

010400 – COORDINATION

Latest Update: 06-12-2025 See Underlined Text for Edits.

(A/E: Edit specifications to meet project requirements. Update blue text in header for project name and submission phase. This includes but is not limited to updating Equipment and/or Material Model Numbers indicated in the specifications and adding any additional specifications that may be required by the project. Turn off all underlines)

PART 1 - GENERAL

1.1 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.

1.2 SUMMARY

- A. This Section includes administrative and supervisory requirements necessary for coordinating construction operations including, but not necessarily limited to, the following:
 - 1. General project coordination procedures.
 - 2. **Outage Scheduling Procedures**
 - 3. Conservation.
 - 4. Coordination Drawings.
 - 5. Administrative and supervisory personnel.
 - 6. Cleaning and protection.

1.3 COORDINATION

- A. Coordinate construction operations included in various Sections of these Specifications to assure efficient and orderly installation of each part of the Work. Coordinate construction operations included under different Sections that depend on each other for proper installation, connection, and operation.
 - 1. Schedule construction operations in the 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 to assure required minimum accessibility for maintenance, service, and repair.
 - 3. Make provisions to accommodate items scheduled for later installation.
- B. Where necessary, prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and attendance at meetings.
 - 1. Prepare similar memoranda for the University and sub-contractors where coordination of their work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and assure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:

Insert other Administrative Activities needed to suit project requirements.

1. Preparation of CPM schedules.
 2. Installation and removal of temporary facilities.
 3. Delivery and processing of submittals.
 4. Progress meetings.
 5. Work coordination meetings.
 6. Project closeout activities.
- D. Conservation: Coordinate construction operations to assure that operations are carried out with consideration given to conservation of energy, water, and materials.
1. Salvage materials and equipment involved in performance of, but not actually incorporated in, the Work.

Edit Outage Scheduling Procedures based on scope of project. Include all requirements for Electrical Infrastructure project.

1.4 OUTAGE SCHEDULING PROCEDURES

- A. All work that will result in any kind of interruption of operations (outage) to the campus including, but not limited to, electrical service, pedestrian pathway, and vehicular pathways or roads, shall be submitted to the University and Engineer for approval a minimum of 4 weeks prior to the requested outage date.
- B. The outage request shall include the following information, developed by the contractor:
1. Date, time, and duration of outage work.
 2. Step-by-step outage sequence indicating duration for each step and contractor outage.
 3. Electronic mark-up of contract documents to identify area of work and what work is being completed.
 - a. For an electrical outage, this will include the demo and new work single line diagrams and floor plan.
 - b. For a site outage, this will include the site plan and maintenance of traffic plans.
 4. For energy sources, identify lock-out-tag-out (LOTO) procedure, including which steps are expected to be completed by UMB.
 5. Copy of applicable electrical tests that have been completed.
 6. Completed UMB standard Outage Form
- C. Electrical outage requirements:
1. An electronic (PDF) up-to-date single line diagram for both demo and new work shall be maintained by the contractor at all times that identifies the following:
 - a. Work completed to date, identified in color with a legend.
 - b. Outstanding work.
 - c. Current LOTO locations.

2. Switching procedures:
 - a. Existing equipment not provided as part of this project will be operated by UMB.
 - b. Equipment provided as part of this project will be operated by the contractor.
3. Outage scheduling:
 - a. A maximum of three (3) electrical outages may be scheduled per week, excluding Mondays and Fridays. Weekend work is acceptable.
 - b. Outages, including equipment testing and commissioning and switching procedures, shall be completed by 6:00AM.
4. Re-energization requirements:
 - a. For low voltage equipment: equipment schedules, even if temporary, shall be provided on all energized equipment identifying branch circuit designations, feeder designations, and feed to/from designations at the conclusion of each outage.
 - b. For medium voltage equipment and feeders: a third party electrical testing agent hired by the contractor shall provide verification of phasing, that all grounds have been removed, and that any applicable electrical tests identified in the division 26 specifications have been completed prior to re-energization.

D. University engagement

1. Standing outage meetings, with frequency as dictated by the University based on the submitted outage plans by the Contractor, shall be attended by the Contractor. The meetings will include:
 - a. Review of submitted outages including outage procedure
 - b. Mitigation strategies for minimizing impact on campus operations
 - c. Forecasting future outages.
 - d. Review of up-to-date campus single lines, updated by the Contractor at the completion of each outage electronically in PDF.

1.5 SUBMITTALS

Delete the requirements for coordination drawings below if installation is completely covered in a single section or shown completely on shop drawings.

- A. Coordination Drawings: Prepare coordination drawings where careful coordination is needed for installation of products and materials fabricated by separate entities. Prepare coordination drawings where limited space availability necessitates maximum utilization of space for efficient installation of different components. At a minimum, prepare coordination drawings for all mechanical rooms, electrical rooms and substation rooms.

1. Show the relationship of components shown on separate Shop Drawings.
 2. Indicate required installation sequences.
 3. Comply with requirements contained in Section "Submittals."
 4. The coordination drawings shall be comprehensive drawings that show all work by all disciplines for each location on a single drawing. The drawings shall be prepared at a large enough scale to permit legibility and ease of recognition of all work.
- B. Staff Names: Within fifteen (15) days of commencement of construction operations, submit a list of the Contractor's principal staff assignments, including the superintendent and other personnel in attendance at the Project Site. Identify individuals and their duties and responsibilities. List their addresses and telephone numbers.
1. Post copies of the list in the Project meeting room, the temporary field office, and at each temporary telephone.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - PART 1 – EXECUTION

3.1 GENERAL COORDINATION PROVISIONS

- A. Inspection of Conditions: Require the Installer of each major component to inspect both the substrate and conditions under which Work is to be performed. Do not proceed until unsatisfactory conditions have been corrected in an acceptable manner.
- B. Coordinate temporary enclosures with required inspections and tests to minimize the necessity of uncovering completed construction for that purpose.

3.2 CLEANING AND PROTECTION

- A. Clean and protect construction in progress and adjoining materials in place, during handling and installation. Apply protective covering where required to assure protection from damage or deterioration until Substantial Completion.
- B. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to assure operability without damaging effects.
- C. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period. Where applicable, such exposures include, but are not limited to, the following:

Delete items from the list below that are not appropriate for the project. Add items to suit project requirements.

1. Excessive static or dynamic loading.
2. Excessive internal or external pressures.
3. Excessively high or low temperatures.
4. Thermal shock.
5. Excessively high or low humidity.
6. Air contamination or pollution.
7. Water or ice.

8. Solvents.
9. Chemicals.
10. Light.
11. Radiation.
12. Puncture.
13. Abrasion.
14. Heavy traffic.
15. Soiling, staining, and corrosion.
16. Bacteria.
17. Rodent and insect infestation.
18. Combustion.
19. Electrical current.
20. High-speed operation.
21. Improper lubrication.
22. Unusual wear or other misuse.
23. Contact between incompatible materials.
24. Destructive testing.
25. Misalignment.
26. Excessive weathering.
27. Unprotected storage.
28. Improper shipping or handling.
29. Theft.
30. Vandalism.

END OF SECTION 010400