

2. Division 3 Section 03 30 00" Cast-in Place Concrete" *as applicable to work of this contract*
3. Division 10 – Specialties – Section 10 14 53 Site Signage and Section 10 75 00 Flagpoles.
4. Division 31 – Earth Work - all Sections.
5. Division 32 – Exterior Improvements - all Sections
6. Division 33 – Utilities - all Sections
7. The Site Work Contract #2 is responsible for installation of and maintenance of all Temporary Erosion and Sediment Control measure for the duration of the project as specified in, "Erosion and Sediment Control". ***Milestone schedule is to be reviewed as there will be the need for the Site Contractor to provide multiple phased visits for work as needed to complete work according to the milestone schedule.***

1.10 CONTRACT 3 - HEATING, VENTILATING, & AIR CONDITIONING WORK CONTRACT

- A. Work of this Contract includes, but is not limited to, the following descriptions:
1. Includes HVAC Equipment, Piping, ductwork, control systems, plus other construction operations traditionally recognized as heating, ventilating and cooling work. This includes, but is not limited to, all work shown on the "M & MD" drawings, and applicable information shown on the A & S drawings, unless noted otherwise. It also includes Administrative and coordination responsibilities.
 2. Coordination:
 - a. Coordination with the work of all the other contractors.
 3. Demolition
 - a. Provide phased demolition of all HVAC equipment and piping as shown and as required at the existing building. Remove items to the point of attachment to the plaster
 - b. Provide demolition of all unit ventilators, provide temporary protection for openings.
 - c. Removal of items as shown and/or required. Remove items to the point of attachment to the plaster walls, cut straps or other carriers and remove items, leave attachment in place.
 - d. Remove and properly dispose of control valves and valve actuators shown to be removed.
 - e. Remove and properly dispose of air dampers and actuators shown to be removed.
 - f. All cutting and patching necessary for work of this contract, including layout, sleeves, coring, debris removal, sawcuts, lintels (furnish and install), drywall work, plaster work, grouting, painting, ceiling removal and replacement, etc.
 4. Temporary Facilities
 - a. Provide Temporary Facilities indicated as Work of this Contract in Division 1 Section 01 50 00, "Temporary Facilities and Controls"
 5. Construction:
 - a. **In existing construction**, each Prime Contractor is to provide their own rough opening in walls, and floors including lintels and any required structural framing for penetrations as part of their own Prime Contract. All lintels and / or framing are to be sized in accordance with the lintel schedules and standard details within the contract documents unless specifically shown to be under the General Construction Contract. Installation is to be performed by a mechanic qualified and experienced with the materials and finishes being altered or installed. Submit to the Construction Manager the name and qualification of the subcontractor performing the installation prior to starting the work.

- b. Install all controls components into air and hydronic systems as required maintaining the integrity of the system:
 - 1) Install motor actuated dampers.
 - 2) Install airflow measuring stations.
 - 3) Install airside temperature and pressure sensors.
 - 4) Install hydronic control valves.
 - 5) Install hydronic temperature and pressure sensor wells
 - 6) Provide TAB and participate in commissioning work of the EMCS as required for controls of the work of this contract.
- c. Provide new Boilers and Condensing Units.
- d. Provide Hydronic and refrigerant piping and pumps
- e. Provide and install new exhaust fans and ductwork as shown.
- f. Provide unit heaters and humidifiers
- g. Provide Air Handling Units and Roof top units
- h. Provide split system air conditioning unit
- i. Provide water source Heat Pumps and / or VAV's
- j. Provide Fan Coil Units
- k. Supply exterior louvers for installation by the General Construction Work Contractor, including louvers for the existing building.
- l. Provide and install new unit heaters, piping controls.
- m. Provide and install ducting for other Contractor provided hoods.
- n. Provide contractor filters, final replacement filters and final duct cleaning.
- o. Provide and install all insulation, painting and labeling of new and modified piping, ductwork, and equipment.
- p. Provide all testing, adjusting, and balancing of all new and existing modified HVAC systems.
- q. All fees required for inspections and permits.
- r. Provide support framing for HVAC equipment, ie mechanical equipment curbs.
- s. Furnish access doors for HVAC access (to be installed by GC)
- t. Provide firestopping and sealing at all HVAC penetrations
- u. Furnish motor controllers/disconnects to Electrical Contract for installation and wiring.
- v. Provide the necessary layout for all roofing penetrations to the General Work Contractor and Roofing Renovation Contractor. Provide curbs for mechanical equipment.
- w. Venting and roof mounted exhaust fans for fume hoods by Mechanical Contractor
- x. Provide owner training / commissioning of equipment.
- 6. General Requirements, including but not limited to, additional items specifically indicated as the Work of this Contract.
- 7. Provide multiple work shifts as needed to complete work as shown on milestone schedule. Schedule shows a significant amount of work to be performed second shift.
"Two Work Shifts" will be required to perform the scheduled work.

- B. The Work of the HVAC Work Contract includes but is not limited to the Work that is specified in the Project Manual(s) and as shown on the drawings that form the contract plans. The Contractor is directed to examine all drawings since certain details and/or notes may appear anywhere therein that apply to his/her particular work. This prime contract is defined as, and includes, all Sections in the Divisions indicated by reference, and specific Sections noted:
- 1. Division 0 –Procurement and Contracting Requirement, all Sections.
 - 2. Division 1 –General Requirements all Sections, including Temporary Facilities indicated
 - 3. Section 07 84 00, Firestopping Systems, as required for the Work of this Contract
 - 4. Section 07 90 05, Joint Sealers, as required for the Work of this Contract

5. Division 23 – HVAC, all Sections.
 - a. *Section 23 09 23 – Direct Digital Control System for HVAC, is included in the HVAC Contract but for coordination and ancillary work purposes only. Coordinate with the Controls Contractor during all demolition and new work. Provide ancillary controls work as stated. Refer to Paragraph 1.7, G also.*

1.11 4 - ELECTRICAL WORK CONTRACT

- A. Work of this Contract includes, but is not limited to, the following descriptions:
 1. Includes Electrical Distribution Service, Lighting, CATV systems, Communications, Fire Alarm, Intercom Systems, Security Systems, Emergency Lighting, and other systems traditionally recognized as Electrical work. This includes but is not limited to, all work shown on the “E & ED” Drawings, and applicable information shown on the “A” and “S” Drawings, unless noted otherwise. It also includes administrative and coordination responsibilities.
 2. Coordination:
 - a. Coordination with the work of all the other contractors.
 - b. Coordination with the work of all outside vendors.
 - c. Coordinate with HazMat Contractor to hook-up and remove temporary panels.
 3. Demolition:
 - a. Removal of items as shown and/or required. Remove items to the point of attachment to the plaster walls, cut straps or other carriers and remove items, leave attachment in place. Coordinate shutoffs with General Contractor during demolition.
 - b.
 - c. Removal and disconnections of electrical devices in walls, ceilings and floors scheduled to be removed in the portion of the building to remain.
 - d. Removal of lighting fixtures not removed as ACM.
 - e. Coordinate with all Contractors for necessary shutdowns, provide temporary power as required.
 - f. Removal of exterior lighting fixtures and wiring.
 - g. Removal of existing unit ventilators power back to panel.
 - h. All cutting and patching necessary for work of this contract, including layout, sleeves, coring, debris removal, sawcuts, lintels (furnish and install), drywall work, plaster work, grouting, painting, ceiling removal and replacement, etc.
 4. Temporary Facilities
 - a. Provide Temporary Facilities indicated as Work of this Contract in Division 1 Section 01 50 00, “Temporary Facilities and Controls”
 - b. Provide temporary power and lights as per the Project Manual
 - c. Provide power for the Hazardous Materials Contractors sub-panels, connection & disconnection. Coordinate with HazMat Contractor.
 5. Construction:
 - a. **In existing construction**, each Prime Contractor is to provide their own rough opening in walls, and floors including lintels and any required structural framing for penetrations as part of their own Prime Contract. All lintels and / or framing are to be sized in accordance with the lintel schedules and standard details within the contract documents unless specifically shown to be under the General Construction Contract. Installation is to be performed by a mechanic qualified and experienced with the materials and finishes being altered or installed. Submit to the Construction Manager the name and qualification of the subcontractor performing the installation prior to starting the work.