

SECTION 011200 – MULTIPLE CONTRACT SUMMARY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes a summary of each Prime Contract, including general requirements for Work, coordination, and specific temporary facilities and controls responsibilities. One set of Construction Documents is issued covering the Work of multiple Prime Contracts.
- B. Specific requirements of Work of each Prime Contract are also indicated in individual paragraphs of this Section and may also be indicated in individual Specification Sections and on drawings. Each Prime Contractor is responsible to review all Construction Documents of the Project for specific requirements, and for a general understanding and knowledge of the Work of other Prime Contractors.
- C. Prime Contractors are responsible for all Work of their Contract, no matter on what drawing the Work appears. Should a conflict or contradiction in assignment of Work be indicated elsewhere in the Construction Documents, this Section shall take precedence over all other assignments of Work.
 - 1. Contract No. 1 – Mechanical Construction (MC)
 - 2. Contract No. 2 – Electrical Construction (EC)
 - 3. Contract No. 3 – Plumbing Construction (PC)
 - 4. Contract No. 4 – General Construction (GC)
 - 5. Contract No. 5 – General Construction – Staff Room Renovations (SRR)

1.3 DEFINITIONS

- A. Project Identification: Project consists of all labor, materials, equipment, appliances, services, and incidentals necessary for layout, installing, and performing the HVAC system replacement at the Cornwall Public Library as shown on the Contract Drawings and described in the Specifications.
- B. Building Site(s): The Building Site(s) shall be defined in the Construction Documents, as the building(s) footprint, and all related construction within a five-foot (5'0") distance of the building's exterior face, unless noted or assigned otherwise.
 - 1. Prime Contractors shall be aware of, and coordinate, specific exceptions to the 5'0" limit indicated within each Scope of Work outline.
- C. Permanent Enclosure: As determined by the Engineer, the condition at which roofing is installed and weather tight; exterior walls are weather tight and insulated; and all openings are closed with permanent construction or substantial temporary closures equivalent in weather protection to permanent construction.

1. All costs associated with failure to provide and maintain described installations that result in any damage or contamination to the Owner's property, shall be borne by the Prime Contract responsible for the installation.

1.4 GENERAL REQUIREMENTS OF PRIME CONTRACTS

- A. Prime Contracts: The context used in this Section are separate Prime Contracts that represent significant elements of Work that is to be performed concurrently and in close coordination with the Work of other Prime Contracts for the benefit of the Owner. Each Prime Contract is recognized to be a significant, integrated part of the Work.
- B. Layout and Installation: Each Prime Contractor shall schedule, layout and install their Work in such manner as not to delay or interfere with, but to compliment the execution of the Work of other Prime Contractors, utility companies and Owner's operations.
- C. Extent of Contract: The Construction Documents, comprised of drawings and specifications, contain more specific descriptions of the Work, indicating which Prime Contract shall provide specific elements of the Project Work.
 1. Work provided by each Prime Contract shall mean complete and operable systems and assemblies, including products, components, accessories and installations required by the Construction Documents, respective manufactured product, or indicated otherwise.
 2. Prime Contractors shall exercise good judgment and perform all Work according to related industry standards.
 3. The Owner is exempt from payment of Federal, State and local taxes, including sales and compensating use taxes on all materials and supplies incorporated in completing the Work; these taxes are not to be included in the Bid. This exemption does not apply to tools, machinery, equipment or other property leased by, or to, the Prime Contractor or subcontractor, or to supplies and materials, which even though consumed are not permanently incorporated into the completed Work.
 - a. Prime Contractors, and their subcontractors, shall be responsible for paying all applicable taxes on said tools, machinery, equipment or property, and upon all said unincorporated supplies and materials, whether purchased or leased.
 4. Prime Contractors shall understand that time is of the essence and will adequately staff the Project by employing the appropriate trade's people to perform the Work; these people shall be experienced in their respective trades. A shortage of labor in the industry shall not be accepted as an excuse for not properly staffing the Project; all efforts shall be made to meet or exceed the schedule, including additional staff and/or labor hours necessary. All cost associated with this item shall be included within the Prime Contract's Bid.
 5. Local custom and trade union jurisdictional agreements or settlements will not control the scope of the Work of each Prime Contract.
 - a. When a potential jurisdictional dispute or similar interruption of Work is first identified or threatened, the affected Prime Contractor(s) shall promptly negotiate a reasonable settlement to avoid or minimize the pending interruption and/or delays.
 - b. Contractor's trade-related issues shall not be grounds for modification or extension of scheduled completion date(s).

6. The Work of all Prime Contractors requires close coordination with other Prime Contractors and construction personnel. Maintain flexibility and cooperation through the Project. “Out of Sequence” and “Delay” claims will only be considered when requirements of Division 01 “Project Management and Coordination” have been adhered to.
 - a. Delay claims must be in writing and forwarded to the Engineer per the requirements of the Conditions of the Contract. Claims not submitted per these requirements will be rejected and/or denied.
 7. The intention of the Work is to follow a logical sequence, however, a Prime Contractor may be required by the Engineer, to temporarily install, omit or leave out a section(s) of Work, out of sequence. All such out of sequence Work, and come back time, at these areas shall be performed at no additional cost to the Owner.
- D. Construction Sequencing: Prime Contractors shall understand that concurrent construction on multiple areas/sites of this Project are a requirement. Should an area of construction not be complete per incremental milestones of the schedule included in the Contract Documents, the responsible Prime Contractor shall immediately augment the labor force, whether self-performed or subcontracted, to recover such lost time.
- E. Existing Conditions: Each Prime Contractor shall verify existing conditions in the field and per the Conditions of the Contract, immediately report conditions to the Engineer that are not represented correctly by the Construction Documents.
1. Each Prime Contractor is responsible for familiarizing himself with Project Site Logistics, whether represented in the Construction Documents, or in real time.
 2. Each Prime Contractor has been given ample opportunity to review existing conditions related to the Project. Existing conditions not noted in the Construction Documents that could be easily recognized during pre-bid review that interfere with the respective Prime Contractor’s Work, shall be the responsibility of the respective Prime Contractor, including related costs associated with removal, patching, relocation or re-fabrication of installations.
 3. Owner shall be responsible for removing Owner’s contents of spaces for construction during unoccupied periods. Prime Contractors shall be responsible for removing and/or protecting, and re-placing Owner’s contents during occupied periods, where contractor needs to perform work (ie: second-shift). The contractor shall ensure that spaces worked in are clean, and as encountered when they entered the space, prior to the next business day.
- F. Protection of Installations: Each Prime Contractor is responsible for protecting their installations at all times. All costs incurred to repair, replace or clean insufficiently protected materials/installations shall be the responsibility of the installing Prime Contractor.
1. The Construction Site Representative(s) shall be notified, in writing, immediately upon material/installation being damaged. Notification shall support indication of the responsible party.
 2. The Owner will not be liable for damaged materials and/or installations by “others”, when “others” cannot be identified.
 3. Repair damaged Work, clean exposed surfaces or replace construction installations that cannot be repaired.

4. Each Prime Contractor shall be responsible for removing all labels not required to remain, from their installations.
 5. Installations shall be wiped clean and proper protection then installed.
- G. Daily Cleaning: All Prime Contractors are responsible for any and all debris and refuse generated by their Work, including the Work of their subcontractors. A daily clean up and disposal is required by each Prime Contractor for the periods which that Prime Contractor, or its subcontractors, are performing Work on site(s).
1. Maintaining a clean Project site(s) shall be deemed a Safety & Health issue, with Prime Contractors and designated Competent Persons being held accountable for fulfilling obligations.
 2. Daily cleaning will be mandated to remove from the building, any debris created by day-to-day activities.
 3. Daily cleaning will not mean any one Prime Contractor is responsible for assisting another Prime Contractor with removing major quantities of debris created by a particular Prime Contractor's Work.
 4. Contractor working solely in an area shall be responsible for cleaning of that area.
 5. Assign at least one person for a daily clean and sweep of the Work area(s). Prime Contractor shall allot sufficient manpower and time for this to be completed by the end of each days' shift.
 - a. Submit name of person(s) identified for this task to the Construction Site Representative(s).
 - b. Construction Site Representative(s) shall have the authority to give direction directly to person(s) on the Project Site(s) identified by the Prime Contract, designated for cleanup task.
 - c. Any Prime Contractor not providing personnel for daily cleaning will be Back-Charged for labor provided by the Owner or others retained to complete this task.
 6. General Construction (GC) Contractor shall provide sweeping compound for daily cleaning. Each Prime Contractor shall provide sufficient number of brooms or other necessary tools, for use by their personnel to adequately fulfill their obligations.
 7. General Construction (GC) Contractor shall provide and maintain garbage cans/refuse containers with liners for each construction area as directed by the Construction Site Representative(s) and shall be responsible for disposing of these materials to a dumpster.
 8. General Construction (GC) Contractor shall provide the necessary equipment/containers (lull/skip-box) to move daily clean/sweep debris from the building to a dumpster daily. Skip-box shall be emptied to a dumpster by 9:00
 9. a.m. the following day.
 10. General Construction (GC) Contractor shall be responsible for waste management (dumpsters, off-site disposal of demolished/removed materials, construction waste, etc.), for their own respective purposes, and for use by Mechanical, Electrical, and Plumbing Prime Contracts.

11. Final Cleaning: Following Substantial Completion of each area of construction, each Prime Contractor shall wipe/vacuum clean all respective installations.

1.5 GENERAL TEMPORARY FACILITIES AND CONTROLS OF PRIME CONTRACTS

- A. Conditions of Use: Keep temporary services or conditions clean and neat in appearance. Operate in a safe and efficient manner. Relocate temporary facilities as required as Work progresses; do not overload facilities or permit them to interfere with progress. Take necessary fire prevention measures; do not allow hazardous, dangerous, or unsanitary conditions to develop or persist on the Project site(s).
 1. Installation, operation, maintenance, and removal of each temporary service or condition are considered part of the respective Prime Contractor's own construction activity, as are costs and use charges associated with each facility.
 2. Locate service or condition where they will serve the Project adequately and with minimum interference of the Work, coordinate with the Construction Site Representative(s) and the other Prime Contractors prior to installation.
- B. Temporary Use of Permanent Facilities: Prime Contractor, as installer of each permanent service or condition, shall assume responsibility for its operation, maintenance and protection during use as a construction facility prior to the Owner's acceptance, regardless of previously assigned temporary facilities and controls responsibility.
- C. Owner's Facilities: Contractors are not allowed to use the Owner's facilities (toilets, telephones, food service, etc.) for their own benefit or convenience. Prime Contractor Superintendents shall enforce this policy with their respective Work forces.
 1. Construction personnel parking will be restricted to an area(s) indicated on the Site Logistics Plans (if included), or otherwise requested by the Owner. The Owner reserves the right to remove from their property, unauthorized vehicles occupying unauthorized areas, at respective vehicle owner's expense.
- D. Storage on the Project Site: Each Prime Contractor shall provide sufficient secure weather-tight storage facilities for their materials and equipment. The Owner's facilities and the Project's building areas shall not be used for storage, unless agreed upon in advance via the Construction Site Representative(s).
 1. Until permanently incorporated into the Work, all materials on the Project site(s) are the Prime Contractor's responsibility for protection, security and insuring thereof.
 2. Prime Contractors and their subcontractors shall coordinate deliveries with the Construction Site Representative(s) to ensure that disruptions and Owner inconvenience are avoided.
- E. Tools and Equipment: Each Prime Contractor shall provide all tools and equipment necessary for its own activities and shall be responsible for secure lock-up and storage for all items on the Project Site(s).
 1. Each Prime Contractor shall provide all construction aids and miscellaneous services and facilities necessary, exclusively for its own construction activities including any additional supplementary power, ventilation, dehumidification, lighting requirements and weather protection.

- F. Project Site Communication: Each Prime Contractor shall provide their Project Superintendent and Competent Person with a wireless cellular telephone for the duration of the Project.
1. Construction Site Representative(s) shall be furnished with contact numbers associated with each wireless telephone.
- G. Safety: Prime Contractors, not the Owner, Architect, or Construction Site Representative(s), are responsible for Project Site Safety, as related to their operations and OSHA compliance (refer to Section 013150 “Special Procedures” for further requirements).
1. Each Prime Contractor shall designate a Competent Person, who shall be available to the Construction Site Representative(s) throughout the Project, in representing Safety of the Project Site.
 - a. A Competent Person is defined as one who through training and/or experience, can identify existing and predictable working conditions which are unsanitary, hazardous, or dangerous to employees, and who has the authority to take prompt corrective measures to eliminate such hazards.
 - b. The Competent Person shall inspect all machinery and equipment before and during use to ensure that they are within safe working parameters. All deficiencies must be promptly repaired, and defective parts replaced before the machine or equipment can be used.
 - c. The Competent Person must have knowledge related to soil classification, protective systems, and safety standards related to excavation.
 2. Maintain unobstructed access to fire extinguishers, fire hydrants, ladders and other safety devices, egress paths, corridors, stairways, and exits.
- H. Fire Extinguishers: General Construction (GC) contractor shall provide and maintain “general use” fire extinguishers for each construction area at respective buildings where work is being performed; comply with applicable codes for quantities required. Comply with NFPA for recommended classes for exposure; extinguishers shall be inspected and appropriately tagged prior to being brought on site. Provide stands, painted bright orange, sturdy enough to carry the extinguisher, and built as not to create a tipping hazard.
1. Each Prime Contractor shall supplement this requirement by providing additional fire extinguishers specifically related to their Work activity (e.g., welding, soldering, abrasive cutting, etc.).
 2. Each Prime Contractor shall provide and maintain proper fire extinguishers at/in their respective on site(s) office and storage facilities.
 3. Store combustible materials in approved containers in fire-safe locations.
- I. Welding: Any Prime Contractor performing welding, cutting or other activities with open flames or producing sparks shall at a minimum:
1. Coordinate interruption/shutdown of detection system(s) to avoid creating false alarms.
 2. Protect the area and surrounding areas from fire and damage.
 3. Maintain fire extinguishers, compatible with activity, at the location of the activity.

4. Provide a continuous Fire Watch during the activity and one-half hour beyond the completion of the activity.
 5. Provide all necessary fans and ventilation required for the activity.
- J. Temporary Barriers: Provide new materials whenever possible; undamaged, previously used materials, in serviceable condition, may be used if approved by the Construction Site Representative(s). Refer to the respective Specification Section when selecting materials and provide similar materials suitable for intended use.
- K. Relocation of Temporary Barrier: In the event a Prime Contractor requires relocation of a temporary barrier, Prime Contractor requiring relocation shall do so and shall protect all personnel in the Work area during the relocation.
1. Initial installing Prime Contractor shall coordinate the location of barriers with other Prime Contracts, prior to placement of the barrier.
 2. If a barrier must be located such that it will interfere with another's Work, the Contractor requiring the Work now interfered with shall relocate the barrier as required to install his Work.
 3. Coordinate with Construction Site Representative(s).
- L. Termination and Removal of Barriers: Remove each temporary facility when it can be replaced by the authorized permanent facility no later than Substantial Completion, or as directed by the Architect and/or Construction Site Representative(s). Complete or restore permanent facilities that may have been delayed due to interim use of a temporary barrier or condition.

1.6 WORK SEQUENCE

- A. Normal "first shift" work hours are anticipated to be 7:00am to 3:30pm.
- B. "Second shift" work hours shall be anticipated to be 3:00pm to 11:00pm. Coordinate "second shift" and weekend work requirements with the Owner via the Construction Site Representative(s).
1. Interruption of any utility and/or power must be coordinated with the Owner, via the Construction Site Representative(s). Shut-downs must be approved in writing.
 2. Each Prime Contractor shall provide multiple crews, supervision, tools, cranes, scaffold and other means necessary to perform the Work and maintain the schedule.
 3. Should a Contractor's progress fall behind schedule, Prime Contractor shall employ additional shifts and/or overtime and/or weekend workforce until situation is rectified to the satisfaction of the Owner, Architect, and Construction Site Representative(s), at no additional cost to the Owner.
- C. The Work shall be conducted to provide the least possible interference to the activities of the Owner's personnel and academic calendar.
1. All Prime Contractors and their subcontractors shall abide by any local ordinances and shall limit excessive noise during "second shift" operations so as not to create a disturbance to neighboring properties.

- D. Construction access to the site(s) shall be limited to personnel, equipment and deliveries by suppliers relative to the Work of Prime Contractors and their subcontractors. Prime Contractors shall keep the Construction Site Representative(s) advised of persons accessing the site(s) and shall seek assistance with coordinating parking and storage facility locations for all Prime Contractors.
1. General Construction (GC) Contractor shall provide temporary fence/barricades/work area protection at each respective work area on the site(s), to secure work zones from access by unauthorized persons/public while construction operations constitute an area restricted to construction personnel, and while related site construction is underway.
 2. General Construction (GC) Contractor shall provide temporary fence/barricades/work area protection at each respective building work area, to secure work zones from access by unauthorized persons/public while building additions or renovations constitute an area restricted to construction personnel, and while related site construction is underway.

1.7 GENERAL CONSTRUCTION (GC) – CONTRACT NO. 1

- A. Applicable Drawings: All drawings itemized are to be provided complete by this Prime Contract, unless noted otherwise, as follows:
1. General (G-Series)
 2. Architectural Demolition (AD-Series) - Coordination related to this Prime Contract
 3. Site/Civil (C-Series)
 4. Structural (S-Series)
 5. Architectural (A-Series)
 6. Architectural Finishes (AF-Series)
- B. Applicable Specification Sections: All specification Sections itemized are to be provided complete by this Prime Contract, unless noted otherwise, as follows:
1. Divisions 00-14 – All Sections
 2. Divisions 22-28 - Coordination related to this Prime Contract
 3. Divisions 30-34 – All Sections
- C. Project Site Superintendent: GC shall provide a full-time on-site Project Site Superintendent while any Work related to this Contract is being performed on site(s), including the activities of their subcontractors, while other Prime Contracts are installing Work, or require the coordination of Work related to this Contract, and/or as requested by the Construction Site Representative(s).
- D. Scope of Work: The Work of this Prime Contract includes but is not limited to, the following:
1. Work delineation between building and site(s) is at five feet (5') outside of the face of building, existing and new, unless noted or assigned otherwise.
 2. Prime Contract shall understand that renovation Work may require Work to proceed while existing systems are required to be maintained; all cost associated with this sequence shall be anticipated and incorporated into the Bid.
 3. Environmental Protection: Provide protection and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.

- a. Restrict use of noisemaking tools and equipment to hours that will minimize complaints from persons or firms on or near the Project Site.
 - b. Provide dust control while Work of this Contract is being performed. Limit situations that may create dust contamination while Work of this Contract is idle.
 - c. Refer to Section 01 "Work Restrictions" for additional information.
4. Provide all Control Lines and Elevations as required. GC shall transfer lines and elevations to other locations as necessary.
 5. The Architectural Drawings are schematic in nature, and the CC will make adequate provisions to accommodate the actual field conditions without additional cost to the Owner.
 6. Provide all demolition of General Construction Systems indicated in the Construction Documents, and/or required for Work of this Prime Contract.
 - a. Coordinate with all other Prime Contracts regarding all removals required for the Project.
 - b. Demolition of a system shall mean any and all components, removed in their entirety, to the point of origin or source.
 7. Provide all Work associated with creating structural openings or penetrations requiring lintels, whether for GC's own Work or Work of the MC, EC or PC (i.e.: ductwork and pipe penetrations). This applies to all openings/penetrations greater than 8" through masonry or concrete walls. GC can find likely locations of such openings/penetrations by noting ductwork/piping penetrations through walls on the respective Mechanical, Electrical, or Plumbing drawings. More or less locations of openings/penetrations may be required upon coordinated installation.
 - a. MC, EC & PC shall indicate all required openings/penetrations requiring lintels on Coordination Drawings. Failure to note required openings/penetrations on the coordination drawings for the GC will require that the respective MC, EC & PC provide their own structural openings in accordance with the contract documents at no additional cost to the Owner.
 - b. Non-structural openings/penetrations, including those for convenience, shall be self-provided by the respective GC, MC, EC or PC.
 - c. Refer to Structural documents for lintel type/size requirements and Architectural drawings for wall types. Walls not specifically identified in the documents are to be assumed as masonry construction.
 - d. All scheduled exterior wall louver openings indicated on Architectural and/or Structural documents are to be created by GC. MC shall supply and install louver.
 - 1) Exact physical locations shall be laid-out by MC for coordinated sequencing with GC.
 - e. All openings/penetrations are to be additionally identified on Record Drawings, by the Prime Contract requiring the opening.
 8. Provide all doors, frames, hardware, windows, and glazing as per the Construction Documents.
 9. Provide all cut and patch Work related to that of this Prime Contract, and at those areas specifically identified in the Construction Documents, regardless of trade creating the area to be patched.
 - a. Each Prime Contract is responsible for all other respective cutting and patching required of their installations (refer to Section "Cutting and Patching" for further information).

10. Provide finishes including, but not limited to; CMU, gypsum board assemblies, plaster, suspended ceiling systems, tile, and all paint, flooring and finishing systems.
 - a. Provide all associated surface preparation for each finish included in this Prime Contract.
 - b. Prep/Paint exposed structural steel and/or concrete including related deck, as indicated in the Construction Documents.
 - c. Prep/paint all exposed, unfinished ducts and conduit in related finished areas.
 11. Provide all new ceiling systems as indicated in the Construction Documents, complete.
 - a. Coordinate with Lighting, PA, Fire Alarm, etc. by EC.
 - b. Coordinate with Registers, Grilles, etc. by MC.
 - c. In Acoustic Panel Ceiling systems, install field tiles only upon approval by the Construction Site Representative(s) to do so. Failure to seek prior approval may require tiles to be removed for further work and/or inspections.
 12. Provide all miscellaneous wood blocking, shimming and supports for items or equipment installed under this Prime Contract, and as coordinated with other Prime Contractors for metal strapping and/or wood blocking for installations of other Prime Contracts.
 13. Provide all access doors/panels indicated, and those not indicated whereas inaccessible installations have been provided by this Prime Contract, located above hard ceilings or in walls.
 14. Provide through-penetration fire stop systems at all penetrations made by this Prime Contract, maintaining listed ratings of indicated assemblies. Provide repair of existing through-penetration fire stopping damaged by Work of this Prime Contract.
 - a. Sleeves with fire stopping are to be installed in sequence with fire-rated construction. This Prime Contract shall be responsible for installing fire stopping material at intersection of sleeve and constructed materials.
 15. Provide coordination with, and notification to, the Construction Site Representative(s) for all specified testing, training, commissioning, etc., of the Work of this Prime Contract.
 16. Substantial Completion: Clean all GC installations and provided equipment at the time of Substantial Completion or as directed by Construction Site Representative(s).
 17. Coordinate all the preceding requirements, accordingly, with all applicable Alternates indicated in Division 01 Section "Alternates".
- E. Supplemental Temporary Facilities and Controls by GC includes but is not limited to:
1. Protection of the Facility: Provide protection of all existing finishes and furnishings within the facility including but not limited to walls, ceilings, floors, desks, tables, book shelves. The Owner will clear off all loose items from the top of surfaces, but all large furniture will remain in place. Contractor shall provide protection over the top of all furniture and flooring within the areas of work.
 2. Waste Disposal Facilities: Provide general debris/refuse/construction waste containers and waste management (dumpsters, off-site disposal of demolished/removed materials, etc.), for their own respective purposes, and for use by Mechanical, Electrical, and Plumbing Prime Contracts.

3. Misc. Temporary Fences, Gates and Barricades: Provide and maintain temporary fencing and barricading to keep unauthorized persons away from interior and exterior excavations and/or construction areas for which this Prime Contract is responsible.
 - a. Coordinate via Construction Site Representative(s), at commencement of, and completion of construction areas, including but not limited to those indicated in the Construction Documents.
4. Temporary Doors, Frames & Wall Assemblies: Provide, maintain and eventually remove all temporary installations per OSHA Regulations, Industry Standards, or as indicated in the Construction Documents.
 - a. Provide fire rated assemblies as required.
 - b. Provide exit (panic bar/crash bar) devices at locations of egress.
 - c. Coordinate locations with Construction Exiting Plan, Sequencing/Phasing Plans, and the Construction Site Representative.
 - d. Temporary doors shall be constructed using 1/2' plywood and 2x construction, equipped with hasps, locks, handle and latch mechanism, and spring or counter weight installed to allow door to close after opening.
 - e. Permanent doors will not be used in temporary conditions.
5. Temporary Window Openings: Window openings shall be enclosed using 2x construction, 1/2' plywood, and reinforced polyethylene. Where window opening start at or near the floor, plywood shall be installed from finish floor to minimum of 42" AFF; reinforced poly may be installed from this point up. Should contractor choose to install plywood across the entire opening, sufficient area will be installed with reinforced poly to allow emergency escape, if required, and to allow natural light into the work area.
 - a. Installation shall be insulated if temporary heat or cooling is being employed.
6. Temporary Exterior Wall Enclosure: Provide and maintain temporary enclosures for weather protection and security of the construction in progress up until completion of permanent installation specified. Enclosures shall protect the building from exposure, foul weather, other construction operations, and similar activities. Provide temporary weather tight enclosure for building exterior.
 - a. Where heating and cooling is needed and permanent enclosure is not complete, provide insulated temporary enclosures. Coordinate enclosure with venting and material drying or curing requirements to avoid dangerous conditions and effects.
 - b. Install tarpaulins securely; install fire retardant materials only.
 - c. Where temporary wood enclosures exceed 100 sq. ft. in area, use fire retardant treated materials for framing and sheathing.
 - d. All cost incurred to repair and/or replace materials damaged, due to the failure of GC to provide and maintain weather tight enclosure shall be borne by this Prime Contract. This includes any contamination of materials that may lead to the introduction of mold and mildew.
 - e. Immediately notify the Construction Site Representative, in writing, as to damage to temporary enclosures by "others"; identify responsible party in the submission. Owner shall not be liable for damages caused by "others" if Prime Contract cannot identify responsible party.
7. Temporary Sanitary Facilities: Provide temporary self-contained toilets units for duration of the project for use by forces of all Prime Contracts (including abatement and demolition phases) and their subcontractors, until completion of Punch List work, and closeout of the Contracts.

- a. Comply with regulations and health codes for type, number, location, operation, and maintenance of fixtures and facilities.
 - b. Provide separate facilities (minimum of one ea.) for male and female personnel in proportion required by OSHA.
 - c. Shield toilets to ensure privacy.
 - d. Coordinate mobilization and demobilization of units with Construction Site Representative(s).
 - e. Toilets shall be cleaned at least once per week, with additional facilities or cleanings provided if requested by Construction Site Representative(s).
 - f. Provide and maintain adequate supply of toilet tissue and hand sanitizer for each facility.
8. Indoor air quality management at all areas of Construction, once building is enclosed.
- a. Provide all necessary dust partitions, fans, temporary ducts, and barricades to properly contain and ventilate all work area fumes and odors, created by demolition and new construction or alterations, directly to the outside. Ventilate to an area outside the building, sufficiently away from the building, as not to contaminate other areas. There will be no additional claims honored if the Construction Site Representative requests additional ventilation or requirements.
 - b. Provide and exhaust air system for the project indoor areas that could produce fumes, VOC's, off gasses, dusts, mists, or other emissions.
 - c. System Operation:
 - 1) A sufficient quantity of exhaust fans in existing window openings or other approved locations shall be operated.
 - 2) Exhaust air system shall operate for a minimum of 72 hours after work is completed or until all materials have cured sufficiently so as to stop out – gassing of fumes or odors and area has been ventilated to remove all detectable traces of odors and fumes.
 - 3) Maintain 25 feet clearance from all temporary exhaust outlets to all active building outdoor air intakes.
 - 4) Refer to Division 01 Section “Work Restrictions” for further information.
9. Project Signage: Provide Project sign(s), and any/all construction signage indicated in the Construction Documents.
- a. Coordinate installation via Construction Site Representative(s).
10. Provide all shoring required for Work of this Contract, including but not limited to.
- a. Cutting or altering of existing construction.
 - b. Provide protection of all new and existing surfaces during the Work. Do not stand, walk, or work off of any unprotected finished surface above the floor.
11. Maintain temporary fencing and barricading to keep unauthorized persons away from excavations and hazardous areas for which this Prime Contract is responsible.
12. Traffic Controls: Provide flagman while any operations of this Prime Contract interfere with traffic flow on adjacent roadways.

1.8 MECHANICAL CONSTRUCTION (MC) – CONTRACT NO. 2

- A. Applicable Drawings: All drawings itemized are to be provided complete by this Prime Contract, unless noted otherwise, as follows:

1. General (G-Series)
 2. Mechanical General (MG-Series)
 3. Mechanical (M-Series)
- B. Applicable Specification Sections: All specification Sections itemized are to be provided complete by this Prime Contract, unless noted otherwise, as follows:
1. Divisions 00 & 01 – All Sections
 2. Divisions 02-22 – Coordination related to this Prime Contract
 3. Division 23 – All Sections
 4. Divisions 26-34 Coordination related to this Prime Contract
- C. Project Site Superintendent: MC shall provide a full-time on-site Project Site Superintendent while any Work related to this Contract is being performed on site(s), including the activities of their subcontractors, while other Prime Contracts are installing Work, or require the coordination of Work related to this Contract, and/or as requested by the Construction Site Representative(s).
- D. Scope of Work: The Work of this Prime Contract includes but is not limited to, the following:
1. Work delineation between building and site(s) is at five feet (5') outside of the face of building, existing and new, unless noted or assigned otherwise.
 2. All new heating system components must be protected, from potential contamination. Once the building is occupied, the building shall be heated to a minimum of 65 degrees F for the heating period of September 15th – May 31st.
 3. Environmental Protection: Provide protection and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
 - a. Restrict use of noisemaking tools and equipment to hours that will minimize complaints from persons or firms on or near the Project site(s).
 - b. Refer to Section 01 "Work Restrictions" for additional information.
 4. GC shall provide concrete housekeeping and structural pads for equipment provided under this Prime Contract. MC shall coordinate size, orientation and location with GC, by way of providing physical layout, and verification prior to construction thereof.
 5. GC shall provide all Work associated with creating structural openings or penetrations requiring lintels, whether for their own Work or Work of the MC, EC or PC (ie: ductwork and pipe penetrations). This applies to all openings/penetrations greater than 8" through masonry or concrete walls.
 - a. MC, EC & PC shall indicate all required openings/penetrations requiring lintels on Coordination Drawings. Failure to note required openings/penetrations on the coordination drawings for the GC will require that the respective MC, EC & PC provide their own structural openings in accordance with the contract documents at no additional cost.
 - b. Non-structural openings/penetrations, including those for convenience, shall be self-provided by the respective Prime Contract. This assignment applies to new and existing construction areas.

- c. Refer to Structural documents for lintel type/size requirements and Architectural drawings for wall types. Walls not specifically identified in the documents are to be assumed as masonry construction.
 - d. All scheduled exterior wall louver openings indicated on Architectural and/or Structural documents are to be created by GC. MC shall supply, install, flash and seal the louver. Exact physical locations shall be laid-out by MC for coordinated sequencing with GC.
 - e. All openings/penetrations are to be additionally identified on Record Drawings, by the Prime Contract requiring the opening.
6. GC shall provide all cut & patch Work, related to that of their Prime Contract, and at those areas specifically identified on the Construction Documents, regardless of trade creating the area to be patched.
 - a. Each Prime Contract is responsible for all other respective Cutting & Patching required of their installations (refer to Section 017310 for further information).
7. Prime Contract shall understand that renovation Work may require Work to proceed while existing systems are required to be maintained; all cost associated with this sequence shall be anticipated and incorporated into the Bid.
8. The HVAC Drawings are schematic in nature, and the MC will make adequate provisions to accommodate the actual field conditions without additional cost to the Owner.
9. Document on the Record Drawings all ductwork openings and penetrations larger than 2 ½” in diameter.
10. Provide all demolition of Mechanical Systems indicated in the Construction Documents, and/or required for Work of this Prime Contract.
 - a. Coordinate with all other Prime Contracts regarding all removals required for the Project.
 - b. Demolition of a system shall mean any and all components, removed in their entirety, to the point of origin or source.
11. Provide valves, whether permanent or temporary, to permit shutoff and/or cap systems to achieve the Work of this Prime Contract.
12. Provide installation of new HVAC system(s), or modifications of existing system(s) as indicated in the Construction Documents, complete and fully operational.
 - a. MC shall furnish all related electrical disconnects, variable speed drives and motor starters (including related “heaters, fuses, and phase protection relays”) for all equipment provided under this Contract, for coordinated installation by EC.
 - b. Owner shall provide DDC Temperature Controls as a function of the Building Automation System, as referenced in the Construction Documents. MC shall install controls and instrumentation devices, including but not limited to control valves, control dampers, thermowells, pressure probes, flow switches, airflow metering stations, insertion flow meters, and ultrasonic flow meters, required for system operations and as indicated. Such devices will be furnished by vendor [Automated Logic] to the MC for coordinated installation in HVAC systems.
 - 1) Temperature Controls System vendor/installer shall provide line voltage power wiring to its own head-end, regionally located control panels, and line voltage valves, actuated dampers, motors, etc. that are not indicated in the E drawings.

- 2) Temperature Controls System vendor/installer shall provide all low voltage wiring of controls, transformers, actuated dampers, motors, etc., as required for a complete operational system.
 13. Provide thermal insulation and identification of all HVAC system/components provided/installed by this Prime Contract.
 14. Provide concrete housekeeping and structural pads for equipment provided under this Prime Contract.
 15. MC shall hang streamers from all above-ceiling equipment that will require access. This is in addition to any specification requirements for tags, labels, etc. Coordination Drawings shall highlight these areas for Architect's and Engineer's review.
 16. Provide all access doors/panels to access inaccessible installations (i.e. valves) provided by this Prime Contract, such as above hard ceilings or in walls. Access panel type shall be same as GC approved submittal, and in sizes adequate for easy access and or replacement of installation.
 17. Provide sleeves required for piping penetrating walls, slabs and/or decks.
 18. Provide through-penetration fire stop systems at all penetrations made by MC for utility penetration of this Prime Contract, maintaining listed ratings of indicated assemblies. Provide repair of existing through-penetration fire stopping damaged by Work of this Prime Contract.
 - a. Sleeves with fire stopping are to be installed in sequence with fire-rated construction. This Prime Contract shall be responsible for installing fire stopping material at intersection of sleeve and constructed materials.
 19. Provide coordination with, and notification to, the Construction Site Representative(s) for all specified testing, training, commissioning, etc., of the Work of this Prime Contract.
 20. Substantial Completion: Clean all MC installations and provided equipment at the time of Substantial Completion or as directed by Construction Site Representative(s).
 21. Coordinate all the preceding requirements, accordingly, with all applicable Alternates indicated in Division 01 Section "Alternates".
- E. Supplemental Temporary Facilities and Controls by MC include, but are not limited to, the following:
1. Waste Disposal Facilities:
 - a. General debris/refuse/construction waste containers (dumpsters) shall be provided by GC, for use by MC.
 - b. It shall be the responsibility of this Prime Contract to recycle metals generated by its Work, and the Work of its subcontracts.

- 1) Joint effort recycling by all Prime Contracts is encouraged.
2. Indoor air quality management at all areas of Work by this Prime Contract, once building is enclosed.
 - a. Provide all necessary dust partitions, fans, temporary ducts, and barricades to properly contain and ventilate all Work area fumes and odors, created by demolition and new construction or alterations, directly to the outside. Ventilate to an area outside the building, sufficiently away from the building, as not to contaminate other areas. There will be no additional claims honored if the Construction Site Representative(s) requests additional ventilation or requirements.
 - b. Provide and exhaust air system for the project indoor areas that could produce fumes, VOC's, off gasses, dusts, mists, or other emissions.
 - c. System Operation:
 - 1) Provide temporary dust/fume protection at areas of Work of this Contract to limit contamination of surrounding areas. All cost incurred, by the Owner, for added cleaning expenses, due to the failure of this contract to provide and maintain adequate dust/fume protection, for the Work of this Contract, shall be borne by this Contract.
 - 2) A sufficient quantity of exhaust fans in existing window openings or other approved locations shall be operated.
 - 3) Exhaust air system shall operate for a minimum of 72 hours after Work is completed or until all materials have cured sufficiently so as to stop out – gassing of fumes or odors and area has been ventilated to remove all detectable traces of odors and fumes.
 - 4) Maintain 25 feet clearance from all temporary exhaust outlets to all active building outdoor air intakes.
 - 5) Refer to Division 01 Section “Work Restrictions” for further information.
3. Provide all shoring required for Work of this Contract, including but not limited to.
 - a. Cutting or altering of existing construction.
 - b. Provide protection of all new and existing surfaces during the Work. Do not stand, walk or work off of any unprotected finished surface above the floor.
4. Maintain temporary fencing and barricading to keep unauthorized persons away from excavations and hazardous areas for which this Prime Contract is responsible.
5. Traffic Controls: Provide flagman while any operations of this Prime Contract interfere with traffic flow on adjacent roadways.

1.9 ELECTRICAL CONSTRUCTION (EC) – CONTRACT NO. 3

- A. Applicable Drawings: All drawings itemized are to be provided complete by this Prime Contract, unless noted otherwise, as follows:
 1. General (G-Series)
 2. Electrical General (EG-Series)

3. Electrical (E-Series)
- B. Applicable Specification Sections: All specification Sections itemized are to be provided complete by this Prime Contract, unless noted otherwise, as follows:
1. Divisions 00 & 01 – All Sections
 2. Divisions 02-23 – Coordination related to this Prime Contract
 3. Divisions 26-28 - All Sections
 4. Divisions 30-34 – Coordination related to this Prime Contract
- C. Project Site Superintendent: EC shall provide a full-time on-site Project Site Superintendent while any Work related to this Contract is being performed on site(s), including the activities of their subcontractors, while other Prime Contracts are installing Work, or require the coordination of Work related to this Contract, and/or as requested by the Construction Site Representative(s).
- D. Scope of Work: The Work of this Prime Contract includes but is not limited to, the following:
1. Work delineation between building and site(s) is at five feet (5') outside of the face of building, existing and new, unless noted or assigned otherwise.
 2. Prime Contract shall understand that renovation Work may require Work to proceed while existing systems are required to be maintained; all cost associated with this sequence shall be anticipated and incorporated into the Bid.
 3. The Electrical Drawings are schematic in nature, and the EC will make adequate provisions to accommodate the actual field conditions without additional cost to the Owner.
 - a. EC shall install Work in accordance with the National Electrical Code requirements. No additional compensation will be made for extra offsets in conduit or retro-fit Work due to improper component location, or lack of Prime Contractor's coordination.
 4. Provide re-routing of existing power distribution as indicated in the Construction Documents, specifically to allow for progression of the Work sequence.
 5. Provide all demolition of Electrical Systems indicated in the Construction Documents, and/or required for Work of this Prime Contract.
 - a. Coordinate with all other Prime Contracts regarding all removals required for the Project.
 - b. Demolition of a system shall mean any and all components, removed in their entirety, to the point of origin or source.
 6. Provide all lighting, including fixtures, switching devices, circuits, etc.
 - a. Provide new fixtures as scheduled.
 - b. Provide removal and complete reinstallation of fixtures scheduled for salvage and re-use.
 - c. Contractor shall be responsible to tie-up and support existing fixtures and ceiling-mounted electrical devices to structure above Acoustic Panel Ceiling systems, when ceilings are to be removed as early-work, and the space is scheduled to remain occupied during continued Work.

7. GC shall provide all Work associated with creating structural openings or penetrations requiring lintels whether for their own Work or Work of the MC, EC or PC (ie: ductwork and pipe penetrations). This applies to all openings/penetrations greater than 8” through masonry or concrete walls.
 - a. MC, EC & PC shall indicate all required openings/penetrations requiring lintels on Coordination Drawings. Failure to note required openings/penetrations on the coordination drawings for the GC will require that the respective MC, EC & PC provide their own structural openings in accordance with the contract documents at no additional cost to the Owner.
 - b. Non-structural openings/penetrations, including those for convenience, shall be self-provided by the respective GC, MC, EC or PC. This assignment applies to new and existing construction areas.
 - c. Refer to Structural documents for lintel type/size requirements and Architectural drawings for wall types. Walls not specifically identified in the documents are to be assumed as masonry construction.
 - d. All openings/penetrations are to be identified on Record Drawings by the Prime Contract requiring the opening.
8. GC shall provide all cut & patch Work, related to that of their Prime Contract, and at those areas specifically identified on the Construction Documents, regardless of trade creating the area to be patched.
 - a. Each Prime Contract is responsible for all other respective Cutting & Patching required of their installations (refer to Section 017310 for further information).
9. GC shall provide concrete housekeeping and structural pads for equipment provided under this Prime Contract. EC shall coordinate size, orientation and location with GC, by way of providing physical layout, and verification prior to construction thereof.
10. Provide complete electrical requirements, materials and methods including but not limited to:
 - a. Service and distribution including bus-way, switchgear, panel boards, and disconnect switches.
 - b. Provide grounding protection for all circuits and outlets and as required by applicable codes and authorities having jurisdiction. Properly ground building equipment provided by this project.
 - c. Coordinate any electrical switchover as to least impact the Project Schedule, and/or as indicated in the Construction Documents.
 - d. Immediately after installation, provide and maintain temporary ID of all circuit breakers and at all shut offs/disconnects until permanent ID is in place.
 - e. Interior and exterior lighting and lighting control equipment; provide occupancy sensors and/or timing devices as indicated.
 - f. Provide raceways, boxes, cabinets and sleeves through existing and new construction.
 - g. Provide wire, cable, conduit, boxes, and wiring devices.
 - h. Provide permanent electrical identification.
 - 1) Provide type written panel board schedules.
 - 2) Clearly label all panel boards, disconnects, relays, junction boxes, and other electrical devices and equipment.
11. Final connection of utilities, installations or equipment by others are by MC, EC and PC, unless noted or assigned otherwise.

- a. MC shall furnish all disconnects, variable speed drives and motor starters (including related “heaters, fuses, and phase protection relays”), for all equipment provided under their respective Prime Contract, for coordinated installation by EC.
 - b. Provide all line voltage circuits and connections to points of demarcation indicated and/or equipment provided by MC.
 - c. Provide final connections to all scheduled equipment furnished by the Owner.
12. Provide Fire Alarm system as indicated in the Construction Documents.
- a. EC shall expand existing, and integrate Fire Alarm system with all HVAC equipment, natural gas shut-downs, Fire Protection systems, AED cabinets, coiling overhead doors, fire shutters, pedestrian doors equipped with electro-magnetic hold-open devices, etc.
13. Provide streamers hung from all above-ceiling equipment that will require access. This is in addition to any specification requirements for tags, labels, etc. Coordination Drawings shall highlight these areas for Architect and Engineer’s review.
14. Provide all access doors/panels to access inaccessible installations (i.e. junction boxes) provided by this Prime Contract, such as above hard ceilings or in walls.
15. Provide sleeves required for piping penetrating walls, slabs and/or decks.
16. Provide through-penetration fire stop systems at all penetrations made by this Prime Contract, maintaining listed ratings of indicated assemblies. Provide repair of existing through-penetration fire stopping damaged by Work of this Prime Contract.
- a. Sleeves with fire stopping are to be installed in sequence with fire-rated construction. This Prime Contract shall be responsible for installing fire stopping material at intersection of sleeve and constructed materials.
17. Provide coordination with, and notification to, the Construction Site Representative(s) for all specified testing, training, commissioning, etc., of the Work of this Prime Contract.
18. Provide all testing and adjusting, instruction and guarantees for materials and equipment of this Prime Contract.
- a. Substantial Completion: Clean all light fixtures and electrical equipment at the time of installation or at Substantial Completion, whichever is later, or as directed by Construction Site Representative(s).
19. Coordinate all the preceding requirements, accordingly, with all applicable Alternates indicated in Division 01 Section “Alternates”.
- E. Supplemental Temporary Facilities and Controls by EC include, but are not limited to, the following:
1. Waste Disposal Facilities:
 - a. General debris/refuse/construction waste containers (dumpsters) shall be provided by GC, for use by EC.
 - b. It shall be the responsibility of this Prime Contract to recycle metals generated by its Work, and the Work of its subcontracts.
 - 1) Joint effort recycling by all Prime Contracts is encouraged.

2. Temporary Lighting and Power.
 - a. Provide temporary power and lighting as needed to the areas of work to allow for ongoing construction activities.
 - b. While permanent light fixtures have been removed from ceilings to allow for overhead work to take place, provide temporary construction lighting throughout the impacted areas.
 - c. Provide temporary stanchion, panel and lighting control mounting at Janitor's Closet to allow for replacement of existing partition walls.
3. Indoor air quality management at all areas of Work by this Prime Contract, once building is enclosed.
 - a. Provide all necessary dust partitions, fans, temporary ducts, and barricades to properly contain and ventilate all Work area fumes and odors, created by demolition and new construction or alterations, directly to the outside. Ventilate to an area outside the building, sufficiently away from the building, as not to contaminate other areas. There will be no additional claims honored if the Construction Site Representative(s) requests additional ventilation or requirements.
 - b. Provide and exhaust air system for the project indoor areas that could produce fumes, VOC's, off gasses, dusts, mists, or other emissions.
 - c. System Operation:
 - 1) Provide temporary dust/fume protection at areas of Work of this Contract to limit contamination of surrounding areas. All cost incurred, by the Owner, for added cleaning expenses, due to the failure of this contract to provide and maintain adequate dust/fume protection, for the Work of this Contract, shall be borne by this Contract.
 - 2) A sufficient quantity of exhaust fans in existing window openings or other approved locations shall be operated.
 - 3) Exhaust air system shall operate for a minimum of 72 hours after Work is completed or until all materials have cured sufficiently so as to stop out – gassing of fumes or odors and area has been ventilated to remove all detectable traces of odors and fumes.
 - 4) Maintain 25 feet clearance from all temporary exhaust outlets to all active building outdoor air intakes.
4. Provide protection of all new surfaces during the Work.
5. Provide shoring required for Work of this Contract, including but not limited to;
 - a. Cutting or altering of existing construction.
 - b. Provide protection of all new and existing surfaces during the Work. Do not stand, walk, or Work from any unprotected finished surface above the floor.
6. Maintain temporary fencing and barricading to keep unauthorized persons away from excavations and hazardous areas for which this Prime Contract is responsible.
7. Traffic Controls: Provide flagman while any operations of this Prime Contract interfere with traffic flow on adjacent roadways.

1.10 PLUMBING CONSTRUCTION (PC) – CONTRACT NO. 4

- A. Applicable Drawings: All drawings itemized are to be provided complete by this Prime Contract, unless noted otherwise, as follows:
1. General (G-Series)
 2. Plumbing General (PG-Series)
 3. Plumbing (P-Series)
- B. Applicable Specification Sections: All specification Sections itemized are to be provided complete by this Prime Contract, unless noted otherwise, as follows:
1. Divisions 00 & 01 – All Sections
 2. Divisions 02 through 14 – Coordination related to this Prime Contract
 3. Division 22 - All Sections
 4. Divisions 23-34 – Coordination related to this Prime Contract
- C. Project Site Superintendent: PC shall provide a full-time on-site Project Site Superintendent while any Work related to this Contract is being performed on site(s), including the activities of their subcontractors, while other Prime Contracts are installing Work, or require the coordination of Work related to this Contract, and/or as requested by the Construction Site Representative(s).
- D. Scope of Work: The Work of this Prime Contract includes but is not limited to, the following:
1. Work delineation between building and site(s) is at five feet (5') outside of the face of building, existing and new, unless noted or assigned otherwise.
 2. Environmental Protection: Provide protection and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
 - a. Restrict use of noisemaking tools and equipment to hours that will minimize complaints from persons or firms on or near the Project site(s).
 - b. Refer to Division 01 Section "Work Restrictions" for additional information.
 3. Prime Contract shall understand that renovation Work may require Work to proceed while existing systems are required to be maintained; all cost associated with this sequence shall be anticipated and incorporated into the Bid.
 4. The plumbing Drawings are schematic in nature, and the PC will make adequate provisions to accommodate the actual field conditions without additional cost to the Owner.
 5. Provide all demolition of Plumbing Systems indicated in the Construction Documents, and/or required for Work of this Prime Contract.
 - a. Coordinate with all other Prime Contracts regarding all removals required for the Project.
 - b. Demolition of a system shall mean any and all components, removed in their entirety, to the point of origin or source.
 6. Provide valves, whether permanent or temporary, to permit shutoff and/or cap systems to achieve the Work of this Prime Contract.

7. Provide all typical building equipment including but not limited to, plumbing equipment and fixtures, supply, waste, drain and vent piping, as indicated in the Construction Documents.
8. GC shall provide concrete housekeeping and structural pads for equipment provided under this Prime Contract. PC shall coordinate size, orientation and location with GC, by way of providing physical layout, and verification prior to construction thereof.
9. GC shall provide all Work associated with creating structural openings or penetrations requiring lintels whether for their own Work or Work of the MC, EC or PC (i.e.: ductwork and pipe penetrations). This applies to all openings/penetrations greater than 8" through masonry or concrete walls.
 - a. MC, EC & PC shall indicate all required openings/penetrations requiring lintels on Coordination Drawings. Failure to note required openings/penetrations on the coordination drawings for the GC will require that the respective MC, EC & PC provide their own structural openings in accordance with the contract documents at no additional cost.
 - b. Non-structural openings/penetrations, including those for convenience, shall be self-provided by the respective GC, MC, EC or PC. This assignment applies to new and existing construction areas.
 - c. Refer to Structural documents for lintel type/size requirements and Architectural drawings for wall types. Walls not specifically identified in the documents are to be assumed as masonry construction.
 - d. All openings/penetrations are to be identified on Record Drawings by the Prime Contract requiring the opening.
10. GC shall provide all cut & patch Work related to that of their Prime Contract, and at those areas specifically identified on the Construction Documents, regardless of trade creating the area to be patched.
 - a. Each Prime Contract is responsible for all other respective Cutting & Patching required of their installations (refer to Section 017310 for further information).
11. PC shall hang streamers from all above ceiling equipment that will require access. This is in addition to any specification requirements for tags, labels, etc. Coordination Drawings shall highlight these areas for Architect and Engineer's review.
12. Provide installation of new plumbing system(s), or modifications of existing system(s) as indicated in the Construction Documents, complete and fully operational.
 - a. PC shall furnish all related electrical wiring and transformers for all equipment provided under this Contract, for coordinated installation by EC.
13. Provide thermal insulation and identification of all plumbing system/components provided/installed by this Prime Contract.
14. Provide all access doors/panels to access inaccessible installations (i.e. valves) provided by this Prime Contract, such as above hard ceilings or in walls.
15. Provide sleeves required for piping penetrating walls, slabs and/or decks.

16. Provide through-penetration fire stop systems at all penetrations made by this Prime Contract, maintaining listed ratings of indicated assemblies. Provide repair of existing through-penetration fire stopping damaged by Work of this Prime Contract.
 - a. Sleeves with fire stopping are to be installed in sequence with fire-rated construction. This Prime Contract shall be responsible for installing fire stopping material at intersection of sleeve and constructed materials.
 17. Provide coordination with, and notification to, the Construction Site Representative(s) for all specified testing, training, commissioning, etc., of the Work of this Prime Contract.
 18. Substantial Completion: Clean all PC installations and provided equipment at the time of Substantial Completion or as directed by Construction Site Representative(s).
 19. Coordinate all the preceding requirements, accordingly, with all applicable Alternates indicated in Division 01 Section "Alternates".
- E. Supplemental Temporary Facilities and Controls by PC include, but are not limited to, the following:
1. Waste Disposal Facilities:
 - a. General debris/refuse/construction waste containers (dumpsters) shall be provided by GC, for use by PC.
 - b. It shall be the responsibility of this Prime Contract to recycle metals generated by its Work, and the Work of its subcontracts.
 - 1) Joint effort recycling by all Prime Contracts is encouraged.
 2. Indoor air quality management at all areas of Work by this Contract, once building is enclosed.
 - a. Provide all necessary dust partitions, fans, temporary ducts, and barricades to properly contain and ventilate all Work area fumes and odors, created by demolition and new construction or alterations, directly to the outside. Ventilate to an area outside the building, sufficiently away from the building, as not to contaminate other areas. There will be no additional claims honored if the Construction Site Representative(s) requests additional ventilation or requirements.
 - b. Provide and exhaust air system for the project indoor areas that could produce fumes, VOC's, off gasses, dusts, mists, or other emissions.
 - c. System Operation:
 - 1) Provide temporary dust/fume protection at areas of Work of this Contract to limit contamination of surrounding areas. All cost incurred, by the Owner, for added cleaning expenses, due to the failure of this contract to provide and maintain adequate dust/fume protection, for the Work of this Contract, shall be borne by this Contract.
 - 2) A sufficient quantity of exhaust fans in existing window openings or other approved locations shall be operated.
 - 3) Exhaust air system shall operate for a minimum of 72 hours after Work is completed or until all materials have cured sufficiently so as to stop out – gassing of fumes or odors and area has been ventilated to remove all detectable traces of odors and fumes.
 - 4) Maintain 25 feet clearance from all temporary exhaust outlets to all active building outdoor air intakes.
 - 5) Refer to section "Work Restrictions" for further information.

3. Provide all shoring required for Work of this Contract, including but not limited to;
 - a. Cutting or altering of existing construction.
 - b. Provide protection of all new and existing surfaces during the Work. Do not stand, walk, or Work from any unprotected finished surface above the floor.
4. Maintain temporary fencing and barricading to keep unauthorized persons away from excavations and hazardous areas for which this Prime Contract is responsible.
5. Water: Provide temporary cold-water service, for use by all Prime Contracts for construction purposes. PC shall procure all related permits, coordinate with utility provider, and meet the requirements of the authorities having jurisdiction, in establishing, maintaining, and removing this temporary service.

1.11 GENERAL CONSTRUCTION – STAFF ROOM RENOVATION (SRR) – CONTRACT NO. 5

- A. Applicable Drawings: All drawings itemized are to be provided complete by this Prime Contract, unless noted otherwise, as follows:
 1. General (G-Series)
 2. Architectural Demolition (AD-Series) - Coordination related to this Prime Contract
 3. Site/Civil (C-Series)
 4. Structural (S-Series)
 5. Architectural (A-Series)
 6. Architectural Finishes (AF-Series)
 7. Electrical (E-Series)
 8. Plumbing (P-Series)
- B. Applicable Specification Sections: All specification Sections itemized are to be provided complete by this Prime Contract, unless noted otherwise, as follows:
 1. Divisions 00-14 – All Sections
 2. Divisions 22-28 – All Sections
 3. Divisions 30-34 – All Sections
- C. Project Site Superintendent: SRR shall provide a full-time on-site Project Site Superintendent while any Work related to this Contract is being performed on site(s), including the activities of their subcontractors, while other Prime Contracts are installing Work, or require the coordination of Work related to this Contract, and/or as requested by the Construction Site Representative(s).
- D. Scope of Work: The Work of this Prime Contract includes but is not limited to, the following:
 1. Work delineation between building and site(s) is at five feet (5') outside of the face of building, existing and new, unless noted or assigned otherwise.
 2. Prime Contract shall understand that renovation Work may require Work to proceed while existing systems are required to be maintained; all cost associated with this sequence shall be anticipated and incorporated into the Bid.

3. Environmental Protection: Provide protection and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
 - a. Restrict use of noisemaking tools and equipment to hours that will minimize complaints from persons or firms on or near the Project Site.
 - b. Provide dust control while Work of this Contract is being performed. Limit situations that may create dust contamination while Work of this Contract is idle.
 - c. Refer to Section 01 "Work Restrictions" for additional information.
4. Provide all Control Lines and Elevations as required. SRR shall transfer lines and elevations to other locations as necessary.
5. The Architectural Drawings are schematic in nature, and the CC will make adequate provisions to accommodate the actual field conditions without additional cost to the Owner.
6. Provide all demolition of General Construction Systems indicated in the Construction Documents, and/or required for Work of this Prime Contract.
 - a. Coordinate with all other Prime Contracts regarding all removals required for the Project.
 - b. Demolition of a system shall mean any and all components, removed in their entirety, to the point of origin or source.
7. Provide all doors, frames, hardware, windows, and glazing as per the Construction Documents.
8. Provide all cut and patch Work related to that of this Prime Contract, and at those areas specifically identified in the Construction Documents, regardless of trade creating the area to be patched.
 - a. Each Prime Contract is responsible for all other respective cutting and patching required of their installations (refer to Section "Cutting and Patching" for further information).
9. Provide finishes including, but not limited to; CMU, gypsum board assemblies, plaster, tile, and all paint, flooring and finishing systems.
 - a. Provide all associated surface preparation for each finish included in this Prime Contract.
 - b. Prep/Paint exposed structural steel and/or concrete including related deck, as indicated in the Construction Documents.
 - c. Prep/paint all exposed, unfinished ducts and conduit in related finished areas.
10. Provide all miscellaneous wood blocking, shimming and supports for items or equipment installed under this Prime Contract, and as coordinated with other Prime Contractors for metal strapping and/or wood blocking for installations of other Prime Contracts.
11. Provide all access doors/panels indicated, and those not indicated whereas inaccessible installations have been provided by this Prime Contract, located above hard ceilings or in walls.
12. Provide through-penetration fire stop systems at all penetrations made by this Prime Contract, maintaining listed ratings of indicated assemblies. Provide repair of existing through-penetration fire stopping damaged by Work of this Prime Contract.

- a. Sleeves with fire stopping are to be installed in sequence with fire-rated construction. This Prime Contract shall be responsible for installing fire stopping material at intersection of sleeve and constructed materials.
 13. Provide coordination with, and notification to, the Construction Site Representative(s) for all specified testing, training, commissioning, etc., of the Work of this Prime Contract.
 14. Substantial Completion: Clean all GC installations and provided equipment at the time of Substantial Completion or as directed by Construction Site Representative(s).
 15. Coordinate all the preceding requirements, accordingly, with all applicable Alternates indicated in Division 01 Section "Alternates".
 16. Provide plumbing scope as indicated on drawing sheet P.301.
 17. Provide electrical scope as indicated on drawing sheet E.301.
- E. Supplemental Temporary Facilities and Controls by GC includes but is not limited to:
1. Waste Disposal Facilities: Provide general debris/refuse/construction waste containers and waste management (dumpsters, off-site disposal of demolished/removed materials, etc.), for their own respective purposes, and for use by Mechanical, Electrical, and Plumbing Prime Contracts.
 2. Misc. Temporary Fences, Gates and Barricades: Provide and maintain temporary fencing and barricading to keep unauthorized persons away from interior and exterior excavations and/or construction areas for which this Prime Contract is responsible.
 - a. Coordinate via Construction Site Representative(s), at commencement of, and completion of construction areas, including but not limited to those indicated in the Construction Documents.
 3. Temporary Doors, Frames & Wall Assemblies: Provide, maintain and eventually remove all temporary installations per OSHA Regulations, Industry Standards, or as indicated in the Construction Documents.
 - a. Provide fire rated assemblies as required.
 - b. Provide exit (panic bar/crash bar) devices at locations of egress.
 - c. Coordinate locations with Construction Exiting Plan, Sequencing/Phasing Plans, and the Construction Site Representative.
 - d. Temporary doors shall be constructed using 1/2' plywood and 2x construction, equipped with hasps, locks, handle and latch mechanism, and spring or counter weight installed to allow door to close after opening.
 - e. Permanent doors will not be used in temporary conditions.
 4. Temporary Window Openings: Window openings shall be enclosed using 2x construction, 1/2' plywood, and reinforced polyethylene. Where window opening start at or near the floor, plywood shall be installed from finish floor to minimum of 42" AFF; reinforced poly may be installed from this point up. Should contractor choose to install plywood across the entire opening, sufficient area will be installed with reinforced poly to allow emergency escape, if required, and to allow natural light into the work area.
 - a. Installation shall be insulated if temporary heat or cooling is being employed.

5. Temporary Exterior Wall Enclosure: Provide and maintain temporary enclosures for weather protection and security of the construction in progress up until completion of permanent installation specified. Enclosures shall protect the building from exposure, foul weather, other construction operations, and similar activities. Provide temporary weather tight enclosure for building exterior.
 - a. Where heating and cooling is needed and permanent enclosure is not complete, provide insulated temporary enclosures. Coordinate enclosure with venting and material drying or curing requirements to avoid dangerous conditions and effects.
 - b. Install tarpaulins securely; install fire retardant materials only.
 - c. Where temporary wood enclosures exceed 100 sq. ft. in area, use fire retardant treated materials for framing and sheathing.
 - d. All cost incurred to repair and/or replace materials damaged, due to the failure of GC to provide and maintain weather tight enclosure shall be borne by this Prime Contract. This includes any contamination of materials that may lead to the introduction of mold and mildew.
 - e. Immediately notify the Construction Site Representative, in writing, as to damage to temporary enclosures by “others”; identify responsible party in the submission. Owner shall not be liable for damages caused by “others” if Prime Contract cannot identify responsible party.

6. Temporary Sanitary Facilities: Provide temporary self-contained toilets units for duration of the project for use by forces of all Prime Contracts (including abatement and demolition phases) and their subcontractors, until completion of Punch List work, and closeout of the Contracts.
 - a. Comply with regulations and health codes for type, number, location, operation, and maintenance of fixtures and facilities.
 - b. Provide separate facilities (minimum of one ea.) for male and female personnel in proportion required by OSHA.
 - c. Shield toilets to ensure privacy.
 - d. Coordinate mobilization and demobilization of units with Construction Site Representative(s).
 - e. Toilets shall be cleaned at least once per week, with additional facilities or cleanings provided if requested by Construction Site Representative(s).
 - f. Provide and maintain adequate supply of toilet tissue and hand sanitizer for each facility.

7. Indoor air quality management at all areas of Construction, once building is enclosed.
 - a. Provide all necessary dust partitions, fans, temporary ducts, and barricades to properly contain and ventilate all work area fumes and odors, created by demolition and new construction or alterations, directly to the outside. Ventilate to an area outside the building, sufficiently away from the building, as not to contaminate other areas. There will be no additional claims honored if the Construction Site Representative requests additional ventilation or requirements.
 - b. Provide and exhaust air system for the project indoor areas that could produce fumes, VOC's, off gasses, dusts, mists, or other emissions.
 - c. System Operation:
 - 1) A sufficient quantity of exhaust fans in existing window openings or other approved locations shall be operated.
 - 2) Exhaust air system shall operate for a minimum of 72 hours after work is completed or until all materials have cured sufficiently so as to stop out –

- gassing of fumes or odors and area has been ventilated to remove all detectable traces of odors and fumes.
- 3) Maintain 25 feet clearance from all temporary exhaust outlets to all active building outdoor air intakes.
 - 4) Refer to Division 01 Section "Work Restrictions" for further information.
8. Project Signage: Provide Project sign(s), and any/all construction signage indicated in the Construction Documents.
 - a. Coordinate installation via Construction Site Representative(s).
 9. Provide all shoring required for Work of this Contract, including but not limited to.
 - a. Cutting or altering of existing construction.
 - b. Provide protection of all new and existing surfaces during the Work. Do not stand, walk, or work off of any unprotected finished surface above the floor.
 10. Maintain temporary fencing and barricading to keep unauthorized persons away from excavations and hazardous areas for which this Prime Contract is responsible.
 11. Traffic Controls: Provide flagman while any operations of this Prime Contract interfere with traffic flow on adjacent roadways.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION 011200