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The TEXT indicated with <\_\_\_\_\_ is to be selected or filled in by the Specifier to meet the requirements of the project.

If any of the SECTIONS (i.e. 1.02, 1.03, etc.) below are not required for the project do NOT delete the Section, but rather change the title of the Section to "NOT USED" (i.e. 1.02 NOT USED) so that numbering of specification references is preserved, and delete the specification language in this Section below the title.

#### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

- A. General requirements.
- B. Definitions and terms.
- C. Working Hours.
- D. Notification requirements.
- E. Outage requests.
- F. Method of Procedure (MOP)
- G. Work sequence.

## 1.02 GENERAL REQUIREMENTS

- A. Work shall be scheduled, sequenced, and performed in a manner which minimizes disruption to the operation and maintenance of existing utilities, plants, facilities, buildings, and shall be coordinated with UTILITIES and other appropriate agencies.
- B. Work which affects or could affect UTILITIES' operations shall not be performed without a specific detailed plan provided by the CONTRACTOR and approved in advance by UTILITIES <and Engineer> as described in Sections 1.05 and 1.06 below.
- C. The CONTRACTOR shall incorporate the construction and schedule constraints of this Section in preparing the construction schedules required under Section 01 32 16 Schedule Requirements.
- D. Work shall be limited to areas shown on the plans unless CONTRACTOR receives written authorization from UTILITIES.
- E. It is the CONTRACTOR's responsibility for scheduling and coordinating the Work of subcontractors, suppliers, and other individuals or entities performing or furnishing any of CONTRACTOR's Work in order to meet the construction schedule accepted by UTILITIES.

## 1.03 DEFINITIONS AND TERMS

A. Outage or Shutdown: An event in which part or all of UTILITIES' ongoing plant, facilities, and/or building activities are temporarily discontinued or temporarily out of service to allow for a portion of the CONTRACTOR's scheduled work activities to be completed.

- B. Operational Constraints: The work performance constraints required because of UTILITIES' plant, facilities or building operations, which must be maintained at all times. These constraints shall be reflected in the CONTRACTOR's construction progress schedule.
- C. Outage Request Form: Form submitted in accordance with section 1.06 below.
- D. Construction Scheduling Constraints: The work performance constraints required because of construction phasing or sequencing with other parts of the work, calendar time constraints, special testing, commissioning, and work procedures. These constraints are in addition to the standard procedural constraints, such as shop drawings, testing, commissioning, training, and operational constraints. These types of constraints shall be included in the CONTRACTOR's construction progress schedule.
- E. Special Conditions: Certain special conditions, if any, related to performance of the Work. If they affect the scheduling of the Work, they shall also be included in the CONTRACTOR's construction progress schedule.

#### 1.04 WORKING HOURS

A. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during the regular working hours of <7:00am to 6:00pm, Monday through Friday>, and the CONTRACTOR will not permit overtime work or the performance of Work on Saturday, Sunday, or any legal holiday observed by UTILITIES without UTILITIES' written consent (which will not be unreasonably withheld) given after prior written notice to UTILITIES. For prior written notice to be considered by UTILITIES, the written notice must be received by UTILITIES <2> < \_\_> days prior to the date for which work outside of regular working hours is being requested. UTILITIES shall not be responsible for any additional cost for overtime work, except as otherwise stated in the Contract Documents. CONTRACTOR is advised that some construction activities are subject to temperature restrictions and those restrictions are not waived for the allowable Construction period. In the event CONTRACTOR is authorized to allow work outside of regular working hours, CONTRACTOR shall be responsible for ensuring that CONTRACTOR personnel necessary to supervise the Work are also on-Site during such periods work is being performed outside of regular working hours.

## B. UTILITIES Observed Holidays:

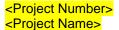
- 1. New Year's Day
- 2. Dr. Martin Luther King Day
- 3. President's Day
- 4. Memorial Day
- 5. Independence Day
- 6. Labor Day
- 7. Veteran's Day
- 8. Thanksgiving Day
- 9. Day after Thanksgiving
- 10. Christmas Day

#### 1.05 NOTIFICATION REQUIREMENTS

A. CONTRACTOR shall provide in writing a minimum of <10> days advance notice to UTILITIES for each system, equipment, valve, power, component, etc. proposed for shutdown or disruption and the duration of the proposed shutdown or disruption, all of which shall be subject to UTILITIES' approval, limitations and required sequencing and phasing.

#### 1.06 OUTAGE REQUESTS

A. Modifications to existing plants, facilities and buildings, the construction of new plants, facilities and buildings, and the connection of new to existing plants, facilities and buildings may require the temporary outage or bypass of existing systems, processes, electrical power, equipment, plants, facilities or buildings. In such cases, the CONTRACTOR shall coordinate work with UTILITIES. The



CONTRACTOR shall submit an Outage Request Form, including a detailed outage plan and time schedule for construction activities which will make it necessary to remove systems, processes, electrical power, equipment, structures, roads, plants, facilities, buildings or other components from service.

В.	Complete outages that limit the plant, facility or building's ability to conduct normal operations shall not
	exceed <4> <> hours in duration. If a longer outage is required, the CONTRACTOR shall coordinate
	and schedule it with UTILITIES <and below="" listed="" maintenance="" planned="" shutdowns="" the="" within="">.</and>

1.	<planned lis<="" maintenance="" shutdown="" th=""></planned>				
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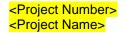
- C. The CONTRACTOR is required to coordinate outages with the accepted schedules required under Section 01 32 16 Construction Progress Schedule. UTILITIES may adjust any required outage dates by up to <6> < \_\_> weeks due to operational needs. CONTRACTOR shall not be entitled to seek a Potential Contract Change for adjustment of outage dates as provided in this section and communicated at least <x> weeks in advance.
- D. Outage plans shall be submitted to UTILITIES for acceptance a minimum of <10> <\_> days in advance of the time that such outages are required. The outage plans shall be coordinated with the construction schedule and shall meet the restrictions and conditions of these Contract Documents. The outage plan shall describe the CONTRACTOR's method of procedure; the length of time required to complete the operation; any necessary temporary power, controls, instrumentation, or alarms required to maintain control, monitoring, and alarms of the systems, processes or equipment; and the manpower and equipment which the CONTRACTOR shall provide in order to ensure proper operation of associated systems, processes and equipment. Costs for preparing and implementing the outage request forms and plans shall be the responsibility of the CONTRACTOR as part of the work.
- E. The existing roadways shall remain accessible, operational, and free from obstructions and debris during construction to allow for operations and maintenance access and deliveries to maintain operations. CONTRACTOR shall submit an outage plan for roadway outages with an alternate truck route proposed for the outage for review and approval by UTILITIES.
- F. The CONTRACTOR shall not begin any work affecting existing utility, plant, facility, or building operations until specific written approval has been provided by UTILITIES for each request.
- G. The CONTRACTOR will coordinate their planned procedure with UTILITIES <and Engineer> <and plant, facility or building personnel>. UTILITIES <and Engineer> have the authority to modify any proposed outage or shutdown procedures if such procedures would adversely impact the operations of the utility, plant, facility or building.
- H. UTILITIES <and Engineer> shall be notified in writing at least <7> <\_\_> days in advance of the required outage if the schedule for performing the work has changed or if revisions to the outage request and plan are required. The CONTRACTOR shall provide written confirmation of the shutdown date and time <3> days prior to the actual shutdown.
- 1.07 METHOD OF PROCEDURE (MOP)
  - A. UTILITIES will provide MOP instructions at the preconstruction meeting. An example is provided below.
  - B. CONTRACTOR shall prepare MOP for the following conditions:
    - 1. <Shutdowns, diversions, and tie-ins to the existing plant, facility, or building.>
    - 2. < Process start-up and testing activities. >
    - 3. < Power interruption and tie-ins.>
    - 4. <Switch over between temporary and permanent facilities, equipment, piping, electrical and instrumentation systems.>
    - 5. < Process constraints requiring interruption of operating processes or utilities. >

- C. Other Work not specifically listed may require MOPs as determined necessary by the CONTRACTOR, or UTILITIES, <or Engineer>.
- D. CONTRACTOR shall submit Baseline Schedule via PM SaaS, as specified in Section 01 33 12 PM SaaS, with proposed MOPs.
- E. CONTRACTOR shall submit Outage Request Form and Log via PM SaaS, as specified in Section 01 33 12 PM SaaS, prior to construction progress meetings.
- F. CONTRACTOR shall submit MOP Form and Log via PM SaaS, as specified in Section 01 33 12 PM SaaS, prior to construction progress meetings.
- G. No consideration will be given to claims of additional time and cost associated with preparing MOPs required by UTILITIES <and Engineer> to complete the work in a manner that facilitates proper operation of the utility, plant, facility, and building, and in compliance with local requirements.
- H. Where required to minimize interruptions while complying with specified sequencing constraints, provide temporary measures as necessary, including but not limited to, pumping, power, lighting, controls, instrumentation, safety devices, etc.

#### 1.08 WORK SEQUENCE

- A. CONTRACTOR shall construct work in phases or stages to accommodate UTILITIES' use and operation of the premises, utility systems, plant, facilities, and buildings during the construction period. The CONTRACTOR shall coordinate construction schedule, outages, and operations with UTILITIES.
- B. CONTRACTOR shall allow for adequate time to clean up, as to not disrupt the operation and daily activities of facility personnel and staff.
  - 1. While working the CONTRACTOR may be accompanied by UTILITIES' inspectors and operators at all times during which Work is performed.
  - 2. UTILITIES' inspectors and operators on site are not responsible for the CONTRACTOR's means and methods.
- C. CONTRACTOR shall perform the removal and placement of all utility, plant, facility, and building systems at an appropriate time not to endanger personnel and staff.
- D. The CONTRACTOR shall minimize all outages to the premises, utility systems, plants, facilities, and buildings and shall notify and coordinate all outages and the durations with UTILITIES prior to commencing work to minimize interference with the daily operation and activities of the premises, utility systems, plants, facilities and buildings, including personnel and staff, as required by the Specifications.
- E. CONTRACTOR shall schedule Work with UTILITIES to minimize interruptions to the utility, plant, facility, and building services.
- F. CONTRACTOR shall construct work in stages to provide for public convenience. CONTRACTOR shall not close off public use of facilities until completion of Work that provides alternative usage, except as approved by UTILITIES.
- G. CONTRACTOR shall not interrupt or close off utility, plant, facility, and building services until completion of Work that will provide alternative service and usage, except as approved by UTILITIES.
- H. The following sequencing and phasing described below indicates the anticipated schedule and general steps required for the CONTRACTOR to complete the project work.
  - 1. < Description.>
  - 2. < Description.>
  - 3. < Description.>

#### PART 2 PRODUCTS



**NOT USED** 

#### PART 3 EXECUTION

#### 3.01 SUBMITTALS

- A. CONTRACTOR submittals required to be submitted through PM SaaS in accordance with Section 01 33 12 PM SaaS shall include, but are not limited to the following:
  - 1. <Outage Plan>
  - 2. <Temporary connection plans and details.>
  - 3. <Temporary service plans and details.>
  - 4. < Temporary bypass plans and details.>
  - 5. < Temporary tie-ins to existing systems plans and details.>
  - 6. < Outage request form.>
  - 7. < Outage request log.>
  - 8. < Method of Procedure (MOP) form.>
  - 9. < Method of Procedure (MOP) log.>

**END OF SECTION** 

# "Method of Procedure" (MOP) Instructions and Forms

# **Definition and Purpose**

"Method of Procedure" (MOP) is a detailed document submitted by the CONTRACTOR to request process shutdown(s), utility tie-in(s), work in areas that may risk unanticipated outages, or operational disruptions to accommodate site construction activities. Such activities may include (but are not limited to) new tie-ins to utilities or structures, mechanical modifications to process piping or equipment, demolition, and cleaning processes.

The MOP provides a detailed plan to UTILITIES <and Engineer> that describes specific aspects of the work including purpose, time of execution, and anticipated impacts on operations. The MOP also includes contingency measures and provisions for rapid closure if issues are encountered. Information from relevant trades associated with the requested shutdown, diversion, or tie-in should also be included.

The UTILITIES should use the information within the MOP to define operational procedures and methods to safely and successfully assist the CONTRACTOR.

# I. MOP Process Summary

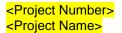
Responsible	Item	Timing
CONTRACTOR	Identify MOPs needed on MOP Log and Baseline Schedule.	7 days prior to Preconstruction Scheduling Meeting
CONTRACTOR, UTILITIES, < ENGINEER>	2. Pre-MOP Meeting.	More than 28 days prior to work
CONTRACTOR	3. Submits MOP via PM SaaS.	No later than 28 days prior to work
UTILITIES	4. Reviews MOP.	
UTILITIES	5. MOP finalized.	7 days prior to work
CONTRACTOR	6. Perform Readiness Check	5 days prior to work
CONTRACTOR	7. Complete Safety Checklist.	Just prior to commencing work
CONTRACTOR	8. Complete Work.	
CONTRACTOR	Update MOP Log and Progress     Schedules.	Monthly

## **MOP Process Detail**

STEP 1. Identifies MOPs needed on MOP Log and Baseline Schedule.

CONTRACTOR submits a preliminary list of anticipated project MOPs on MOP Log. MOPs identified but not limited to those shutdowns, or tie-ins described in the Contract Documents. Incorporate MOPs as tasks in Baseline Schedule. Date scheduled MOPs to coincide with the appropriate construction activities

STEP 2. Pre-MOP Meeting.



CONTRACTOR requests a Pre-MOP Meeting with the UTILITIES <and Engineer> to discuss the nature of the shutdown, diversion, or tie-in, and to gather the information necessary to complete the MOP Form. The Pre-MOP meeting may be waived by the UTILITIES <or Engineer> if the work is deemed to be minor.

## STEP 3. Submits MOP.

Contractor completes the MOP Form and submit via EADOC for acceptance by UTILITIES. Sufficient details on process isolation, work sequencing, and safety should be provided to demonstrate a full understanding of the work constraints. Details should also be provided on operational and facility impacts, and contingency planning.

# STEP 4. Reviews MOP.

UTILITIES will distribute MOP Form for review including, but not limited to, completeness, accuracy, compliance with both the construction schedule, constraints defined in contract documents, and to ensure that the requested work does not negatively impact operations or other concurrent project activities. Additional information may be requested to better understand the nature of and method for completing the Work.

# STEP 5. MOP finalized.

Once the MOP is agreed to by all parties, the MOP will be finalized by signature. Copies are distributed to the Owner, <Engineer> and CONTRACTOR.

STEP 6. Perform Readiness Check.

CONTRACTOR verifies everything is ready for the work.

STEP 7. Complete Safety Checklist.

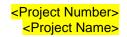
CONTRACTOR ensures safety.

STEP 8. Complete work.

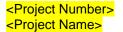
CONTRACTOR complete work.

STEP 9. Update MOP Log and Progress Schedules.

CONTRACTOR updates MOP Log weekly and distributes at the regularly scheduled progress meetings.



	METHOD OF PROCEDURE (MOP) FORM					
Colorado Springs Utilities						
It's how we're all connected						
Contractor:	Date:					
Project Name: Specification and Drawings Reference(s):	MOP No:					
Specification and Drawings Reference(s):						
MOP Start (Date and Time): Primary Point of Contact: Secondary Point of Contact:	MOP End (Date and Time):					
Primary Point of Contact:	Visionales - Business translations and the American Business and					
Secondary Point of Contact:						
Required Notifications and Phone: (i.e. Control Room, Security, Facilities, Operations):						
Location of Work:						
Decription of Work:						
Operational Areas Affected: Trades Affected:						
Work Plan (Include items identified in STEP 3 of the inst	tructions):					
Critical Equipment and Tools:	8.0					
Impacted or Potentially Impacted Operations and/or Services:						
	<u> </u>					



# METHOD OF PROCEDURE (MOP) Safety Form

Colorado Springs Utilities This form is to be used as a template and may not include all safety items. Contractor is responsible for It's how we're all connected safe and proper completion of the MOP and required Job Hazard Analysis.

Contractor:

Project Name:

Date: MOP No:

Site

Emergency Exits
Emergency showers/eyewash
Fire extinguisher
Key phone numbers

Shut-off valves, breakers, etc.

SDS (Safety Data Sheets)

Identify and review SDS for all materials

Lockout/Tagout Procedures

Identify all energy sources Identify all valves

Overhead work

Identify OH power and clearance requirements

Identify required PPE (i.e. safety harnesses, tie-off points, spotters, etc..)

Excavation work

Locates completed

Shoring properly designed and installed

Safety equipment required

ARC flash protection
Fall protection, air monitors

Incident reporting

Evacuation procedures