SECTION 00 60 00 - PROJECT FORMS

I.I FORM OF AGREEMENT AND GENERAL CONDITIONS

- A. The following form of Owner/Contractor Agreement and form of the General Conditions shall be used for Project:
 - AIA Document A101, "Standard Form of Agreement between Owner and Contractor, Stipulated Sum."
 - a. The General Conditions for Project are AIA Document A201, "General Conditions of the Contract for Construction."
 - 2. AIA Document A102, "Standard Form of Agreement between Owner and Contractor, Cost Plus Fee, Guaranteed Maximum Price."
 - The General Conditions for Project are AIA Document A201, "General Conditions of the Contract for Construction."
 - 3. AIA Document A103, "Standard Form of Agreement between Owner and Contractor, Cost Plus Fee."
 - a. The General Conditions for Project are AIA Document A201, "General Conditions of the Contract for Construction."
 - 4. AIA Document A105, "Standard Form of Agreement between Owner and Contractor for a Small Project, Where the Basis of Payment Is a Stipulated Sum."
 - 5. AIA Document A132, "Standard Form of Agreement between Owner and Contractor, Construction Manager as Adviser Edition."
 - a. The General Conditions for Project are AIA Document A232, "General Conditions of the Contract for Construction, Construction Manager as Adviser Edition."
 - 6. AIA Document A133, "Standard Form of Agreement between Owner and Contractor, Construction Manager as Constructor, Guaranteed Maximum Price."
 - a. The General Conditions for Project are AIA Document A201, "General Conditions of the Contract for Construction."
 - AIA Document A133, "Standard Form of Agreement between Owner and Contractor for Integrated Project Delivery."
 - a. The General Conditions for Project are AIA Document A295, "General Conditions of the Contract for Integrated Project Delivery."
 - 8. The General Conditions are included in the Project Manual
 - 9. Requirements for WBE/MBE as required by financial institutions & Owner must be strictly adhered to.

PROJECT FORMS 006000 - I

10. Owner's document(s) bound and referenced in Section 00 01 16.

1.2 ADMINISTRATIVE FORMS

- A. Administrative Forms: Additional administrative forms are specified in Division 01 General Requirements.
- B. Copies of AIA standard forms may be obtained from the American Institute of Architects; http://www.aia.org/contractdocs/purchase/index.htm; docspurchases@aia.org; (800) 942-7732.

C. Preconstruction Forms:

- I. Form of Performance Bond and Labor and Material Bond: AIA Document A312, "Performance Bond and Payment Bond."
- 2. Form of Certificate of Insurance: AIA Document G715, "Supplemental Attachment for ACORD Certificate of Insurance 25-S."

D. Information and Modification Forms:

- I. Form for Requests for Information (RFIs): AIA Document G716, "Request for Information (RFI)."

 Or RFI form included at end of this section.
- 2. Form of Request for Proposal: AIA Document G709, "Work Changes Proposal Request."
- 3. Change Order Form: AIA Document G701, "Change Order."
- 4. Form of Architect's Memorandum for Minor Changes in the Work: AIA Document G707, "Architect's Supplemental Instructions."
- 5. Form of Change Directive: AIA Document G714, "Construction Change Directive."

E. Payment Forms:

- Schedule of Values Form: AIA Document G703, "Continuation Sheet."
- 2. Payment Application: AIA Document G702/703, "Application and Certificate for Payment and Continuation Sheet."
- 3. Form of Contractor's Affidavit: AIA Document G706, "Contractor's Affidavit of Payment of Debts and Claims."
- 4. Form of Affidavit of Release of Liens: AIA Document G706A, "Contractor's Affidavit of Payment of Release of Liens."
- 5. Form of Consent of Surety: AIA Document G707, "Consent of Surety to Final Payment."

END OF DOCUMENT 006000

PROJECT FORMS 006000 - 2

RFI



482 Norristown Road, Suite 200 Blue Bell, PA 19422 610.834.7805 Kimmel-Bogrette.com

roject Name: MSMC – Guzman Hall IFI #: Date:	
Tompany: Jame:	
Question:	
Prawing/Spec Reference:	
inswer:	
answered by:	
attachments:	

SECTION 01-3400 - COORDINATION DRAWINGS

PART I - GENERAL

I.I RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Where space for installation of essential building services is limited, and to avoid conflicts among the building trades, it is necessary for the Prime Contractors to coordinate the use of "shared" space, and prepare Coordination Drawings, before commencing the Work. All Prime Contractors and their associated subcontractors, during the coordination process, shall harmoniously plan and/or adjust the location of items as necessary, to avoid such conflicts and to ensure future access to critical items of equipment. All Prime Contractors shall also coordinate the installation sequence as necessary.
- B. Coordination of the Work, and production of Coordination Drawings, are contractual obligations of all Prime Contractors and led by the Project Coordinator and Coordinators for the other Primes. The Owner will not compensate any Prime Contractor for conflicts arising during installation, should they be the result of improper coordination between Prime Contractors. Nor will the Owner extend the Contract duration, due to delays caused by improper coordination. Each Contractor shall be solely responsible to recover any and all construction time lost as a result of such delays.
- C. Coordination drawings are in addition to separate shop drawings to be submitted at the conclusion of the coordination process by each Prime Contractor (as required by other specification sections).

I.3 SUBMITTALS

- A. Time of submission of Coordination Drawings shall be determined at the initial job conference, and shall be included as a milestone on the Construction Schedule. The General Construction Contractor (Project Coordinator) shall initiate this action and acquire the necessary dates from the other Prime Contractors as part of their overall scheduling responsibilities.
- B. All Prime Contractor{s} shall jointly develop and submit dimensioned Coordination Drawings indicating the arrangement of General Construction, Mechanical (HVAC), Plumbing, Electrical and Fire Protection work, including but not limited to: all ducts, air-handling equipment, control equipment, piping, conduits, raceways, junction boxes, fixtures, panels, and all associated equipment, which must be coordinated with the General Construction and other equipment or distribution lines. The Coordination Drawings must be signed and dated by all Prime Contractors, indicating concurrence, and transmitted to the Project Coordinator (in accordance with the construction schedule), for submission.
- C. The Owner's receipt of Coordination Drawings does not in any way constitute approval, or relieve the Prime Contractors of the responsibility to accurately coordinate and install their work.
- D. The Project Coordinator shall submit completed, signed, and dated Coordination Drawings as follows:

- 1. The Architect one (I) copy of each Coordination Drawing and one (I) PDF file containing each drawing.
- 2. Prime Contractors one (1) copy of each Coordination Drawing and one (1) PDF file containing each drawing.
- E. Note: If determined necessary, Coordination Drawings may be formulated and submitted in partial submittals to facilitate the construction schedule and sequence of work within the Project. This must be jointly discussed and agreed to by all Prime Contractors at the initial job conference, and a priority of sequence must be established that has the concurrence of all parties (including the Owner).
- F. The Project Coordinator shall keep all coordination drawings on-site at all times and updated regularly through the entire construction duration. These drawings will become part of the as-built drawing package.

I.4 COORDINATION OF WORK

- A. Each Prime Contractor shall coordinate its construction operations with those of other Prime Contractors and entities to ensure efficient and orderly installation for each part of the Work. Each Prime Contractor shall coordinate its operations with other operations, included in different Sections that depend on each other for proper installations, connection, and operation. All Prime Contractors shall:
 - I. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 - 2. Coordinate installation of all components with other Prime Contractors to ensure adequate accessibility/clearance for required maintenance and service.
 - 3. Make provisions to accommodate items scheduled for later installation.
- B. Each Prime Contractor shall clearly show, and coordinate with the other Prime Contractors, the following:
 - I. Arrange for pipe spaces, chases, slots, sleeves, and openings with general construction work, and arrange in building structure during progress of the Work, to allow for and facilitate distribution line and equipment installation.
 - 2. Coordinate installation of required supporting devices for ductwork, piping, and conduit, as well as sleeves, and other structural components, as they are constructed.
 - 3. Coordinate requirements for access panels and doors for HVAC, Plumbing, Fire Protection and Electrical items requiring access where concealed behind finished surfaces.
 - 4. Coordinate electrical connections to equipment provided by all Contractors.
 - 5. Sequence, coordinate, and integrate installing materials and equipment for efficient flow of the Work. Coordinate installing large items of equipment requiring positioning before closing in the building.

1.5 COORDINATION DRAWINGS

- A. Format: All Coordination Drawings shall include "X, Y & Z" coordinates for all distribution and equipment, which will allow a three-dimensional coordination plan to be created.
 - 1. Indicate ducts, pipes and conduits of dimensions greater than 6" by double lines.
 - 2. Circle and clearly note all deviations from the Contract Documents, with reason for deviation stated.
 - 3. Use scale not less than $\frac{1}{4}$ " = 1'-0". Detail complex areas at larger scale.
 - 4. Each different system shall be drawn in a different color.
 - 5. The MEPFP Coordinator shall prepare a title box on each drawing which allows space for the signature of the authorized individual from the Prime Contractor's firms, with the statement below:

"The undersigned individuals certify by their signatures that they have coordinated their work with all other work noted on this drawing and the contract documents and shall be held responsible for any costs arising out of their respective inability to fully coordinate their work."

B. Coordination Procedure:

- The MEPFP Coordinator is responsible for acquiring from all the other Prime Contractors and assembling scaled coordination drawings indicating all new and existing architectural finishes, as well as the locations of all ductwork, piping, conduit, system devices, associated equipment, etc. for this Project.
- 2. The MEPFP Coordinator shall prepare the basic background drawings, showing the existing conditions as well as the new construction items to be installed by this Contractor. The MEPFP Coordinator may either:
 - a. Produce the required base drawings itself,
 - b. Obtain them from the Architect, at a cost not to exceed 1.2 times the cost of reproduction, or
 - c. Via e-mail, obtain electronic files from the Architect of the floor plans and reflected ceiling plans for a fee of \$250.00, payable to the Architect. A Letter of Indemnification will need to be signed by any contractor using the electronic files.
- 3. After producing its own background drawings or obtaining background drawings from the Architect, the MEPFP Coordinator shall put the following information on the Coordination Drawings: Architectural backgrounds, structural work, ceiling systems, and any special work, such as pools construction. The Project Contractor shall call attention on the Coordination Drawings to particular areas of conflict, which may affect the architecture or the structure.
- 4. After adding its specific requirements to these reproducible background drawings, the MEPFP Coordinator shall place his signature on each sheet and give the Coordination Drawings to the Plumbing Contractor.
- 5. The Plumbing Contractor shall put the following information on the Coordination Drawings: Plumbing Contract Work.
- 6. After adding its specific requirements to these reproducible background drawings, the Plumbing Contractor shall place his signature on each sheet and give the Coordination Drawings to the Fire Protection Contractor.

- 7. The Fire Protection Contractor shall put the following information on the Coordination Drawings: Fire Protection Contract Work, including Sprinkler/ Fire Protection Systems.
- 8. After adding its specific requirements to these reproducible background drawings, the Fire Protection Contractor shall place his signature on each sheet and give the Coordination Drawings to the Electrical Contractor.
- 9. The Electrical Contractor shall put the following information on the Coordination Drawings: Electrical Contract Work, including fire alarm, telecommunications and security systems, major conduit runs, lighting and panel locations, and conduit embeds in floor slabs and underground.
- 10. After adding its specific requirements to these reproducible background drawings, the Electrical Contractor shall place his signature on each sheet and give the Coordination Drawings to the General Contractor.
- II. The General Contractor shall put the following information on the Coordination Drawings: Any general construction items not shown on the coordination drawings.
- 12. The General Contractor shall place his signature on each sheet and give the Coordination Drawings to the next Prime Contractor (if there are other Prime Contractors not mentioned here), or otherwise return the Coordination Drawings to the Project Coordinator, for Submission to the Owner and Architect.
- 13. Discrepancies between the Prime Contractors shall be settled by the Project Coordinator, if no design modifications are required. Where design modifications are required, affected Contractor(s) shall submit them to the Architect for review and resolution, or initiate a Request For Information (RFI).
- 14. The Prime Contractors, together, are solely responsible for the accuracy and completeness of all Coordination Drawings.
- 15. The MEPFP Coordinator shall lead in the resolution of the final coordination drawing to be initialed (certifying that they have met, reviewed and agreed) by all contractors and submitted to the Architect within 65 days after the start of construction for review. Other contractors shall finalize their shop drawings and submittals in accordance with the coordination drawings.

D. Distribution:

I. Upon receipt of all fully-coordinated and signed Coordination Drawings from the other Prime Contractors, the Project Coordinator shall make proper distribution, as defined above

E. Review:

- Architect will review coordination drawings to confirm that the Work is being coordinated, but not for the details of the coordination, which are Contractor's responsibility. If Architect determines that coordination drawings are not being prepared in sufficient scope or detail, or are otherwise deficient, Architect will so inform Contractor, who shall make changes as directed and resubmit.
- I.06 SPECIFIC REQUIREMENTS

A. General Construction/Structural Work Information Required:

- I. Openings and sleeve locations required in slabs, walls, beams, and other structural elements, including required openings not indicated on the Contract Documents.
- 2. Slab edge locations.
- 3. Embed locations, as described above. Note embedded steel angles at edges of sump and sewage ejector pits, to accept basin covers.
- 4. Wall and chase spaces for housing HVAC, Plumbing, Fire Protection, or Electrical items.
- 5. All site work and utilities
- 6. Other specific/critical conditions unique to this Project, not noted above but necessary to assure proper coordination.

B. HVAC Work Information Required:

- 1. Sizes and bottom elevations of rectangular ductwork, including angle bracing, flanges, and support systems.
- 2. Sizes and centerline elevations of round ductwork, piping and conduit runs
- 3. Acoustical lining in ductwork.
- 4. Identification of ductwork pressure class.
- 5. Dimensions of major components, such as dampers, valves, diffusers, registers, cleanouts, coils, VAV boxes, HVAC equipment, and electrical distribution equipment.
- 6. Fire-rated enclosures around ductwork.
- 7. Access panels required.
- 8. Geothermal well field
- 9. Other specific/critical conditions unique to this Project, not noted above but necessary to assure proper coordination.

C. Plumbing and Fire Protection Information Required:

- 1. Sizes and centerline elevations of piping runs.
- 2. Locations of plumbing valves, equipment, and fixtures.
- 3. Locations of standpipes, floor control assemblies, fire hose valves, mains, piping, branch lines, pipe drops, sprinkler heads, fire pumps/controllers, and jockey pumps.
- 4. Other specific/critical conditions unique to this Project, not noted above but necessary to assure proper coordination.

D. Electrical Work Information Required:

- I. Runs of vertical and horizontal conduit, I $\frac{1}{4}$ " diameter and larger.
- 2. Light fixture locations.
- 3. Exit light locations.
- 4. Smoke detector and other fire alarm locations.
- 5. Panelboards, switchboards, switchgear, transformers, busways, generators and motor control center, exit signs, and emergency battery pack locations.
- 6. Locations of pull boxes and junction boxes, dimensioned from column centerlines.
- 7. Access panels required.
- 8. Site electric
- 9. Other specific/critical conditions unique to this Project, not noted above but necessary to assure proper coordination.
- E. Ceiling Systems and Plenum Space Information Required:
 - I. For HVAC, plumbing, fire protection, fire alarm, electrical, controls, and telecommunications Work penetrating acoustical ceilings, show locations of each item (including sprinkler heads, diffusers, grilles, access doors, light fixtures, smoke detectors, exit signs, speakers, and other visible ceilingmounted devices) relative to the acoustical ceiling grid.
 - 2. Locate components within ceiling plenums to accommodate layout of light fixtures indicated on Drawings. Clearly indicate areas of conflict between light fixtures and other components on Coordination Drawings.
 - 3. Other specific/critical conditions unique to this Project, not noted above but necessary to assure proper coordination.

1.07 ORGANIZATION OF DRAWINGS

A. Organize Coordination Drawings into a set, as follows: Floor Plans, Wall and Building Sections, Mechanical/Plumbing/Electrical Rooms, Structural Penetrations, Imbeds, Curbs, Pads, and Floor Depressions.

PART 2 – PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

END OF SECTION 01-3400