

**SECTION 01060**  
**SPECIAL CONDITIONS**

**PART 1 - GENERAL**

**1.1 SUMMARY**

- A. Section Includes:
1. Summary of Work
  2. Work by Others
  3. Work by Owner
  4. Owner Furnished Product
  5. Contractor's Use of Site and Premises.
  6. Coordination with Owner's Operations
  7. Order of Construction and Construction Schedule
  8. Preconstruction Conference
  9. Contractor's Superintendent's Field Office
  10. Drawings and Contract Documents for Contractor's Use
  11. Project Photographs
  12. Testing
  13. Project Meetings
  14. Special Considerations
- B. Related Sections include but are not necessarily limited to:
1. Division 0 - Bidding Requirements, Contract Forms, and Conditions of the Contract.
  2. Division 1 - General Requirements.

**1.2 SUMMARY OF WORK**

- A. Work covered by the Lump Sum Base Price shall be as shown on the drawings and specified therein, and as reasonably inferred there from including, but not limited to, the following:
1. Work consists of repairing damaged A3 Clarifier Mechanism. Repair process shall generally conform to the following sequence:
    - a. Support clarifier arms to unload center drive cage.
    - b. Remove bridge and center drive mechanism.
    - c. Replace top portion of center column.
    - d. Rebuild drive cage, as required, to square drive cage around center column.
    - e. Reinforce skimmer arms and supports, where indicated.
    - f. Reinstall center drive mechanism and bridge.
    - g. Level clarifier arms and adjust scrappers once repairs above are complete.
      - 1) Turn rake arms manually. Complete at least two complete revolutions to ensure that arms do not drag throughout rotation.
  2. Calibrate existing torque switch in accordance with manufacturers' recommendation.
  3. Assist with start-up of clarifier (allow 1 day for start-up assistance).
  4. All new members shall be painted carbon steel. Paint shall be applied in all repaired areas to cover the bare steel. Base coat shall be PPG Pitt Guard Rapid, or equal. Top coat with PPG Aquapon HB, or equal.
  5. Electrical work required to complete the work above is the responsibility of the Contractor.

**1.3 WORK BY OTHERS**

- A. Other Contractors may be onsite performing work under separate contract at various locations throughout the Cedar Rapids Water Pollution Control Facility.

#### **1.4 WORK BY OWNER**

- A. Owner will isolate piping with valves. Lock out/Tag out will be utilized on the valves with contractor participation.
- B. Owner shall isolate A3 Clarifier from operations and perform dewatering activities.

#### **1.5 OWNER FURNISHED PRODUCTS**

- A. None.

#### **1.6 CONTRACTOR'S USE OF SITE AND PREMISES**

- A. If provided, locate field office, materials storage and staging areas, and limit use of site and premises to allow:
  - 1. Owner occupancy and uninterrupted operation of the Cedar Rapids Water Pollution Control Facility.
  - 2. Work by others and work by Owner.
  - 3. Continuous Owner access to the Water Pollution Control Facility through all three existing entrances.
  - 4. Continuous Owner use of Cedar Rapids Water Pollution Control Facility roadways.
- B. Temporary Utilities
  - 1. Electricity: Power will be available to Contractor at no cost as long as its use does not hinder Owner's operations at Owner's sole discretion. Provide and maintain required facilities for use of electric power.
  - 2. Heat: Provide and pay for heat devices and heat as required to maintain specified condition for construction purposes.
  - 3. Telephone Service: Provide cellular phone service for Contractor's personnel.
  - 4. Water Service: Potable and nonpotable water will be available to Contractor at no cost as long as its use does not hinder Owner's operations, at Owner's sole discretion. Provide and maintain required facilities for use of water.
  - 5. Sanitary Facilities: Provide and maintain facilities and enclosures for employees.
  - 6. Disconnect, dismantle, and/or remove temporary utilities when no longer required for the work.
- C. Safety
  - 1. The Contractor is responsible for becoming fully acquainted with the safety and health policies/procedures at the Cedar Rapids Water Pollution Control Plant prior to the commencement of work. This responsibility also extends to any subcontractors or suppliers retained or used by the Contractor. All employees of the Contractor who will be at the work site for more than four (4) consecutive hours shall participate in site-specific safety orientation and pass a written examination prior to work on site. See Supplementary Conditions paragraph SC-6.15.
  - 2. As specified in the General Conditions the Contractor is responsible for safety of their personnel and shall designate a site safety supervisor.
  - 3. Contractor's site safety supervisor will jointly investigate with the Cedar Rapids Water Utilities Safety Coordinator any reported condition(s) that may pose a hazard to the safety and health of Cedar Rapids Water Pollution Control Facility employees that the Contractor's employees, including subcontractors and suppliers, may have created in the course of their work.
  - 4. The Contractor will notify the Cedar Rapids Water Utilities Safety Coordinator of any OSHA-recordable illnesses or injuries sustained by the Contractor's employees, including subcontractors and suppliers, on Cedar Rapids Water Pollution Control Facility property and of any OSHA inspections or citations related to work conducted on Cedar Rapids Water Pollution Control Facility property.
  - 5. The Contractor is responsible for providing gas monitoring equipment capable of monitoring oxygen, combustible gases, and hydrogen sulfide for their personnel.

D. Lockout/Tagout

1. Contractor shall coordinate all lockout/tagout activities with Owner's Operations Supervisor. Owner's personnel will perform the actual lockout of any equipment, after which Contractor shall apply their own personal lock. Each Contractor employee, including subcontractors and suppliers, shall have their own personal locks. Tagout is NOT permitted.

E. Security:

1. The perimeter of the Cedar Rapids Water Pollution Control Facility is fenced. There are three vehicle gates, each off of Bertram Road, and one turnstile pedestrian gate providing access to the plant. The east gate is locked at all times unless special arrangements are made with Plant Operations. The center and west vehicle gates, and the center turnstile gate, are controlled access entry points, with ingress and egress by Owner issued proximity cards. The facility is staffed 24 hours per day, but uses a skeleton crew at night.
2. Contractor vehicle access to and from the site shall be through the center entrance gate along Bertram Road. Contractor vehicles shall be clearly identified as such and a current list of vehicles and license plate numbers shall be given to resident inspector. OWNER reserves the right to limit number of Contractor vehicles on site and to tow unidentified vehicles from the site.
3. Contractor employee parking: Personal cars owned by Contractor employees shall be parked in the parking lot at the center plant entrance.
4. Contractor employees shall enter the plant only through the center pedestrian gate turnstile, or through the center access controlled vehicle gate. **Each employee is required to badge in, and badge out, each time he/she enters, or exits, the site whether exiting on foot or in vehicle.** Badges will be issued by the Owner at no cost to the Contractor. Contractor employees will need to have a valid Kirkwood Community College safety card and a driver's license to receive an ID badge. Driver's licenses will be photocopied. Replacements for lost, stolen, or damaged badges will be issued by the Owner at a cost of \$15.00 per badge. Contractor employees shall wear ID badges so they are visible at all times. Contractor employees shall turn their ID badges in to the Owner when they are done working on the Project.
5. At all times during Project: Contractor shall keep roster of its employees and all visitors. Any employee discharged shall be immediately reported to construction inspector so discharged employee may be removed from access roster.
6. Contractor shall provide, maintain, and pay for security services, fences, and lighting as required to protect stored material, equipment, and field offices.
7. Deliveries: Contractor shall make arrangements for deliveries, loading, and unloading. Owner employees and/or equipment will not unload Contractor's deliveries. Contractor shall maintain log of delivery personnel entering and leaving plant site. East plant gate will remain locked at all times except when it is necessary for Contractor to make use of east gate for deliveries. The gate is not to be opened without permission of the Owner's construction inspector. When the gate is open for deliveries, Contractor shall provide visual, personnel control over gate at all times. If necessary, Contractor shall employ security personnel when entries are quite frequent. All vehicles must be logged in and out, and be restricted to only those permitted deliveries and vehicles. If Contractor does not have a representative to receive truck shipment, that truck will not be allowed on plant Site.
8. Visitors: Short term visitors (such as field engineers, day laborers and vendors) to the Project Site who can not reasonably attend the Kirkwood Community College training shall wear a visitor badge and be accompanied at all times by Contractor employee, who has been safety trained.

F. Cleaning:

1. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.

2. Provide means of removing mud from vehicle wheels before entering plant roadways and adjacent streets. Remove project-related mud and other debris from plant roadways and adjacent streets.
  3. Leave the site in a condition with an appearance equal to original condition.
- G. Protect existing facilities and installed work. Repair or replace damaged facilities to original condition.

#### **1.7 COORDINATION WITH OWNER'S OPERATIONS**

- A. All work requiring interface with existing facilities and operation of the Cedar Rapids Water Pollution Control Facility must be coordinated with a representative of the Cedar Rapids Water Pollution Control Facility to be designated by the Owner.
- B. The Contractor is prohibited from operating any valves, gates or other equipment at any time.

#### **1.8 ORDER OF CONSTRUCTION AND CONSTRUCTION SCHEDULE**

- A. Construction operations will be scheduled to allow the Owner uninterrupted operation of existing adjacent facilities. Coordinate connections with existing work to ensure timely completion of interfaced items.
- B. At no time shall Contractor or his employees modify operation of the existing facilities or start construction modifications without approval of the Owner except in emergency to prevent or minimize damage.
- C. If Contractor does not take necessary action to accomplish work according to schedule, Contractor may be ordered by Owner in writing to take necessary and timely action to improve work progress. Owner may require increased work forces, extra equipment, extra shifts or other action as necessary. Should Contractor refuse or neglect to take such action authorized, under provisions of this contract, Owner may take necessary actions including, but not necessarily limited to, withholding of payment and termination of contract.

#### **1.9 PRECONSTRUCTION CONFERENCE**

- A. A preconstruction conference shall be held at the Cedar Rapids Water Pollution Control Facility after award of Contract. Owner will notify the Contractor as to the date and time of the conference one week in advance of the proposed date. Contractor's Project Manager and Project Superintendent shall attend.

#### **1.10 PROJECT SIGNS**

- A. None required.

#### **1.11 CONTRACTOR'S SUPERINTENDENT'S FIELD OFFICE**

- A. Not required, but Contractor may establish Contractor's field office in an area identified by Owner.
- B. Remove field office from site upon acceptance of the entire work by the Owner.

#### **1.12 ENGINEER'S FIELD OFFICE**

- A. None required.

#### **1.13 DRAWINGS AND CONTRACT DOCUMENTS FOR CONTRACTOR USE**

- A. Additional documents will be furnished as requested to the Contractor.

#### **1.14 PROJECT PHOTOGRAPHS**

- A. Contractor shall take pictures of all damaged members. Provide all pictures to Owner in electronic format.

### **1.15 TESTING**

- A. None required.

### **1.16 PROJECT MEETINGS**

- A. Construction Meetings:
  - 1. The Owner will conduct construction meetings involving:
    - a. Contractor's project manager.
    - b. Contractor's project superintendent.
    - c. Owner's designated representative(s).
    - d. Engineer's designated representative(s) as appropriate.
    - e. Contractor's subcontractors as appropriate to the work in progress.
  - 2. Meetings will be conducted on an as needed basis at mutually agreed upon times.
  - 3. The Owner will take meeting minutes and submit copies of meeting minutes to participants and designated recipients identified at the Preconstruction Conference. Corrections, additions or deletions to the minutes shall be noted and addressed at the following meeting.
  - 4. The Contractor shall have available at each meeting an up-to-date schedule.

### **1.17 SPECIAL CONSIDERATIONS**

- A. Contractor shall be responsible for negotiations of any waivers or alternate arrangements required to enable transportation of materials to the site.
- B. Maintain conditions of access road to site such that access is not hindered as the result of construction related deterioration.

## **PART 2 - PRODUCTS - (NOT APPLICABLE TO THIS SECTION)**

## **PART 3 - EXECUTION - (NOT APPLICABLE TO THIS SECTION)**

**END OF SECTION**

# DORR-O-LITH

<b>OPERATING INSTRUCTIONS</b>	
Instruction number	21-21

## ELECTRO-MECHANICAL OVERLOAD ALARM

The purpose of the Overload Alarm is to warn the operator when the mechanism is being overloaded. The most common cause of overload is excessive depth of settled solids, but frequently the overload can be traced to some object in the tank, obstructing or wedged under the raking arms. The cause of the overload should be thoroughly investigated and eliminated, as any attempt to operate the mechanism in this condition may seriously damage the machine.

The Overload Alarm housing is mounted on the housing of the driving unit at the end of the worm shaft. The end thrust of the worm shaft is made to operate against a series of springs in the alarm housing compressing it an amount in proportion to the load that is required to operate the machine. This movement is transmitted to a dial indicator inside the housing cover. Two mercury switches are mounted on the dial indicator and are so arranged so as to sound an alarm in case of impending excessive load, and to stop the motor when such a load is reached.

When the Overload Alarm is properly assembled, adjusted, and wired, the edge of the red semi-circle should appear opposite the NO LOAD on the dial indicator. This is the no-load position. As the load is increased to where the red semi-circle appears opposite the RED LINE, the mercury alarm switch closes and sends the alarm signal. If the load increases so where the red semi-circle is opposite the NO. 1 MARK, the mercury cut-out switch will open the motor pilot circuit and shut the unit down. When the overload condition has been corrected, the indicator will return to zero and the unit can be restarted.

Should it become necessary to adjust the indicator dial or the mercury switches, remove the mechanism housing cover. Without disturbing the terminal block, the indicator dial can be positioned by loosening the set screw in the pinion hub and rotating the dial counter clockwise so that the edge of the red semi-circle is on zero. To adjust the mercury alarm switch, slowly pull on the extension of the gear rack, so that the dial will revolve. When the edge of the red semi-circle appears opposite the RED LINE, the mercury switch should close and the alarm should go off. In this position, adjust the switch securely. Continue the pull on the gear rack until the edge of the red semi-circle appears

Electro-Mechanical Overload Alarm  
Operating Instructions 21-04

opposite the No. 4 MARK. The mercury switch should open and the motor should stop. Tighten this switch securely in place. Release the gear rack and the dial and rack will return to its normal operating position.

Once properly set, the position of the switches and the indicator dial should not be changed except on advise of a representative of Dorr-Oliver Incorporated, and to this end, a Dorr-Oliver Engineer will, at field inspection, apply a lead seal at the Overload Alarm housing and the mechanism housing cover to prevent tampering with the device.

CHECKED

M. D., FEBRUARY, 1971