

SECTION 01 31 00
PROJECT MANAGEMENT AND COORDINATION

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:

1. Definitions.
2. Construction Coordination.
3. Submittals.
4. Coordination Drawings.
5. Requests for Information (RFIs).
6. NPS/DSC Project Website.
7. Project Meetings.
8. Environmental Coordination.
9. Permits.

- B. Related Requirements:

1. Section 01 32 16, Construction Schedule, for preparing and submitting Contractor's construction schedule.
2. Section 01 73 40, Execution, for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.
3. Section 01 77 00, Closeout Procedures, for coordinating closeout of the Contract.
4. Section 01 79 00, Demonstration and Training, for coordinating training requirements for Government staff on new equipment.
5. Section 01 91 14, Equipment Testing and Facility Startup.
6. Section 01 91 15, Total Building Commissioning, for coordinating the work with Government's Commissioning Authority.

1.2 DEFINITIONS

- A. [Agency with Jurisdiction.](#)
- B. [Construction Permits – Contractor Provided.](#)
- C. [Government Furnished Permits.](#)

1.3 CONSTRUCTION COORDINATION

- A. Coordination: Coordinate construction operations included in different sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different sections, which depend on each other for proper installation, connection, and operation.
 - 1. Schedule construction operations in sequence required to obtain 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 accessibility for required maintenance, service, and repair.
 - 3. Make provisions to accommodate items scheduled for later installation.
 - 4. Where availability of space is limited, coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair of components, including mechanical and electrical.
 - 5. Properly plan construction operations to include permit requirements. Allow enough time to execute permit provisions to maintain work schedule, site visits, inspections, and reporting deadlines.
- 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. Refer to Section 01 40 00, Quality Requirements.
 - 2. Provide Method of Procedure for all outages and coordination with NPS. Provide Step-by-step procedure, timelines and critical involvement required by Contractor and NPS.
- C. Administrative Procedures:
 - 1. 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:
 - a. Preparation of Contractor's Construction Schedule.
 - b. Preparation of the Schedule of Values.
 - c. Installation and removal of temporary facilities and controls.
 - d. Delivery and processing of submittals.
 - e. Progress meetings.
 - f. Permit requirements.
 - g. Pre-installation conferences.
 - h. Project closeout activities.
 - i. Commissioning activities.

1.4 CONSTRUCTION CONSTRAINTS AND SEQUENCING

- A. Prior to work Contractor shall locate underground utilities as required in Section 01 73 40, Execution.
- B. Use of explosive materials for rock excavation, including but not limited to nitroglycerine and TNT based products, is not allowed. Refer to Section 31 23 16, Excavation for methods and products.
- C. Coordinate new facilities commissioning and startup activities that require transfer of process fluids including, but not limited to, wastewater, biomass or sludges between existing and new treatment facilities in accordance Section 01 91 14, Equipment Testing and Facility Startup.

1.5 CONTRACTOR'S USE OF CAD FILES

- A. At Contractor's written request, copies of CAD files will be provided to Contractor for Contractor's use in connection with Project, subject to the following conditions:
 - 1. Files will be provided as is; no format or other changes to files or changes to the objects in the drawing will be done by the Government.

1.6 SUBMITTALS

- A. Coordination Drawings: Prepare coordination drawings for South Rim WWTP site utilization through construction phases, to facilitate efficient and safe access for Contractor staff and NPS operations staff to existing wastewater treatment facilities to maximize utilization of space for efficient installation of different project components.
 - 1. Content:
 - a. Project-specific information, drawn accurately to scale. Do not base coordination drawings on reproductions of Contract Documents or standard printed data. Include-following information, as applicable:
 - 1) Indicate functional and spatial relationships of components of architectural, structural, civil, mechanical, and electrical systems.
 - 2) Indicate dimensions shown on the Drawings and make specific note of dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternate sketches to Contracting Officer (CO) for resolution of such conflicts.
 - 3) Indicate space requirements for routine access for construction and for maintenance and operation of WWTP components during construction.

- 4) Show location and size of roads, driveways, access points, access doors required for access to WWTP facilities.
 - 5) Indicate required construction and installation sequences.
2. Sheet Size: At least 8-1/2 inches by 11 inches (215 mm by 280 mm) but no larger than 30 inches by 40 inches (750 mm by 1,000 mm).
3. Number of Copies: Submit two opaque copies of each submittal. Contracting Officer (CO) will return one copy.
4. Refer to individual sections for coordination drawing requirements for Work in those sections.
5. Follow NPS DSC Electronic Drawing Standards. See [CAD/BIM \(Computer Aided Design/Building Information Modeling\) & Drafting Standards](#) page > DSC Requirements section.
6. Review: Contracting Officer will review coordination drawings to confirm Work is being coordinated; details of coordination are Contractor's responsibility. If Contracting Officer determines coordination drawings are not prepared in scope or detail, or are otherwise deficient, Contracting Officer will inform Contractor, who shall make changes and resubmit.
7. Coordination Drawing Prints: Prepare coordination drawing prints according to requirements in Section 01 33 23, Submittal Procedures.

B. Coordination Digital Data Files:

1. Prepare coordination digital data files according to:
 - a. File Preparation Format: Same digital data software program, version, and operating system as original Drawings.
 - b. File Submittal Format: Submit or post coordination drawing files using Portable Document Format (PDF) file format.
 - c. Contracting Officer will furnish Contractor one set of digital data files (AutoCad.dwg) of the Drawings for use in preparing coordination digital data files.
 - 1) Contracting Officer makes no representations as to accuracy or completeness of digital data files as they relate to the Drawings.
 - 2) Digital Data Software Program: The Drawings are available in AutoCad.dwg.

C. Division 01 Documents:

1. The following items shall be submitted a minimum of 14 calendar days prior to the Preconstruction Conference:
 - a. Letter designating Project Superintendent.
 - b. Construction Schedule.
 - c. A Comprehensive Schedule of Values.
 - d. Accident Prevention Plan.

- e. A List of Subcontractors for this Project.
 - f. Written statements from Subcontractors certifying compliance with applicable labor standard clauses.
 - g. Satisfactory evidence of liability insurance coverage and workman's compensation for the Contractor and all subcontractors.
 - h. Waste Management Plan.
 - i. Quality Control Plan.
 - j. Temporary Storm Water Pollution Prevention Plan (SWPP or UPPP).
 - k. Indoor Air Quality (IAQ) Management Plan.
 - l. Contractors Commissioning Plan.
 - m. List of Required Construction Permits. Include the following information for each permit:
 - 1) Name of permit.
 - 2) Agency(ies) with Jurisdiction issuing the permit.
 - 3) Information required from Government to complete permit application.
- D. Provide items listed to Contracting Officer at least 14 calendar days prior to Pre-Construction Conference, or as directed by Contracting Officer.
- 1. Failure to submit items may result in:
 - a. Construction conference may be cancelled, Notice to Proceed may not be issued, and Contracting Officer will consider other contractual remedies.
 - b. Work shall not commence until written Notice to Proceed has been issued and satisfactory evidence of liability insurance coverage and workman's compensation documents are received for Contractor and all Subcontractors.

1.7 REQUESTS FOR INFORMATION (RFIS)

- A. General: Immediately on discovery of the need for additional information or interpretation of Contract Documents, Contractor shall prepare and submit an RFI utilizing form created on NPS/DSC management software website.
- 1. Contracting Officer will not respond to RFIs submitted by other entities controlled by Contractor.
 - 2. Coordinate and submit RFIs in a prompt manner to avoid delays in the Work.
- B. Content of RFI:
- 1. Include detailed, legible description of item needing information or interpretation and the following:
 - a. RFI number, numbered sequentially.
 - b. Date.

- c. RFI subject.
- d. Specification section number and title and related paragraphs, as appropriate.
- e. Drawing number and detail references, as appropriate.
- f. Field dimensions and conditions, as appropriate.
- g. Contractor's Suggested Resolution: If Contractor's suggested resolution impacts Contract Time or Contract Sum, Contractor shall state impact in RFI.
- h. Contractor's signature.
- i. Requested date for response. Requested date must not be less than 10 calendar days.
- j. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.
 - 1) Include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments on attached sketches.

C. RFI Form:

- 1. Complete RFI Form on NPS/DSC Project Website as follows:
 - a. Enter general information at the top of the form.
 - b. Under the "Action" section at the bottom of the form, select "Question" then select "CMR" in drop-down of "Send to" box.
 - c. Enter details of question and attach related documents.
 - d. Select "Submit Form" at bottom of page.

D. Contracting Officer's Action: Contracting Officer will review each RFI, determine action required, and respond. Contracting Officer will determine critical nature of each RFI and issue response accordingly.

- 1. The following are not considered to be RFIs and will receive no 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 Contract Documents.
 - e. Requests for adjustments in Contract Time or Contract Sum.
 - f. Requests for interpretation of Architect's actions on submittals.
 - g. Incomplete RFIs or inaccurately prepared RFIs.
- 2. Contracting Officer's action may include a request for additional information; time for response will date from time of receipt of additional information.

3. Contracting Officer's action on RFIs may result in need for a change to Contract Time or Contract Sum. All Contract changes will be processed following terms and conditions of Contract.

1.8 PROJECT WEBSITE

- A. The Contractor shall develop and host Project Website for communication throughout the Contract Period. The Contractor provided system shall meet Department of the Interior Cybersecurity Requirements. The Project website will be used for the following functions:
 1. Project directory.
 2. Project correspondence.
 3. Meeting agendas and minutes.
 4. Contract modifications forms and logs.
 5. RFI form and processing.
 6. Task and issue management.
 7. Photo documentation.
 8. Baseline schedule, schedule updates and calendar management.
 9. Submittal form and processing.
 10. Payment coordination documentation.
 11. Drawing and specification document hosting, viewing, and updating.
 12. Online document collaboration.
 13. Reminder and tracking functions.
 14. Archiving functions.
 15. Notification of submittal and RFI statuses and current responsible party.
 16. Permits and addendums.
- B. Contracting Officer shall provide a list of Government employees or Government contracted employees who will need access to the website.
- C. All users will be required to have the following software packages:
 1. Internet Explorer version 11 or later.
 2. Adobe Acrobat Professional (Pro) version 9 or later.

1.9 PROJECT MEETINGS

- A. Preconstruction Conference:
 1. Before start of construction, Contracting Officer will arrange an onsite meeting with Contractor. Meeting agenda will include the following as a minimum:
 - a. Roles & Responsibilities / Lines of Authority.
 - b. Park rules and regulations.
 - c. Jobsite Safety.
 - d. Resolution of comments on required Division 01 documents.

- e. Coordination of Subcontractors.
- f. Labor law application.
- g. Modifications.
- h. Payments to Contractor.
- i. Payroll reports.
- j. Contract Time.
- k. Liquidated damages.
- l. Contractor Performance Evaluation.
- m. Display of Hotline posters.
- n. Notice to proceed.
- o. Correspondence procedures.
- p. NPS/DSC Project website.
- q. Acceptance/rejection of work.
- r. Progress meetings.
- s. Submittal procedures.
- t. NPS Final Accessibility Inspection.
- u. Environmental requirements.
- v. Permit requirements.
- w. As-constructed drawings/operation and maintenance (O&M) manuals.
- x. Saturday, Sunday, holiday, and night work.
- y. Reference materials.
- z. Value engineering.
- aa. Schedule of Values.
- bb. Materials delivery restrictions.
- cc. Plant outage provisions and restrictions.
- dd. Site security.

B. Progress Meetings: Contracting Officer will schedule weekly meetings with Contractor.

- 1. Attendees: In addition to Government Representatives, each Contractor, Subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented. Participants at meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
- 2. Agenda:
 - a. Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Meeting agenda will include:
 - 1) Approval of minutes of previous meetings.
 - 2) Submittal status.
 - 3) Review of offsite fabrication and delivery schedules.
 - 4) Requests for information (RFI) and other issues.
 - 5) Modifications.

- 6) Work in progress and projected.
 - a) Status of required inspections (Special Inspections, Accessibility, etc.).
 - 7) Inspections of work in progress and projected (Special inspections, Accessibility, etc.).
 - 8) Construction Schedule update (provide updated Critical Path Method (CPM)).
 - 9) Status of Project Record Drawings and O&M manuals.
 - 10) Other business relating to Work.
 - 11) Permit requirements
 - 12) Review and Mitigation of Project Risks.
- C. Preinstallation Conferences: Conduct 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 installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend meeting. Advise Contracting Officer of scheduled meeting dates.
 2. Agenda:
 - a. Review progress of other construction activities and preparations for particular activity under consideration, including requirements for:
 - 1) Contract Documents.
 - 2) Options.
 - 3) Related RFIs.
 - 4) Related Change Orders.
 - 5) Purchases.
 - 6) Deliveries.
 - 7) Submittals.
 - 8) Review of mockups.
 - 9) Possible conflicts.
 - 10) Compatibility requirements.
 - 11) Time schedules.
 - 12) Weather limitations.
 - 13) Manufacturer's written instructions.
 - 14) Warranty requirements.
 - 15) Compatibility of materials.
 - 16) Acceptability of substrates.
 - 17) Temporary facilities and controls.
 - 18) Space and access limitations.
 - 19) Regulations of agency(ies) with jurisdiction.
 - 20) Testing and inspecting requirements.

- 21) Installation procedures.
 - 22) Coordination with other work.
 - 23) Required performance results.
 - 24) Protection of adjacent work.
 - 25) Protection of construction and personnel.
 - 26) Phasing of construction work.
3. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
 4. Reporting: Distribute minutes of meeting to each party present and to other parties requiring information.
 5. Do not proceed with installation if conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of Work and reconvene conference at earliest feasible date.
- D. Building Commissioning Scoping Meetings: Conduct at Project Site in accordance with the requirements listed in Section 01 91 15, Total Building Commissioning, for each building.
- E. Facility Startup Coordination Meetings: Conduct at Project site and via video conference call to coordinate the development of the Facility Startup and Performance Demonstration Plan, prior to all Unit Processes startups, and prior to the Facility Performance Demonstration in accordance with Section 01 91 14, Equipment Testing and Facility Startup.
1. Attendees: Government Representatives, including Contracting Officer, South Rim WWTP operations staff, Application Software Programming Engineer, and Process Testing and Startup Manager; Contractor's Testing and Startup Representative and any other representatives of the Contractor; and any installer and representatives of manufacturers and fabricators involved with Unit Processes and/or Facility Performance Demonstration shall attend meeting. Advise Contracting Officer of scheduled meeting dates.
 2. Agenda: Review and coordination of the Facility Startup and Performance Demonstration Plan, review completion of activities and submittals required prior to Unit Processes startups the Facility Performance Demonstration, and coordinate activities and requirements during the Unit Processes startups the Facility Performance Demonstration.

1.10 ENVIRONMENTAL COORDINATION

- A. Contractor's Environmental Manager: Designate onsite party responsible for overseeing Contractor's conformance to environmental goals for Project and implementing procedures for environmental protection.
1. Qualifications: Minimum 3 years Construction experience on projects of similar size and scope; with environmental procedures similar to this Project;

must be familiar with environmental regulations applicable to construction operations.

2. Responsibilities:

a. Responsibilities shall include:

- 1) Compliance with applicable federal, state, and local environmental regulations, including maintaining required documentation.
- 2) Implementation of Waste Management Plan (WMP).
- 3) Implementation of Indoor Air Quality (IAQ) Management Plan.
- 4) Implementation of Storm Water Pollution Prevention Plan (SWPPP).
- 5) Implementation of Hazardous Waste Removal Plan.
- 6) Present overview of environmental issues and summarize Site-specific procedures relating to management plans at Preconstruction conference.
- 7) Training for Contractor personnel in accordance with position requirements.
- 8) Monitoring and documentation of environmental procedures.

B. Perform Project quality control in accordance with requirements specified in Paragraph Related Requirements, including:

1. Quality Requirements.
2. Regulatory Requirements.
3. Indoor Air Quality (IAQ) Management.
4. Noise and Acoustics Management.
5. Temporary Storm Water Pollution Prevention Environmental Management.
6. Construction Waste Management.
7. Hazardous Waste Management.

C. Contractor's Environmental Training Program:

D. Contractor shall provide environmental training for workers performing work on Project Site. Training shall include:

1. Overview of environmental issues related to building industry.
2. Overview of environmental issues related to Project.
3. Review of Site-specific procedures and management plans:
 - a. Construction Waste Management.
 - b. Indoor Air Quality (IAQ) Management.
 - c. Noise and Acoustics Management.
 - d. Temporary Storm Water Pollution Prevention.
 - e. Hazardous Waste Management Plan.

4. Pollution Prevention (P2) Practices: Submit evidence of participation in P2 programs illustrating familiarity with P2 practices.
 5. Compliance with Environmental Regulations: As specified in Regulatory Requirements. Submit Contractor 40 CFR (Code of Federal Regulations) employee training records upon request of Contracting Officer.
- E. Provide documentation for environmental procedures as specified herein and in accordance with approved Waste Management Plan, IAQ Management Plan, Hazardous Waste Management Plan, and Storm Water Pollution Prevention Plan.
- F. Resource Protection:
1. Contractor shall comply with requirements in the NEPA compliance documents.
 2. Wildlife: to avoid impacts to migratory birds during nesting season, all tree removal activities, if possible, should occur outside of March 1 to August 31. Refer to Section 01 35 00, Environmental Protection and Special Controls.
 3. Tree and vegetation protection: Refer to Section 32 01 90, Tree and Shrub Preservation.
 4. Top soil preservation: Refer to Section 01 35 00, Environmental Protection and Special Controls.
 5. Archeological resources: Refer to Section 01 35 13.22, Archeological Protection.
- 1.11 PERMITS
- A. General:
1. Permits and Responsibilities: Contractor shall, without additional expense to the Government, be responsible for obtaining necessary licenses and permits, and for complying with Federal, State and municipal laws, codes, and regulations applicable to the performance of the Work. Contractor shall also be responsible for damages to persons or property that occur as a result of Contractor's fault or negligence; and for materials delivered and work performed until completion and acceptance of the Work.
 2. For the purpose of this Contract, Contractor will not be considered an agent of the Government. Contractor shall comply with appropriate federal, state, and local laws.
- B. Government Furnished Permits: During development of the Project's design, permits listed below were negotiated and agreed to by the Government. Terms and provisions of these permits shall be adhered to for the duration specified in each permit.
1. Aquifer Protection Permit (APP) from Arizona Department of Environmental Quality (ADEQ).

2. National Pollutant Discharge Elimination System (NPDES) Permit from Arizona Department of Environmental Quality (ADEQ).
 3. Reclaimed Water General Permit from ADEQ.
- C. Potential Permits: Permits listed below were identified during the design process as likely to be required based on typical means and methods of construction. The list is provided to assist Contractor in determining which permits will be required for Contract's chosen means and methods. The list shall not be considered complete; it is the Contractors' responsibility to determine means and methods and obtain required permits. Contractor shall obtain all permits required to legally conduct work.
1. General Permit for Stormwater Discharges Associated with Construction Activity to Protected Surface Waters Permit No. AZG2025 and any subsequent modifications or permits issued by Arizona Department of Environmental Quality (includes Stormwater Pollution Prevention Plan Development and implementation).
 2. General Permit for De Minimis Discharges to Protected Surface Waters AZG2021-001 (Covers Construction Dewatering) and any modifications or subsequent modifications: Issued by Arizona Department of Environmental Quality.
 3. Temporary Electrical Service Connection Permit: APS Power Initiation Request.
 4. New Electrical Utility Service Connection Permit: APS.
 5. New Water Meter: NPS.
- D. Coordination with Agency(ies) with Jurisdiction Issuing Permits:
1. Coordination:
 - a. Contact the Agency(ies) with Jurisdiction as needed and sufficiently in advance to avoid delaying work: Coordinate meetings, reporting requirements, inspections, and other requirements.
- E. Administrative Procedures:
1. Coordinate scheduling and timing of required administrative provisions of Project permits with Agency(ies) with Jurisdiction, Construction Manager, and Park to avoid conflicts.
 2. Supply needed information to Agency(ies) with Jurisdiction issuing permits, pay fees required and provide material needed to comply with permit's conditions and provisions.
 3. Upload permits to Project Website or by other means as directed by the Contracting Officer when permits are obtained.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION