and bracing, anchors and inserts and sleeves to attach steel or metal fabrications to concrete and masonry construction as required, remove and replace defective metals or work not in compliance with project specifications.

Materials provided under this work package for installation by others include: structural steel column anchor bolts, pipe bollards and embed steel for concrete package work.

Materials provided under separate work packages and installed under this work package include: (none)

Related work provided, installed and performed under other work packages include: material testing, setting of steel column anchor bolts, grouting of steel column base plates, field welding of masonry anchors to columns and beams, installation of loose steel masonry lintels and pipe bollards and embed steel, metal roof and covered canopy panels, sheet metal flashing and trim, gutters and downspouts.

Rough Carpentry & Miscellaneous Installations - Package 6-A

Supply and install materials and provide labor, equipment and supervision as required to complete the following: daily project cleanup, unloading and material handling, provisions for material storage and protection, cold/hot weather and moisture protection measures, scaffolding and temporary platforms per OSHA compliance, provide materials and field installation of all required materials as detailed in the project drawings and as described in the project specifications including Rough Carpentry section 061000 -Sheathing Section 061600, product data and material samples, wood furring, wood blocking to support toilet accessories and partitions and architectural woodwork in metal stud framed walls, continuous nailers and blocking for roof parapets and roof deck edges, plywood wall, roof (if applicable), and parapet sheathing, exterior cavity wall window and door blocking nailers, sills and sleepers, stripping, plates, nailers and blocking for skylight curbs and roof mounted HVAC equipment curbs, treated lumber with zinc coated fasteners where required, fire-retardant lumber with appropriate fasteners where required, equipment boards and miscellaneous panels, nails, brads, wood screws, lag bolts, expansion anchors, power driven fasteners, provide and install all wood running trim and nosings, install KNOX box, if required, install fire extinguishers and cabinets, install architectural joint systems, remove and replace defective carpentry or work not in compliance with project specifications.

Materials provided under separate work packages and installed under this work package include: Knox Box, Flag Pole, Fire Extinguisher Cabinets, and Architectural Joints.

Related work provided, installed and performed under other work packages include: non-permanent wood carpentry related to temporary opening templates for exterior windows to accomplish masonry work, wood formwork related to concrete work, installation of pipe and tube steel railings(as applicable), architectural woodwork and shelving, electrical and mechanical connections to residential appliances and exhaust vent hoods.

EIFS - Package 7-A

Supply and install materials and provide labor, equipment and supervision as required to complete the following: daily project cleanup, unloading and material handling, provisions for material storage and protection, cold/hot weather and moisture protection, provide materials and field installation of all required materials as detailed in the project drawings and as described in the project specifications including Polymer-Based Exterior Insulation and Finish Systems Section 072413 – Joint Sealants section 079200, detailed shop drawings and product data submittals and material samples for approval of fabrication and installation of materials per specifications, mock-up samples, perform field measurements as required for approval and fabrication process, ensure proper fitting of work, reinforcing fabric and meshes, accessories as specified, base coat materials, primers, fasteners, finish coat materials, drip flashings, 45-Bead, starter track, casing beads, and associated caulking and trim, and associated vent tracks or stripping, remove and replace defective work not in compliance with project specifications.

Materials provided under separate work packages and installed under this work package include: none

Related work provided, installed and performed under other work packages include: installation of exterior wall systems and ceiling framing and sheathing systems

TPO Sheet Roofing, Roof Accessories, and Associated Sheet Metal, Flashing & Trim – Package 7-B

Supply and install materials and provide labor, equipment and supervision as required to complete the following: daily project cleanup, unloading and material handling, provisions for material storage and protection, cold/hot weather and moisture protection measures, scaffolding and temporary platforms per OSHA compliance, develop fall protection plan per OSHA requirements and provide safety equipment as required, detailed shop drawings and product data and material samples with engineer's certification and connection design for approval of fabrication and installation of materials per specifications, perform field measurements as required for approval and fabrication process, ensure proper fitting of work, provide materials and field installation of all required materials as detailed in the project drawings and as described in the project specifications including Thermal Insulation section 072100 (as pertains to roofing insulation) – Thermoplastic-Polyolefin (TPO) Roofing section 075423 – Sheet Metal Flashing and Trim section 076200 – Joint Sealants section 079200 (as applicable), faults and defects warranty, manufacturer's and roofer's warranties, special finish warranty, underlayment materials, coatings, pre-finished sheet metal flashing and trim, pre-finished metal copings and fascias, ridge closures and caps with weatherseals, seam covers, battens, scuppers, gutters and downspouts, downspout boots and adapters, roof membrane with surface cap sheet, base flashing, cant strips, rigid polyisocyanurate board roof insulation (tapered where indicated and required), top layer rigid perlite cover boards, saddles and crickets, tapered edge strips, reglets, install boot penetrations or pitch pockets and roof drains (provided by plumbing subcontractor), expansion joint systems, counterflashings, cap flashings, prefinished roof edge and rake trim, equipment supports, pre-formed aluminum cornice system complete with accessories and fasteners, meet FM/UL listing requirements, quality control requirement per specifications, walkway protection membranes, aluminum roof access hatches with insulated roof curb and cover, mock-ups, walk pad and equipment pads, concrete splash blocks at all downspouts discharging on roof surface, final sweeping and clean-up of roof areas at completion of roof work, removal of debris from gutters and valleys, remove and replace defective roofing or work not in compliance with project specifications.

Materials provided under separate work packages and installed under this work package include: (none)

Related work provided, installed and performed under other work packages include: wood carpentry roof and parapet nailers, plywood sheathing, installation of mechanical equipment curbs, and roof drain hubs.

Joint Firestopping – Package 7-C

Install materials and provide labor, equipment and supervision as required to complete the following: daily project cleanup, unloading and material handling, provisions for material storage and protection, cold/hot weather and moisture protection measures, installation of materials per specifications, perform field measurements as required for installation process, ensure proper fitting of and appearance of work, provide field installation of all required materials as detailed in the project drawings and as described in the project specifications including Joint Firestopping section 078443, all joint firestopping work complete per the contract documents, manufacturer's warranty, remediate materials not in compliance with project specifications or approval submittals.

Joint Sealants – Package 7-D

Install materials and provide labor, equipment and supervision as required to complete the following: daily project cleanup, unloading and material handling, provisions for material storage and protection, cold/hot weather and moisture protection measures, installation of materials per specifications, perform field measurements as required for installation process, ensure proper fitting of and appearance of work, provide field installation of all required materials as detailed in the project drawings and as described in the project specifications including Joint Sealants section 07920, all interior joint sealants of unlike surfaces and substrates, all acoustical joint sealants per contract documents, all exterior joint sealants including backer rods, manufacturer's warranty, remediate materials damaged in shipping and replace materials not in compliance with project specifications or approval submittals.

Materials provided under separate work packages and installed under this work package include: (none)

Related work provided, installed and performed under other work packages include: (none)

<u>Hollow Metal Doors & Frames, Flush Wood Doors, and Door Hardware – Package</u> 8-A-*Material Only*

Supply and install materials and provide labor, equipment and supervision as required to complete the following: daily project cleanup, unloading and material handling, provisions for material storage and protection, cold/hot weather and moisture protection measures, detailed shop drawings and product data and material samples for approval and installation of materials per specifications, perform field measurements as required for approval and fabrication process, ensure proper fitting of and appearance of work, provide materials and field installation of all required materials as detailed in the project drawings and as described in the project specifications including Hollow Metal Doors and Frames section 081113 - Flush Wood Doors section 081416 - Door Hardware section 087100, hollow metal doors and frames, beveled edges for all hollow metal doors, steel frames for wood doors, sidelight frames, borrowed light frames, louvers in doors, louvered panels as indicated, glazed openings in doors, fire-rated frame and door assemblies where required, smoke control door assemblies where required, door preparation at exterior doors and frames electric power transfer with blank plates for EDT preps in exterior doors and frames where EPT's are not scheduled in hardware schedule, seals and gaskets, fully prepare doors and frames for door hardware, reinforcing in hollow metal doors and frames per specifications for finish hardware, galvanized steel frames and doors at exterior locations, 14 gage frames for openings over 48" wide with continuous steel channel or angle stiffener of not less than 12 gage, closed or tubular mullions and transom bars where indicated, removable spreader bars, door silencers, welded mortar/plaster boxes, closed top/bottom door edges at exterior locations, thermal and sound rated assemblies, factory/shop priming for steel sheet and galvanized hollow metal material, interior solid core doors, interior fire-rated solid core doors, vision panels for flush wood doors, factory finishing of wood doors, factory pre-machining of wood doors for finish hardware, provide light openings and trim kits as scheduled with seals and gaskets, metal clad traffic doors with impact & base plates and jamb guards, fiberglass reinforced plastic (FRP) doors and hinges, finish hardware and related fasteners as scheduled in the specifications and noted on the drawings, hinges, locksets, trim, keying and cylinders, exit devices, closers, protection plates, wall stops, overhead stops and holders, lock guards, electrified hardware and low energy operators, thresholds, sweeps, weatherstrip, fire and smoke seals, silencers, provide lock cylinders and cores for teachers' cabinet doors provided by others, provide keyed construction cores, conduct keying meeting to establish project owner requirements and provide a complete keying schedule to be submitted to the Architect and Owner subsequent to the meeting, inventory hardware prior to commencement of installation, hang hollow metal doors and install finish hardware, check and readjust operating hardware items to ensure proper installation and operation, promptly notify Construction Manger of any hollow metal frame installation issues detrimental to the proper operation of doors and hardware prior to installation of doors or finish hardware, remove and replace defective door and hardware materials or work not in compliance with project specifications, provide door and hardware warranties per specifications, deliver keys directly to Owner.

<u>Hollow Metal Doors & Frames, Wood Doors and Door Hardware – Package 8-A-Material Only (continued)</u>

Related work provided, installed and performed under other work packages include: masonry work, rough carpentry, aluminum storefront hardware, glass and glazing, caulking, painting.

Door & Hardware Installation - Package 8-B - Labor Only

Install materials and provide labor, equipment and supervision as required to complete the following: daily project cleanup, unloading and material handling, provisions for material storage and protection, cold/hot weather and moisture protection measures, installation of materials per specifications, perform field measurements as required for installation process, ensure proper fitting of and appearance of work, provide field installation of all required materials as detailed in the project drawings and as described in the project specifications including Hollow Metal Doors and Frames section 081113 – Flush Wood Doors section 081416 – Door Hardware section 087100, installation of the following: steel doors, wood doors, sidelight frames, borrowed light frames, louvers in doors, louvered panels as indicated, glazed openings in doors, fire-rated frame and door assemblies where required, smoke control door assemblies where required, installation at exterior doors and frames for electric power transfer with blank plates for EDT preps in exterior doors and frames where EPT's are not scheduled in hardware schedule, seals and gaskets, removable spreader bars, door silencers, vision panels for flush wood doors, factory finishing of wood doors, finish hardware and related fasteners as scheduled in the specifications and noted on the drawings, hinges, locksets, trim, keying and cylinders, exit devices, closers, protection plates, wall stops, overhead stops and holders, lock guards, electrified hardware and low energy operators, thresholds, sweeps, weatherstrip, fire and smoke seals, silencers, provide lock cylinders and cores for teachers' cabinet doors provided by others, provide keyed construction cores, conduct keying meeting to establish project owner requirements and provide a complete keying schedule to be submitted to the Architect and Owner subsequent to the meeting, inventory hardware prior to commencement of installation, hang hollow metal doors and install finish hardware, check and readjust operating hardware items to ensure proper installation and operation, promptly notify Construction Manger of any hollow metal frame installation issues detrimental to the proper operation of doors and hardware prior to installation of doors or finish hardware, remove and replace defective door and hardware materials or work not in compliance with project specifications, provide door and hardware warranties per specifications, deliver keys directly to Owner.

Related work provided, installed and performed under other work packages include: masonry work, rough carpentry, aluminum storefront hardware, glass and glazing, caulking, painting.

Glass & Glazing(Including Float Glass Mirrors) – Package 8-C

Supply and install materials and provide labor, equipment and supervision as required to complete the following: daily project cleanup, unloading and material handling, provisions for material storage and protection, cold/hot weather and moisture/dust protection measures, detailed shop drawings and product data and material samples for approval and installation of materials per specifications, perform field measurements as required for approval and fabrication process, ensure proper fitting of and appearance of work, provide materials and field installation of all required materials as detailed in the project drawings and as described in the project specifications including Glazing section 088000 – Joint Sealants section 079200 (as applicable), faults and defects warranty, manufacturer's and installer's warranties (including glass breakage per specifications), high performance coatings, same manufacturers for all materials under this package, sealants and gaskets, weatherstripping and seals, glazing of windows(as applicable), glazing of interior/exterior hollow metal steel doors/transoms/sidelights and borrowed lites, polycarbonate glazing pertaining to gymnasium area (if applicable), fire-rated and safety glass as required, insulated glass as required, primary float glass, heat-treated glass, coated monolithic glass, laminated glass, glazing gaskets/tapes and elastomeric sealants, setting blocks and spacers, butt joint conditions, and j-channel framing for float glass, styles and rails and shelving units at display casework, display casework doors, and hardware, water leakage tests, mock-ups and tests of, cleaning of aluminum materials and glazing at completion of work, check and readjust doors and operating hardware items to ensure proper installation and operation, remove and replace defective glazing materials or work not in compliance with project specifications.

<u>Materials provided under separate work packages and installed under this work package include</u>: steel hollow metal and wood glazing stops and moulding for hollow metal doors and borrowed light frames and wood doors.

Related work provided, installed and performed under other work packages include: framed restroom lavatory mirrors.

Gypsum Board Assemblies, Building Insulation, Cold-Formed Metal Framing & Acoustical Panel Ceilings – Package 9-A

Supply and install materials and provide labor, equipment and supervision as required to complete the following: daily project cleanup, unloading and material handling, provisions for material storage and protection, cold/hot weather and moisture/dust protection measures, detailed shop drawings and product data and material samples for approval and installation of materials per specifications, perform field measurements as required for approval and fabrication process, ensure proper fitting of and appearance of work, provide materials and field installation of all required materials as detailed in the project drawings and as described in the project specifications including Cold-Formed Metal Framing section 054000 – Access Doors(as pertains to any drywall or acoustical application area) – Gypsum Board Assemblies section 092900 – Acoustical Panel Ceilings section 095113 – Thermal Insulation section 072100 – Weather Barriers section 072500 (as pertains to non- masonry applied weather barriers) – Vapor Retarders section 072600 (as pertains to non-masonry applied vapor retarders) – Joint Sealants section 079200 (as applicable), designing and detailing of cold-formed metal framing and support systems for exterior steel stud walls, steel framing members for gypsum board for metal soffit panel assemblies, steel framing members for non-load-bearing interior gypsum partitions, steel framing members for smoke and fire rated partitions, steel beams and top of cmu walls to roof deck at smoke and fire rated plenum assemblies, steel framing of gypsum ceilings and bulkheads and soffits, anchors, clips, fasteners, ties and hangers, channels, furring channels, furring, sound attenuation blankets, mineral fiber blanket and batt insulation, exterior glass mat gypsum sheathing board, interior regular and fire-rated gypsum board, water resistant gypsum board, corner beads and miscellaneous accessories, joint treatment and finishing, stencil markings at rated partitions, acoustical joint sealant at tops of interior walls and at floor, standard acoustic ceiling tiles, mold resistant ceiling tiles, vinyl-clad ceiling tiles, stainless steel ceiling tiles (if applicable), high absorption ceiling tiles, acoustic diffuser ceiling tiles, linear metal ceiling framing and suspension systems and accessories, all access panels for drywall and metal ceilings (typical), portland cement plaster (if applicable), expanded metal lath and accessories (if applicable), acrylic-based finishes (if applicable), manufacturer's and installer's warranties, special finishes warranties, mock-ups, clean installed materials at completion of work, readjust installed materials to ensure proper installation and operation, extra materials, remove and replace defective materials or work not in compliance with project specifications.

Materials provided under this work package for installation by others include: (none)

Materials provided under separate work packages and installed under this work package include: (none)

Related work provided, installed and performed under other work packages include: plywood sheathing, exterior joints at edges of gypsum sheathing over metal stud parapet wall framing prior to placement of brick veneers.

Ceramic Tile – Package 9-B

Supply and install materials and provide labor, equipment and supervision as required to complete the following: daily project cleanup, unloading and material handling, provisions for material storage and protection, cold/hot weather and moisture/dust protection measures, detailed shop drawings and product data and material samples for approval and installation of materials per specifications, perform field measurements as required for approval and fabrication process, ensure proper fitting of and appearance of work, provide materials and field installation of all required materials as detailed in the project drawings and as described in the project specifications including Ceramic Tiling section 093013 – Joint Sealants section 079200 (as applicable), all hard tile, setting and grouting materials, uncoupling membrane through-out, stone thresholds, latex-portland cement grout, epoxy grout, miscellaneous materials, accessories and trim pieces, metal edge strips, expansion joints and sealants, crack suppression membranes, trowelable underlayments and patching compounds, temporary protective coatings, tile cleaners, grout sealers, manufacturer's and installer's warranties, special finishes warranties, clean installed materials at completion of work, check and readjust installed materials to ensure proper installation, extra materials, remove and replace defective materials or work not in compliance with project specifications.

Materials provided under this work package for installation by others include: (none)

Materials provided under separate work packages and installed under this work package include: (none)

Related work provided, installed and performed under other work packages include: concrete sub-floor.

<u>Resilient Flooring, Resilient Athletic Flooring, & Wall Base and Accessories – Package 9-C</u>

Supply and install materials and provide labor, equipment and supervision as required to complete the following: daily project cleanup, unloading and material handling, provisions for material storage and protection, cold/hot weather and moisture/dust protection measures, detailed shop drawings and product data and material samples for approval and installation of materials per specifications, perform field measurements as required for approval and fabrication process, ensure proper fitting of and appearance of work, provide materials and field installation of all required materials as detailed in the project drawings and as described in the project specifications including Resilient Flooring section 096519 – Resilient Athletic Flooring section 096567 - Resilient Base and Accessories section 096513, vinyl composition floor tile, rubber athletic flooring, resilient wall base and flooring accessories, concrete slab primers, concrete slab moisture treatments, trowelable underlayments, and patching compounds, adhesives and cements, transition strips, non-metallic carpet edge guards, resilient edge guards, seaming and rolling of flooring, sanding and leveling of concrete sub-floors prior to installation, calcium chloride moisture and alkalinity tests, manufacturer's and installer's warranties, special carpet warranties, clean installed materials at completion of work, check and readjust installed materials to ensure proper installation and operation, extra materials, remove and replace defective materials or work not in compliance with project specifications.

Materials provided under this work package for installation by others include: (none)

Materials provided under separate work packages and installed under this work package include: (none)

Related work provided, installed and performed under other work packages include: Concrete sub-floor.

Interior & Exterior Painting, & Stained and Sealed Concrete Floors – Package 9-D

Supply and install materials and provide labor, equipment and supervision as required to complete the following: daily project cleanup, unloading and material handling, provisions for material storage and protection, cold/hot weather and moisture/dust protection measures, detailed shop drawings and product data and material samples for approval and installation of materials per specifications, perform field measurements as required for approval and fabrication process, ensure proper fitting of and appearance of work, provide materials and field installation of all required materials as detailed in the project drawings and as described in the project specifications including Joint Sealants section 079200 (as applicable and adjacent to all field painted surfaces) – Exterior Painting section 099113 – Interior Painting section 099123, caulking and joint sealants related to the interior and exterior side of hollow metal steel door and window frames, interior caulking and joint sealants related to surfaces adjacent to painted masonry or hollow metal frame assemblies, interior side of horizontal and vertical joints of aluminum storefront and windows to masonry, interior masonry control and expansion joints, interior masonry-to-alternate material joints, clean and prepare substrate surfaces prior to priming or block filling and between paint coats as required, surface preparation and priming and field painting of exposed interior and exterior surfaces and items according to project drawings and specifications and paint schedules, acrylic elastomeric waterproof coatings around inside face of exterior concrete unit masonry wall around mechanical yard and as indicated, primers, fillers and sealers, prepare surfaces to receive coatings, alkalinity tests per manufacturer's requirements for elastomeric coatings, faults and defects warranty, manufacturer's and installer's warranties, special finishes warranties, clean installed materials at completion of work, mock-ups, check and readjust installed materials to ensure proper appearance, remove

mock-ups, check and readjust installed materials to ensure proper appearance, remove and replace defective materials or work not in compliance with project specifications.

Materials provided under this work package for installation by others include: (none)

Materials provided under separate work packages and installed under this work package include: (none)

Related work provided, installed and performed under other work packages include: caulking related to plumbing fixtures between wall and floor surfaces, caulking and joint sealants related to roofing sections, firestopping joint sealants, exterior pavement and sidewalk joint sealants, exterior vertical brick masonry control and expansion joints, exterior horizontal joints between masonry and coping cap metal at top of parapet conditions, exterior of louver and vent perimeters, exterior joints at edges of gypsum sheathing over metal stud parapet wall framing prior to placement of brick veneers.

Plaques, Dimensional Letters, and Signage – Package 10-A

Supply materials and install as required to provide the following: detailed shop drawings and product data and material samples for approval and installation of materials per specifications, freight expenses to project site, provide all required materials as detailed in the project drawings and as described in the project specifications including Panel Signs section 101423, framed panel signs for rooms and classrooms and restrooms/toilets, cast dimensional letters and numbers for interior and exterior building, cast bronze metal plaques, fasteners and anchors and adhesives required for installation, manufacturer's warranty, remediate materials damaged in shipping and replace materials not in compliance with project specifications or approval submittals.

Visual Display Boards – Package 10-B

Supply and install materials and provide labor, equipment and supervision as required to complete the following: daily project cleanup, unloading and material handling, provisions for material storage and protection, cold/hot weather and moisture/dust protection measures, detailed shop drawings and product data and material samples for approval and installation of materials per specifications, perform field measurements as required for approval and fabrication process, ensure proper fitting of and appearance of work, provide materials and field installation of all required materials as detailed in the project drawings and as described in the project specifications including Visual Display Units section 101100, porcelain enamel markerboards, plastic-impregnated cork tackboards, surface-mounted non-illuminated bulletin boards with plastic-impregnated cork tack surfaces and tempered glass doors and operating hardware, provide music staffs where required, extruded aluminum alloy trim and accessories, additional support where required, field-applied trim, trays, dry marker pen sets as specified, map rails and tack strips, end stops, map hooks, flag holders, display rails, class II clear anodized aluminum frame and trim finish for markerboards and tackboards, baked enamel organic coating finish for bulletin board frames, fasteners and hardware, hinges and locks for bulletin boards, preparation of wall surface to receive clips and adhesives, install boards straight and plumb and level, manufacturer's and installer's warranties, special finishes warranties, clean installed materials at completion of work, check and readjust installed materials to ensure proper installation and operation, remove and replace defective materials or work not in compliance with project specifications.

Materials provided under this work package for installation by others include: (none)

Materials provided under separate work packages and installed under this work package include: (none)

Related work provided, installed and performed under other work packages include: (none)

Toilet and Bath Accessories – Package 10-C

Supply and install materials and provide labor, equipment and supervision as required to complete the following: daily project cleanup, provide dumpster for debris generated by this package work, unloading and material handling, provisions for material storage and protection, cold/hot weather and moisture/dust protection measures, detailed shop drawings and product data and material samples for approval and installation of materials per specifications, perform field measurements as required for approval and fabrication process, ensure proper fitting of and appearance of work, provide materials and field installation of all required materials as detailed in the project drawings and as described in the project specifications including Toilet, Bath, and Laundry Accessories section 102800, all toilet and bath accessories per the project drawings and specifications, standard and custom grab bars, framed and ADA mirrors, folding shower seats, shower rods, plastic toilet partitions or dividers or screens as specified and shown and the contract documents, manufacturer's and installer's warranties, special finishes warranties, clean installed materials at completion of work, check and readjust installed materials to ensure proper installation and operation, remove and replace defective materials or work not in compliance with project specifications.

Materials provided under this work package for installation by others include: (none)

Materials provided under separate work packages and installed under this work package include: (none)

Related work provided, installed and performed under other work packages include: masonry, rough carpentry nailers and acoustical ceilings, non-framed, float glass mirrors.

Fire Extinguishers, Cabinets, and Accessories – Package 10-D (Material Only)

Supply materials as required to provide the following: detailed shop drawings and product data and material samples for approval and installation of materials per specifications, freight expenses to project site, provide all required materials as detailed in the project drawings and as described in the project specifications including Fire Protection Extinguisher, Cabinet, & Accessories section 104413, Class K, 4A and 2A fire extinguishers as scheduled, fire extinguisher cabinets with trim/frame/door/hardware to suit cabinet type, provide mounting brackets for extinguishers mounted directly to wall surfaces, provide tags and UL labels for all extinguishers, provide fire-rated cabinets as required for cabinets located in rated masonry walls, special warranty, remediate materials damaged in shipping and replace materials not in compliance with project specifications or approval submittals.

Metal Lockers - Package 10-E

Supply and install materials and provide labor, equipment and supervision as required to complete the following: daily project cleanup, provide dumpster for debris generated by this package work, unloading and material handling, provisions for material storage and protection, cold/hot weather and moisture/dust protection measures, detailed shop drawings and product data and material samples for approval and installation of materials per specifications, perform field measurements as required for approval and fabrication process, ensure proper fitting of and appearance of work, provide materials and field installation of all required materials as detailed in the project drawings and as described in the project specifications including Metal Lockers section 105113, athletic lockers, locks, hooks and coat rods, number plates, continuously sloping tops, recess trim and filler panels, boxed end panels, powder-coat applied finish with primer and topcoat, allwelded construction with no bolts or screws or rivets used in assembly, built-in bases(if applicable according to specifications), fasteners and anchors required for installation, manufacturer's and installer's warranties, clean installed materials at completion of work, check and readjust systems to ensure proper installation and operation, remove and replace defective materials or work not in compliance with project specifications.

Materials provided under this work package for installation by others include:

Materials provided under separate work packages and installed under this work package include: (none)

Related work provided, installed and performed under other work packages include: cast-concrete locker bases(if applicable).

Aluminum Canopies – Package 10-F

Supply and install materials and provide labor, equipment and supervision as required to complete the following: daily project cleanup, unloading and material handling, provisions for material storage and protection, cold/hot weather protection and stain prevention measures, scaffolding and temporary platforms per OSHA compliance, temporary bracing and guying during erection operation as required, develop fall protection plan per OSHA requirements and provide safety equipment as required, provide welding certification and mill reports per specifications, detailed shop drawings and product data and material samples with engineer's certification and connection design for approval of fabrication and erection of materials per specifications, perform field measurements as required for approval and fabrication process, ensure proper fitting of work, provide materials and field erection of all required materials as detailed in the project drawings and as described in the project specifications including Aluminum Canopy section 107316 - Joint Sealants section 079200(as required), wall supported aluminum door canopies, self-supporting aluminum bus and covered walkway covers, internal or external drainage system and connection boots/transitions to storm piping and rain leader systems, field welding and or fastening of connections as required for erection and installation of aluminum canopies, filling and dressing of exposed fillet welds to smooth profile, bolts and fasteners and accessories, supply imbeds, anchor rods, and/or block-out materials as required, bridging and bracing, internal or external gutter systems or wiring chases (as required), anchors and inserts and sleeves to attach canopies to concrete and masonry construction as required, remove and replace defective metals or work not in compliance with project specifications

Materials provided under this work package for installation by others include: imbed items, block-outs or anchor bolts.

Materials provided under separate work packages and installed under this work package include: (none)

Related work provided, installed and performed under other work packages include: cast-in-place concrete, material testing, setting of steel column anchor bolts or block-outs, grouting of steel column base plates, masonry, structural steel, landscaping, sidewalks, and electrical.

Gymnasium Equipment – Package 11-A

Supply and install materials and provide labor, equipment and supervision as required to complete the following: daily project cleanup, debris removal and related dump fees, unloading and material handling, provisions for material storage and protection, cold/hot weather protection, stain prevention measures, scaffolding and temporary platforms per OSHA guidelines, provide detailed shop drawings and product data and material samples with engineer's certification, perform field measurements as required for approval and fabrication process, ensure proper fitting and appearance of work, repair of defective or unacceptable materials or surfaces as required, remove and replace work not in compliance with project specifications, provide materials and installation of all required materials as detailed in the project drawings and as described in the project specifications including Gymnasium Equipment section 116623.

Package Scope:

Provide the necessary materials, equipment and labor required to install all project related wall/post mounted safety pads on a turn-key basis to include the following: wall-mounted safety padding, tube column safety pads, fittings and hardware, fasteners and anchors required for installation, any required field welding, provide support frames structurally designed according to specifications regarding seismic movements, provide manufacturer's and installer's warranties required per project specifications.

Related work provided, installed and performed under other work packages include: (none)

Wet Pipe Fire Protection Systems – Package 21-A

Supply and install materials and provide labor, equipment and supervision as required to complete the following: daily project cleanup, unloading and material handling, provisions for material storage and protection, cold/hot weather and moisture/dust protection measures, detailed shop drawings and product data and material samples for approval and installation of materials per specifications, design fire sprinkler system in accordance with the project specifications and requirements of State and Local authorities, perform field measurements as required for approval and fabrication process, ensure proper fitting of and appearance of work, provide materials and field installation of all required materials as detailed in the project drawings and as described in the project specifications including, but not limited to, the following: Fire Protection section 210000 Penetration Firestopping section 078413 (as applicable) – Joint Sealants section 079200 (as applicable), begin work 12" above finish floor elevation of riser room, install flow detection switches with interlocking capabilities to the fire alarm system, flush and test system as required, coordinate equipment requirements and work installation with Plumbing and Electrical and HVAC subcontractors, faults and defects warranty, manufacturer's and installer's warranties, special finishes warranties, clean installed materials at completion of work, check and readjust systems to ensure proper installation and operation, remove and replace defective materials or work not in compliance with project specifications.

Note for this package: The installation of a complete fire sprinkler system is for the new weight room and locker room building areas only.

Plumbing & Gas Piping Systems – Package 22-A

Supply and install materials and provide labor, equipment and supervision as required to complete the following: daily project cleanup, unloading and material handling, provisions for material storage and protection, cold/hot weather and moisture/dust protection measures, detailed shop drawings and product data and material samples for approval and installation of materials per specifications, perform field measurements as required for approval and fabrication process, ensure proper fitting of and appearance of work, provide materials and field installation of all required materials as detailed in the project drawings and as described in the project specifications including, but not limited to, the following: Piping and Accessories section 221000 - Plumbing - Major Equipment section 223000 - Plumbing - Fixtures section 224000 - Penetration Firestopping section 078413 (as applicable to plumbing) – Joint Sealants section 079200 (as applicable) seismic restraints, gas piping systems, complete replacement of water coolers, roof penetration boots and collars, lead-sheet flashing for roof drains, interior roof drain leaders and underslab piping systems, connect kitchen equipment utilities, coordinate equipment requirements and work installation with HVAC and Electrical and Fire Sprinkler Piping subcontractors, faults and defects warranty, manufacturer's and installer's warranties, special finishes warranties, clean installed materials at completion of work, check and readjust systems to ensure proper installation and operation, remove and replace defective materials or work not in compliance with project specifications.

HVAC Systems, Instrumentation & Controls, and Test and Balancing Package – Package 23-A

Supply and install materials and provide labor, equipment and supervision as required to complete the following: daily project cleanup, unloading and material handling, provisions for material storage and protection, cold/hot weather and moisture/dust protection measures, detailed shop drawings and product data and material samples for approval and installation of materials per specifications, perform field measurements as required for approval and fabrication process, ensure proper fitting of and appearance of work, provide materials and field installation of all required materials as detailed in the project drawings and as described in the project specifications including, but not limited to, the following: Mechanical General section 230010 – Supports and Foundations section 230520 – Testing and Balancing section 230595 – Insulation section 230700 – HVAC Automatic Controls section 230900 – Ductwork section 233000 – HVAC – Major Equipment section 238000, Firestopping (as applicable) – Sheet Metal Flashing and Trim section 076200 (as applicable) – Penetration Firestopping section 078413 (as pertains to HVAC work) – Joint Sealants section 079200 (as applicable) – Metal Wall Louvers (as applicable), seismic restraints, fire/smoke dampers and grilles, roof curbs and equipment supports for roof mounted equipment and fans, low voltage control wiring and actuators, paint-grip duct in exposed finished areas, kitchen exhaust hood system complete with automatic fire suppression system, kitchen dishwasher exhaust ductwork from above ceiling through roof, gas exhaust duct for boilers and water heaters, roof penetration boots and collars, coordinate equipment requirements and work installation with Plumbing and Electrical and Fire Sprinkler Piping subcontractors, faults and defects warranty, manufacturer's and installer's warranties, special finishes warranties, clean installed materials at completion of work, check and readjust systems to ensure proper installation and operation, remove and replace defective materials or work not in compliance with project specifications.

Electrical Systems & Low Voltage Systems – Package 26-A

Supply and install materials and provide labor, equipment and supervision as required to complete the following: daily project cleanup, unloading and material handling, provisions for material storage and protection, cold/hot weather and moisture/dust protection measures, detailed shop drawings and product data and material samples for approval and installation of materials per specifications, perform field measurements as required for approval and fabrication process, ensure proper fitting of and appearance of work, provide materials and field installation of all required materials as detailed in the project drawings and as described in the project specifications including, but not limited to, the following: Geotechnical Data section 003132 (Appendix C) – Common Work Results section 260500 – Low Voltage Conductors section 260519 – Grounding section 260526 - Raceway and Boxes section 260533 - Identification section 260553 - Dry Type Transformer section 262200 – Panelboards section 262400 – Wiring Devices section 262726 – Fuses section 262813 – Disconnect Switches section 262816 – Lighting section 265100 – Fire Alarm per drawings – Firestopping (as applicable) – Joint Sealants section 079200 (as applicable), connect kitchen equipment power, projection screens power (if applicable), provide required line voltage and starters to HVAC equipment, GFI outlets and breakers for water coolers, modifications to fire alarm system, modifications to public address systems, modifications to master television system (as applicable), coordinate equipment requirements and work installation with Plumbing and HVAC and Fire Sprinkler Piping subcontractors, faults and defects warranty, manufacturer's and installer's warranties, special finishes warranties, clean installed materials at completion of work, check and readjust systems to ensure proper installation and operation, remove and replace defective materials or work not in compliance with project specifications.

<u>Notes for Electrical Package</u>: Only the Low Voltage Systems shown on the plans are inclusive of this package. Please see plans for full details. Specifications will not be issued.