

## SECTION 01 31 00 - PROJECT MANAGEMENT AND COORDINATION

## PART I - GENERAL

## I.1 RELATED DOCUMENTS

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

## I.2 SUMMARY

- A. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
  - 1. General coordination procedures.
  - 2. Coordination drawings.
  - 3. Requests for Information (RFIs).
  - 4. Project meetings.
- B. Each contractor shall participate in coordination requirements. Certain areas of responsibility are assigned to a specific contractor.
- C. Related Requirements:
  - 1. Section 01-3200 "Construction Progress Documentation" for preparing and submitting Contractor's construction schedule.
  - 2. Section 01-7300 "Execution" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.
  - 3. Section 01-7700 "Closeout Procedures" for coordinating closeout of the Contract.

## I.3 DEFINITIONS

- A. RFI: Request from Owner, Owner's Representative, Architect, or Contractor seeking information required by or clarifications of the Contract Documents.

## I.4 INFORMATIONAL SUBMITTALS

- A. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
  - 1. Name, address, and telephone number of entity performing subcontract or supplying products.
  - 2. Number and title of related Specification Section(s) covered by subcontract.
  - 3. Drawing number and detail references, as appropriate, covered by subcontract.
- B. Key Personnel Names: Within 15 days of starting construction operations, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including home, office, and

cellular telephone numbers and e-mail addresses. Provide names, addresses, and telephone numbers of individuals assigned as alternates in the absence of individuals assigned to Project.

1. Post copies of list in project meeting room, in temporary field office, and by each temporary telephone. Keep list current at all times.

#### I.5 GENERAL COORDINATION PROCEDURES

- A. Coordination: Each contractor shall coordinate its construction operations with those of other contractors and entities to ensure efficient and orderly installation of each part of the Work. Each contractor shall coordinate its operations with operations, included in different Sections, that depend on each other for proper installation, connection, and operation.
  1. 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 different components with other contractors to ensure maximum performance and accessibility for required maintenance, service, and repair.
  3. Make adequate provisions to accommodate items scheduled for later installation.
- B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
  1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
  1. Preparation of Contractor's construction schedule.
  2. Preparation of the schedule of values.
  3. Installation and removal of temporary facilities and controls.
  4. Delivery and processing of submittals.
  5. Progress meetings.
  6. Preinstallation conferences.
  7. Project closeout activities.
  8. Startup and adjustment of systems.
- D. Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials. Coordinate use of temporary utilities to minimize waste.
  1. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work. See other Sections for disposition of salvaged materials that are designated as Owner's property.

#### I.6 COORDINATION DRAWINGS

- A. Coordination Drawings, General: Prepare coordination drawings according to requirements in individual Sections, and additionally where installation is not completely shown on Shop Drawings, where limited space availability necessitates coordination, or if coordination is required to facilitate integration of products and materials fabricated or installed by more than one entity.

- I. Content: Project-specific information, drawn accurately to a scale large enough to indicate and resolve conflicts. Do not base coordination drawings on standard printed data. Include the following information, as applicable:
  - a. Use applicable Drawings as a basis for preparation of coordination drawings. Prepare sections, elevations, and details as needed to describe relationship of various systems and components.
  - b. Coordinate the addition of trade-specific information to the coordination drawings by multiple contractors in a sequence that best provides for coordination of the information and resolution of conflicts between installed components before submitting for review.
  - c. Indicate functional and spatial relationships of components of architectural, structural, civil, mechanical, and electrical systems.
  - d. Indicate space requirements for routine maintenance and for anticipated replacement of components during the life of the installation.
  - e. Show location and size of access doors required for access to concealed dampers, valves, and other controls.
  - f. Indicate required installation sequences.
  - g. Indicate dimensions shown on the Drawings. Specifically note dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternate sketches to Architect indicating proposed resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.
  
- B. Coordination Drawing Organization: Organize coordination drawings as follows:
  1. Mechanical Rooms: Provide coordination drawings for mechanical rooms showing plans and elevations of mechanical, plumbing, fire-protection, fire-alarm, and electrical equipment.
  2. Mechanical and Plumbing Work: Show the following:
    - a. Sizes and bottom elevations of ductwork, piping, and conduit runs, including insulation, bracing, flanges, and support systems.
    - b. Dimensions of major components, such as dampers, valves, diffusers, access doors, cleanouts and electrical distribution equipment.
    - c. Fire-rated enclosures around ductwork.
  3. Electrical Work: Show the following:
    - a. Runs of vertical and horizontal conduit **1-1/4 inches** in diameter and larger.
    - b. Light fixture, exit light, emergency battery pack, smoke detector, and other fire-alarm locations.
    - c. Panel board, switch board, switchgear, transformer, busway, generator, and motor control center locations.
    - d. Location of pull boxes and junction boxes, dimensioned from column center lines.
  4. Fire-Protection System: Show the following:
    - a. Locations of standpipes, mains piping, branch lines, pipe drops, and sprinkler heads.
  5. 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.

- C. Coordination Digital Data Files: Prepare coordination digital data files according to the following requirements:
1. File Preparation Format: Same digital data software program, version, and operating system as original Drawings.
  2. File Preparation Format: DWG, Version, operating in Microsoft Windows operating system.
  3. File Submittal Format: Submit or post coordination drawing files using Portable Data File (PDF) format.
  4. Architect will furnish Contractor one set of digital data files of Drawings for use in preparing coordination digital data files. See Section 01 34 00 for more information.
    - a. Architect makes no representations as to the accuracy or completeness of digital data files as they relate to Drawings.
    - b. Digital Data Software Program: Drawings are available in AutoCAD.
    - c. Contractor shall execute a data licensing agreement in the form of Agreement form acceptable to Owner and Architect.

#### I.7 REQUESTS FOR INFORMATION (RFIs)

- A. General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.
1. Architect will return RFIs submitted to Architect by other entities controlled by Contractor with no response.
  2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:
1. Project name.
  2. Project number.
  3. Date.
  4. Name of Contractor.
  5. Name of Architect and Owner's Representative.
  6. RFI number, numbered sequentially.
  7. RFI subject.
  8. Specification Section number and title and related paragraphs, as appropriate.
  9. Drawing number and detail references, as appropriate.
  10. Field dimensions and conditions, as appropriate.
  11. Contractor's suggested resolution. If Contractor's suggested resolution impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
  12. Contractor's signature.
  13. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.
    - a. Include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments on attached sketches.
- C. RFI Forms: AIA Document G716.

- I. Attachments shall be electronic files in Adobe Acrobat PDF format.
  - D. Architect's and Owner's Representative's Action: Architect and Owner's Representative will review each RFI, determine action required, and respond. Allow seven working days for Architect's response for each RFI. RFIs received by Architect or Owner's Representative after 1:00 p.m. will be considered as received the following working day.
    - I. The following Contractor-generated RFIs will be returned without action:
      - a. Requests for approval of submittals.
      - b. Requests for approval of substitutions.
      - c. Requests for approval of Contractor's means and methods.
      - d. Requests for coordination information already indicated in the Contract Documents.
      - e. Requests for adjustments in the Contract Time or the Contract Sum.
      - f. Requests for interpretation of Architect's actions on submittals.
      - g. Incomplete RFIs or inaccurately prepared RFIs.
    2. Architect's action may include a request for additional information, in which case Architect's time for response will date from time of receipt of additional information.
    3. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Section 012600 "Contract Modification Procedures."
      - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect and Owner's Representative in writing within 10 days of receipt of the RFI response.
  - E. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly .Include the following:
    1. Project name.
    2. Name and address of Contractor.
    3. Name and address of Architect and Owner's Representative.
    4. RFI number including RFIs that were returned without action or withdrawn.
    5. RFI description.
    6. Date the RFI was submitted.
    7. Date Architect's and Owner's Representative's response was received.
  - F. On receipt of Architect's and Owner's Representative's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect and Owner's Representative within seven days if Contractor disagrees with response.
    1. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.
    2. Identification of related Field Order, Work Change Directive, and Proposal Request, as appropriate.
- I.8 PROJECT MEETINGS
- A. General: GC to Schedule and conduct meetings and conferences at Project site unless otherwise indicated.

1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times.
  2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
  3. Minutes: Entity responsible for conducting meeting will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner, Owner's Representative, and Architect, within three days of the meeting.
- B. "Preconstruction Conference: GC to schedule, prepare agenda, create and distribute meeting minutes and conduct a Preconstruction Conference before starting construction, at a time convenient to the Owner, Owner's Rep and Architect.
1. Conduct the conference to review responsibilities and personnel assignments
  2. Attendees: Authorized representatives of Owner, Owner's Rep, Architect and their Consultants; Prime Contractors and their Project Managers and Superintendents; major subcontractors; suppliers; and other key parties as appropriate. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work
  3. Agenda: Discuss items of significance that could affect progress, including the following:
    - a. Tentative Construction schedule
    - b. Phasing
    - c. Critical Work sequencing
    - d. Designation of key personnel and their duties
    - e. Lines of communication
    - f. Procedures for processing field decisions and Change Orders
    - g. Procedures for RFI's
    - h. Procedures for testing and inspections
    - i. Procedures for processing Applications for Payment
    - j. Distribution of the Contract Documents
    - k. Submittal procedures
    - l. Preparation of Record Documents
    - m. Use of the Premises
    - n. Work restrictions
    - o. Working hours
    - p. Owner's occupancy requirements
    - q. Responsibility for temporary facilities and controls
    - r. Procedures for moisture and mold control
    - s. Procedures for disruptions and shutdowns
    - t. Construction waste management and recycling
    - u. Parking and laydown areas
    - v. Office, work and storage areas
    - w. Equipment deliveries and priorities
    - x. First Aid
    - y. Security
    - z. Progress cleaning and site maintenance
- C. Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity that requires coordination with other construction.

1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Architect, Owner's Representative of scheduled meeting dates.
  2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:
    - a. Deliveries.
    - b. Submittals.
    - c. Review of mockups.
    - d. Possible conflicts.
    - e. Compatibility requirements.
    - f. Time schedules.
    - g. Weather limitations.
    - h. Manufacturer's written instructions.
    - i. Compatibility of materials.
    - j. Acceptability of substrates.
    - k. Space and access limitations.
    - l. Testing and inspecting requirements.
    - m. Installation procedures.
    - n. Coordination with other work.
    - o. Required performance results.
    - p. Protection of adjacent work.
    - q. Protection of construction and personnel.
  3. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
  4. Reporting: Distribute minutes of the meeting to each party present and to other parties requiring information.
  5. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.
- D. Progress Meetings: GC conduct progress meetings at weekly intervals.
1. Coordinate dates of meetings with preparation of payment requests.
  2. Attendees: In addition to representatives of Owner, Owner's Representative, and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
  3. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
    - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
      - 1) Review schedule for next period.

- b. Review present and future needs of each entity present, including the following:
  - 1) Interface requirements.
  - 2) Sequence of operations.
  - 3) Status of submittals.
  - 4) Deliveries.
  - 5) Off-site fabrication.
  - 6) Access.
  - 7) Site utilization.
  - 8) Temporary facilities and controls.
  - 9) Progress cleaning.
  - 10) Quality and work standards.
  - 11) Status of correction of deficient items.
  - 12) Field observations.
  - 13) Status of RFIs.
  - 14) Status of proposal requests.
  - 15) Pending changes.
  - 16) Status of Change Orders.
  - 17) Pending claims and disputes.
  - 18) Documentation for processing pay requests
  - 19) Manpower summaries and work progress
  - 20) Status of inspections
  - 21) Status of testing
4. Minutes: Entity responsible for conducting the meeting will record and distribute the meeting minutes to each party present and to parties requiring information.
  - a. Schedule Updating: Revise Contractor's construction schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.
- E. Coordination Meetings: Owner's Representative will conduct Project coordination meetings at weekly intervals. Project coordination meetings are in addition to specific meetings held for other purposes, such as progress meetings and preinstallation conferences.
  1. Attendees: In addition to representatives of Owner, Owner's Representative, and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meetings shall be familiar with Project and authorized to conclude matters relating to the Work.
  2. Agenda: Review and correct or approve minutes of the previous coordination meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
    - a. Combined Contractor's Construction Schedule: Review progress since the last coordination meeting. Determine whether each contract is on time, ahead of schedule, or behind schedule, in relation to combined Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
    - b. Schedule Updating: Revise combined Contractor's construction schedule after each coordination meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with report of each meeting.

c. Review present and future needs of each contractor present, including the following:

- 1) Interface requirements.
- 2) Sequence of operations.
- 3) Status of submittals.
- 4) Deliveries.
- 5) Off-site fabrication.
- 6) Access.
- 7) Site utilization.
- 8) Temporary facilities and controls.
- 9) Work hours.
- 10) Hazards and risks.
- 11) Progress cleaning.
- 12) Quality and work standards.
- 13) Change Orders.

3. Reporting: Record meeting results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01-3100

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