



ADDENDUM #1

Date: June 18, 2021

To: All Bid Document Holders

City of Palmer – Wastewater Treatment Facility Improvements – Phase II

The following changes, additions, and/or deletions are hereby made a part of the Request for Bid as fully and completely as if same were fully set forth herein:

GENERAL

1. Attendance sheet for pre-bid conference attached to this addendum.
2. In general, pipes buried 10' or more do not need to be arctic pipe. The 2" NPW shown in Detail B on Sheet 001C404 is currently shown at depth less than 10' and would need to be arctic pipe as shown. The Contractor would have the option of installing this at 10' depth and arctic pipe would not be required.
3. Based on the labeling of pipe systems in the plans and specifications, SCM should be considered the same as SCUM.
4. The water required for clarifier leak tests will be provided at no charge to the Contractor. The Contractor will be required to pump/route as needed, but no surcharge will be applied by the Owner.
5. Testing/engineering/monitoring services for the tank leak tests shall be provided by the Contractor.
6. The baffle assembly described in Standard Detail 05 50 00-20 and Specification Section 46 43 24 shall run the entire circumference of the effluent weir.

SPECIFICATIONS

1. **Replace the following Specification Sections with the revised Sections attached to this addendum:**

USDA CONTRACT FORMS

C-111 - ADVERTISEMENT FOR BIDS
C-200 - INSTRUCTIONS TO BIDDERS FOR CONSTRUCTION CONTRACTS
C-200A - ATTACHMENT - AK WAGE RATES
C-410 - BID FORM FOR CONSTRUCTION CONTRACTS
C-430 - BID BOND FORM
C-451 - QUALIFICATIONS STATEMENT
C-510 - NOTICE OF AWARD
C-520 - AGREEMENT BETWEEN OWNER AND CONTRACTOR FOR CONSTRUCTION CONTRACT (STIPULATED PRICE)
C-520A - EXHIBIT A-3 CONSENT DECREE
C-550 - NOTICE TO PROCEED
C-610 - PERFORMANCE BOND
C-615 - PAYMENT BOND
C-620 - APPLICATION FOR PAYMENT
C-625 - CERTIFICATE OF SUBSTANTIAL COMPLETION
C-700 - STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT
C-800 - SUPPLEMENTARY CONDITIONS
C-940 - WORK CHANGE DIRECTIVE
C-941 - CHANGE ORDER
C-942 - FIELD ORDER
CERTIFICATE OF OWNER'S ATTORNEY AND AGENCY CONCURRENT (RUS BULLETIN 1780-26)
CERTIFICATION FOR CONTRACTS, GRANTS, AND LOANS (USDA RD 1940-Q)
CERTIFICATION REGARDING DEBARMENT (USDA FORM AD-1048)
COMPLIANCE STATEMENT (USDA FORM RD 400-6)
CONTRACTOR AIS CERTIFICATION (USDA 1780-35 Exhibit C)
ENGINEER'S CERTIFICATE OF FINAL PLANS AND SPECS
EXAMPLE MANUFACTURER AIS CERTIFICATION (USDA 1780-35 Exhibit D)
TEMPORARY CONSTRUCTION SIGN

43 21 23 - WET PIT PREROTATION SCREW CENTRIFUGAL IMMERSIBLE NON-CLOG PUMPING SYSTEM

DRAWINGS

1. **DRAWING 001C505:** - The plan view for Manhole #15 shows 2 gates (GV 5103 and GV 5104), while the section only shows one valve (GV 5201). The plan view is correct – two gates will be required.
2. Add attached Figure ADD1-S1 to Sheet 300S501, Secondary Treatment Clarifier Typical Details.
3. Sheet 300S101, Detail A, Note Specifying Clarifier Wall Reinforcement (All Around):

Change 2nd and 3rd lines of note addressing vertical reinforcement to read: "VERTICAL = #7 @ 8" O.C. EACH FACE, PER FIGURE ADD1-S1 (OUTSIDE PLACEMENT)."

Horizontal wall reinforcement remains unchanged.

Signed by the Project Manager _____



Dated 6/18/2021

SECTION 43 21 23
WET PIT PREROTATION SCREW CENTRIFUGAL IMMERSIBLE NON-CLOG
PUMPING SYSTEM

PART 1 - GENERAL

1.1 SUMMARY

- A. This section specifies screw centrifugal pumping systems.
 - 1. This specification section includes pump systems that include screw centrifugal pumps with integral Prerostal basin, inverter rated motors, bearings, seals, base plates, couplings, supports, anchor bolts, lifting eyes, stands, local control panels and other items as necessary for a complete and operational system.
- B. Section Includes:
 - 1. Immersible non-clog pumps:
 - a. Wet pit application.
- C. Related Specification Sections include but are not necessarily limited to:
 - 1. Division 00 – Bidding Requirements, Contract Forms, and Conditions of the Contract.
 - 2. Division 01 – General Requirements.
 - 3. Section 09 96 00 – High Performance Industrial Coatings
 - 4. Section 43 21 00 – Pumping Equipment: Basic Requirements.

1.2 QUALITY ASSURANCE

- A. Referenced Standards:
 - 1. American Bearing Manufacturers Association (ABMA).
 - 2. American National Standards Institute (ANSI).
 - 3. ASTM International (ASTM):
 - a. A48, Standard Specification for Gray Iron Castings.
 - 4. FM Global (FM).

5. American National Standards Institute/Hydraulic Institute (ANSI/HI):
 - a. 1.1.-1.2, Rotodynamic (Centrifugal) Pumps for Nomenclature and Definitions
 - b. 1.3, Rotodynamic (Centrifugal) Pumps for Design and Application
 - c. 9.1-9.5, Pumps-General Guidelines
 - d. 11.6, Rotodynamic Submersible Pumps: for Hydraulic Performance, Hydrostatic Pressure, Mechanical and Electrical Acceptance Tests .
6. National Electrical Manufacturers Association (NEMA):
 - a. 250, Enclosures for Electrical Equipment (1000 Volts Maximum).
 - b. MG 1, Motors and Generators.
7. National Fire Protection Agency (NFPA):
 - a. 70, National Electrical Code (NEC):
 - 1) Article 500, Hazardous (Classified) Locations, Classes I, II, and III, Divisions 1 and 2.
8. Underwriters Laboratories, Inc. (UL).
 - a. 62, Flexible Cord and Fixture Wire.
 - b. 508A, Standard for Safety Industrial Control Panels.
 - c. 913, Standard for Safety, Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, and III, Division 1, Hazardous (Classified) Locations.

1.3 SYSTEM DESCRIPTION

- A. Secondary Scum Pump (SCP-3301):
 1. Secondary Scum Wastewater pumps utilizing wet well level control.
- B. Provide single source coordination responsibility through the pump manufacturer for the entire system including but not limited to the following:
 1. Pumps.
 2. Prerostal basins and associated systems
 3. Motors.
 4. Cables.
 5. Local Control Panels.

6. Lifting/removal guide system.

1.4 SUBMITTALS

A. Shop Drawings:

1. See Specification Section 01 33 00 for requirements for the mechanics and administration of the submittal process.
2. Requirements in Specification Section 43 21 00.
3. Source quality control test reports.
4. Certified statement signed by a registered professional engineer that the ABMA L-10 bearing lives meet or exceed the specified requirements.

5. Local Control Panels:

- a. Panel front and interior back panel layout drawings drawn to scale.
- b. Wiring diagrams.
- c. Bill of materials.
- d. Manufacture catalog cut-sheets.

B. Operation and Maintenance Manuals:

1. See Specification Section 01 33 00 for requirements for:
 - a. The mechanics and administration of the submittal process.
 - b. The content of Operation and Maintenance Manuals.

C. Final Shop Performance Data Submittal.

D. Manufacturer to provide a written guarantee to the Owner for a period for 12 months after startup.

1. Should the pump impeller clog with solids or debris normally found in domestic wastewater.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Like items of equipment provided herein this specification section shall be the end products of one manufacturer.
- B. Responsibility: This Work including the pumping system, shall be complete with all accessories (including motors, rails, safety guards and spare parts, operation and control manuals and training) shall be the end product of one manufacturer or supplier. These systems utilize variable frequency drives and

this work shall be coordinated with Contract Drawings and Specification Section 26 29 23 – Variable Frequency Drives Units. The Contractor shall be responsible to the Owner for coordination with the supplier/manufacturer to provide the systems as specified.

2.2 MANUFACTURERS

A. Hidrostal, LLC

1. Secondary Scum Pump (SCP-3301) and spare pump: Model D3K-S

B. No or equal

2.3 GENERAL REQUIREMENTS

A. Pump and associated electrical equipment shall meet the Area Classification ratings for the areas shown on the drawings and as specified in the electrical specifications.

B. The pump system shall include an immersible pump and shall be a clog-free, single passage pump using a screw-centrifugal impeller. The pump system shall self-cleaning, able to pump large unscreened sewage containing rags, fibers, stringy material without clogging be high efficiency and a low required NPSH.

C. The pumping system shall be designed to operate without the use of variable frequency drive or modulating valves to provide the ability to match flow automatically using the pump impeller and Prerostal basin geometry.

D. Each pump shall have a spare pump provided matching the pump characteristics and model number of the primary, installed pump.

2.4 MATERIALS

A. Wet Well Applications:

1. Pump casing, backhead and suction nozzle: Grey Cast iron, ASTM A48, Class 30
2. Suction Liner: Shimmed Hi-Chrome Iron liner, ASTM A532-CL III Type A1, 450 BN.
3. Motor housing: Cast iron, ASTM A48, Class 25 or Class 35B minimum.
4. Impeller: DUCTILE IRON
 - a. DIN material code: A536-80-55-06
 - b. Brinell hardness: 187-269
5. Shaft:
 - a. Stainless steel: Series 400 stainless steel

6. Liner: Hi-Chrome, A532-III-A
7. Sealing surfaces: Precision machined and fitted mating surfaces.
8. Sealing of Watertight surfaces on motor: O-rings: Nitrile (Buna-N) or fluorocarbon (Viton).
9. Fasteners: Stainless steel, ANSI Series 316.
10. Guide rails: Stainless steel.
11. Lifting Handle: Stainless steel, ANSI Series 300
12. Lifting cables: Stainless steel.
13. Lower ring seal: Rubber Booted with Tungsten-carbide rotating face and silicon-carbide stationary face.
14. Upper ring seal: Carbon/silicon-carbide.
15. Seal metal parts: Stainless steel.

2.5 EQUIPMENT

- A. Secondary Scum Pump (SCP-3301) plus one spare pump:
 - a. Design condition: 100 gpm minimum at 23 FT TDH maximum with minimum pump efficiency of 63 percent.
 - b. Minimum shutoff condition: 0 gpm at 27 FT.
 - c. Pump configuration:
 - 1) Immersible wet pit.
 - d. Maximum pump speed: 1750 rpm.
 - e. Drive type: Constant speed.
 - f. Minimum solids passage: 2.25 IN.
 - g. Suction: 4 IN DIA.
 - h. Discharge: 3 IN DIA.

2.6 COMPONENTS

- A. General:
 1. Provide pumps capable of handling raw, unscreened sewage.
 2. Where watertight sealing is required, precision machined and fitted mating surfaces with O-rings.

3. Provide with heavy duty lift lugs or hoisting bail designed for lifting the entire pump and motor assembly.

B. Impeller:

1. Single passage clog-free screw centrifugal nonclog-type dynamically balanced impeller in accordance with HI standards.
2. Impeller flange or impeller shall contain a spiral groove on the rear face so that any solids in the pumped media are discharged from the space between the backplate and the rear of the impeller.

C. Shaft:

1. Design pump shaft of sufficient size to transmit full driver output.
2. Use shaft which is accurately machined and constructed.
3. Design shaft for a maximum deflection of 0.002 IN measured at the mechanical seal.

D. Mechanical Seal:

1. Seal shaft with two independent, tandem mounted seals running in an oil filled chamber.
2. Hold interface in contact by its own spring system. The seal faces shall be a solid tungsten steel spring which loads the seal.
3. The outboard mechanical seal shall utilize a ceramic/carbon faces.
4. Both mechanical inner and outer seals shall be interchangeable with standard off-the-shelf, size, John Crane mechanical seals, or equal to allow for second source available seals from a local distributor to allow for emergency repair.
5. Provide seals requiring neither routine maintenance nor adjustment, but capable of being easily inspected and replaced.

E. Bearings:

1. Support shaft on upper and lower permanently lubricated bearings with a minimum ABMA L-10 life of 100,000 hours.

F. Immersible Motor

1. Motors shall be explosion-proof design, approved by Factory Mutual for Class I, Groups C&D, hazardous locations as specified.
2. The motors shall be immersible type, suitable for full-load, continuous operation in either a completely dry environment and/or fully submerged environment in wet wells with up to 65 feet water depths.

3. Motors shall be air-filled type, to optimize efficiency with stator and rotor housed in a watertight housing containing air only.
4. Service factor: 1.15.
5. Minimum motor efficiency: 92 percent.
6. Minimum power factor: 75% at full load and 68 percent at 3/4 of load.
7. Ambient conditions:
 - a. Wastewater maximum temperature: 80 DegF.
 - b. Air maximum temperature: 120 DegF.
8. Squirrel-cage induction motor suitable for 460 VAC, 3-phase power.
9. Stator windings insulated with moisture resistant Class H insulation rated for 180 DegC, with Class F insulation for slot and phase laminations.
10. Motor shall be designed for continuous duty handling pumped media of 40 DegC and capable of no less than 10 evenly spaced starts per hour.
11. Thermal temperature switches embedded for motor winding temperatures. Assure motor is capable of running dry for extended periods without damage to motor or seal, 30 minutes
12. The motor horsepower provided shall be adequate for all points on the pump curve and non-overloading throughout the curve.

G. Power and Control Cables:

1. Provide power cable(s) and control cable(s) to pump suitable for submersible applications in wastewater and indicate same by a code or legend permanently embossed on cables.
2. Size cables in accordance with applicable NFPA 70 specifications.
3. Provide power cable and control cables with lengths as required to reach the respective pump control panel.
 - a. The pump cable terminal cabinets shall be located adjacent to the pump station wet well, refer to Drawings.
 - b. The pump cables shall be routed through cable trenches constructed into the top slab of the wet well to the pump cable terminal boxes.
 - c. Supplier shall coordinate with the Contractor to determine the pump cable length requirements and provide this information in the submittals.
 - d. Provide Metric Plug attached to each cable for ease of connecting to the control panel as specified in Sections 26 05 00 Electrical Work, and 26 05 19 Wire and Cables

- e. Provide each cable with a strain relief and cord grip installed in accordance with NFPA 70, Article 500.
4. Non-armored cable gland:
 - a. Furnish each cable with a cable gland (Crouse-Hinds).
 - b. The gland will be used to route the cables into the respective pump cable terminal cabinet or disconnect panel.
- H. Integrally Mounted Pump Sensors:
1. Thermal switches (3 in a series) or thermistors for stator temperature
 2. Conductivity probe to monitor the moisture content of the oil in the chamber between the outer and the inner mechanical seals.
- I. Coatings and finishes:
1. Wet pit applications: Apply coating system to the exterior of the pump casing and motor housing as specified in Specification Section 09 96 00.
 2. Protect all metallic surfaces coming into contact with sewage except stainless steel and bronze by a corrosion-resistant coating.
- J. Wet Pit Applications:
1. Provide a dual 304L stainless steel guide rail system for each pump.
 2. Provide sliding guide bracket integral to pump unit which properly aligns the pump discharge with the discharge connection elbow for watertight seal during pumping.
 3. Guide the entire weight of the pumping unit by guide rail(s).
 4. The guide rail(s) shall not support any portion of the weight of the pump.
 5. Provide chains or cable of sufficient strength to lift pumps from sump.
 6. Furnish guiding rail assembly and the discharge flange assembly of nonsparking components.
 7. Design pump to allow for removal without entering the wet well and without removal of bolts, nuts or other fastenings.
 8. Provide pump unit connecting to discharge connection with a simple downward motion without rotation.
 9. Provide necessary sliding guide bracket and discharge connection which, when bolted to the floor of the sump and to the discharge line, will receive the pump discharge connecting flange without need of adjustment, fasteners, clamp, or similar devices.

10. No portion of the pump shall bear directly on the floor or the wet well.

2.7 MOUNTING

- A. The manufacturer shall provide a heavy-duty cast iron fast-out fixture, conforming to ASTM A536 which shall be permanently mounted to the prerotation basin in the wet well as shown on the Contract Drawings.
- B. The fast-out fixture shall cantilever the entire pump volute and motor from the volute discharge flange, providing an un-obstructed sump floor under the pump; supports from the underside of the pump volute or pump suction to sump floor (which could collect rags, stringy material and impede flow to the pump) shall not be acceptable.
- C. The fast-out fixture shall include a 90-degree cast iron, schedule 80, elbow to connect to the vertical piping, and shall provide mounts for two stainless steel guide rails which will guide the pump into position.
- D. The pump shall be supported by a positive metal to metal interlocking flange, which is additionally sealed by a leak proof nitrile rubber ring pressed against the fixture flange by the weight of the pump.

2.8 SUCTION BELL

- A. Provide one stainless steel suction bell to prevent premature vortexing of the liquid column, thereby extending the prerotation range. The hot-dipped coating shall be in accordance with ASTM A123

2.9 PREROTATION BASIN

- A. The pump/prerotation system manufacturer shall provide one patented prefabricated basin for installation by the Contractor. The pump/prerotation system manufacturer shall be responsible for the design geometry and shall certify that the installed basins will allow the prerotation system to meet the specified pumping criteria.
- B. The prerotation basin shall be self-cleaning and shall capture, entrain and remove floatables and other debris from the wet-well and shall be designed by the manufacturer.
- C. The pump/prerotation manufacturer shall provide a circular fiberglass basin of the appropriate geometry that allows the basin, pump/motor and base/elbow, fast-out fixture to be pre-assembled outside the wet-well for simplified field installation. The basin shall be constructed that it can easily be filled with concrete grout outside the wet-well by the Contractor, and the manufacturer shall furnish a plate and/or a discharge elbow, which locates and contains the anchor bolts for the fast-out fixture during the concrete grout pour. This plate/elbow shall also be designed so that it can be used to rotate and move the basin after filling. Three anchor bolts shall also be encapsulated in the concrete grout for lifting and lowering, and the anchor bolts and eye bolts shall be furnished by the manufacturer.

- D. After the concrete grout has set, the basin shall be turned over using the locator plate/elbow, the fast-out fixture shall be mounted on the anchor bolts, the pump shall be attached to the fast-out fixture while outside the wet-well. The assembly shall then be lowered into the wet well for final adjustment and grouting.
- E. The prefabricated basin shall be constructed of a minimum thickness of 3/8-inch reinforced fiberglass plastic. The coating shall be a gel coat of 9-12 mils equal to Pittsburg Paint #56 -5335 (blue).

2.10 CONTROLS

A. Local Control Panels:

1. General requirements:

- a. Enclosed motor controllers and motor protector panel.
- b. Stainless steel enclosure with NEMA 4X rating:
 - 1) Dead-front design.
 - 2) Continuous seam welded.
 - 3) Single front door with continuous hinge, neoprene gasket.
 - 4) Mechanism designed for securing enclosure with padlock.
 - 5) Mounted on a support frame, pedestal mounting.
 - 6) Inner door in cabinet-mounted on a continuous vertical steel hinge; size to completely cover wiring and components mounted on the back panel; provide for mounting of controls and instruments on inner door.
- c. Incoming power: 480 VAC, 3-phase.
 - 1) Main circuit breaker with external circuit breaker operating handle.
 - 2) Handle shall include locking tabs that prevent the door from being opened with the breaker in the ON position.
 - 3) Transient Voltage Surge Suppression (TVSS):
 - a) UL 1449 listed.
- d. Combination motor starter for the pump:
 - 1) NEMA rated, full-voltage non-reversing type.
 - 2) 3-pole ambient compensated bimetal overload relay.
- e. Control transformer with line and load fuses.
- f. Moisture and temperature sensing relays for the pump.
 - 1) Shall be fully compatible with the moisture and temperature sensors embedded in the pump/motor.

- g. Terminal strip for connections to level switches and plant control system.
 - 1) Each discrete interface point shall be in the form of a dry, relay contact wired to terminal blocks.
- h. Intrinsically safe relays or intrinsically safe barriers to interface to the float switches located in the wetwell per UL 913.
- i. Pump Elapsed Time Meter (ETM).
- j. Electronic time delay relays.
- k. Ice cube, industrial control relays.
- l. Pilot device requirements:
 - 1) Heavy-duty type.
 - 2) Oiltight, NEMA 4X rating.
 - 3) Mounting hole: 30.5 mm.
 - 4) Knob type operators.
 - 5) Push-to-test pilot lights, lens color as indicated.
 - 6) Legend plates:
 - a) Laminated, phenolic plastic with white field and black letters.
 - b) Size: 2 IN x 2 IN.
- m. Condensation protection shall be provided with a space heater controlled with a thermostat.
- n. Fabrication requirements:
 - 1) All internal wiring shall be neat and color coded. Each wire shall be labeled at both ends with a heat-shrinkable wire label. All incoming wires shall terminate into a box clamp type terminal block. All control wires shall be 14 Ga. Type TEW, tinned copper, rated for 105 DegC.
 - 2) A schematic diagram (showing wire color) shall be permanently fastened to the inside of the enclosure. An Installation and Service Manual shall also be included with each control panel.
 - 3) Apply corrosion inhibitors inside the panel after fabrication and prior to shipment to the jobsite. Inhibitor shall consist of agents that vaporize and then condenses on all internal surfaces of the enclosure.
 - 4) Panel shall be factory wired and tested.
 - 5) The control panel shall be U.L. listed as an assembly.

2. Specific Requirements for the Secondary Scum Pump Local Control Panel.
 - a. Tag number: LCP-3301.
 - b. Local control pilot devices:
 - 1) HAND/OFF/AUTO selector switch for the pump.
 - 2) RUNNING light for the pump, red lens.
 - 3) OFF light for the pump, green lens.
 - 4) Overload FAULT light for the pump, amber lens.
 - 5) Motor SEAL LEAK light for the pump, amber lens.
 - 6) Motor HIGH TEMPERATURE light for the pump, amber lens.
 - 7) OPEN/CLOSE/AUTO selector switch for the spray water valve.
 - 8) Control power ON light, white lens.
 - 9) Alarm RESET pushbutton.
 - c. Plant Control System interface requirements:
 - 1) Discrete Outputs to the Plant Control System:
 - a) Pump RUNNING status for the pump.
 - b) FAULT alarm for the pump.
 - c) HOA switch in AUTO for the pump.
 - d) Lift station HIGH level alarm.
 - 2) Discrete Inputs from Plant Control System:
 - a) Pump RUN command.
 - d. Controls description:
 - 1) When the selector switch for the pump in HAND, the pump shall operate.
 - 2) The pump shall be inhibited from operation in either HAND or AUTO operation with the following alarm conditions:
 - a) Overload
 - b) Seal Leak
 - c) High Temperature
 - 3) When the selector switch for the pump is AUTO, the pump shall be called to start by the Plant Control System.
 - 4) When the selector switch for the valve is in OPEN, the valve shall be opened.
 - 5) When the selector switch for the valve is in AUTO, the valve will be called to open when the pump is running and called to close when the pump is stopped.

- 6) A level float switch shall be installed in the wetwell for high level alarm.
- 7) The alarms shall latch in and must be manually reset.

B. Level Float Switches: Mechanical tilt switches in a solid polypropylene casing.

1. Provide float with large radius top at electrical cable connection to assure trouble-free operation.
2. The float switches shall be attached to a weighted chain as shown in the Drawings. Reference Detail 40 91 10-57.
3. Provide floats to operate at elevation shown on Drawings.
4. Design float switch installations to be field-adjustable.
5. Provide an intrinsically safe relay or barrier for each level control circuit to reduce the energy in the circuit to the point that no spark is created by switching per UL 913.
6. Stainless steel cable support grip.

2.11 EQUIPMENT LABELING/TAGGING

- A. As specified. See Section 10 14 00 Identification Devices

2.12 ACCESSORIES

- A. See Specification Section 43 21 00 Pumping Equipment Basic Requirements.

2.13 SOURCE QUALITY CONTROL

- A. Secure from the pump manufacturer the following inspections and tests on each pump before shipment from factory:
1. Check impeller, motor rating and electrical connections for compliance with this Specification Section.
 2. Test motor and cable insulation for moisture content or insulation defects.
 3. Prior to submergence, run pump dry to establish correct rotation and mechanical integrity.
 4. Submerge pump for 30 minutes, a minimum of 6 FT under water.
 5. After operational test #4, perform insulation test (#2) again.
- B. Factory test of head (FT) versus flow (gpm) for one pump of each service category as specified in Section 43 21 00 Pumping Equipment Basic Requirements.

2.14 SPARE PARTS AND TOOLS

- A. Provide one spare pump for each pump supplied including the pump, motor and cable, ready to be installed if the duty pump fails or needs replacement.
- B. Any special tools required for installation and maintenance.
- C. Furnish for each pump the following items:
 - 1. Complete set of bearings.
 - 2. Complete set of shaft sleeves.
 - 3. Suction Liner and sheaves.
 - 4. Complete set of O-rings and gaskets.
 - 5. Complete set of keys, dowels, pins, etc.
 - 6. All spare parts shall be labeled/tagged with the project equipment number and name and properly protected with lubricants for long term storage as necessary. See Section 10 14 00 Identification Devices.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. See Specification Section 43 21 00 Pumping Equipment Basic Requirements.
- B. Attach pump cable end as specified in to make it impervious to moisture or water seepage prior to electrical installation.

3.2 FIELD QUALITY CONTROL

- A. See Specification Section 43 21 00 Pumping Equipment Basic Requirements.

3.3 FIELD VIBRATION TEST

- A. Perform field vibration test on each pump per 40 05 05 Pipe and Pipe Fittings Basic Requirements.

END OF SECTION



USDA CONTRACT FORMS

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ADVERTISEMENT FOR BIDS

City of Palmer, Alaska

Palmer, Alaska

Wastewater Treatment Facility Improvements Project – Phase II

General Notice

The City of Palmer, Alaska (Owner) is requesting Bids for the construction of the following Project:

Palmer Wastewater Treatment Facility Wastewater Treatment Facility Improvements Project – Phase II

Sealed Bids for the construction of the Project will be received at **Palmer City Hall, 231 W Evergreen Avenue, Palmer Alaska**, until **2:00 p.m.** local time on **June 24, 2021**. At that time the Bids received will be publicly opened and read.

The Project includes the following Work:

Construction of new secondary clarifiers, a waste activated sludge pumping station, a scum pump station, and associated electrical, SCADA, mechanical and civil work. Additional work for upgrades at the existing facility will include demolition, modifications to existing lagoons, piping upgrades, and installation of new equipment, and subsidiary and incidental work in accordance with the plans and specifications.

Bids will be received for a single prime Contract. Bids shall be on a lump sum basis, with additive alternate bid items as indicated in the Bid Form.

Obtaining the Bidding Documents

Bid documents will be available starting May 27, 2021 in electronic format only. Documents may be downloaded at www.cityofpalmer.org or a CD may be picked up from Palmer Public Works at 1316 S Bonanza Street, Palmer. There is no fee for bid documents.

Revised drawings will be issued to plan holders as necessary with addenda.

Neither Owner nor Engineer will be responsible for Bidding Documents, including Addenda, if any, obtained from sources other than the designated website.

Pre-bid Conference

A mandatory Pre-Bid conference will be held at the Palmer City Hall, 231 W Evergreen Avenue, Palmer Alaska, at 10:00 AM June 8, 2021 and a site visit will be conducted after the Pre-Bid Conference at Palmer Wastewater Treatment Facility: Location: 1802 S. Brooks Road, Palmer, Alaska. Attendance at the pre-bid conference is mandatory and lack of attendance at the pre-bid conference shall disqualify the Bidder.

For all further requirements regarding bid submittal, qualifications, procedures, and contract award, refer to the Instructions to Bidders that are included in the Bidding Documents. Bid security shall be furnished in accordance with the Instructions to Bidders.

American Iron and Steel

Section 746 of Title VII of the Consolidated Appropriations Act of 2017 (Division A - Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2017) and subsequent statutes mandating domestic preference applies an American Iron and Steel requirement to this project. All iron and steel products used in this project must be produced in the United States. The

term "iron and steel products" means the following products made primarily of iron or steel: lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and Construction Materials.

The following waivers apply to this Contract:

De Minimis,

Minor Components,

Pig iron and direct reduced iron

The City reserves the right to reject any or all bids and to waive irregularities or informalities in any of the bids when in its best interest.

Questions regarding this "Advertisement for Bids" should be submitted in writing via email to:

Ryan Moyers, PE
Project Manager
HDR Engineering, Inc.
2525 C Street
Suite # 500
Anchorage, AK 99503-2633
Phone (907) 644-2000
E-mail : Ryan.Moyers@hdrinc.com

This Advertisement is issued by:

Owner: City of Palmer, Alaska
By: John Moosey
Title: City Manager

1.0 PURPOSE AND INTENDED USE OF THE DOCUMENT

INSTRUCTIONS TO BIDDERS
FOR CONSTRUCTION CONTRACT

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ARTICLE 1—DEFINED TERMS

- 1.01 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:
- A. *Issuing Office*—The office from which the Bidding Documents are to be issued, and which registers plan holders.
 - B. **Successful Bidder - The lowest responsible Bidder submitting a responsive bid to whom Owner (on the basis of Owner’s evaluation as hereinafter provided) makes an award.**
 - C. **Owner— City of Palmer Alaska**

ARTICLE 2—BIDDING DOCUMENTS

- 2.01 Bidder shall obtain a complete set of Bidding Requirements and proposed Contract Documents (together, the Bidding Documents). See the Agreement for a list of the Contract Documents. It is Bidder’s responsibility to determine that it is using a complete set of documents in the preparation of a Bid. Bidder assumes sole responsibility for errors or misinterpretations resulting from the use of incomplete documents, by Bidder itself or by its prospective Subcontractors and Suppliers.
- 2.02 Bidding Documents are made available for the sole purpose of obtaining Bids for completion of the Project and permission to download or distribution of the Bidding Documents does not confer a license or grant permission or authorization for any other use, nor does it grant or confer ownership or any property interest in the Bidding Documents and other documents distributed for the Project. Authorization to download documents, or other distribution, includes the right for Bidding Documents holders to print documents solely for their use, and the use of their prospective Subcontractors and Suppliers, provided the Bidding Documents holder pays all costs associated with printing or reproduction. Paper or other types of printed documents may not be re-sold under any circumstances.
- 2.03 Owner has established a Bidding Documents Website as indicated in the Advertisement or invitation to bid. Owner recommends that Bidder register as a Bidding Documents holder with the Issuing Office at such website, and obtain a complete set of the Bidding Documents from such website. Bidders may rely that sets of Bidding Documents obtained from the Bidding Documents Website are complete, unless an omission is blatant. Registered Bidding Documents holders will receive Addenda issued by Owner or Issuing Office.
- 2.04 Bidder may register as a Bidding Documents holder and obtain complete sets of Bidding Documents, in the format stated in the Advertisement or invitation to bid, from the Issuing Office. Bidders may rely that sets of Bidding Documents obtained from the Issuing Office are complete, unless an omission is blatant. Registered Bidding Documents holders will receive Addenda issued by Owner or Issuing Office.
- 2.05 Plan rooms (including construction information subscription services, and electronic and virtual plan rooms) may distribute the Bidding Documents, or make them available for examination. Those prospective bidders that obtain an electronic (digital) copy of the Bidding Documents from a plan room are encouraged to register as Bidding Documents holders from the Bidding Documents Website or Issuing Office. Owner is not responsible for omissions in Bidding Documents or other documents obtained from plan rooms or other such

sources (such as other prospective bidders), or for a Bidder's failure to obtain Addenda from a plan room.

2.06 *Electronic Documents*

- A. When the Bidding Requirements indicate that electronic (digital) copies of the Bidding Documents are available, such documents will be made available to prospective Bidders as Electronic Documents in the manner specified.
 - 1. Bidding Documents will be provided in Adobe PDF (Portable Document Format) (.pdf) that is readable by Adobe Acrobat Reader. It is the intent of the Engineer and Owner that such Electronic Documents are to be exactly representative of the paper copies of the documents. However, because the Owner and Engineer cannot totally control the transmission and receipt of Electronic Documents nor any bidder's or the Contractor's means of reproduction of such documents, the Owner and Engineer cannot and do not guarantee that Electronic Documents and reproductions prepared from those versions are identical in every manner to the paper copies.
- B. Unless otherwise stated in the Bidding Documents, the Bidder may use and rely upon complete sets of Electronic Documents of the Bidding Documents, described in Paragraph 2.06.A above. However, Bidder assumes all risks associated with differences arising from transmission/receipt of Electronic Documents versions of Bidding Documents and reproductions prepared from those versions and, further, assumes all risks, costs, and responsibility associated with use of the Electronic Documents versions to derive information that is not explicitly contained in paper versions of the documents, and for Bidder's reliance upon such derived information.
- C. After the Contract is awarded, the Owner will provide or direct the Engineer to provide for the use of the Contractor certain documents that were developed by Engineer as part of the Project design process, as Electronic Documents in native file formats as originally prepared by Engineer.
 - 1. Electronic Documents that are available in native file format include:
 - a. Project drawings and specifications
 - 2. Release of such documents will be solely for the convenience of the Contractor and subject to additional requirements, if any, for such release as indicated in Specifications Section 01 31 26 – Electronic Communication Protocols. No such document is a Contract Document.
 - 3. Unless the Contract Documents explicitly identify that such information will be available to the Successful Bidder (Contractor), nothing herein will create an obligation on the part of the Owner or Engineer to provide or create such information, and the Contractor is not entitled to rely on the availability of such information in the preparation of its Bid or pricing of the Work. In all cases, the Contractor shall take appropriate measures to verify that electronic/digital information provided in Electronic Documents is appropriate and adequate for Contractor's specific purposes.
 - 4. In no case will Contractor be entitled to additional compensation or time for completion due to any differences between the actual Contract Documents and any related document in native file format.

ARTICLE 3—QUALIFICATIONS OF BIDDERS

- 3.01 To demonstrate Bidder's qualifications to perform the Work, Bidder shall submit the **EJCDC Form C- 451 Qualifications Statement** AND the following information with its bid:
- A. Written evidence establishing its qualifications such as financial data, previous experience, and present commitments.
 - B. A written statement that Bidder is authorized to do business in the state where the Project is located, or a written certification that Bidder will obtain such authority prior to the Effective Date of the Contract. Such statement or certification, as applicable, shall be signed by the same officer of Bidder's company that signed the Bid.
 - C. Bidder's state (or other issuing entity) contractor license number, if applicable.
 - D. Subcontractor and Supplier qualification information.
 - E. Other required information regarding qualifications.
- 3.02 [DELETED]
- 3.03 Bidder is to submit the following information with its Bid to demonstrate Bidder's qualifications to perform the Work:
- A. Written evidence establishing its qualifications such as financial data, previous experience, and present commitments.
 - B. A written statement that Bidder is authorized to do business in the state where the Project is located, or a written certification that Bidder will obtain such authority prior to the Effective Date of the Contract.
 - C. Bidder's state (or other) contractor license number, if applicable.
 - D. Subcontractor and Supplier qualification information.
 - E. Other required information regarding qualifications.
- 3.04 A Bidder's failure to submit required qualification information within the times indicated may disqualify Bidder from receiving an award of the Contract.
- 3.05 No requirement in this Article 3 to submit information will prejudice the right of Owner to seek additional pertinent information regarding Bidder's qualifications.
- 3.06 Bidders shall be experienced in the kind of Work to be performed, shall have the or be able to obtain construction equipment necessary for the Work, and shall possess sufficient capital to properly perform the Work within the time allowed. Bids received from Bidders who have previously failed to complete work within the time required, or who have previously performed similar work in an unsatisfactory manner, may be rejected. A Bid may be rejected if Bidder cannot show and document to Owner's satisfaction that Bidder has the necessary ability, facilities, equipment, and resources to commence the Work at the time prescribed and thereafter to prosecute and complete the Work at the rate or within the times specified. A Bid may be rejected if Bidder is already obligated for the performance of other work which would delay the commencement, prosecution or completion of the Work.

ARTICLE 4—PRE-BID CONFERENCE

- 4.01 A mandatory pre-bid conference will be held at the time and location indicated in the Advertisement or invitation to bid. Representatives of Owner and Engineer will be present to discuss the Project. Bids will not be accepted from Bidders who do not attend the conference. It is each Bidder's responsibility to sign in at the pre-bid conference to verify its participation. Bidders must sign in using the name of the organization that will be submitting a Bid. A list of Bidders that attended the pre-

bid conference and are, on that basis alone, eligible to submit a Bid for this Project, will be issued in an Addendum.

- 4.02 Information presented at the pre-bid conference does not alter the Bidding Documents. Owner or Issuing Office will issue Addenda to make any changes to the Bidding Documents that result from discussions at the pre-bid conference. Information presented, and statements made at the pre-bid conference will not be binding or legally effective unless incorporated in an Addendum.

ARTICLE 5—SITE AND OTHER AREAS; EXISTING SITE CONDITIONS; EXAMINATION OF SITE; OWNER’S SAFETY PROGRAM; OTHER WORK AT THE SITE

5.01 *Site and Other Areas*

- A. The Site is identified in the Bidding Documents, including in Specifications Section 01 11 00 – Summary of Work. By definition, the Site includes rights-of-way, easements, and other lands furnished by Owner for the use of the Contractor. Any additional lands required for temporary construction facilities, construction equipment, or storage of materials and equipment, and any access needed for such additional lands, are to be obtained and paid for by Contractor.

5.02 *Existing Site Conditions*

- A. *Subsurface and Physical Conditions; Hazardous Environmental Conditions*
1. The Supplementary Conditions identify the following regarding existing conditions at or adjacent to the Site:
 - a. Those reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data.
 - b. Those drawings known to Owner of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data.
 - c. Reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site.
 - d. Technical Data contained in such reports and drawings.
 2. Owner will make copies of reports and drawings referenced above available to any prospective Bidder on request. These reports and drawings are not part of the Contract Documents, but the Technical Data contained therein upon whose accuracy Bidder is entitled to rely, as provided in the General Conditions, has been identified and established in the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any Technical Data or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.
 3. If the Supplementary Conditions do not identify Technical Data, the default definition of Technical Data set forth in Article 1 of the General Conditions will apply.
 4. *Geotechnical Baseline Report and Geotechnical Data Report:* The Bidding Documents contain a Geotechnical Baseline Report (GBR) and Geotechnical Data Report (GDR).
 - a. The GBR describes certain select subsurface conditions that are anticipated to be encountered by Contractor during construction in specified locations (“Baseline Conditions”). Because it is an

attachment to a Specifications section, the GBR is a Contract Document.

- b. The Baseline Conditions in the GBR are intended to reduce uncertainty and the degree of contingency in submitted Bids. However, Bidders cannot rely solely on the Baseline Conditions. Bids should be based on a comprehensive approach that includes an independent review and analysis of the GBR, all other Contract Documents, Technical Data, other available information, and observable surface conditions. Not all potential subsurface conditions are baselined.
 - c. Nothing in the GBR is intended to relieve Bidders of the responsibility to make their own determinations regarding construction costs, bidding strategies, and Bid prices, nor of the responsibility to select and be responsible for the means, methods, techniques, sequences, and procedures of construction, and for safety precautions and programs incident thereto.
 - d. The GDR is a Contract Document containing data prepared by or for the Owner in support of the GBR.
- B. *Underground Facilities:* Underground Facilities are shown or indicated on the Drawings, pursuant to Paragraph 5.05 of the General Conditions, and not in the drawings referred to in Paragraph 5.02.A of these Instructions to Bidders. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data.

5.03 *Site Visit and Testing by Bidders*

- A. Bidder is required to visit the Site and conduct a thorough visual examination of the Site and adjacent areas. During the visit the Bidder must not disturb any ongoing operations at the Site.
- B. A Site visit is scheduled following the pre-bid conference. Maps, directions, or GPS coordinates to the Site, when the Site is remote from the pre-bid conference location, will be available at the pre-bid conference.
- C. A Site visit is scheduled for **11:30 AM June 8, 2021 at the Palmer Wastewater Treatment Facility Location: 1802 S. Brooks Road, Palmer, Alaska.**
- D. Bidders visiting the Site are required to: (1) arrange their own transportation to the Site; and (2) each Bidder visiting the Site is responsible for providing and using its own personal protective equipment appropriate for the Site and conditions, and in accordance with posted requirements, if any. [At minimum, each visitor to the Site should have an appropriate hardhat, steel-toed boots, eye and hearing protection (other than ordinary eyewear), and a high-visibility reflective safety vest.] Comply with Paragraph 5.05 of these Instructions to Bidders.
- E. All access to the Site, other than during a regularly scheduled Site visit, must be coordinated through the following Owner or Engineer contact for visiting the Site: [provide contact information]. Bidder must conduct the required Site visit during normal working hours, Mondays through Fridays.
- F. Bidder is not required to conduct any subsurface testing, or exhaustive investigations of Site conditions.
- G. On request, and to the extent Owner has control over the Site, and schedule permitting, the Owner will provide Bidder general access to the Site to conduct such additional examinations, investigations, explorations, tests, and studies

as Bidder deems necessary for preparing and submitting a successful Bid. Owner will not have any obligation to grant such access if doing so is not practical because of existing operations, security or safety concerns, or restraints on Owner's authority regarding the Site. Bidder is responsible for establishing access needed to reach specific selected test sites.

- H. Bidder must comply with Laws and Regulations regarding excavation and location of utilities, obtain necessary permits, and comply with all terms and conditions established by Owner or by property owners or other entities controlling the Site with respect to schedule, access, existing operations, security, liability insurance, and applicable safety programs.
- I. Bidder must fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies.

5.04 Owner's Safety Program

- A. Site visits and work at the Site may be governed by an Owner safety program. If an Owner safety program exists, it will be indicated in the Supplementary Conditions. Where the Bidding Documents indicate an Owner's safety program, visitors to the Site during the bidding phase and at other times shall comply with Owner's safety programs.

5.05 Other Work at the Site

- A. Reference is made to Specifications Section 01 11 00 – Summary of Work, for the identification of the general nature of other work of which Owner is aware (if any) that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) and relates to the Work contemplated by these Bidding Documents. If Owner is party to a written contract for such other work, then on request, Owner will provide to each Bidder access to examine such contracts (other than portions thereof related to price and other potentially confidential matters), if any.

ARTICLE 6—BIDDER'S REPRESENTATIONS AND CERTIFICATIONS

6.01 *Express Representations and Certifications in Bid Form, Agreement*

- A. The Bid Form that each Bidder will complete and submit contains express representations regarding the Bidder's examination of Project documentation, Site visit, and preparation of the Bid, and certifications regarding lack of collusion or fraud in connection with the Bid. Bidder should review these representations and certifications, and assure that Bidder can make the representations and certifications in good faith, before executing and submitting its Bid.
- B. If Bidder is awarded the Contract, Successful Bidder (as Contractor) will make similar express representations and certifications when it signs the Agreement.

ARTICLE 7—INTERPRETATIONS AND ADDENDA

- 7.01 Owner on its own initiative may issue Addenda to clarify, correct, supplement, or change the Bidding Documents.
- 7.02 Bidder shall submit all questions about the meaning or intent of the Bidding Documents to Engineer in writing. Contact information and submittal procedures for such questions are as follows:
- A. **Ryan Moyers, PE, Project Manager, HDR Engineering, Inc, 2525 C Street, Suite 500, Anchorage, AK 99503, Phone (907) 644-2000, E-mail : Ryan.Moyers@hdrinc.com.**
- 7.03 Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda delivered to all Bidding Documents holders registered with the Issuing Office. Questions received less than seven days prior to the date for opening of Bids may not be answered.
- 7.04 Only responses set forth in an Addendum will be binding. Oral and other interpretations or clarifications will be without legal effect. Responses to questions are not part of the Contract Documents unless set forth in an Addendum that expressly modifies or supplements the Bidding Documents.
- 7.05 Addenda that engineer judges to have a material or significant effect on Bidders' preparation of pricing and other requirement element of the Bid will be transmitted via Addendum for Bidders' receipt not less than three days prior to the scheduled date for receipt of the Bids. Clarifications or modifications that Engineer deems will not have a material or substantial effect on the preparation of Bids may be transmitted for Bidders' receipt later, for receipt prior to the deadline for receipt of Bids.

ARTICLE 8—BID SECURITY

- 8.01 *Required Form and Amount of Bid Security*
- A. A Bid must be accompanied by bid security made payable to Owner in an amount of five percent of Bidder's maximum Bid price (determined by adding the base bid and all alternates) and in the form of a bid bond issued by a surety meeting the requirements of Paragraph 6.01 of the General Conditions. Bid security must be at least 5% of the Bidder's maximum Bid price.
- B. Such bid bond will be issued in the form included in the Bidding Documents.
- 8.02 *Bid Security of Successful Bidder*
- A. The Bid security of the apparent Successful Bidder will be retained until Owner awards the Contract to such Bidder, and such Bidder has signed the Contract, furnished the required Contract security, and met the other conditions of the Notice of Award, whereupon the Successful Bidder's bid security will be released.
- B. If the Successful Bidder fails to sign and deliver the Contract and furnish the required Contract security within the number of days, indicated in Paragraph 20.01 of these Instructions to Bidders, after the Notice of Award, Owner may consider Bidder to be in default, annul the Notice of Award, and the bid security of that Bidder will be forfeited.
- C. Upon Successful Bidder's default:
1. When the bid security is a penal sum bid bond, the entire penal sum amount of the bid bond will be forfeit and due Owner.
 2. When the bid security is a damages form of bid bond, to the extent of Owner's damages will be forfeit and due Owner.

3. If a type of bid security other than a bid bond is allowed and is furnished, the amount that will be forfeit and due Owner will be the same as for the form of bid bond included in the Bidding Documents. Owner will so notify the defaulting Bidder in writing of the annulment and the amount of the forfeiture, with documentation of the amount forfeited.
 - D. Such forfeiture will be Owner's exclusive remedy if Bidder defaults.
- 8.03 *Bid Security of Bidders other than the Successful Bidder*
- A. The bid security of other Bidders that Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of seven days after the Effective Date of the Contract or 61 days after the Bid opening, whereupon bid security furnished by such Bidders will be released.
 - B. Bid security of other Bidders that Owner believes do not have a reasonable chance of receiving the award will be released within seven days after the bid opening.
 - C. Release of Bid Security: Owner may release any Bidder's bid security by returning such bid security to the associated Bidder. When bid security is in the form of a bid bond, Owner may dispose of or destroy the bid bond and so advise the associated Bidder in writing that the bid bond has been released.

ARTICLE 9—CONTRACT TIMES

- 9.01 The number of days within which, or the dates by which, the Work is to be (a) substantially completed and (b) ready for final payment, and (c) Milestones (if any), are to be achieved are set forth in the Agreement.
- 9.02 [DELETED]
- 9.03 Provisions for liquidated and special damages, if any, for failure to timely attain a Milestone, Substantial Completion, or completion of the Work in readiness for final payment, are set forth in the Agreement.

ARTICLE 10—SUBSTITUTE AND "OR EQUAL" ITEMS

- 10.01 [DELETED]
- 10.02 The Contract for the Work, as awarded, will be on the basis of materials, equipment, and procedures specified or described in the Bidding Documents, and those "or-equal" or substitute or materials and equipment subsequently approved by Engineer prior to the submittal of Bids and identified by Addendum. No item of material or equipment or alternative procedure will be considered by Engineer as an "or-equal" or substitute unless written request for approval has been submitted by Bidder and has been received by Engineer within 10 days of the issuance of the Advertisement or invitation to bid. Each such request must comply with the requirements of (1) Paragraphs 7.05 and 7.06 of the General Conditions, and (2) the Division 01 Specifications governing substitutes and "or-equals", as applicable, and the review of the request will be governed by the principles in those provisions of the Bidding Documents. Each such request shall include the Manufacturer's Certification for Compliance with AIS. Refer to the Manufacturer's Certification form provided in these construction Contract Documents. The burden of proof of the merit of the proposed item or procedure is upon Bidder. Engineer's decision of approval or disapproval of a proposed item or procedure will be final. If Engineer approves any such proposed item or procedure, such approval will be set forth in an Addendum issued in accordance with Article 7 of these Instructions to Bidders. Bidders cannot rely upon approvals made in any other manner. Substitutes and

“or-equal” materials and equipment may be proposed by Contractor in accordance with Paragraphs 7.05 and 7.06 of the General Conditions after the Effective Date of the Contract. Each such request shall include Manufacturer’s Certification letter to document compliance with AIS requirements of Section 746 of Title VII of the Consolidated Appropriations Act of 2017 (Division A - Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2017) and subsequent statutes mandating domestic preference, if applicable. Refer to Manufacturer’s Certification Letter provided in these Contract Documents.

- 10.03 All prices that Bidder sets forth in its Bid will be based on the presumption that the Contractor will furnish the materials and equipment specified or described in the Bidding Documents, and will perform the Work in accordance with procedures indicated in the Bidding Documents, as supplemented by Addenda, if any. Assumptions regarding the possibility of post-bid approvals of “or-equal” or substitution requests are made at Bidder’s sole risk.

ARTICLE 11—SUBCONTRACTORS, SUPPLIERS, AND OTHERS

11.01 [DELETED]

11.02 The apparent Successful Bidder, and any other Bidder so requested by Owner or Engineer, must submit to Owner (with a copy to Engineer) a list of the Subcontractors and Suppliers proposed for the following portions of the Work within five days after the bid opening:

A. [List key categories of the Work. Depending on the Project, this might include electrical, fire protection, plumbing, HVAC, and/or Suppliers of certain major equipment items].

11.03 If requested by Owner or Engineer, such list must be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor or Supplier. If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor or Supplier, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit an acceptable substitute, in which case apparent Successful Bidder will submit a substitute, Bidder’s Bid price will be increased (or decreased) by the difference in cost occasioned by such substitution, and Owner may consider such price adjustment in evaluating Bids and awarding the Contract.

11.04 If apparent Successful Bidder declines to make a requested substitution, Owner may award the Contract to another Bidder, consistent with the basis for evaluating the Bids for award as set forth in these Instructions to Bidders, that proposes to use acceptable Subcontractors and Suppliers. Declining to make requested substitutions will constitute grounds for forfeiture of the bid security of any Bidder. Any Subcontractor or Supplier, so listed and against which Owner or Engineer makes no written objection prior to issuance of the Notice of Award will be deemed acceptable to Owner and Engineer subject to subsequent revocation of such acceptance as provided in Paragraph 7.07 of the General Conditions.

- 11.05 The Contractor shall not award work to Subcontractor(s) in excess of the limits stated in SC 7.07A.

ARTICLE 12—PREPARATION OF BID

- 12.01 The Bid Form is included with the Bidding Documents.
- A. All blanks on the Bid Form must be completed in ink and the Bid Form signed in ink. Erasures or alterations must be initialed in ink by the person signing the Bid Form. A Bid price must be indicated for each section, Bid item, alternate, adjustment unit price item, and unit price item listed therein.
 - B. If the Bid Form expressly indicates that submitting pricing on a specific alternate item is optional, and Bidder elects to not furnish pricing for such optional alternate item, then Bidder may enter the words “No Bid” or “Not Applicable.”
- 12.02 If Bidder has obtained the Bidding Documents as Electronic Documents, then Bidder shall prepare its Bid on a paper copy of the Bid Form printed from the Electronic Documents version of the Bidding Documents. The printed copy of the Bid Form must be clearly legible, printed on 8.5inch by 11-inch paper and as closely identical in appearance to the Electronic Document version of the Bid Form as may be practical. The Owner reserves the right to accept Bid Forms which nominally vary in appearance from the original paper version of the Bid Form, providing that all required information and submittals are included with the Bid.
- 12.03 A Bid by a corporation must be signed in the corporate name by a corporate officer (whose title must appear under the signature), accompanied by evidence of authority to sign. The corporate address and state of incorporation must be shown.
- 12.04 A Bid by a partnership must be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership must be shown.
- 12.05 A Bid by a limited liability company must be signed in the name of the firm by a member or other authorized person and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm must be shown.
- 12.06 A Bid by an individual must show the Bidder’s name and official address.
- 12.07 A Bid by a joint venture must be signed by an authorized representative of each joint venturer in the manner indicated on the Bid Form. The joint venture must have been formally established prior to submittal of a Bid, and the official address of the joint venture must be shown.
- 12.08 All names must be printed in ink below the signatures.
- 12.09 The Bid must contain an acknowledgment of receipt of all Addenda, the numbers of which must be filled in on the Bid Form.
- 12.10 Postal and e-mail addresses and telephone number for communications regarding the Bid must be indicated on the Bid Form.
- 12.11 The Bid must contain evidence of Bidder’s authority to do business in the state where the Project is located, or Bidder must certify in writing that it will obtain such authority within the time for acceptance of Bids and attach such certification to the Bid.
- 12.12 If Bidder is required to be licensed to submit a Bid or perform the Work in the state where the Project is located, the Bid must contain evidence of Bidder’s licensure, or Bidder must certify in writing that it will obtain such licensure within the time for

acceptance of Bids and attach such certification to the Bid. Bidder's state contractor license number, if any, must also be shown on the Bid Form.

ARTICLE 13—BASIS OF BID

13.01 *Sum*

A. Bidders must submit a Bid on a lump sum basis as set forth in the Bid Form.

13.02 *[DELETED]*

13.03 *Cash Allowances*

A. For cash allowances the bid price (for items other than cash allowances) must include such amounts as Bidder deems proper for Contractor's overhead, handling and installation costs, profit, and other expenses on account of cash allowances, if any, named in the Contract Documents, in accordance with Paragraph 13.02.B of the General Conditions.

13.04 *[DELETED]*

ARTICLE 14—SUBMITTAL OF BID

14.01 Five (5) copies of the Bid shall be submitted in one sealed envelope or container, which shall contain the items of information listed in Section C-410 Bid Form. With each copy of the Bidding Documents, a Bidder is furnished one separate unbound copy of the Bid Form, and, if required, the Bid Bond Form. The unbound copy of the Bid Form is to be completed and submitted with the Bid security and the other documents required to be submitted under the terms of Article 7 of the Bid Form.

14.02 A Bid must be received no later than the date and time prescribed and at the place indicated in the Advertisement or invitation to bid and must be enclosed in a plainly marked package with the Project title, and, if applicable, the designated portion of the Project for which the Bid is submitted, and the name and address of Bidder, and must be accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery method, the sealed envelope containing the Bid must be enclosed in a separate package plainly marked on the outside with the notation "BID ENCLOSED." A mailed Bid must be addressed to the location designated in the Advertisement or invitation to bid.

14.03 Bids received after the date and time prescribed for the opening of Bids, or not submitted at the correct location or in the designated manner, will not be accepted and will be returned to the Bidder unopened. Owner accepts no responsibility for delays in returning Bids submitted or delivered to the incorrect location.

ARTICLE 15—MODIFICATION AND WITHDRAWAL OF BID

15.01 An unopened Bid may be withdrawn by an appropriate document duly signed in the same manner that a Bid must be signed and delivered to the place where Bids are to be submitted, prior to the date and time established in the Bidding Documents for the receipt of Bids. Upon receipt of such notice, the unopened Bid will be returned to the Bidder.

15.02 If a Bidder wishes to modify its Bid prior to Bid opening, Bidder must withdraw its initial Bid in the manner specified in Paragraph 15.01 of this Article and submit a new Bid prior to the date and time for established in the Bidding Documents the receipt of Bids.

15.03 If, within [24] hours after Bids are opened, any Bidder files a duly signed, written notice with Owner and promptly thereafter demonstrates to the reasonable

satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, the Bidder may withdraw its Bid, and the bid security will be returned. Thereafter, if the Work is rebid, the Bidder will be disqualified from further bidding on the Work.

ARTICLE 16—OPENING OF BIDS

- 16.01 Bids will be opened at the time and place indicated in the Advertisement or invitation to bid and, unless obviously non-responsive, will be read aloud publicly. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.
- 16.02 Bids will be opened privately.
- 16.03 [An abstract of the amounts of the base Bids and major alternates, if any, will be furnished by Owner or Engineer to plan rooms and construction information subscription services.]

ARTICLE 17—BIDS TO REMAIN SUBJECT TO ACCEPTANCE

- 17.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

ARTICLE 18—EVALUATION OF BIDS AND AWARD OF CONTRACT

- 18.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner also reserves the right to waive all minor Bid informalities not involving price, time, or changes in the Work.
- 18.02 Owner will reject the Bid of any Bidder that Owner finds, after reasonable inquiry and evaluation, to not be responsible. Owner may reject the Bid of any Bidder that fails to demonstrate appropriate qualifications, experience, and resources for the Work, in accordance with Article 3 of these Instructions to Bidders.
- 18.03 If Bidder purports to add terms or conditions to its Bid, takes exception to any provision of the Bidding Documents, or attempts to alter the contents of the Contract Documents for purposes of the Bid, whether in the Bid itself or in a separate communication to Owner or Engineer, then Owner will reject the Bid as nonresponsive.
- 18.04 *Basis for Award of Contract*
- A. If Owner awards the contract for the Work, such award will be to the responsible Bidder submitting the lowest-priced, responsive Bid that has not otherwise been disqualified.
- B.
- 18.05 *Evaluation of Bids*
- A. In evaluating Bids, Owner will consider whether the Bids comply with the prescribed requirements, and such alternates, unit prices, and other data, as may be requested in the Bid Form or elsewhere in the Bidding Documents, or prior to the Notice of Award.
- B. *Unit Price Work:* For the determination of the apparent low-price Bid when unit price bids are submitted, Bids will be compared on the basis of the total of the products of the estimated quantity of each item and unit price bid for that item, together with amount(s) of lump sum items (if any).

- C. [DELETED]
- D. [DELETED]
- 18.06 In evaluating whether a Bidder is responsible, Owner will consider the qualifications, experience, and resources of the Bidder and may consider the qualifications, experience, and resources of Subcontractors and Suppliers proposed for those portions of the Work for which the identity of Subcontractors and Suppliers must be submitted as provided in the Bidding Documents.
- 18.07 Owner, with or without Engineer's assistance, may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders and any proposed Subcontractors or Suppliers.

ARTICLE 19—BONDS AND INSURANCE

- 19.01 Paragraph 2.01 and Article 6 of the General Conditions, as may be modified by the Supplementary Conditions, set forth Owner's requirements as to performance and payment bonds, other required bonds (if any), and insurance. When the Successful Bidder delivers the signed Agreement to Owner (or Owner's representative), it must be accompanied by required bonds and insurance documentation.
- 19.02 Article 8 ("Bid Security") of these Instructions to Bidders addresses any requirements for providing bid bonds as part of the bidding process.

ARTICLE 20—SIGNING OF AGREEMENT

- 20.01 When Owner issues a Notice of Award to the Successful Bidder, it will be accompanied by the unsigned counterparts of the Agreement, along with the other Contract Documents as identified in the Agreement. Within [15] days thereafter, Successful Bidder must execute and deliver the required number of counterparts of the Agreement and required bonds and insurance documentation (as required by the Contract Documents) to [Owner] [Owner's representative, as indicated in the Notice of Award]. Within [10] days thereafter, Owner will deliver one fully signed counterpart of the Agreement to Successful Bidder, together with printed and

electronic copies of the Contract Documents as stated in Paragraph 2.02 of the General Conditions.

ARTICLE 21—SALES AND USE TAXES

- 21.01 Contractor shall be responsible for all taxes and duties arising out of the sale of the Goods and the furnishing of any Special Services. Refer to Paragraph SC-7.10 of the Supplementary Conditions for additional information.

ARTICLE 22—CONTRACTS TO BE ASSIGNED (NOT USED)

ARTICLE 23—FEDERAL REQUIREMENTS

- 23.01 If the contract price is in excess of \$100,000, provisions of the Contract Work Hours and Safety Standards Act at 29 CFR 5.5(b) apply.
- 23.02 Federal requirements at Article 19 of the Supplementary Conditions apply to this Contract.
- 23.03 American Iron and Steel requirements apply to this project.

ARTICLE 24—WAGE RATE REQUIREMENTS

- 24.01 If the contract price is in excess of \$100,000, provisions of the Contract Work Hours and Safety Standards Act at 29 CFR 5.5(b) shall apply.
- 24.02 **This project has federal funding and State of Alaska Davis-Bacon wage rates apply. Copies of State certified payroll records must be submitted monthly with the Application for Payment.**
- 24.03 **The Contractor is hereby made aware that the provisions of Title 36 of the Alaska Statutes and Title 8 of the Alaska Administrative Code will be enforced on the project. The Contractor will be required to become familiar with the State Statute and pay his/her labor the local prevailing wage rates. The most recent State of Alaska, Department of Labor-Laborer's and Mechanics Minimum Rates of Pay will be used with any updated changes throughout the entire duration of this project. Current State of Alaska, Department of Labor wages rates can be obtained from the State of Alaska website (<http://www.labor.state.ak.us/lss/pamp600.htm>) and have been attached to this Section.**

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PAMPHLET No. 600

Title 36. Public Contracts
AS 36.05

Laborers' and Mechanics' MINIMUM RATES OF PAY

Effective April 1, 2021

Issue 42

DEPARTMENT OF LABOR
AND WORKFORCE DEVELOPMENT
Wage and Hour Administration

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April 1, 2021

TO ALL CONTRACTING AGENCIES:

At the Alaska Department of Labor and Workforce Development, our goal is putting Alaskans to work. This pamphlet is designed to help contractors awarded public construction contracts understand the most significant laws of the State of Alaska pertaining to prevailing wage.

This pamphlet identifies current prevailing wage rates for public construction contracts (any construction projects awarded for the State of Alaska or its political subdivisions, such as local governments and certain non-profit organizations). Because these rates may change in a subsequent determination, please be sure you are using the appropriate rates. The rates published in this edition become effective April 1, 2021.

The prevailing wage rates contained in this pamphlet are applicable to public construction projects with a final bid date of April 11, 2021, or later. As the law now provides, these rates will remain stable during the life of a contract or for 24 calendar months, whichever is shorter. **The 24-month period begins on the date the prime contract is awarded.** Upon expiration of the initial 24-month period, the latest wage rates issued by the department shall become effective for a subsequent 24-month period or until the original contract is completed, whichever occurs first. This process shall be repeated until the original contract is completed.

The term "original contract" means the signed contract that resulted from the original bid and any amendments, including changes of work scope, additions, extensions, change orders, and other instruments agreed to by the parties that have not been subject to subsequent open bid procedures.

If a higher federal rate is required due to partial federal funding or other federal participation, the higher rate must be paid.

For additional copies of this pamphlet go to: <http://labor.state.ak.us/lss/pamp600.htm>

For questions regarding prevailing wage or employment preference requirements, please contact the nearest Wage and Hour office. These offices are listed on Page x.

Sincerely,

A handwritten signature in black ink that reads "Tamika L. Ledbetter".

Dr. Tamika L. Ledbetter
Commissioner

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Wage Rates Pages 1-26

Note to Readers: The statutes and administrative regulations listed in this publication were taken from the official codes, as of the effective date of the publication. However, there may be errors or omissions that have not been identified and changes that occurred after the publication was printed. This publication is intended as an informational guide only and is not intended to serve as a precise statement of the statutes and regulations of the State of Alaska. To be certain of current laws and regulations, please refer to the official codes.

EXCERPTS FROM ALASKA LAW

Sec. 36.05.005. Applicability.

This chapter applies only to a public construction contract that exceeds \$25,000.

Sec. 36.05.010. Wage rates on public construction.

A contractor or subcontractor who performs work on a public construction contract in the state shall pay not less than the current prevailing rate of wages for work of a similar nature in the region in which the work is done. The current prevailing rate of wages is that contained in the latest determination of prevailing rate of wages issued by the Department of Labor and Workforce Development at least 10 days before the final date for submission of bids for the contract. The rate shall remain in effect for the life of the contract or for 24 calendar months, whichever is shorter. At the end of the initial 24-month period, if new wage determinations have been issued by the department, the latest wage determination shall become effective for the next 24-month period or until the contract is completed, whichever occurs first. This process shall be repeated until the contract is completed.

Sec. 36.05.040. Filing schedule of employees, wages paid, and other information.

All contractors or subcontractors who perform work on a public construction contract for the state or for a political subdivision of the state shall, before the Friday of every second week, file with the Department of Labor and Workforce Development a sworn affidavit for the previous reporting period, setting out in detail the number of persons employed, wages paid, job classification of each employee, hours worked each day and week, and other information on a form provided by the Department of Labor and Workforce Development.

Sec. 36.05.045. Notice of work and completion; withholding of payment.

- (a) Before commencing work on a public construction contract, the person entering into the contract with a contracting agency shall designate a primary contractor for purposes of this section. Before work commences, the primary contractor shall file a notice of work with the Department of Labor and Workforce Development. The notice of work must list work to be performed under the public construction contract by each contractor who will perform any portion of work on the contract and the contract price being paid to each contractor. The primary contractor shall pay all filing fees for each contractor performing work on the contract, including a filing fee based on the contract price being paid for work performed by the primary contractor's employees. The filing fee payable shall be the sum of all fees calculated for each contractor. The filing fee shall be one percent of each contractor's contract price. The total filing fee payable by the primary contractor under this subsection may not exceed \$5,000. In this subsection, "contractor" means an employer who is using employees to perform work on the public construction contract under the contract or a subcontract.
- (b) Upon completion of all work on the public construction contract, the primary contractor shall file with the Department of Labor and Workforce Development a notice of completion together with payment of any additional filing fees owed due to increased contract amounts. Within 30 days after the department's receipt of the primary contractor's notice of completion, the department shall inform the contracting agency of the amount, if any, to be withheld from the final payment.
- (c) A contracting agency
 - (1) may release final payment of a public construction contract to the extent that the agency has received verification from the Department of Labor and Workforce Development that
 - (A) the primary contractor has complied with (a) and (b) of this section;
 - (B) the Department of Labor and Workforce Development is not conducting an investigation under this title; and
 - (C) the Department of Labor and Workforce Development has not issued a notice of a violation of this chapter to the primary contractor or any other contractors working on the public construction contract; and

- (2) shall withhold from the final payment an amount sufficient to pay the department's estimate of what may be needed to compensate the employees of any contractors under investigation on this construction contract, and any unpaid filing fees.
- (d) The notice and filing fee required under (a) of this section may be filed after work has begun if
 - (1) The public construction contract is for work undertaken in immediate response to an emergency; and
 - (2) The notice and fees are filed not later than 14 days after the work has begun.
- (e) A false statement made on a notice required by this section is punishable under AS 11.56.210.

Sec. 36.05.060. Penalty for violation of this chapter.

A contractor who violates this chapter is guilty of a misdemeanor and upon conviction is punishable by a fine of not less than \$100 nor more than \$1,000, or by imprisonment for not less than 10 days nor more than 90 days, or by both. Each day a violation exists constitutes a separate offense.

Sec. 36.05.070. Wage rates in specifications and contracts for public works.

- (a) The advertised specifications for a public construction contract that requires or involves the employment of mechanics, laborers, or field surveyors must contain a provision stating the minimum wages to be paid various classes of laborers, mechanics, or field surveyors and that the rate of wages shall be adjusted to the wage rate under AS 36.05.010.
- (b) Repealed by §17 ch 142 SLA 1972.
- (c) A public construction contract under (a) of this section must contain provisions that
 - (1) the contractor or subcontractors of the contractor shall pay all employees unconditionally and not less than once a week;
 - (2) wages may not be less than those stated in the advertised specifications, regardless of the contractual relationship between the contractor or subcontractors and laborers, mechanics, or field surveyors;
 - (3) the scale of wages to be paid shall be posted by the contractor in a prominent and easily accessible place at the site of the work;
 - (4) the state or a political subdivision shall withhold so much of the accrued payments as is necessary to pay to laborers, mechanics, or field surveyors employed by the contractor or subcontractors the difference between
 - (A) the rates of wages required by the contract to be paid laborers, mechanics, or field surveyors on the work; and
 - (B) the rates of wages in fact received by laborers, mechanics, or field surveyors.

Sec. 36.05.080. Failure to pay agreed wages.

Every contract within the scope of AS 36.05.070 shall contain a provision that if it is found that a laborer, mechanic, or field surveyor employed by the contractor or subcontractor has been or is being paid a rate of wages less than the rate of wages required by the contract to be paid, the state or its political subdivision may, by written notice to the contractor, terminate the contractor's right to proceed with the work or the part of the work for which there is a failure to pay the required wages and to prosecute the work to completion by contract or otherwise, and the contractor and the contractor's sureties are liable to the state or its political subdivision for excess costs for completing the work.

Sec. 36.05.090. Payment of wages from withheld payments and listing contractors who violate contracts.

- (a) The state disbursing officer in the case of a state public construction contract and the local fiscal officer in the case of a political subdivision public construction contract shall pay directly to laborers, mechanics, or field surveyors from accrued payments withheld under the terms of the contract the wages due laborers, mechanics, or field surveyors under AS 36.05.070.
- (b) The state disbursing officer or the local fiscal officer shall distribute to all departments of the state government and to all political subdivisions of the state a list giving the names of persons who have disregarded their obligations to employees. A person appearing on this list and a firm, corporation, partnership, or association in which the person has an interest may not work as a contractor or

subcontractor on a public construction contract for the state or a political subdivision of the state until three years after the date of publication of the list. If the accrued payments withheld under the contract are insufficient to reimburse all the laborers, mechanics, or field surveyors with respect to whom there has been a failure to pay the wages required under AS 36.05.070, the laborers, mechanics, or field surveyors have the right of action or intervention or both against the contractor and the contractor's sureties conferred by law upon persons furnishing labor or materials, and in the proceedings it is not a defense that the laborers, mechanics, or field surveyors accepted or agreed to accept less than the required rate of wages or voluntarily made refunds.

Sec. 36.05.900. Definition.

In this chapter, "contracting agency" means the state or a political subdivision of the state that has entered into a public construction contract with a contractor.

EXCERPTS FROM ALASKA ADMINISTRATIVE CODE

*****Notice:** Regulations relating to board and lodging and per diem went into effect on November 25, 2018. The new regulations are excerpted here***

8 AAC 30.051. Purpose. The purpose of 8 AAC 30.052 – 8 AAC 30.056 is to ensure that wages paid to laborers, mechanics, and field surveyors do not fall below the prevailing rate of pay.

8 AAC 30.052. Board and lodging; remote sites. (a) A contractor on a public construction project located 65 or more road miles from the international airport closest to the project area in either Fairbanks, Juneau, or Anchorage, or that is inaccessible by road in a two-wheel drive vehicle, shall provide adequate board and lodging to each laborer, mechanic, or field surveyor while the person is employed on the project. If commercial lodging facilities are not available, the contractor shall provide temporary lodging facilities. Lodging facilities must comply with all applicable state and federal laws. For a highway project, the location of the project is measured from the midpoint of the project.

(b) A contractor is not required to provide board and lodging:

(1) to a laborer, mechanic, or field surveyor who is a domiciled resident of the project area; or

(2) on a laborer, mechanic, or field surveyor's scheduled days off, when the person can reasonably travel between the project and the person's permanent residence; for the purposes of this paragraph, "scheduled day off" means a day in which a person does not perform work on-site, is not required to remain at or near the job location for the benefit of the contractor, and is informed of the day off at least seven days before the day off.

(c) Upon a contractor's written request, the commissioner may waive the requirements of (a) of this section where:

(1) the project is inaccessible by road in a two-wheel drive vehicle, but the laborer, mechanic, or field surveyor can reasonably travel between the project and the person's permanent residence within one hour; or

(2) a laborer, mechanic, or field surveyor is not a domiciled resident of the project area, but has established permanent residence, with the intent to remain indefinitely, within 65 road miles of the project, or for a highway project, the mid-point of the project.

8 AAC 30.054. Per diem instead of board and lodging. (a) A contractor may pay a laborer, mechanic, or field surveyor per diem instead of providing board and lodging, when the following conditions are met:

(1) the department determines that per diem instead of board and lodging is an established practice for the work classification; the department shall publish and periodically revise its determinations in the pamphlet *Laborers' and Mechanics' Minimum Rates of Pay*;

(2) the contractor pays each laborer, mechanic, or field surveyor the appropriate per diem rate as published and periodically revised in the pamphlet *Laborers' and Mechanics' Minimum Rates of Pay*; and

(3) the contractor pays the per diem to each laborer, mechanic, or field surveyor on the same day that wages are paid.

(b) A contractor may not pay per diem instead of board and lodging on a highway project located

- (1) west of Livengood on the Elliot Highway, AK-2;
- (2) on the Dalton Highway, AK-11;
- (3) north of milepost 20 on the Taylor Highway, AK-5;
- (4) east of Chicken on the Top of the World Highway; or
- (5) south of Tetlin Junction to the Alaska-Canada border on the Alaska Highway, AK-2.

8 AAC 30.056. Alternative arrangement. Upon a contractor’s written request, the commissioner may approve an alternative board and lodging or per diem arrangement, provided

- (1) the arrangement does not reduce the laborer, mechanic, or field surveyor’s wages below the prevailing wage rate; and
- (2) the laborer, mechanic, or field surveyor voluntarily enters into and signs the written arrangement; a labor organization representing laborers, mechanics, or field surveyors may enter into the written agreement on their behalf.

8 AAC 30.900. General definitions (selected excerpts only):

In this chapter and in AS 36

(22) “domiciled resident” means a person living within 65 road miles of a public construction project, or in the case of a highway project, the mid-point of the project, for at least 12 consecutive months prior to the award of the public construction project;

(23) “employed on the project” means the time period from the date the laborer, mechanic, or field surveyor first reports on-site to the project through the final date the person reports on-site to the project.

ADDITIONAL INFORMATION

PER DIEM

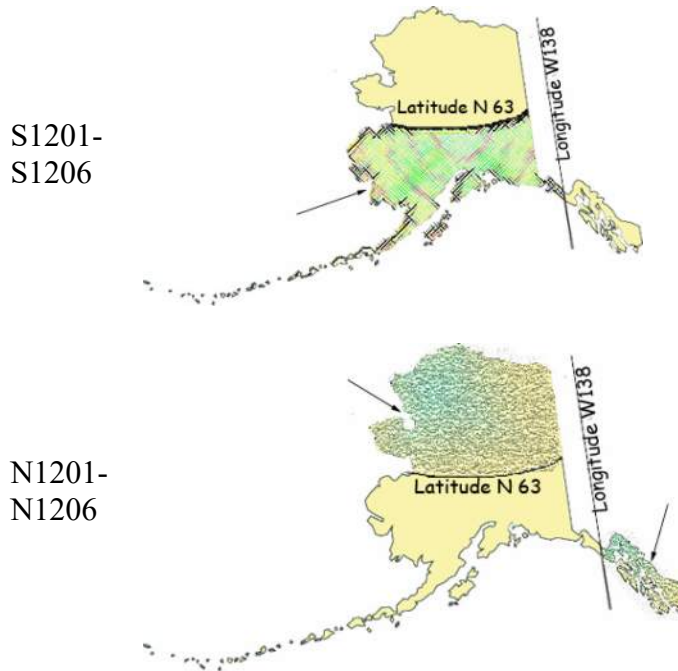
Notice: New regulations relating to board and lodging and per diem went into effect on November 25, 2018. The regulations provide a comprehensive set of requirements for the provision of board and lodging or per diem for workers on remote projects. Please refer to Alaska Administrative Code 8 AAC Chapter 30 and read the chapter carefully.

The Alaska Department of Labor and Workforce Development has determined that per diem is an established work practice for certain work classifications. These classifications are indicated throughout the Pamphlet by an asterisk (*) under the classification title. If all of the conditions of 8 AAC 30.054 are met, an employer may pay workers in these classifications per diem instead of providing board and lodging on a remote project.

Per Diem Rate: As of May 1st, 2019, the minimum per diem rate is \$100.00 per day, or part thereof, the worker is employed on the project. In the event that a contractor provides lodging facilities, but no meals, the department will accept a payment of \$48 per day for meals to meet the per diem requirements.

LABORER CLASSIFICATION CLARIFICATION

The laborer rates categorized in class code S1201-S1206 apply in one area of Alaska; the area that is south of N63 latitude and west of W138 Longitude. The laborer rates categorized in class code N1201-N1206 apply in two areas of Alaska; the Alaska areas north of N63 latitude and east of W138 longitude. The following graphic representations should assist with clarifying the applicable wage rate categories:



APPRENTICE RATES

Apprentice rates at less than the minimum prevailing rates may be paid to apprentices according to an apprentice program which has been registered and approved by the Commissioner of the Alaska Department of Labor and Workforce Development in writing or according to a bona fide apprenticeship program registered with the U.S. Department of Labor, Office of Apprenticeship Training. **Any employee listed on a payroll at an apprentice wage rate who is not registered as above shall be paid the journeyman prevailing minimum wage in that work classification.** Wage rates are based on prevailing crew makeup practices in Alaska and apply to work performed regardless of either the quality of the work performed by the employee or the titles or classifications which may be assigned to individual employees.

FRINGE BENEFIT PLANS

Contractors/subcontractors may compensate fringe benefits to their employees in any one of three methods. The fringe benefits may be paid into a union trust fund, into an approved benefit plan, or paid directly on the paycheck as gross wages.

Where fringe benefits are paid into approved plans, funds, or programs including union trust funds, the payments must be contributed at least monthly. If contractors submit their own payroll forms and are paying fringe benefits into approved plans, funds, or programs, the employer’s certification must include, in addition to those requirements of 8 AAC 30.020(c), a statement that fringe benefit payments have been or will be paid at least monthly. Contractors who pay fringe benefits to a plan must ensure the plan is one approved by the Internal Revenue Service and that the plan meets the requirements of 8 AAC 30.025 (eff. 3/2/08) in order for payments to be credited toward the prevailing wage obligation.

SPECIAL PREVAILING WAGE RATE DETERMINATION

Special prevailing wage rate determinations may be requested for special projects or a special worker classification if the work to be performed does not conform to traditional public construction for which a prevailing wage rate has been established under 8 AAC 30.050(a) of this section. Requests for special wage rate determinations must be in writing and filed with the Commissioner at least 30 days before the award of the contract. An applicant for a special wage rate determination shall have the responsibility to support the necessity for the special rate. An application for a special wage rate determination filed under this section must contain:

- (1) a specification of the contract or project on which the special rates will apply and a description of the work to be performed;
- (2) a brief narrative explaining why special wage rates are necessary;
- (3) the job class or classes involved;
- (4) the special wage rates the applicant is requesting, including survey or other relevant wage data to support the requested rates;
- (5) the approximate number of employees who would be affected; and
- (6) any other information which might be helpful in determining if special wage rates are appropriate.

Requests made pursuant to the above should be addressed to:

Director
Alaska Department of Labor and Workforce Development
Labor Standards and Safety Division
Wage and Hour Administration
P.O. Box 111149
Juneau, AK 99811-1149

-or-

Email: statewide.wagehour@alaska.gov

EMPLOYMENT PREFERENCE INFORMATION

In October 2019, the Alaska Attorney General issued a formal opinion stating that the Alaska Statutes 36.10.150 of the State’s 90% Employment Preference law, also known as the Alaska Resident Hire law, violates both the U.S. and Alaska Constitutions. As a result, the state has stopped all enforcement activity.

A copy of the Attorney General opinion is found here:

http://law.alaska.gov/pdf/opinions/opinions_2019/19-005_AK-hire.pdf

**Alaska Department of Labor and Workforce Development
Labor Standards and Safety Division
Wage and Hour Administration
Web site: <http://labor.state.ak.us/lss/pamp600.htm>**

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1251 Muldoon Road, Suite 113
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Fairbanks, Alaska 99701-4593
Phone: (907) 451-2886

Email:
statewide.wagehour@alaska.gov

LABOR STANDARDS AND SAFETY NOTICE REQUESTS

If you would like to receive Wage and Hour Administration or Mechanical Inspection **regulation notices** or **publications information**, they are available via electronic mail, by signing up in the GovDelivery System, <https://public.govdelivery.com/accounts/AKDOL/subscriber/new> and selecting topics *LSS – Wage and Hour – Forms and Publications*, *LSS – Mechanical Inspection Regulations*, or *LSS – Wage and Hour Regulations*.

Publications are also available online at <http://labor.alaska.gov/lss/home.htm>

DEBARMENT LIST

AS 36.05.090(b) states that “the state disbursing officer or the local fiscal officer shall distribute to all departments of the state government and to all political subdivisions of the state a list giving the names of persons who have disregarded their obligations to employees.”

A person appearing on the following debarment list and a firm, corporation, partnership, or association in which the person has an interest may not work as a contractor or subcontractor on a public construction contract for the state or a political subdivision of the state for three years from the date of debarment.

Company Name

Debarment Expires

No companies are currently debarred.

Laborers' & Mechanics' Minimum Rates of Pay

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other	Benefits	THR
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Boilermakers

*See per diem note on last page

A0101	Boilermaker (journeyman)	47.03	8.57	17.02	1.90	VAC	SAF	78.36
						3.50	0.34	

Bricklayers & Blocklayers

*See per diem note on last page

A0201	Blocklayer	42.16	9.00	10.05	0.62	L&M		62.03
						0.20		

- Bricklayer
- Marble or Stone Mason
- Refractory Worker (Firebrick, Plastic, Castable, and Gunitite Refractory Applications)
- Terrazzo Worker
- Tile Setter

A0202	Tuck Pointer Caulker	42.16	9.00	10.05	0.62	L&M		62.03
						0.20		

Cleaner (PCC)

A0203	Marble & Tile Finisher	35.99	9.00	10.05	0.62	L&M		55.86
						0.20		

Terrazzo Finisher

A0204	Torginal Applicator	40.10	9.83	8.50	0.55	L&M	0.87	60.00
						0.15		

Carpenters, Region I (North of 63 latitude)

*See per diem note on last page

N0301	Carpenter (journeyman)	38.34	10.08	15.23	1.10	L&M	SAF	64.95
						0.10	0.10	

Lather/Drywall/Acoustical

Carpenters, Region II (South of N63 latitude)

*See per diem note on last page

S0301	Carpenter (journeyman)	38.34	10.08	15.77	1.10	L&M	SAF	65.49
						0.10	0.10	

Lather/Drywall/Acoustical

Cement Masons

*See per diem note on last page

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Cement Masons								
*See per diem note on last page								

A0401	Group I, including:	39.38	8.70	11.80	1.43		L&M 0.10	61.41
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- Application of Sealing Compound
- Application of Underlayment
- Building, General
- Cement Finisher
- Cement Mason (journeyman)
- Concrete
- Concrete Paving
- Concrete Polishing
- Concrete Repair
- Curb & Gutter, Sidewalk
- Curing of All Concrete
- General Concrete Pour Tender
- Grouting & Caulking of Tilt-Up Panels
- Grouting of All Plates
- Patching Concrete
- Screed Pin Setter
- Screeder or Rodder
- Spackling/Skim Coating

A0402	Group II, including:	39.38	8.70	11.80	1.43		L&M 0.10	61.41
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- Form Setter

A0403	Group III, including:	39.38	8.70	11.80	1.43		L&M 0.10	61.41
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- Concrete Saw Cutter Operator (All Control Joints and Self-powered)
- Curb & Gutter Machine
- Floor Grinder
- Pneumatic Power Tools
- Power Chipping & Bushing
- Sand Blasting Architectural Finish
- Screed & Rodding Machine Operator
- Troweling Machine Operator (all concrete surfaces)

A0404	Group IV, including:	39.38	8.70	11.80	1.43		L&M 0.10	61.41
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- Acoustical or Imitation Acoustical Finish
- Application of All Composition Mastic
- Application of All Epoxy Material
- Application of All Plastic Material
- Finish Colored Concrete
- Guniting Nozzleman

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Cement Masons
*See per diem note on last page

A0404	Group IV, including:	39.38	8.70	11.80	1.43		L&M 0.10	61.41
	Hand Powered Grinder							
	Preparing, scratching and browsing of all ceilings and walls, finished with terrazo or tile							
	Tunnel Worker							

A0405	Group V, including:	39.38	8.70	11.80	1.43		L&M 0.10	61.41
	Casting and finishing							
	EIFS Systems							
	Finishing of all interior and exterior plastering							
	Fireproofing (Pryocrete, Cafco, Albi-Clad, sprayed fiberglass)							
	Gypsum, Portland Cement							
	Kindred material and products							
	Operation and control of all types of plastering machines, including power tools and floats, used by the industry							
	Overcoating and maintenance of interior/exterior plaster surfaces							
	Plasterer							
	Veneer plastering process (Rapid Plaster, U.S.G. "Imperial Systems", and Pabcoat Systems")							
	Venetian plaster and color-integrated Italian/Middle-Eastern line plaster							

Culinary Workers

A0501	Baker/Cook	28.37	7.31	7.56			LEG	43.24
A0503	General Helper	25.07	7.31	7.56			LEG	39.94
	Housekeeper							
	Janitor							
	Kitchen Helper							
A0504	Head Cook	28.97	7.31	7.56			LEG	43.84
A0505	Head Housekeeper	25.45	7.31	7.56			LEG	40.32
	Head Kitchen Help							

Dredgemen
*See per diem note on last page

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other	Benefits	THR
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Dredgemen
*See per diem note on last page

A0601	Assistant Engineer	41.76	10.70	13.50	1.00	L&M	0.10	0.05	67.11
	Craneman								
	Electrical Generator Operator (primary pump/power barge/dredge)								
	Engineer								
	Welder								
A0602	Assistant Mate (deckhand)	40.60	10.70	13.50	1.00	L&M	0.10	0.05	65.95
A0603	Fireman	41.04	10.70	13.50	1.00	L&M	0.10	0.05	66.39
A0605	Leverman Clamshell	44.29	10.70	13.50	1.00	L&M	0.10	0.05	69.64
A0606	Leverman Hydraulic	42.53	10.70	13.50	1.00	L&M	0.10	0.05	67.88
A0607	Mate & Boatman	41.76	10.70	13.50	1.00	L&M	0.10	0.05	67.11
A0608	Oiler (dredge)	41.04	10.70	13.50	1.00	L&M	0.10	0.05	66.39

Electricians
*See per diem note on last page

A0701	Inside Cable Splicer	42.02	14.05	13.90	0.95	L&M	LEG	0.20	0.15	71.27
A0702	Inside Journeyman Wireman, including: Technicians (including use of drones in electrical construction)	41.69	14.05	14.14	0.95	L&M	LEG	0.20	0.15	71.18
A0703	Power Cable Splicer	60.79	14.05	19.01	0.95	L&M	LEG	0.25	0.15	95.20
A0704	Tele Com Cable Splicer	50.53	14.05	16.67	0.95	L&M	LEG	0.20	0.15	82.55
A0705	Power Journeyman Lineman, including: Power Equipment Operator Technician (including use of drones in electrical construction)	59.04	14.05	18.96	0.95	L&M	LEG	0.25	0.15	93.40
A0706	Tele Com Journeyman Lineman, including: Technician (including use of drones in telecommunications construction) Tele Com Equipment Operator	48.78	14.05	16.61	0.95	L&M	LEG	0.20	0.15	80.74

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other	Benefits	THR
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Electricians
*See per diem note on last page

A0707	Straight Line Installer - Repairman	48.78	14.05	16.61	0.95	L&M	LEG	80.74
						0.20	0.15	
A0708	Powderman	57.04	14.05	18.90	0.95	L&M	LEG	91.34
						0.25	0.15	
A0710	Material Handler	26.57	13.76	5.30	0.15	L&M	LEG	46.08
						0.15	0.15	
A0712	Tree Trimmer Groundman	28.37	14.05	12.59	0.15	L&M	LEG	55.46
						0.15	0.15	
A0713	Journeyman Tree Trimmer	37.30	14.05	12.86	0.15	L&M	LEG	64.66
						0.15	0.15	
A0714	Vegetation Control Sprayer	40.85	14.05	12.97	0.15	L&M	LEG	68.32
						0.15	0.15	
A0715	Inside Journeyman Communications CO/PBX	40.27	14.05	13.85	0.95	L&M	LEG	69.47
						0.20	0.15	

Elevator Workers
*See per diem note on last page

A0802	Elevator Constructor	42.76	15.88	19.31	0.64	L&M	VAC	83.87
						0.54	4.74	
A0803	Elevator Constructor Mechanic	61.08	15.88	19.31	0.64	L&M	VAC	104.23
						0.54	6.78	

Heat & Frost Insulators/Asbestos Workers
*See per diem note on last page

A0902	Asbestos Abatement-Mechanical Systems	38.68	9.24	11.01	1.20	SAF		60.25
						0.12		
A0903	Asbestos Abatement/General Demolition All Systems	38.68	9.24	11.01	1.20	SAF		60.25
						0.12		
A0904	Insulator, Group II	38.68	9.24	11.01	1.20	SAF		60.25
						0.12		
A0905	Fire Stop	38.68	9.24	11.01	1.20	SAF		60.25
						0.12		

IronWorkers
*See per diem note on last page

A1101	Ironworkers, including:	38.87	9.51	24.28	0.74	L&M	IAF	73.84
						0.20	0.24	

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

IronWorkers
*See per diem note on last page

						L&M	IAF	
A1101	Ironworkers, including:	38.87	9.51	24.28	0.74	0.20	0.24	73.84
	Bender Operators							
	Bridge & Structural							
	Hangar Doors							
	Hollow Metal Doors							
	Industrial Doors							
	Machinery Mover							
	Ornamental							
	Reinforcing							
	Rigger							
	Sheeter							
	Signalman							
	Stage Rigger							
	Toxic Haz-Mat Work							
	Welder							

						L&M	IAF	
A1102	Helicopter	39.87	9.51	24.28	0.74	0.20	0.24	74.84
	Helicopter (used for rigging and setting)							
	Tower (energy producing windmill type towers to include nacelle and blades)							

						L&M	IAF	
A1103	Fence/Barrier Installer	35.37	9.51	23.93	0.74	0.20	0.24	69.99

						L&M	IAF	
A1104	Guard Rail Layout Man	36.11	9.51	23.93	0.74	0.20	0.24	70.73

						L&M	IAF	
A1105	Guard Rail Installer	36.37	9.51	23.93	0.74	0.20	0.24	70.99

Laborers (The Alaska areas north of N63 latitude and east of W138 longitude)
*See per diem note on last page

						L&M	LEG	
N1201	Group I, including:	32.00	8.95	20.66	1.30	0.20	0.20	63.31
	Asphalt Worker (shovelman, plant crew)							
	Brush Cutter							
	Camp Maintenance Laborer							
	Carpenter Tender or Helper							
	Choke Setter, Hook Tender, Rigger, Signalman							
	Concrete Labor (curb & gutter, chute handler, curing, grouting, screeding)							
	Crusher Plant Laborer							
	Demolition Laborer							

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Laborers (The Alaska areas north of N63 latitude and east of W138 longitude)

*See per diem note on last page

						L&M	LEG	
N1201	Group I, including:	32.00	8.95	20.66	1.30	0.20	0.20	63.31
	Ditch Digger							
	Dumpman							
	Environmental Laborer (hazard/toxic waste, oil spill)							
	Fence Installer							
	Fire Watch Laborer							
	Flagman							
	Form Stripper							
	General Laborer							
	Guardrail Laborer, Bridge Rail Installer							
	Hydro-seeder Nozzleman							
	Laborer, Building							
	Landscaper or Planter							
	Laying of Mortarless Decorative Block (retaining walls, flowered decorative block 4 feet or less - highway or landscape work)							
	Material Handler							
	Pneumatic or Power Tools							
	Portable or Chemical Toilet Serviceman							
	Pump Man or Mixer Man							
	Railroad Track Laborer							
	Sandblast, Pot Tender							
	Saw Tender							
	Slurry Work							
	Steam Cleaner Operator							
	Steam Point or Water Jet Operator							
	Storm Water Pollution Protection Plan Worker (SWPPP Worker - erosion and sediment control Laborer)							
	Tank Cleaning							
	Utiliwalk & Utilidor Laborer							
	Watchman (construction projects)							
	Window Cleaner							

						L&M	LEG	
N1202	Group II, including:	33.00	8.95	20.66	1.30	0.20	0.20	64.31
	Burning & Cutting Torch							
	Cement or Lime Dumper or Handler (sack or bulk)							
	Certified Erosion Sediment Control Lead (CESCL Laborer)							
	Choker Splicer							
	Chucktender (wagon, air-track & hydraulic drills)							
	Concrete Laborer (power buggy, concrete saws, pumpcrete nozzleman, vibratorman)							
	Culvert Pipe Laborer							

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Laborers (The Alaska areas north of N63 latitude and east of W138 longitude)

*See per diem note on last page

N1202	Group II, including:	33.00	8.95	20.66	1.30	L&M	LEG	64.31
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- Cured Inplace Pipelayer
- Environmental Laborer (asbestos, marine work)
- Floor Preparation, Core Drilling
- Foam Gun or Foam Machine Operator
- Green Cutter (dam work)
- Gunite Operator
- Hod Carrier
- Jackhammer/Chipping Gun or Pavement Breaker
- Laser Instrument Operator
- Laying of Mortarless Decorative Block (retaining walls, flowered decorative block over 4 feet - highway or landscape work)
- Mason Tender & Mud Mixer (sewer work)
- Pilot Car
- Pipelayer Helper
- Plasterer, Bricklayer & Cement Finisher Tender
- Powderman Helper
- Power Saw Operator
- Railroad Switch Layout Laborer
- Sandblaster
- Scaffold Building & Erecting
- Sewer Caulker
- Sewer Plant Maintenance Man
- Thermal Plastic Applicator
- Timber Faller, Chainsaw Operator, Filer
- Timberman

N1203	Group III, including:	33.90	8.95	20.66	1.30	L&M	LEG	65.21
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- Bit Grinder
- Camera/Tool/Video Operator
- Guardrail Machine Operator
- High Rigger & Tree Topper
- High Scaler
- Multiplate
- Plastic Welding
- Slurry Seal Squeegee Man
- Traffic Control Supervisor
- Welding Certified (in connection with laborer's work)

N1204	Group IIIA	37.18	8.95	20.66	1.30	L&M	LEG	68.49
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- Asphalt Raker, Asphalt Belly Dump Lay Down

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Laborers (The Alaska areas north of N63 latitude and east of W138 longitude)

*See per diem note on last page

						L&M	LEG	
N1204	Group IIIA	37.18	8.95	20.66	1.30	0.20	0.20	68.49
	Drill Doctor (in the field)							
	Driller (including, but not limited to wagon drills, air-track drills, hydraulic drills)							
	Pioneer Drilling & Drilling Off Tugger (all type drills)							
	Pipelayers							
	Powderman (Employee Possessor)							
	Storm Water Pollution Protection Plan Specialist (SWPPP Specialist)							
	Traffic Control Supervisor, DOT Qualified							

						L&M	LEG	
N1205	Group IV	21.57	8.95	20.66	1.30	0.20	0.20	52.88
	Final Building Cleanup							
	Permanent Yard Worker							

						L&M	LEG	
N1206	Group IIIB	40.97	6.24	20.66	1.30	0.20	0.20	69.57
	Driller (including, but not limited to wagon drills, air-track drills, hydraulic drills)(over 5,000 hours)							
	Federal Powderman (Responsible Person in Charge)							
	Grade Checking (setting or transferring of grade marks, line and grade, GPS, drones)							
	Pioneer Drilling & Drilling Off Tugger (all type drills)(over 5,000 hours)							
	Stake Hopper							

Laborers (The area that is south of N63 latitude and west of W138 longitude)

*See per diem note on last page

						L&M	LEG	
S1201	Group I, including:	32.00	8.95	20.66	1.30	0.20	0.20	63.31
	Asphalt Worker (shovelman, plant crew)							
	Brush Cutter							
	Camp Maintenance Laborer							
	Carpenter Tender or Helper							
	Choke Setter, Hook Tender, Rigger, Signalman							
	Concrete Labor (curb & gutter, chute handler, curing, grouting, screeding)							
	Crusher Plant Laborer							
	Demolition Laborer							
	Ditch Digger							
	Dumpman							
	Environmental Laborer (hazard/toxic waste, oil spill)							
	Fence Installer							

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Laborers (The area that is south of N63 latitude and west of W138 longitude)

*See per diem note on last page

						L&M	LEG	
S1201	Group I, including:	32.00	8.95	20.66	1.30	0.20	0.20	63.31

- Fire Watch Laborer
- Flagman
- Form Stripper
- General Laborer
- Guardrail Laborer, Bridge Rail Installer
- Hydro-seeder Nozzleman
- Laborer, Building
- Landscaper or Planter
- Laying of Mortarless Decorative Block (retaining walls, flowered decorative block 4 feet or less - highway or landscape work)
- Material Handler
- Pneumatic or Power Tools
- Portable or Chemical Toilet Serviceman
- Pump Man or Mixer Man
- Railroad Track Laborer
- Sandblast, Pot Tender
- Saw Tender
- Slurry Work
- Steam Cleaner Operator
- Steam Point or Water Jet Operator
- Storm Water Pollution Protection Plan Worker (SWPPP Worker - erosion and sediment control Laborer)
- Tank Cleaning
- Utiliwalk & Utilidor Laborer
- Watchman (construction projects)
- Window Cleaner

						L&M	LEG	
S1202	Group II, including:	33.00	8.95	20.66	1.30	0.20	0.20	64.31

- Burning & Cutting Torch
- Cement or Lime Dumper or Handler (sack or bulk)
- Certified Erosion Sediment Control Lead (CESCL Laborer)
- Choker Splicer
- Chucktender (wagon, air-track & hydraulic drills)
- Concrete Laborer (power buggy, concrete saws, pumpcrete nozzleman, vibratorman)
- Culvert Pipe Laborer
- Cured Inplace Pipelayer
- Environmental Laborer (asbestos, marine work)
- Floor Preparation, Core Drilling
- Foam Gun or Foam Machine Operator

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Laborers (The area that is south of N63 latitude and west of W138 longitude)

*See per diem note on last page

						L&M	LEG	
S1202	Group II, including:	33.00	8.95	20.66	1.30	0.20	0.20	64.31

- Green Cutter (dam work)
- Gunite Operator
- Hod Carrier
- Jackhammer/Chipping Gun or Pavement Breaker
- Laser Instrument Operator
- Laying of Mortarless Decorative Block (retaining walls, flowered decorative block over 4 feet - highway or landscape work)
- Mason Tender & Mud Mixer (sewer work)
- Pilot Car
- Pipelayer Helper
- Plasterer, Bricklayer & Cement Finisher Tender
- Powderman Helper
- Power Saw Operator
- Railroad Switch Layout Laborer
- Sandblaster
- Scaffold Building & Erecting
- Sewer Caulker
- Sewer Plant Maintenance Man
- Thermal Plastic Applicator
- Timber Faller, Chainsaw Operator, Filer
- Timberman

						L&M	LEG	
S1203	Group III, including:	33.90	8.95	20.66	1.30	0.20	0.20	65.21

- Bit Grinder
- Camera/Tool/Video Operator
- Guardrail Machine Operator
- High Rigger & Tree Topper
- High Scaler
- Multiplate
- Plastic Welding
- Slurry Seal Squeegee Man
- Traffic Control Supervisor
- Welding Certified (in connection with laborer's work)

						L&M	LEG	
S1204	Group IIIA	37.18	8.95	20.66	1.30	0.20	0.20	68.49

- Asphalt Raker, Asphalt Belly Dump Lay Down
- Drill Doctor (in the field)
- Driller (including, but not limited to wagon drills, air-track drills, hydraulic drills)
- Pioneer Drilling & Drilling Off Tugger (all type drills)

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Laborers (The area that is south of N63 latitude and west of W138 longitude)

*See per diem note on last page

S1204	Group IIIA	37.18	8.95	20.66	1.30	L&M	LEG	68.49
						0.20	0.20	

- Pipelayers
- Powderman (Employee Possessor)
- Storm Water Pollution Protection Plan Specialist (SWPPP Specialist)
- Traffic Control Supervisor, DOT Qualified

S1205	Group IV	21.57	8.95	20.66	1.30	L&M	LEG	52.88
						0.20	0.20	

- Final Building Cleanup
- Permanent Yard Worker

S1206	Group IIIB	40.97	6.24	20.66	1.30	L&M	LEG	69.57
						0.20	0.20	

- Driller (including, but not limited to wagon drills, air-track drills, hydraulic drills)(over 5,000 hours)
- Federal Powderman (Responsible Person in Charge)
- Grade Checking (setting or transferring of grade marks, line and grade, GPS, drones)
- Pioneer Drilling & Drilling Off Tugger (all type drills)(over 5,000 hours)
- Stake Hopper

Millwrights

*See per diem note on last page

A1251	Millwright (journeyman)	40.77	10.08	12.28	1.10	L&M		64.68
						0.40	0.05	

A1252	Millwright Welder	41.77	10.08	12.28	1.10	L&M		65.68
						0.40	0.05	

Painters, Region I (North of N63 latitude)

*See per diem note on last page

N1301	Group I, including:	34.19	8.71	14.30	1.08	L&M		58.35
						0.07		

- Brush
- General Painter
- Hand Taping
- Hazardous Material Handler
- Lead-Based Paint Abatement
- Roll

N1302	Group II, including:	34.71	8.71	14.30	1.08	L&M		58.87
						0.07		

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Painters, Region I (North of N63 latitude)

*See per diem note on last page

		BHR	H&W	PEN	TRN	Other	L&M	Benefits	THR
N1302	Group II, including:	34.71	8.71	14.30	1.08	0.07			58.87
	Bridge Painter								
	Epoxy Applicator								
	General Drywall Finisher								
	Hand/Spray Texturing								
	Industrial Coatings Specialist								
	Machine/Automatic Taping								
	Pot Tender								
	Sandblasting								
	Specialty Painter								
	Spray								
	Structural Steel Painter								
	Wallpaper/Vinyl Hanger								

N1304	Group IV, including:	39.80	8.71	17.71	1.05	0.05			67.32
	Glazier								
	Storefront/Automatic Door Mechanic								

N1305	Group V, including:	28.63	8.71	5.02	0.83	0.07			43.26
	Carpet Installer								
	Floor Coverer								
	Heat Weld/Cove Base								
	Linoleum/Soft Tile Installer								

Painters, Region II (South of N63 latitude)

*See per diem note on last page

		BHR	H&W	PEN	TRN	Other	L&M	Benefits	THR
S1301	Group I, including :	31.33	8.71	15.15	1.08	0.07			56.34
	Brush								
	General Painter								
	Hand Taping								
	Hazardous Material Handler								
	Lead-Based Paint Abatement								
	Roll								
	Spray								

S1302	Group II, including :	32.58	8.71	15.15	1.08	0.07			57.59
	General Drywall Finisher								
	Hand/Spray Texturing								
	Machine/Automatic Taping								

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other	Benefits	THR	
Painters, Region II (South of N63 latitude)									
*See per diem note on last page									
S1302	Group II, including :	32.58	8.71	15.15	1.08		L&M 0.07	57.59	
	Wallpaper/Vinyl Hanger								
S1303	Group III, including :	32.68	8.71	15.15	1.08		L&M 0.07	57.69	
	Bridge Painter								
	Epoxy Applicator								
	Industrial Coatings Specialist								
	Pot Tender								
	Sandblasting								
	Specialty Painter								
	Structural Steel Painter								
S1304	Group IV, including:	40.01	8.71	16.75	1.08		L&M 0.07	66.62	
	Glazier								
	Storefront/Automatic Door Mechanic								
S1305	Group V, including:	28.63	8.71	5.02	0.83		L&M 0.07	43.26	
	Carpet Installer								
	Floor Coverer								
	Heat Weld/Cove Base								
	Linoleum/Soft Tile Installer								
Piledrivers									
*See per diem note on last page									
A1401	Piledriver	38.34	10.08	15.23	1.10		L&M 0.10	IAF 0.10	64.95
	Assistant Dive Tender								
	Carpenter/Piledriver								
	Rigger								
	Sheet Stabber								
	Skiff Operator								
A1402	Piledriver-Welder/Toxic Worker	39.34	10.08	15.23	1.10		L&M 0.10	IAF 0.10	65.95
A1403	Remotely Operated Vehicle Pilot/Technician	42.65	10.08	15.23	1.10		L&M 0.10	IAF 0.10	69.26
	Single Atmosphere Suit, Bell or Submersible Pilot								
A1404	Diver (working) **See note on last page	82.45	10.08	15.23	1.10		L&M 0.10	IAF 0.10	109.06

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Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other	Benefits	THR
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Piledrivers
*See per diem note on last page

A1405	Diver (standby) **See note on last page	42.65	10.08	15.23	1.10	L&M	IAF	69.26
A1406	Dive Tender **See note on last page	41.65	10.08	15.23	1.10	L&M	IAF	68.26
A1407	Welder (American Welding Society, Certified Welding Inspector)	43.90	10.08	15.23	1.10	L&M	IAF	70.51

Plumbers, Region I (North of N63 latitude)
*See per diem note on last page

N1501	Journeyman Pipefitter	41.91	11.25	17.20	1.50	L&M	S&L	72.51
	Plumber							
	Welder							

Plumbers, Region II (South of N63 latitude)
*See per diem note on last page

S1501	Journeyman Pipefitter	41.00	11.13	15.02	1.55	L&M		68.90
	Plumber							
	Welder							

Plumbers, Region IIA (1st Judicial District)
*See per diem note on last page

X1501	Journeyman Pipefitter	38.82	13.37	11.75	2.50	L&M		66.68
	Plumber							
	Welder							

Power Equipment Operators
*See per diem note on last page

A1601	Group I, including:	42.53	10.70	13.50	1.00	L&M		67.88
	Asphalt Roller: Breakdown, Intermediate, and Finish							
	Back Filler							
	Barrier Machine (Zipper)							
	Beltcrete with Power Pack & similar conveyors							
	Bending Machine							
	Boat Coxswain							
	Bulldozer							
	Cableways, Highlines & Cablecars							

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Power Equipment Operators

*See per diem note on last page

	L&M						
A1601 Group I, including:	42.53	10.70	13.50	1.00	0.10	0.05	67.88
Cleaning Machine							
Coating Machine							
Concrete Hydro Blaster							
Cranes (45 tons & under or 150 feet of boom & under (including jib & attachments))							
(a) Hydralifts or Transporters, (all track or truck type)							
(b) Derricks							
(c) Overhead							
Crushers							
Deck Winches, Double Drum							
Ditching or Trenching Machine (16 inch or over)							
Drag Scraper, Yarder, and similar types							
Drilling Machines, Core, Cable, Rotary and Exploration							
Finishing Machine Operator, Concrete Paving, Laser Screed, Sidewalk, Curb & Gutter Machine							
Grade Checker and/or Line and Grade including Drone							
Helicopters							
Hover Craft, Flex Craft, Loadmaster, Air Cushion, All-Terrain Vehicle, Rollagon, Bargecable, Nodwell, & Snow Cat							
Hydro Ax, Feller Buncher & similar							
Hydro Excavation (Vac-Truck and Similar)							
Loaders (2 1/2 yards through 5 yards, including all attachments):							
(a) Forklifts (with telescopic boom & swing attachment)							
(b) Front End & Overhead, (2-1/2 yards through 5 yards)							
(c) Loaders, (with forks or pipe clamp)							
(d) Loaders, (elevating belt type, Euclid & similar types)							
Material Transfer Vehicle (Elevating Grader, Pickup Machine, and similar types)							
Mechanic, Welder, Bodyman, Electrical, Camp & Maintenance Engineer							
Micro Tunneling Machine							
Mixers: Mobile type with hoist combination							
Motor Patrol Grader							
Mucking Machine: Mole, Tunnel Drill, Horizontal/Directional Drill Operator and/or Shield							
Off-Road Hauler (including Articulating and Haul Trucks)							
Operator on Dredges							
Piledriver Engineer, L.B. Foster, Puller or similar paving breaker							
Plant Operator (Asphalt & Concrete)							
Power Plant, Turbine Operator 200 k.w & over (power plants or combination of power units over 300 k.w.)							

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Power Equipment Operators

*See per diem note on last page

		L&M						
A1601	Group I, including:	42.53	10.70	13.50	1.00	0.10	0.05	67.88

- Remote Controlled Equipment
- Scraper (through 40 yards)
- Service Oiler/Service Engineer
- Shot Blast Machine
- Shovels, Backhoes, Excavators with all attachments, and Gradealls (3 yards & under)
- Sideboom (under 45 tons)
- Sub Grader (Gurries & similar types)
- Tack Tractor
- Truck Mounted Concrete Pump, Conveyor/Tele-belt, & Creter
- Wate Kote Machine

		L&M						
A1602	Group IA, including:	44.29	10.70	13.50	1.00	0.10	0.05	69.64

- Camera/Tool/Video Operator (Slipline)
- Certified Welder, Electrical Mechanic, Camp Maintenance Engineer, Mechanic (over 10,000 hours)
- Cranes (over 45 tons or 150 feet including jib & attachments)
 - (a) Clamshells & Draglines (over 3 yards)
 - (b) Tower Cranes
- Licensed Water/Waste Water Treatment Operator
- Loaders (over 5 yards)
- Motor Patrol Grader, Dozer, Grade Tractor (finish: when finishing to final grade and/or to hubs, or for asphalt)
- Power Plants (1000 k.w. & over)
- Profiler, Reclaimer, and Roto-Mill
- Quad
- Scrapers (over 40 yards)
- Screed
- Shovels, Backhoes, Excavators with all attachments (over 3 yards)
- Sidebooms (over 45 tons)
- Slip Form Paver, C.M.I. & similar types
- Topside (Asphalt Paver, Slurry machine, Spreaders, and similar types)

		L&M						
A1603	Group II, including:	41.76	10.70	13.50	1.00	0.10	0.05	67.11

- Boiler - Fireman
- Cement Hogs & Concrete Pump Operator
- Conveyors (except those listed in Group I)
- Hoists on Steel Erection, Towermobiles & Air Tuggers
- Horizontal/Directional Drill Locator
- Locomotives, Rod & Geared Engines

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Power Equipment Operators

*See per diem note on last page

A1603 Group II, including:							L&M	
	41.76	10.70	13.50	1.00	0.10	0.05		67.11

- Mixers
- Screening, Washing Plant
- Sideboom (cradling rock drill, regardless of size)
- Skidder
- Trenching Machines (under 16 inches)
- Water/Waste Water Treatment Operator

A1604 Group III, including:							L&M	
	41.04	10.70	13.50	1.00	0.10	0.05		66.39

- "A" Frame Trucks, Deck Winches
- Bombardier (tack or tow rig)
- Boring Machine
- Brooms, Power (sweeper, elevator, vacuum, or similar)
- Bump Cutter
- Compressor
- Farm Tractor
- Forklift, Industrial Type
- Gin Truck or Winch Truck (with poles when used for hoisting)
- Hoists, Air Tuggers, Elevators
- Loaders:
 - (a) Elevating-Athey, Barber Greene & similar types
 - (b) Forklifts or Lumber Carrier (on construction job sites)
 - (c) Forklifts, (with tower)
 - (d) Overhead & Front End, (under 2-1/2 yards)
- Locomotives: Dinkey (air, steam, gas & electric) Speeders
- Mechanics, Light Duty
- Oil, Blower Distribution
- Posthole Digger, Mechanical
- Pot Fireman (power agitated)
- Power Plant, Turbine Operator, (under 200 k.w.)
- Pumps, Water
- Roller (other than Asphalt)
- Saws, Concrete
- Skid Hustler
- Skid Steer (with all attachments)
- Stake Hopper
- Straightening Machine
- Tow Tractor

A1605 Group IV, including:							L&M	
	34.83	10.70	13.50	1.00	0.10	0.05		60.18

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Power Equipment Operators

*See per diem note on last page

A1605 Group IV, including:							L&M	
		34.83	10.70	13.50	1.00	0.10	0.05	60.18

- Crane Assistant Engineer/Rig Oiler
- Drill Helper
- Parts & Equipment Coordinator
- Spotter
- Steam Cleaner
- Swamper (on trenching machines or shovel type equipment)

Roofers

*See per diem note on last page

A1701 Roofer & Waterproofer							L&M	
		44.62	12.75	3.91	0.81	0.10	0.06	62.25

A1702 Roofer Material Handler							L&M	
		31.23	12.75	3.91	0.81	0.10	0.06	48.86

Sheet Metal Workers, Region I (North of N63 latitude)

*See per diem note on last page

N1801 Sheet Metal Journeyman							L&M	
		48.64	11.50	14.11	1.65	0.12		76.02

- Air Balancing and duct cleaning of HVAC systems
- Brazing, soldering or welding of metals
- Demolition of sheet metal HVAC systems
- Fabrication and installation of exterior wall sheathing, siding, metal roofing, flashing, decking and architectural sheet metal work
- Fabrication and installation of heating, ventilation and air conditioning ducts and equipment
- Fabrication and installation of louvers and hoods
- Fabrication and installation of sheet metal lagging
- Fabrication and installation of stainless steel commercial or industrial food service equipment
- Manufacture, fabrication assembly, installation and alteration of all ferrous and nonferrous metal work
- Metal lavatory partitions
- Preparation of drawings taken from architectural and engineering plans required for fabrication and erection of sheet metal work
- Sheet Metal shelving
- Sheet Metal venting, chimneys and breaching
- Skylight installation

Sheet Metal Workers, Region II (South of N63 latitude)

*See per diem note on last page

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Sheet Metal Workers, Region II (South of N63 latitude)

*See per diem note on last page

							L&M	
S1801	Sheet Metal Journeyman	43.20	11.50	14.09	1.68	0.43		70.90

- Air Balancing and duct cleaning of HVAC systems
- Brazing, soldering or welding of metals
- Demolition of sheet metal HVAC systems
- Fabrication and installation of exterior wall sheathing, siding, metal roofing, flashing, decking and architectural sheet metal work
- Fabrication and installation of heating, ventilation and air conditioning ducts and equipment
- Fabrication and installation of louvers and hoods
- Fabrication and installation of sheet metal lagging
- Fabrication and installation of stainless steel commercial or industrial food service equipment
- Manufacture, fabrication assembly, installation and alteration of all ferrous and nonferrous metal work
- Metal lavatory partitions
- Preparation of drawings taken from architectural and engineering plans required for fabrication and erection of sheet metal work
- Sheet Metal shelving
- Sheet Metal venting, chimneys and breaching
- Skylight installation

Sprinkler Fitters

*See per diem note on last page

							L&M	
A1901	Sprinkler Fitter	47.35	10.55	18.05	0.52	0.25		76.72

Surveyors

*See per diem note on last page

							L&M	
A2001	Chief of Parties	45.16	11.83	13.14	1.15	0.10		71.38

							L&M	
A2002	Party Chief	43.57	11.83	13.14	1.15	0.10		69.79

							L&M	
A2003	Line & Grade Technician/Office Technician/GPS, Drones	42.97	11.83	13.14	1.15	0.10		69.19

							L&M	
A2004	Associate Party Chief (including Instrument Person & Head Chain Person)/Stake Hop/Grademan	40.85	11.83	13.14	1.15	0.10		67.07

							L&M	
A2006	Chain Person (for crews with more than 2 people)	36.51	11.83	13.14	1.15	0.10		62.73

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Truck Drivers

*See per diem note on last page

							L&M	
A2101	Group I, including:	41.94	11.83	13.14	1.15	0.10		68.16
	Air/Sea Traffic Controllers							
	Ambulance/Fire Truck Driver (EMT certified)							
	Boat Coxswain							
	Captains & Pilots (air & water)							
	Deltas, Commanders, Rollagons, & similar equipment (when pulling sleds, trailers or similar equipment)							
	Dump Trucks (including rockbuggy, side dump, belly dump, & trucks with pups) over 40 yards up to & including 60 yards							
	Helicopter Transporter							
	Liquid Vac Truck/Super Vac Truck							
	Material Coordinator or Purchasing Agent							
	Ready-mix (over 12 yards up to & including 15 yards) (over 15 yards to be negotiated)							
	Semi with Double Box Mixer							
	Tireman, Heavy Duty/Fueler							
	Water Wagon (250 Bbls and above)							
A2102	Group 1A including:	43.21	11.83	13.14	1.15	0.10		69.43
	Dump Trucks (including rockbuggy, side dump, belly dump & trucks with pups) over 60 yards up to & including 100 yards (over 100 yards to be negotiated)							
	Jeeps (driver under load)							
	Lowboys, including tractor attached trailers & jeeps, up to & including 12 axles (over 12 axles or 150 tons to be negotiated)							
A2103	Group II, including:	40.68	11.83	13.14	1.15	0.10		66.90
	All Deltas, Commanders, Rollagons, & similar equipment							
	Batch Trucks (8 yards & up)							
	Batch Trucks (up to & including 7 yards)							
	Boom Truck/Knuckle Truck (over 5 tons)							
	Cacasco Truck/Heat Stress Truck							
	Construction and Material Safety Technician							
	Dump Trucks (including rockbuggy, side dump, belly dump, & trucks with pups) over 20 yards up to & including 40 yards							
	Gin Pole Truck, Winch Truck, Wrecker (truck mounted "A" frame manufactured rating over 5 tons)							
	Mechanics							
	Oil Distributor Driver							
	Partsman							
	Ready-mix (up to & including 12 yards)							
	Stringing Truck							

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Truck Drivers

*See per diem note on last page

A2103	Group II, including:	40.68	11.83	13.14	1.15		L&M 0.10	66.90
	Turn-O-Wagon or DW-10 (not self loading)							
A2104	Group III, including:	39.86	11.83	13.14	1.15		L&M 0.10	66.08
	Boom Truck/Knuckle Truck (up to & including 5 tons)							
	Dump Trucks (including rockbuggy, side dump, belly dump, & trucks with pups) over 10 yards up to & including 20 yards							
	Expeditor (electrical & pipefitting materials)							
	Gin Pole Truck, Winch Truck, Wrecker (truck mounted "A" frame manufactured rating 5 tons & under)							
	Greaser - Shop							
	Semi or Truck & Trailer							
	Thermal Plastic Layout Technician							
	Traffic Control Technician							
	Trucks/Jeeps (push or pull)							
A2105	Group IV, including:	39.28	11.83	13.14	1.15		L&M 0.10	65.50
	Air Cushion or similar type vehicle							
	All Terrain Vehicle							
	Buggymobile							
	Bull Lift & Fork Lift, Fork Lift with Power Boom & Swing Attachment (over 5 tons)							
	Bus Operator (over 30 passengers)							
	Cement Spreader, Dry							
	Combination Truck-Fuel & Grease							
	Compactor (when pulled by rubber tired equipment)							
	Dump Trucks (including rockbuggy, side dump, belly dump, & trucks with pups) up to & including 10 yards							
	Dumpster							
	Expeditor (general)							
	Fire Truck/Ambulance Driver							
	Flat Beds, Dual Rear Axle							
	Foam Distributor Truck Dual Axle							
	Front End Loader with Fork							
	Grease Truck							
	Hydro Seeder, Dual Axle							
	Hyster Operators (handling bulk aggregate)							
	Loadmaster (air & water operations)							
	Lumber Carrier							
	Ready-mix, (up to & including 7 yards)							
	Rigger (air/water/oilfield)							

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Truck Drivers
 *See per diem note on last page

						L&M	
A2105	Group IV, including:	39.28	11.83	13.14	1.15	0.10	65.50
	Tireman, Light Duty						
	Track Truck Equipment						
	Truck Vacuum Sweeper						
	Warehouseperson						
	Water Truck (Below 250 Bbls)						
	Water Truck (straight)						
	Water Wagon, Semi						

						L&M	
A2106	Group V, including:	38.52	11.83	13.14	1.15	0.10	64.74
	Buffer Truck						
	Bull Lifts & Fork Lifts, Fork Lifts with Power Boom & Swing Attachments (up to & including 5 tons)						
	Bus Operator (up to 30 passengers)						
	Farm Type Rubber Tired Tractor (when material handling or pulling wagons on a construction project)						
	Flat Beds, Single Rear Axle						
	Foam Distributor Truck Single Axle						
	Fuel Handler (station/bulk attendant)						
	Gear/Supply Truck						
	Gravel Spreader Box Operator on Truck						
	Hydro Seeders, Single axle						
	Pickups (pilot cars & all light-duty vehicles)						
	Rigger/Swamper						
	Tack Truck						
	Team Drivers (horses, mules, & similar equipment)						

Tunnel Workers, Laborers (The Alaska areas north of N63 latitude and east of W138 longitude)
 *See per diem note on last page

						L&M	LEG	
N2201	Group I, including:	35.20	8.95	20.66	1.30	0.20	0.20	66.51
	Brakeman							
	Mucker							
	Nipper							
	Storm Water Pollution Protection Plan Worker (SWPPP Worker - erosion and sediment control Laborer)							
	Topman & Bull Gang							
	Tunnel Track Laborer							

						L&M	LEG	
N2202	Group II, including:	36.30	8.95	20.66	1.30	0.20	0.20	67.61
	Burning & Cutting Torch							

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Tunnel Workers, Laborers (The Alaska areas north of N63 latitude and east of W138 longitude)
 *See per diem note on last page

						L&M	LEG	
N2202	Group II, including:	36.30	8.95	20.66	1.30	0.20	0.20	67.61
	Certified Erosion Sediment Control Lead (CESCL Laborer)							
	Concrete Laborer							
	Floor Preparation, Core Drilling							
	Jackhammer/Chipping Gun or Pavement Breaker							
	Laser Instrument Operator							
	Nozzlemen, Pumpcrete or Shotcrete							
	Pipelayer Helper							

						L&M	LEG	
N2203	Group III, including:	37.29	8.95	20.66	1.30	0.20	0.20	68.60
	Miner							
	Retimberman							

						L&M	LEG	
N2204	Group IIIA, including:	40.90	8.95	20.66	1.30	0.20	0.20	72.21
	Asphalt Raker, Asphalt Belly Dump Lay Down							
	Drill Doctor (in the field)							
	Driller (including, but not limited to wagon drills, air-track drills, hydraulic drills)							
	Pioneer Drilling & Drilling Off Tugger (all type drills)							
	Pipelayer							
	Powderman (Employee Possessor)							
	Storm Water Pollution Protection Plan Specialist (SWPPP Specialist)							
	Traffic Control Supervisor, DOT Qualified							

						L&M	LEG	
N2206	Group IIIB, including:	45.07	6.24	20.66	1.30	0.20	0.20	73.67
	Driller (including, but not limited to wagon drills, air-track drills, hydraulic drills)(over 5,000 hours)							
	Federal Powderman (Responsible Person in Charge)							
	Grade Checking (setting or transferring of grade marks, line and grade, GPS, drones)							
	Pioneer Drilling & Drilling Off Tugger (all type drills)(over 5,000 hours)							
	Stake Hopper							

Tunnel Workers, Laborers (The area that is south of N63 latitude and west of W138 longitude)
 *See per diem note on last page

						L&M	LEG	
S2201	Group I, including:	35.20	8.95	20.66	1.30	0.20	0.20	66.51
	Brakeman							
	Mucker							

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Tunnel Workers, Laborers (The area that is south of N63 latitude and west of W138 longitude)
 *See per diem note on last page

S2201	Group I, including:	35.20	8.95	20.66	1.30		L&M 0.20	LEG 0.20	66.51
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- Nipper
- Storm Water Pollution Protection Plan Worker (SWPPP Worker - erosion and sediment control Laborer)
- Topman & Bull Gang
- Tunnel Track Laborer

S2202	Group II, including:	36.30	8.95	20.66	1.30		L&M 0.20	LEG 0.20	67.61
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- Burning & Cutting Torch
- Certified Erosion Sediment Control Lead (CESCL Laborer)
- Concrete Laborer
- Floor Preparation, Core Drilling
- Jackhammer/Chipping Gun or Pavement Breaker
- Laser Instrument Operator
- Nozzlemen, Pumpcrete or Shotcrete
- Pipelayer Helper

S2203	Group III, including:	37.29	8.95	20.66	1.30		L&M 0.20	LEG 0.20	68.60
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- Miner
- Retimberman

S2204	Group IIIA, including:	40.90	8.95	20.66	1.30		L&M 0.20	LEG 0.20	72.21
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- Asphalt Raker, Asphalt Belly Dump Lay Down
- Drill Doctor (in the field)
- Driller (including, but not limited to wagon drills, air-track drills, hydraulic drills)
- Pioneer Drilling & Drilling Off Tugger (all type drills)
- Pipelayer
- Powderman (Employee Possessor)
- Storm Water Pollution Protection Plan Specialist (SWPPP Specialist)
- Traffic Control Supervisor, DOT Qualified

S2206	Group IIIB, including:	45.07	6.24	20.66	1.30		L&M 0.20	LEG 0.20	73.67
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- Driller (including, but not limited to wagon drills, air-track drills, hydraulic drills)(over 5,000 hours)
- Federal Powderman (Responsible Person in Charge)
- Grade Checking (setting or transferring of grade marks, line and grade, GPS, drones)
- Pioneer Drilling & Drilling Off Tugger (all type drills)(over 5,000 hours)

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other	Benefits	THR
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Tunnel Workers, Laborers (The area that is south of N63 latitude and west of W138 longitude)
 *See per diem note on last page

S2206	Group IIIB, including:	45.07	6.24	20.66	1.30		L&M	LEG	
	Stake Hopper						0.20	0.20	73.67

Tunnel Workers, Power Equipment Operators
 *See per diem note on last page

A2207	Group I	46.78	10.70	13.50	1.00		L&M		
							0.10	0.05	72.13
A2208	Group IA	48.72	10.70	13.50	1.00		L&M		
							0.10	0.05	74.07
A2209	Group II	45.94	10.70	13.50	1.00		L&M		
							0.10	0.05	71.29
A2210	Group III	45.14	10.70	13.50	1.00		L&M		
							0.10	0.05	70.49
A2211	Group IV	38.31	10.70	13.50	1.00		L&M		
							0.10	0.05	63.66

* Per diem is an established practice for this classification. This means that per diem is an allowable alternative to board and lodging if all criteria are met. See 8 AAC 30.051-08 AAC 30.056, and the per diem information on page vii of this Pamphlet.

** Work in combination of classifications: Employees working in any combination of classifications within the diving crew (working diver, standby diver, and tender) in a shift are paid in the classification with the highest rate for a minimum of 8 hours per shift.

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pens fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

1.0 PURPOSE AND INTENDED USE OF THE DOCUMENT

BID FORM

FOR CONSTRUCTION CONTRACT

The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 1—OWNER AND BIDDER

- 1.01 This Bid is submitted to: **City of Palmer, Alaska**; herein after referred to as Owner.
- 1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2—ATTACHMENTS TO THIS BID

- 2.01 The following documents are submitted with and made a condition of this Bid:
- A. Required Bid security;
 - B. List of Proposed Subcontractors;
 - C. List of Proposed Suppliers;
 - D. List of Project References;
 - E. Evidence of authority to do business in the State of Alaska; or a written covenant to obtain such authority within the time for acceptance of Bids;
 - F. Contractor's license number: _____
 - G. Required Bidder Qualification Statement with supporting data;
 - H. If Bid amount exceeds \$10,000, signed Compliance Statement (RD 400-6). Refer to specific equal opportunity requirements set forth in the Supplementary Conditions of the Construction Contract (EJCDC C-800);
 - I. If Bid amount exceeds \$25,000, signed Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions (AD-1048);
 - J. If Bid amount exceeds \$100,000, signed RD Instruction 1940-Q Exhibit A-1, Certification for Contracts, Grants, and Loans."
 - K. Manufacturers' Certification letter of compliance with Section 746 of Title VII of the Consolidated Appropriations Act of 2017 (Division A - Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2017) and subsequent statutes mandating domestic preference for all equals or substitutes approved by Addenda for American Iron and Steel products as provided in these Contract Documents.

ARTICLE 3—BASIS OF BID—LUMP SUM BID AND UNIT PRICES

- 3.01 This section, in general, describes the bid items included in the bid schedule. The description of Bid Items is provided for clarity purposes only. It is not intended to replace, supersede or preclude any information in the plans and specifications.

Unless specified otherwise, all lump sum bid items will be paid as a percentage of actual work complete. Percent complete will be based on the schedule of values submitted by the Contractor and approved by the engineer. The schedule of values will break down the lump sum bid items into discrete work activities beyond the breakdown shown on the Bid Form. The schedule of values must be submitted and approved by the Engineer before the Contractor can request a payment for work under this Contract.

Descriptions of the project Bid Items are provided below:

BID ITEM NO. 1: BASE CONSTRUCTION. This lump sum Bid Item includes all other work not specifically designated in all other Bid Items. Provide all labor, equipment, materials and services to construct and commence operation of the Palmer WWTF Improvements. The Bid Item includes work shown and/or specified for the MBBR channel modifications, new standby engine generator, Lagoon 2 modifications, new Manhole #15, yard piping, site work, electrical, instrumentation, equipment, civil related work, mechanical related work and all state and local permits, complete. Excludes secondary clarifiers associated with Bid Item No. 2, Waste Activated Sludge (WAS) Vault associated with Bid Item No. 3, Scum Pump Station associated with Bid Item No. 4, and Lagoon 2 Overflow Structure associated with Bid Item No. 5.

BID ITEM NO. 2: SECONDARY CLARIFIERS. This lump sum Bid Item includes construction of the new Secondary Clarifier Split Structure, new Secondary Clarifier No. 1 and Secondary Clarifier No. 2, new Manhole #16, and associated equipment, site work, concrete tankage, piping, mechanical, electrical, instrumentation and coatings as described in the Contract Documents. The Bid Item includes, but is not limited to, all associated facilities defined in Section 46 43 24 – Sludge Collection: Circular Spiral Scraper-Type and Section 46 73 18 – Aluminum Flat Panel Covers. This Bid Item also includes facilities defined in the 400 Series Drawings and associated state and local permits, complete.

BID ITEM NO. 3: WASTE ACTIVATED SLUDGE (WAS) VAULT. This lump sum Bid Item includes construction of the new WAS Vault, and associated equipment, site work, concrete tankage, piping, mechanical, electrical, instrumentation and coatings as described in the Contract Documents. The Bid Item includes, but is not limited to, all associated facilities defined in Section 43 23 17 – Pumping Equipment: Vortex (Torque-Flow) and Section 43 24 16 – Pumping Equipment: Sump. This Bid Item also includes facilities defined in the 300 Series Drawings and associated state and local permits, complete.

BID ITEM NO. 4: SCUM PUMP STATION. This lump sum Bid Item includes construction of the new Scum Pump Station, and associated equipment, site work, concrete tankage, piping, mechanical, electrical, instrumentation and coatings as described in the Contract Documents. The Bid Item includes, but is not limited to, all associated facilities defined in Section 43 21 23 – WET PIT PREROTATION SCREW CENTRIFUGAL IMMERSIBLE NON-CLOG PUMPING SYSTEM. This Bid Item also includes facilities defined on Drawing 000C009 and associated state and local permits, complete.

BID ITEM NO. 5: LAGOON 2 OVERFLOW STRUCTURE. This lump sum Bid Item includes construction of the new Lagoon 2 Overflow Structure, and

associated site work, concrete structure, and piping, as described in the Contract Documents. The Bid Item includes, but is not limited to, all associated facilities defined on Drawing 000C007 and associated state and local permits, complete.

- a. Bidder will complete the Work in accordance with the contract Documents and the provisions below for the following price(s) as summarized in the Bid Sheet Schedule(s) hereinafter.
- b. Bidder agrees that all sales and use taxes are included in the stated bid price for the work.
- c. The Owner reserves the right to reject any or all bids.
- d. Contractor Take Note: It is the intent of the Owner to award a contract to the lowest responsive, responsible bidder on the basis of the combined total of Bid Items No. 1, No. 2, No. 3, No. 4, and No. 5. Bidders must include lump sum bid prices for all Bid Items No. 1 through 5. Bids received that do not include pricing for Bid Items 1 through 5 will be considered non-responsive. The purpose and intent of using such a basis of award is to allow the Owner to construct the greatest possible number of Bid Items based upon the responsible bids received and the funding available. The Owner reserves the right to authorize construction of any combination of, or all of, the bid additive alternates defined at the bid amounts presented in the Contractor's Bid Proposal.

BIDDER will complete the Work in accordance with the Contract Documents for the following prices(s):

**WASTEWATER TREATMENT FACILITY IMPROVEMENTS PROJECT – Phase II
Bid Schedule A**

The Bid for the following items shall be a lump sum bid for all construction work described in the Contract Documents. The bid price shall include all temporary or permanent equipment, materials, supplies, and labor necessary to construct the item in accordance with the Contract Documents. The total lump sum price shall be broken down into the following items for the purpose of progress payments and for the information of the OWNER.

1. BID SCHEDULES: All specific cash allowances are included in the prices set forth below and have been computed in accordance with the General Conditions.

Bid Item No.	Description	Total Bid Item Price (Use Figures)
1	Base Construction	\$ _____ (Use Figures)
2	Secondary Clarifiers	\$ _____ (Use Figures)
3	Waste Activated Sludge (WAS) Vault	\$ _____ (Use Figures)
4	Scum Pump Station	\$ _____ (Use Figures)
5	Lagoon 2 Overflow Structure	\$ _____ (Use Figures)
Total Contract Bid Price (Items No. 1 through No. 5)		\$ _____ (Use Figures)
Total Contract Bid Price, (Bid Items No. 1 through No. 5)		

(Use Words)		

3.02 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of days indicated in the Agreement.

3.03 [DELETED]

- 3.04 [DELETED]
- 3.05 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 4—BIDDER’S ACKNOWLEDGEMENTS: ACCEPTANCE PERIOD, INSTRUCTIONS, AND RECEIPT OF ADDENDA

- 4.01 *Bid Acceptance Period*
 - A. This Bid will remain subject to acceptance for [60] days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.
- 4.02 *Instructions to Bidders*
 - A. Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security.
- 4.03 *Receipt of Addenda*
 - A. Bidder hereby acknowledges receipt of the following Addenda:

Addendum Number	Addendum Date
Addendum 1	June 18, 2021

ARTICLE 5—BIDDER’S REPRESENTATIONS AND CERTIFICATIONS

- 5.01 *Bidder’s Representations*
 - A. In submitting this Bid, Bidder represents the following:
 1. Bidder has examined and carefully studied the Bidding Documents, including Addenda.
 2. Bidder has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 3. Bidder is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work, including all American Iron and Steel requirements.”
 4. Bidder has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.
 5. Bidder has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.
 6. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and

performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, if selected as Contractor; and (c) Bidder's (Contractor's) safety precautions and programs.

7. Based on the information and observations referred to in the preceding paragraph, Bidder agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
8. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
9. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
10. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
11. The submission of this Bid constitutes an incontrovertible representation by Bidder that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

5.02 *Bidder's Certifications*

A. The Bidder certifies the following:

1. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation.
2. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid.
3. Bidder has not solicited or induced any individual or entity to refrain from bidding.
4. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 5.02.A:
 - a. Corrupt practice means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process.
 - b. Fraudulent practice means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition.
 - c. Collusive practice means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels.
 - d. Coercive practice means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

BIDDER hereby submits this Bid as set forth above:

Bidder:

(typed or printed name of organization)

By:

(individual's signature)

Name:

(typed or printed)

Title:

(typed or printed)

Date:

(typed or printed)

If Bidder is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.

Attest:

(individual's signature)

Name:

(typed or printed)

Title:

(typed or printed)

Date:

(typed or printed)

Bidder's Address for giving notices:

Bidder's Contact Person:

Name:

(typed or printed)

Title:

(typed or printed)

Phone:

Email:

Address:

Bidder's Contractor License No.: (if applicable)

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BID BOND (PENAL SUM FORM)

<p>Bidder</p> <p>Name: [Full formal name of Bidder]</p> <p>Address (<i>principal place of business</i>): [Address of Bidder's principal place of business]</p>	<p>Surety</p> <p>Name: [Full formal name of Surety]</p> <p>Address (<i>principal place of business</i>): [Address of Surety's principal place of business]</p>
<p>Owner</p> <p>Name: City of Palmer, Alaska</p> <p>Address (<i>principal place of business</i>): 231 W Evergreen Avenue Palmer, Alaska 99645</p>	<p>Bid</p> <p>Project (<i>name and location</i>): City of Palmer Wastewater Treatment Facility Improvements Projects Phase II</p> <p>Bid Due Date: June 24, 2021</p>
<p>Bond</p> <p>Penal Sum: [Amount]</p> <p>Date of Bond: [Date]</p>	
<p>Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth in this Bid Bond, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.</p>	
Bidder	Surety
<i>(Full formal name of Bidder)</i>	<i>(Full formal name of Surety) (corporate seal)</i>
By: _____ <i>(Signature)</i>	By: _____ <i>(Signature) (Attach Power of Attorney)</i>
Name: _____ <i>(Printed or typed)</i>	Name: _____ <i>(Printed or typed)</i>
Title: _____	Title: _____
Attest: _____ <i>(Signature)</i>	Attest: _____ <i>(Signature)</i>
Name: _____ <i>(Printed or typed)</i>	Name: _____ <i>(Printed or typed)</i>
Title: _____	Title: _____
<p><i>Notes: (1) Note: Addresses are to be used for giving any required notice. (2) Provide execution by any additional parties, such as joint venturers, if necessary.</i></p>	

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond will be Owner's sole and exclusive remedy upon default of Bidder.
2. Default of Bidder occurs upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
3. This obligation will be null and void if:
 - 3.1. Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
 - 3.2. All Bids are rejected by Owner, or
 - 3.3. Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).
4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions does not in the aggregate exceed 120 days from the Bid due date without Surety's written consent.
6. No suit or action will be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety, and in no case later than one year after the Bid due date.
7. Any suit or action under this Bond will be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
8. Notices required hereunder must be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Postal Service registered or certified mail, return receipt requested, postage pre-paid, and will be deemed to be effective upon receipt by the party concerned.
9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond will be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute governs and the remainder of this Bond that is not in conflict therewith continues in full force and effect.
11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

QUALIFICATIONS STATEMENT

ARTICLE 1—GENERAL INFORMATION

1.01 Provide contact information for the Business:

Legal Name of Business:			
Corporate Office			
Name:		Phone number:	
Title:		Email address:	
Business address of corporate office:			
Local Office			
Name:		Phone number:	
Title:		Email address:	
Business address of local office:			

1.02 Provide information on the Business’s organizational structure:

Form of Business:	<input type="checkbox"/> Sole Proprietorship <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation		
	<input type="checkbox"/> Limited Liability Company <input type="checkbox"/> Joint Venture comprised of the following companies:		
	1.		
	2.		
	3.		
Provide a separate Qualification Statement for each Joint Venturer.			
Date Business was formed:		State in which Business was formed:	
Is this Business authorized to operate in the Project location?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Pending	

1.03 Identify all businesses that own Business in whole or in part (25% or greater), or that are wholly or partly (25% or greater) owned by Business:

Name of business:		Affiliation:	
Address:			
Name of business:		Affiliation:	
Address:			
Name of business:		Affiliation:	

Address:	
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1.04 Provide information regarding the Business’s officers, partners, and limits of authority.

Name:		Title:	
Authorized to sign contracts: <input type="checkbox"/> Yes <input type="checkbox"/> No		Limit of Authority:	\$
Name:		Title:	
Authorized to sign contracts: <input type="checkbox"/> Yes <input type="checkbox"/> No		Limit of Authority:	\$
Name:		Title:	
Authorized to sign contracts: <input type="checkbox"/> Yes <input type="checkbox"/> No		Limit of Authority:	\$
Name:		Title:	

ARTICLE 2—LICENSING

2.01 Provide information regarding licensure for Business:

Name of License:			
Licensing Agency:			
License No:		Expiration Date:	
Name of License:			
Licensing Agency:			
License No:		Expiration Date:	

ARTICLE 3—DIVERSE BUSINESS CERTIFICATIONS

3.01 Provide information regarding Business’s Diverse Business Certification, if any. Provide evidence of current certification.

Certification	Certifying Agency	Certification Date
<input type="checkbox"/> Disadvantaged Business Enterprise		
<input type="checkbox"/> Minority Business Enterprise		
<input type="checkbox"/> Woman-Owned Business Enterprise		
<input type="checkbox"/> Small Business Enterprise		
<input type="checkbox"/> Disabled Business Enterprise		
<input type="checkbox"/> Veteran-Owned Business Enterprise		
<input type="checkbox"/> Service-Disabled Veteran-Owned Business		
<input type="checkbox"/> HUBZone Business (Historically Underutilized) Business		
<input type="checkbox"/> Other		
<input type="checkbox"/> None		

ARTICLE 4—SAFETY

4.01 Provide information regarding Business’s safety organization and safety performance.

Name of Business’s Safety Officer:		
Safety Certifications		
Certification Name	Issuing Agency	Expiration

4.02 Provide Worker’s Compensation Insurance Experience Modification Rate (EMR), Total Recordable Frequency Rate (TRFR) for incidents, and Total Number of Recorded Manhours (MH) for the last 3 years and the EMR, TRFR, and MH history for the last 3 years of any proposed Subcontractor(s) that will provide Work valued at 10% or more of the Contract Price. Provide documentation of the EMR history for Business and Subcontractor(s).

Year									
Company	EMR	TRFR	MH	EMR	TRFR	MH	EMR	TRFR	MH

ARTICLE 5—FINANCIAL

5.01 Provide information regarding the Business’s financial stability. Provide the most recent audited financial statement, and if such audited financial statement is not current, also provide the most current financial statement.

Financial Institution:			
Business address:			
Date of Business’s most recent financial statement:		<input type="checkbox"/> Attached	
Date of Business’s most recent audited financial statement:		<input type="checkbox"/> Attached	
Financial indicators from the most recent financial statement			
Contractor’s Current Ratio (Current Assets ÷ Current Liabilities)			
Contractor’s Quick Ratio ((Cash and Cash Equivalents + Accounts Receivable + Short Term Investments) ÷ Current Liabilities)			

ARTICLE 6—SURETY INFORMATION

6.01 Provide information regarding the surety company that will issue required bonds on behalf of the Business, including but not limited to performance and payment bonds.

Surety Name:	
--------------	--

Surety is a corporation organized and existing under the laws of the state of:			
Is surety authorized to provide surety bonds in the Project location?		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Is surety listed in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" published in Department Circular 570 (as amended) by the Bureau of the Fiscal Service, U.S. Department of the Treasury?			
<input type="checkbox"/> Yes <input type="checkbox"/> No			
Mailing Address (principal place of business):			
Physical Address (principal place of business):			
Phone (main):		Phone (claims):	

ARTICLE 7—INSURANCE

7.01 Provide information regarding Business’s insurance company(s), including but not limited to its Commercial General Liability carrier. Provide information for each provider.

Name of insurance provider, and type of policy (CLE, auto, etc.):			
Insurance Provider		Type of Policy (Coverage Provided)	
Are providers licensed or authorized to issue policies in the Project location?		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Does provider have an A.M. Best Rating of A-VII or better?		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Mailing Address (principal place of business):			
Physical Address (principal place of business):			
Phone (main):		Phone (claims):	

ARTICLE 8—CONSTRUCTION EXPERIENCE

8.01 Provide information that will identify the overall size and capacity of the Business.

Average number of current full-time employees:	
Estimate of revenue for the current year:	
Estimate of revenue for the previous year:	

8.02 Provide information regarding the Business’s previous contracting experience.

Years of experience with projects like the proposed project:		
As a general contractor:		As a joint venturer:
Has Business, or a predecessor in interest, or an affiliate identified in Paragraph 1.03:		
Been disqualified as a bidder by any local, state, or federal agency within the last 5 years? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Been barred from contracting by any local, state, or federal agency within the last 5 years? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Been released from a bid in the past 5 years? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Defaulted on a project or failed to complete any contract awarded to it? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Refused to construct or refused to provide materials defined in the contract documents or in a change order? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Been a party to any currently pending litigation or arbitration? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Provide full details in a separate attachment if the response to any of these questions is Yes.		

8.03 List all projects currently under contract in Schedule A and provide indicated information. Note any projects that are subject to American Iron and Steel requirements.

8.04 List a minimum of three and a maximum of six projects completed in the last 5 years in Schedule B and provide indicated information to demonstrate the Business’s experience with projects similar in type and cost of construction. Note any projects that are subject to American Iron and Steel requirements.

8.05 In Schedule C, provide information on key individuals whom Business intends to assign to the Project. Provide resumes for those individuals included in Schedule C. Key individuals include the Project Manager, Project Superintendent, Quality Manager, and Safety Manager. Resumes may be provided for Business’s key leaders as well.

ARTICLE 9—REQUIRED ATTACHMENTS

9.01 Provide the following information with the Statement of Qualifications:

- A. If Business is a Joint Venture, separate Qualifications Statements for each Joint Venturer, as required in Paragraph 1.02.
- B. Diverse Business Certifications if required by Paragraph 3.01.
- C. Certification of Business’s safety performance if required by Paragraph 4.02.
- D. Financial statements as required by Paragraph 5.01.

- E. Attachments providing additional information as required by Paragraph 8.02.
- F. Schedule A (Current Projects) as required by Paragraph 8.03.
- G. Schedule B (Previous Experience with Similar Projects) as required by Paragraph 8.04.
- H. Schedule C (Key Individuals) and resumes for the key individuals listed, as required by Paragraph 8.05.
- I. Additional items as pertinent.

This Statement of Qualifications is offered by:

Business: _____
(typed or printed name of organization)

By: _____
(individual's signature)

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Date: _____
(date signed)

(If Business is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest: _____
(individual's signature)

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Address for giving notices:

Designated Representative:

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Address: _____

Phone: _____

Email: _____

Schedule A—Current Projects

Name of Organization					
Project Owner			Project Name		
General Description of Project					
Project Cost			Date Project Completed		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name					
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					
Project Owner			Project Name		
General Description of Project					
Project Cost			Date Project Completed		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name					
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					
Project Owner			Project Name		
General Description of Project					
Project Cost			Date Project Completed		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name					
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					

Schedule B—Previous Experience with Similar Projects

Name of Organization					
Project Owner			Project Name		
General Description of Project					
Project Cost			Date Project Completed		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name					
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					
Project Owner			Project Name		
General Description of Project					
Project Cost			Date Project Completed		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name					
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					
Project Owner			Project Name		
General Description of Project					
Project Cost			Date Project Completed		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name					
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					

Schedule B—Previous Experience with Similar Projects

Name of Organization					
Project Owner			Project Name		
General Description of Project					
Project Cost			Date Project Completed		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name					
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					
Project Owner			Project Name		
General Description of Project					
Project Cost			Date Project Completed		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name					
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					
Project Owner			Project Name		
General Description of Project					
Project Cost			Date Project Completed		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name					
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					

Schedule C—Key Individuals

Project Manager			
Name of individual			
Years of experience as project manager			
Years of experience with this organization			
Number of similar projects as project manager			
Number of similar projects in other positions			
Current Project Assignments			
Name of assignment		Percent of time used for this project	Estimated project completion date
Reference Contact Information (listing names indicates approval to contact named individuals as a reference)			
Name		Name	
Title/Position		Title/Position	
Organization		Organization	
Telephone		Telephone	
Email		Email	
Project		Project	
Candidate's role on project		Candidate's role on project	
Project Superintendent			
Name of individual			
Years of experience as project superintendent			
Years of experience with this organization			
Number of similar projects as project superintendent			
Number of similar projects in other positions			
Current Project Assignments			
Name of assignment		Percent of time used for this project	Estimated project completion date
Reference Contact Information (listing names indicates approval to contact named individuals as a reference)			
Name		Name	
Title/Position		Title/Position	
Organization		Organization	
Telephone		Telephone	
Email		Email	
Project		Project	
Candidate's role on project		Candidate's role on project	

Safety Manager			
Name of individual			
Years of experience as project manager			
Years of experience with this organization			
Number of similar projects as project manager			
Number of similar projects in other positions			
Current Project Assignments			
Name of assignment		Percent of time used for this project	Estimated project completion date
Reference Contact Information (listing names indicates approval to contact named individuals as a reference)			
Name		Name	
Title/Position		Title/Position	
Organization		Organization	
Telephone		Telephone	
Email		Email	
Project		Project	
Candidate's role on project		Candidate's role on project	
Quality Control Manager			
Name of individual			
Years of experience as project superintendent			
Years of experience with this organization			
Number of similar projects as project superintendent			
Number of similar projects in other positions			
Current Project Assignments			
Name of assignment		Percent of time used for this project	Estimated project completion date
Reference Contact Information (listing names indicates approval to contact named individuals as a reference)			
Name		Name	
Title/Position		Title/Position	
Organization		Organization	
Telephone		Telephone	
Email		Email	
Project		Project	
Candidate's role on project		Candidate's role on project	

NOTICE OF AWARD

Date of Issuance:

Owner:

Owner's Project No.:

Engineer:

Engineer's Project No.:

Project:

Contract Name:

Bidder:

Bidder's Address:

You are notified that Owner has accepted your Bid dated [_____] for the above Contract, and that you are the Successful Bidder and are awarded a Contract for:

[_____]

The Contract Price of the awarded Contract is \$[_____].

Contract Price is subject to adjustment based on the provisions of the Contract, including but not limited to those governing changes, Unit Price Work, and Work performed on a cost-plus-fee basis, as applicable.

unexecuted counterparts of the Agreement accompany this Notice of Award, and one copy of the Contract Documents accompanies this Notice of Award, or has been transmitted or made available to Bidder electronically.

drawings will be delivered separately from the other Contract Documents.

You must comply with the following conditions precedent within 15 days of the date of receipt of this Notice of Award:

1. Deliver to Owner [number of copies sent] counterparts of the Agreement, signed by Bidder (as Contractor).
2. Deliver with the signed Agreement(s) the Contract security (such as required performance and payment bonds) and insurance documentation, as specified in the Instructions to Bidders and in the General Conditions, Articles 2 and 6.
3. Other conditions precedent (if any):
 - Certificates of insurance are required to be purchased and maintained in accordance with the Contract Documents.
 - Signed Copy of the Agreement Between Owner and Contractor.
 - Bonds are required to be purchased and maintained in accordance with the Contract Documents.
 - All applicable licenses required by the contract documents.

Failure to comply with these conditions within the time specified will entitle Owner to consider you in default, annul this Notice of Award, and declare your Bid security forfeited. Within 10 days after you comply with the above conditions, Owner will return to you one fully signed counterpart of the Agreement, together with any additional copies of the Contract Documents as indicated in Paragraph 2.02 of the General Conditions.

Owner:

By (signature): _____

Name (printed): _____

Title: _____

Copy:

Engineer

This page intentionally left blank.

AGREEMENT

BETWEEN OWNER AND CONTRACTOR
FOR CONSTRUCTION CONTRACT (STIPULATED PRICE)

This Agreement is by and between [_____] (“Owner”) and [name of contracting entity] (“Contractor”).

Terms used in this Agreement have the meanings stated in the General Conditions and the Supplementary Conditions.

Owner and Contractor hereby agree as follows:

ARTICLE 1—WORK

1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

- A. Furnish and install all labor, materials, and equipment for the construction of new secondary clarification equipment; new secondary split box; installation of new waste activated sludge and scum pumping equipment; piping, valves, and appurtenances; together with related subsidiary and incidental work in accordance with the plans and specifications

ARTICLE 2—THE PROJECT

2.01 The Project, of which the Work under the Contract Documents is a part, is generally described as follows: City of Palmer Wastewater Treatment Facility Improvements – Phase II

ARTICLE 3—ENGINEER

3.01 The Owner has retained HDR Engineering, Inc (“Engineer”) to act as Owner’s representative, assume all duties and responsibilities of Engineer, and have the rights and authority assigned to Engineer in the Contract.

3.02 The part of the Project that pertains to the Work has been designed by “Engineer” ..

ARTICLE 4—CONTRACT TIMES

4.01 *Time is of the Essence*

- A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.02 *Contract Times: Dates*

- A. The Work will be substantially complete on or before July 1, 2022, and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before November 30, 2022.

4.03 Milestones

A. Parts of the Work must be substantially completed on or before the following Milestone(s):

1. Milestone 1: BID ITEMS indicated below shall meet the requirements for Substantial Completion on or before July 1, 2022. This work includes the following work items;

- a. SECONDARY CLARIFIERS: This lump sum Bid Item includes construction of the new Secondary Clarifier Split Structure, new Secondary Clarifier No. 1 and Secondary Clarifier No. 2, new Manhole #16, and associated equipment, site work, concrete tankage, piping, mechanical, electrical, instrumentation and coatings as described in the Contract Documents. The Bid Item includes, but is not limited to, all associated facilities defined in Section 46 43 24 – Sludge Collection: Circular Spiral Scraper-Type and Section 46 73 18 – Aluminum Flat Panel Covers. This Bid Item also includes facilities defined in the 400 Series Drawings and associated state and local permits, complete.
- b. WASTE ACTIVATED SLUDGE (WAS) VAULT: This lump sum Bid Item includes construction of the new WAS Vault, and associated equipment, site work, concrete tankage, piping, mechanical, electrical, instrumentation and coatings as described in the Contract Documents. The Bid Item includes, but is not limited to, all associated facilities defined in Section 43 23 17 – Pumping Equipment: Vortex (Torque-Flow) and Section 43 24 16 – Pumping Equipment: Sump. This Bid Item also includes facilities defined in the 300 Series Drawings and associated state and local permits, complete.
- c. SCUM PUMP STATION; This lump sum Bid Item includes construction of the new Scum Pump Station, and associated equipment, site work, concrete tankage, piping, mechanical, electrical, instrumentation and coatings as described in the Contract Documents. The Bid Item includes, but is not limited to, all associated facilities defined in Section 43 21 23 – WET PIT PREROTATION SCREW CENTRIFUGAL IMMERSIBLE NON-CLOG PUMPING SYSTEM. This Bid Item also includes facilities defined on Drawing 000C009 and associated state and local permits, complete.

2. Milestone 2: BID ITEMS indicated below shall meet the requirements for Substantial Completion on or before October 1, 2022: This work includes the following work items;

Milestone 2 includes all other work not specifically designated in all other Bid Items. The Bid Item includes work shown and/or specified for the MBBR channel modifications, new standby engine generator, Lagoon 2 modifications, new Manhole #15, yard piping, site work, electrical, instrumentation, equipment, civil related work, mechanical related work and all state and local permits, complete. Excludes secondary clarifiers associated with Bid Item No. 2, Waste Activated Sludge (WAS) Vault associated with Bid Item No. 3, Scum Pump Station associated with Bid Item No. 4, and Lagoon 2 Overflow Structure associated with Bid Item No.

5

- d. LAGOON 2 OVERFLOW STRUCTURE; This lump sum Bid Item includes construction of the new Lagoon 2 Overflow Structure, and associated site work, concrete structure, and piping, as described in the Contract Documents. The Bid Item includes, but is not limited to, all associated facilities defined on Drawing 000C007 and associated state and local permits, complete.

4.04 *Liquidated Damages*

- A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial and other losses if the Work is not completed and Milestones not achieved within the Contract Times, as duly modified. The parties also recognize the delays, expense, and difficulties involved in proving, in a legal or arbitration proceeding, the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):
 - 1. *Substantial Completion*: Contractor shall pay Owner \$5,000 for each day that expires after the time (as duly adjusted pursuant to the Contract) specified above for Substantial Completion, until the Work is substantially complete.
 - 2. *Completion of Remaining Work*: After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Times (as duly adjusted pursuant to the Contract) for completion and readiness for final payment, Contractor shall pay Owner \$5,000 for each day that expires after such time until the Work is completed and ready for final payment.
 - 3. *Milestones*: Contractor shall pay Owner \$5,000 for each day that expires after the time (as duly adjusted pursuant to the Contract) specified above for achievement of Milestone 1, until Milestone 1 is achieved, or until the time specified for Substantial Completion is reached, at which time the rate indicated in Paragraph 4.05.A.1 will apply, rather than the Milestone rate.
 - 4. Liquidated damages for failing to timely attain Milestones, Substantial Completion, and final completion are not additive, and will not be imposed concurrently.
- B. If Owner recovers liquidated damages for a delay in completion by Contractor, then such liquidated damages are Owner's sole and exclusive remedy for such delay, and Owner is precluded from recovering any other damages, whether actual, direct, excess, or consequential, for such delay, except for special damages (if any) specified in this Agreement.
- C. [DELETED]

- 4.05 *Special Damages (deleted)*
- 4.06 Owner reserves the right to withhold from payments due Contractor under the Contract amounts for liquidated damages (if any), special damages (if any), and performance damages (if any) in accordance with the Contract.

ARTICLE 5—CONTRACT PRICE

- 5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents, the amounts that follow, subject to adjustment under the Contract:
- A. For a lump sum of \$_____.
- All specific cash allowances are included in the above price in accordance with Paragraph 13.02 of the General Conditions.
- B. For all Work, at the prices stated in Contractor's Bid, attached hereto as an exhibit.

ARTICLE 6—PAYMENT PROCEDURES

- 6.01 *Submittal and Processing of Payments*
- A. Contractor shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.
- 6.02 *Progress Payments; Retainage*
- A. Owner shall make progress payments on the basis of Contractor's Applications for Payment on or about the 25th day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided in the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of Values, as provided elsewhere in the Contract.
1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Owner may withhold, including but not limited to liquidated damages, in accordance with the Contract.
- a. 95 percent of the value of the Work completed (with the balance being retainage).
- 1) [DELETED]
- b. 95 percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).
- B. Upon Substantial Completion of the entire construction to be provided under the construction Contract Documents, Owner shall pay an amount sufficient to increase total payments to Contractor to 95 percent of the Work completed, less such amounts set off by Owner pursuant to Paragraph 15.01.E of the General Conditions, and reflecting the Engineer's estimate of the value of Work to be completed or corrected

as shown on the punch list of items to be completed or corrected prior to final payment.

6.03 *Final Payment*

- A. Upon final completion and acceptance of the Work, Owner shall pay the remainder of the Contract Price in accordance with Paragraph 15.06 of the General Conditions.

6.04 *Consent of Surety*

- A. Owner will not make final payment, or return or release retainage at Substantial Completion or any other time, unless Contractor submits written consent of the surety to such payment, return, or release.

6.05 *Interest*

- A. All amounts not paid when due will bear interest at the maximum statutory rate allowed by law at the place of OWNER's project in accordance with the GENERAL CONDITIONS, or eighteen (18) percent per annum, whichever is lowest.

ARTICLE 7—CONTRACT DOCUMENTS

7.01 *Contents*

- A. The Contract Documents consist of all of the following:
 - 1. This Agreement.
 - 2. Bonds:
 - a. Performance bond (together with power of attorney).
 - b. Payment bond (together with power of attorney). 3. General Conditions.
 - 3. General Conditions.
 - 4. Supplementary Conditions.
 - 5. Volume 1: Specifications as listed in the table of contents of the project manual.
 - 6. Volume 2: Geotechnical Report
 - 7. Volume 3: Drawings listed on the attached sheet index.
 - 8. Volume 4: Standard Details
 - 9. Addenda (numbers __ to __, inclusive).
 - 10. Exhibits to this Agreement (enumerated as follows):
 - a. Contractor's bid (pages __ to __, inclusive)
 - b. Exhibit A1: Consent Decree for Reference
 - 11. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:
 - a. Notice to Proceed.
 - b. Work Change Directives.
 - c. Change Orders.
 - d. Field Orders.

- B. The Contract Documents listed in Paragraph 7.01.A are attached to this Agreement (except as expressly noted otherwise above).
- C. There are no Contract Documents other than those listed above in this Article 7.
- D. The Contract Documents may only be amended, modified, or supplemented as provided in the Contract.

Precedence Order of the Contract Documents

- B. The Engineer, or designee, shall resolve any discrepancies between these documents. The following order of precedence (highest precedence to lowest precedence) shall apply:
 - 1. Authorized Change Orders
 - 2. This Agreement, including exhibits and addenda
 - 3. Supplementary Conditions
 - 4. Standard General Conditions of the Construction Contract, EJCDC.
 - 5. Specifications
 - 6. Detailed Drawings: Figure dimensions, and dimensions that can be computed, on plans shall take precedence over scaled drawings.
 - 7. General Drawings

Contractor acknowledges that it has or has access to all of the Contract Documents referred to in this Section and agrees to comply with all of the Contract Documents.

ARTICLE 8—REPRESENTATIONS, CERTIFICATIONS, AND STIPULATIONS

8.01 Contractor's Representations

- A. In order to induce Owner to enter into this Contract, Contractor makes the following representations:
 - 1. Contractor has examined and carefully studied the Contract Documents, including Addenda.
 - 2. Contractor has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 - 3. Contractor is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.
 - 4. Contractor has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.

5. Contractor has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.
6. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (c) Contractor's safety precautions and programs.
7. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
8. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
9. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
10. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
11. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

8.02 *Contractor's Certifications*

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 8.02:
 1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process or in the Contract execution;
 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;

3. “collusive practice” means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
4. “coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

8.03 *Standard General Conditions*

- A. Owner stipulates that if the General Conditions that are made a part of this Contract are EJCDC® C-700, Standard General Conditions for the Construction Contract (2018), published by the Engineers Joint Contract Documents Committee, and if Owner is the party that has furnished said General Conditions, then Owner has plainly shown all modifications to the standard wording of such published document to the Contractor, through a process such as highlighting or “track changes” (redline/strikeout), or in the Supplementary Conditions.

ARTICLE 9 – GOVERNING LAW

- 9.01 This contract shall be governed by the laws of the State of Alaska.
- 9.02 The CONTRACTOR shall give such notices, file information, and pay taxes, deductions, and premiums as may be required by law and comply with all laws, ordinances, permit requirements, rules, and regulations pertaining to the conduct of the Work. The CONTRACTOR shall be liable for violations of same in connection with any portion of the Work provided by the CONTRACTOR and shall cooperate with all governmental entities regarding inspection of the Work in compliance with such requirements. If the CONTRACTOR observes that the Drawings, Specifications, or other portions of the Contract Documents are in conflict with any such laws, ordinances, permit requirements, rules, or regulations, CONTRACTOR shall promptly notify the ENGINEER in writing of such conflict. The OWNER will promptly review the matter and, if necessary, issue a Change Order or take any other action necessary to bring about compliance with the law, ordinance, rule, or regulation in question if it is the responsibility of the OWNER; otherwise, the CONTRACTOR shall ensure such compliance. The CONTRACTOR shall not perform Work known to be contrary to any laws, ordinances, permits, rules, or regulations.
- 9.03 Unless otherwise specified herein, permits and licenses from governmental agencies that are necessary only for ensuring the prosecution of the Work and the subsequent guarantee period shall be secured and paid for by the CONTRACTOR. Permits and licenses of governmental agencies that are necessary to be maintained after expiration of the guarantee period will be secured and paid for by the OWNER.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement.

This Agreement will be effective on [_____] (which is the Effective Date of the Contract).

Owner:

Contractor:

(typed or printed name of organization)

(typed or printed name of organization)

By: _____
(individual's signature)

By: _____
(individual's signature)

Date: _____
(date signed)

Date: _____
(date signed)

Name: _____
(typed or printed)

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Title: _____
(typed or printed)

(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest: _____
(individual's signature)

Attest: _____
(individual's signature)

Title: _____
(typed or printed)

Title: _____
(typed or printed)

Address for giving notices:

Address for giving notices:

Designated Representative:

Designated Representative:

Name: _____
(typed or printed)

Name: _____
(typed or printed)

Title: _____
(typed or printed)

Title: _____
(typed or printed)

Address:

Address:

Phone: _____

Phone: _____

Email: _____

Email: _____

(If Owner is a corporation, attach evidence of authority to sign. If Owner is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of this Agreement.)

License No.: _____
(where applicable)

State: _____

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Attorneys for Plaintiffs

UNITED STATES COURT FOR THE
DISTRICT OF ALASKA

UNITED STATES OF AMERICA, and
STATE OF ALASKA

Plaintiffs,

v.

CITY OF PALMER, ALASKA

Defendant.

Civil Action No: 3:16-cv-00204-TMB

FIRST MATERIAL MODIFICATION TO CONSENT DECREE

BACKGROUND

A. On December 22, 2016, the United States District Court for the District of Alaska entered a Consent Decree in the above-captioned action between the United States, State of Alaska, and the City of Palmer, Alaska. *See* E.C.F. No. 7. The Consent Decree settled Plaintiffs' claims for violations of the Clean Water Act (CWA) at the City's wastewater treatment plant (WWTP).

B. The Consent Decree contains provisions requiring the City to take various measures to comply with its National Pollutant Discharge Elimination System (NPDES) permit issued by the Alaska Department of Environmental Conservation (ADEC) that authorizes the discharge of pollutants under various conditions and subjects the discharges to limitations, including effluent limits, sampling, and reporting requirements. *See* 33 U.S.C. § 1342(a). Among these measures, the Consent Decree requires that by August 31, 2020, the City shall install and thereafter continuously operate secondary clarifiers which are basins specifically designed to provide effective gravity separation of settleable and suspended solids in biologically treated wastewater. *See* Consent Decree ¶ 11.d.

C. The City has requested an extension of the deadline for installation and operation of the secondary clarifiers because it believes that with other measures the clarifiers are not necessary to comply with its NPDES permit.

D. The Parties have agreed to modify the Consent Decree to extend the deadline for installation and operation of the secondary clarifiers until July 1, 2022, and to require certain measures to mitigate the potential for NPDES permit violations and determine if permit compliance can be achieved without the secondary clarifiers.

E. Paragraph 70 of the Consent Decree provides that:

The terms of this Consent Decree, including any attached appendices, may be modified only by a subsequent written agreement signed by all the Parties. Where the modification constitutes a material change to this Consent Decree, it shall be effective only upon approval by the Court. Extension of any deadlines set forth herein that are less than 120 Days shall not be considered to be a material modification.

F. The changes in this proposed modification are material because they extend a Consent Decree deadline by more than 120 days.

G. This First Material Modification to the Consent Decree does not affect, alter, modify, or amend any obligations or requirements pertaining to the wastewater treatment plant other than as expressly stated herein;

H. The Parties agree, and this Court by entering this First Material Modification to the Consent Decree finds, that this First Material Modification to the Consent Decree has been negotiated in good faith and at arm's length; that this settlement is fair, reasonable, and in the public interest; and that entry of this First Material Modification to the Consent Decree without further litigation is appropriate;

I. The Parties agree and acknowledge that final approval of the United States and entry of this First Material Modification to the Consent Decree is subject to the procedures set forth in 28 C.F.R. § 50.7, which provides for notice of this First Material Modification to the Consent Decree in the *Federal Register*, an opportunity for public comment, and the right of the United States to withdraw or withhold consent if the comments disclose facts or considerations which indicate that this First Material Modification to the Consent Decree is inappropriate, improper, or inadequate. No action by the Court is thus required at this time. Following the expiration of the comment period, the United States will evaluate any comments received and, if it continues to believe this modification is appropriate, will then request that the Court enter the Modification.

J. The City of Palmer consents to entry of this First Material Modification of the Consent Decree without further notice and agrees not to withdraw from or oppose entry of this First Material Modification to the Consent Decree by this Court or challenge any provision of this First Material Modification to the Consent Decree, unless the United States has notified it in writing, that the United States no longer supports entry of the First Material Modification to the Consent Decree;

K. The Parties hereby agree that this Agreement shall be effective as of the date that it is entered by the Court.

L. The undersigned representatives are fully authorized to enter into the terms and conditions of this First Material Modification to the Consent Decree. This First Material Modification to the Consent Decree may be executed in several parts, each of which will be considered an original.

NOW THEREFORE, the Parties hereby agree that, upon approval of this First Material Modification to the Consent Decree, the 2016 Consent Decree shall be modified as follows:

1. On the Title Page above the caption Richard Pomeroy and his contact information shall be replaced with the following:

“STEVEN E. SKROCKI
Office of the U.S. Attorney
Federal Building & U.S. Courthouse
222 West Seventh Avenue, #9, Room 253
Anchorage, Alaska 99513-7567
Tel: (907) 271-5071
Steven.skrocki@usdoj.gov”

and Steven Ross and his contact information shall be replaced with the following:

“JENNIFER CURRIE
Assistant Attorney General
Alaska Department of Law
1031 W. 4th Avenue, Suite 200

Anchorage, AK 99501
907-269-5280(t)
Jennifer.Currie@alaska.gov”

2. In Paragraph 9.b of the Consent Decree, the name Mike Solter and his contact information shall be deleted and replaced with the following:

“ADEC Division of Water
Attn: Tiffany Larson, Compliance Program Manager
610 University Ave
Fairbanks, AK 99709
Tiffany.Larson@alaska.gov”

3. In Paragraph 11.d.i the date August 31, 2020 shall be deleted and replaced with “July 1, 2022.”

4. In Paragraph 11, the following subsection “e” shall be added in double spacing:

“e. Additional Requirements Prior to Installation of Secondary

Clarifiers. Until the installation and continuous operation of Secondary

Clarifiers, the City shall implement the following measures:

i. No later than September 30, 2020, the City shall implement the Solids Management Plan attached as Appendix B to this Consent Decree.

ii. No later than September 30, 2020, the City shall implement the Lagoon Dredging and Ammonia Management Plan attached as Appendix C to this Consent Decree.

iii. No later than August 30, 2020 the City shall complete dredging of Lagoon 2 in accordance with the approved Lagoon Dredging and Ammonia Management Plan attached as Appendix C to this Consent Decree.

iv. As early as possible, but no later than May 31 of each calendar year after 2020, the City shall complete dredging of Lagoon 2 in accordance with the approved Lagoon Dredging and Ammonia Management Plan attached as Appendix C to this Consent Decree.

v. The City shall use best efforts to secure funding for Secondary Clarifiers; the City acknowledges that its failure to secure funding is not a defense to non-compliance with the deadline for installing secondary clarifiers set forth in Paragraph 11.d.i above.

vi. No later than December 31, 2020, the City shall carry out jar testing and full-scale testing, in accordance with the Polymer Testing Plan attached as Appendix D to this Consent Decree and the schedule contained therein, to evaluate whether the addition of polymer would facilitate more efficient solids capture and management, and shall report the results to EPA and DEC for comment and approval within 30 Days of completion of testing, in accordance with the schedule established in Appendix D to this Consent Decree and in accordance with the requirements of Section VII of this Consent Decree.”

5. Paragraph 17 of the Consent Decree shall be deleted and replaced with the following new Paragraph 17:

“17. Submissions Subject to EPA and/or ADEC Comment or Approval.
Where any provision of this Consent Decree specifically requires that a Submission by the City is subject to EPA and/or ADEC approval or

subject to EPA and/or ADEC comment, or where any provision of this Consent Decree specifically references this Section VII, the Submission shall be subject to the provisions of this Section.

a. Unless otherwise provided herein, for Submissions under any provision of this Consent Decree that are subject to EPA and/or ADEC review and opportunity to comment, EPA and/or the State may provide written comments on the Submission, in whole or in part, or may decline to comment. If EPA and/or the State provide written comments within thirty (30) Days of receiving a Submission, the City shall within fifteen (15) Days of receiving such comments either: (i) alter and implement the Submission consistent with such written comments; or (ii) submit the matter for dispute resolution under Section XI (Dispute Resolution) of this Consent Decree.

b. Unless otherwise provided herein, after thirty (30) Days from the date of such Submission, EPA and/or ADEC may nonetheless thereafter provide written comments requiring changes to the Submission which the City shall implement unless implementation of the written comments would be unduly burdensome given the degree to which the City has proceeded with implementing the deliverable, or implementation would otherwise be unreasonable. If the City determines that implementation of the written comments is unduly burdensome or otherwise unreasonable, it shall invoke dispute resolution within sixty (60)

c. For Submissions subject to EPA and/or ADEC approval, EPA and/or ADEC may approve the Submission or decline to approve it, in whole or in part, and may provide written comments.

i. If EPA and/or ADEC disapproves a Submission, in whole or in part, it shall state in writing the basis for such disapproval.

ii. Unless otherwise provided herein, upon receiving EPA's and/or ADEC's written comments or written notice that EPA and/or ADEC disapproves a Submission, in whole or in part, the City shall have forty-five (45) Days to: (1) alter the Submission consistent with EPA's and/or ADEC's written comments or notice of disapproval and provide the Submission to EPA and/or ADEC for final approval, or (2) to invoke Dispute Resolution under Section XI of this Consent Decree."

6. The following changes shall be made to Paragraph 18:

a. the heading shall be deleted and replaced with the following heading:

"Implementation of Plans or Other Measures Pursuant to Submissions Subject to EPA or ADEC Comment or Approval."

b. Paragraph 18.b shall be deleted and replaced with the following:

"b. Where EPA and/or ADEC have approved a Submission or submitted comments on a Submission, fifteen (15) Days after receiving EPA/ADEC approval or comments."

7. In Paragraph 19.a, the following changes shall be made:
- a. The word “and” at the end of 19.a (iv) shall be deleted;
 - b. The period at the end of 19.a (v) shall be replaced with a semi-colon; and
 - c. The following subsections 19.a (vi)-(ix) shall be added after 19.a (v):
“(vi) the status on ammonia and TSS discharges, (vii) NPDES permit compliance, (viii) overall system performance, and (ix) planning and funding for secondary clarifiers.”
8. The following subparagraph c shall be added to Paragraph 29:
- c. The word requirements shall be changed to “requirement.”
9. The following subparagraph d shall be added to Paragraph 29:
- “d. Violation of Additional Requirements Prior to Installation of Secondary Clarifiers. The following stipulated penalties shall accrue per violation per Day for each violation of the additional requirements prior to installation of secondary clarifiers set forth in Paragraph 11.e.

Period of Delay or Non-Compliance	Stipulated Penalty Per Violation Per Day
Days 1-30	\$500
Days 31-60	\$1,000
61 st Day and Beyond	\$2,000

10. The following shall be added to the end of Paragraph 37:
- “Except as provided by Paragraph 56, upon the Effective Date of this Consent Decree and any modifications thereto, the stipulated penalty provisions of this Decree shall be retroactively enforceable with regard to any and all violations of Paragraphs 11.e and 19 of this Consent Decree that occurred prior to the Effective Date of this Consent Decree or any subsequent modifications thereto provided that such stipulated penalties may not be

collected unless and until this Consent Decree or any modifications thereto have been entered by the Court.”

11. The following changes shall be made to Paragraph 66:

a. Delete the contact information for the Environmental Protection Agency

and replace with:

“Director, Enforcement and Compliance Assurance Division
U.S. Environmental Protection Agency
1200 Sixth Avenue, Suite 155, 20-C04
Seattle, WA 98101”

b. Delete Mike Solter as the contact for ADEC and replace with:

“Attn: Tiffany Larson, Compliance Program Manager
610 University Ave
Fairbanks, AK 99709
Tiffany.Larson@alaska.gov”

c. Replace Steven G. Ross with “Jennifer Currie” for the Alaska Department of Law with the email address of “Jennifer.Currie@alaska.gov.”

d. Replace Nathan Wallace as the contact for the City of Palmer with:

“John Moosey
City Manager
231 W. Evergreen Avenue
Palmer, AK 99645
jmoosey@palmerak.org”

12. In last sentence of Paragraph 70, “120 Days” shall be replaced with “12 months”.

13. The following appendices shall be added to Paragraph 82:

“Appendix B: Solids Management Plan

Appendix C: Lagoon Dredging and Ammonia Management Plan

Appendix D: Polymer Testing Plan”

14. A redline showing the changes to the Consent Decree by the First Material Modification is attached as Exhibit 1.

ORDER

Before the taking of any testimony, without adjudication of any issue of fact or law, and upon consent and agreement of the United States, Alaska Department of Environmental Conservation, and City of Palmer, it is:

ORDERED, ADJUDGED, AND DECREED that the foregoing First Material Modification to the Consent Decree is hereby approved and entered as a final order of this Court.

Dated and entered this _____ day of _____, 2021.

Timothy Mark Burgess
United States District Judge
District of Alaska

THE UNITED STATES HEREBY CONSENTS TO ENTRY OF THE FIRST MATERIAL MODIFICATION TO THE CONSENT DECREE IN UNITED STATES ET AL. v. CITY OF PALMER, SUBJECT TO THE PUBLIC NOTICE REQUIREMENTS OF 28 C.F.R. § 50.7.

FOR THE UNITED STATES OF AMERICA:

THE UNITED STATES DEPARTMENT OF JUSTICE

JONATHAN BRIGHTBILL
Principal Deputy Assistant Attorney General
Environment and Natural Resources Division

January 19, 2021

DATE

/s/ Elizabeth L. Loeb
ELIZABETH L. LOEB
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BEVERLY LI Digitally signed by BEVERLY LI
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DATE

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FOR THE STATE OF ALASKA:

CLYDE "ED" SNIFFEN, JR.
ACTING ATTORNEY GENERAL

December 18, 2020
DATE

By: /s/ Jennifer A. Currie
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Assistant Attorney General
Alaska Bar No. 0609056
Alaska Department of Law
1031 W. 4th Avenue, Suite 200
Anchorage, AK 99501-1994
jennifer.currie@alaska.gov

FOR THE CITY OF PALMER:

12.23.2020
DATE

John Moosey
City Manager
231 W. Evergreen Avenue
Palmer, AK 99645
jmoosey@palmerak.org

EXHIBIT 1

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Attorneys for Plaintiffs

UNITED STATES COURT FOR THE
DISTRICT OF ALASKA

UNITED STATES OF AMERICA, and
STATE OF ALASKA

Plaintiffs,

v.
CITY OF PALMER, ALASKA

Defendant.

Civil Action No: 3:16-cv-00204-TMB

CONSENT DECREE

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WHEREAS Defendant, the City of Palmer, Alaska (the City), owns and operates a publicly owned treatment works (Facility) currently located at 1802 S. Brooks Road in Palmer, Alaska 99645, that collects, pumps, treats, and disposes of domestic wastewater into the Matanuska River approximately 5 miles northeast of the tidewater at the head of Knik Arm.

WHEREAS Pursuant to Section 402 of the Clean Water Act, 33 U.S.C. § 1342, on December 5, 2006, the United States Environmental Protection Agency (EPA) issued the City a National Pollution Discharge Elimination System (NPDES) permit (Permit) for the Facility, Permit Number AK002249-7. The Permit authorizes the City to discharge specified concentrations and amounts of certain pollutants from the Facility and imposes various monitoring and reporting requirements on the City. The Permit expired on December 31, 2011, however the City timely applied for a new Permit thereby administratively extending the Permit in accordance with federal regulations, 40 C.F.R. § 122.6, and state regulations, 18 AAC 83.155(c).

WHEREAS Plaintiff, the United States of America, on behalf of EPA, and the State of Alaska (State), on behalf of the Alaska Department of Environmental Conservation (ADEC), have filed a Complaint in this action alleging that the City violated the terms and conditions of the Permit and is thereby is liable for civil penalties and injunctive relief pursuant to Section 309(b) and (d) of the Federal Water Pollution Control Act of 1972, as amended (Clean Water Act or CWA), 33 U.S.C. § 1319(b)&(d) and AS 46.03.760(e) and AS 46.03.765.

WHEREAS the City does not admit any liability for the violations alleged in the Complaint.

WHEREAS the Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and will avoid litigation among the Parties, and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, with the consent of the Parties and without adjudication of any issue of fact or law except as expressly provided herein, IT IS HEREBY ADJUDGED, ORDERED, AND DECREED as follows:

I. JURISDICTION AND VENUE

1. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331, 1345, and 1355, Section 309(b) of the CWA, 33 U.S.C. § 1319(b), and over the Parties. Venue lies in this District pursuant to Section 309(b) of the CWA, 33 U.S.C. § 1319(b), and 28 U.S.C. §§ 1391 and 1395(a), because the City is located in this judicial district. For purposes of this Decree, or any action to enforce this Decree, the City consents to the Court's jurisdiction over this Decree and any such action, and over the City, and the City consents to venue in this judicial district.

2. For purposes of this Consent Decree, the City agrees that the Complaint states claims upon which relief may be granted pursuant to Section 309(b) of the CWA, 33 U.S.C. § 1319(b), and 28 U.S.C. §§ 1331, 1345, and 1355, and Title 18, Alaska Administrative Code (AAC) Chapter 83.

II. APPLICABILITY

3. The obligations of this Consent Decree apply to and are binding upon the United States, the State, the City, and any successors, assigns, or other entities or persons otherwise bound by law.

4. No transfer of ownership or operation of the Facility, whether in compliance with the procedures of this Paragraph or otherwise, shall relieve the City of its obligation to ensure that the terms of the Consent Decree are implemented. At least thirty (30) Days prior to any transfer of ownership or operation of the Facility, the City shall provide a copy of this Consent Decree to the proposed transferee and shall simultaneously provide written notice of the prospective transfer, together with a copy of the proposed transfer agreement, to the United States and State, in accordance with Section XV (Notices). Any attempt to transfer ownership or operation of the Facility without complying with this Paragraph constitutes a violation of this Consent Decree.

5. The City shall provide a copy of this Consent Decree to all officers, employees, and agents whose duties might reasonably include compliance with any provision of this Decree, as well as to any contractor retained to perform work required under this Consent Decree. The City shall condition any such contract upon performance of the work in conformity with the terms of this Consent Decree.

6. In any action to enforce this Consent Decree, the City shall not raise as a defense the failure by any of its officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Consent Decree.

III. OBJECTIVES

7. It is the goal of the Parties and this Consent Decree for the City to construct and operate various wastewater treatment-related projects that will enable the Facility to comply with its NPDES Permit.

IV. DEFINITIONS

8. Terms used in this Consent Decree that are defined in the CWA or in regulations promulgated pursuant to the CWA shall have the meanings assigned to them in the CWA or such regulations, unless otherwise provided in this Consent Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions shall apply:

- a. “ADEC” shall mean the Alaska Department of Environmental Conservation and any components thereof or successor agencies and departments.
- b. “APDES Permit” shall mean an Alaska Pollutant Discharge Elimination System Permit issued or administered by ADEC for the Facility under 18 AAC 83, including any amendments and modifications thereto.
- c. “Clean Water Act” or “CWA” shall mean the Federal Water Pollution Control Act of 1972, as amended, 33 U.S.C. §§ 1251-1387.
- d. “Complaint” shall mean the complaint filed by the United States and State in this action.
- e. “Compliance Measures” shall mean all of the requirements set forth in Section VI of this Consent Decree.
- f. “Consent Decree” or “Decree” shall mean this Consent Decree and all appendices attached hereto.
- g. “Date of Lodging” shall mean the day that the Consent Decree is lodged with the Court for public comment as provided by Section XIX (Public Participation) of this Consent Decree.
- h. “Day” shall mean a calendar day unless expressly stated to be a business day. In computing any period of time under this Consent Decree, where the last day

would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next business day.

i. “The City” shall mean the City of Palmer, Alaska.

j. “EPA” shall mean the United States Environmental Protection Agency and any of its successor departments or agencies.

k. “Effective Date” shall mean the date upon which this Consent Decree is entered by the Court or a motion to enter the Consent Decree is granted, whichever occurs first, as recorded on the Court’s docket.

l. “Facility” shall mean the City’s publicly owned treatment works, currently located at 1802 South Brooks Road in Palmer, Alaska 99645, all associated collection, holding, transporting and treatment and discharge systems, and all appurtenances, additions, improvements or replacements thereto. As of the Date of Lodging, the Facility includes three lagoons, referred to as Lagoon No.1, Lagoon No. 2, and Lagoon No. 3, as is indicated on the diagram attached hereto as Appendix A.

m. “Interest” shall mean the interest rate specified at 28 U.S.C. § 1961 as of the date that Interest begins to accrue.

n. “Moving Bed Biofilm Reactor” or “MBBR” shall mean a biological wastewater treatment system that utilizes small plastic biofilm carriers (media) suspended in an aeration basin to provide a high biomass density.

o. “NPDES Permit” or “Permit” shall mean the National Pollutant Discharge Elimination System Permit issued by EPA for the Facility, Permit Number AK002249-7, on December 5, 2006, including any amendments and modifications thereto.

p. “Paragraph” shall mean a portion of this Consent Decree identified by an Arabic numeral.

q. “Parties” shall mean the United States, the State, and the City.

r. “Performance Period” shall apply to the MBBR installation and operation and is specified in Paragraph 11.b. below to give the City a period of time to ensure that the MBBR system is running properly before liability for stipulated penalties begins.

s. “Plaintiffs” shall mean the United States and the State of Alaska.

t. “Secondary Clarifiers” shall mean basins specifically designed to provide effective gravity separation of settleable and suspended solids in wastewater treated in a biological treatment process such as MBBR.

u. “Section” shall mean a portion of this Consent Decree identified by a Roman numeral.

v. “State” shall mean the State of Alaska.

w. “Submission” shall mean any plan, notification, report, procedure, protocol, or other deliverable submitted or required to be submitted under this Consent Decree by the City to EPA and/or the State for approval or comment.

x. “Substantial Completion” of a Compliance Measure shall mean that (i) all equipment necessary for successful operation of the Compliance Measure has been constructed or installed, and satisfactorily tested under the range of normal conditions; (ii) personnel have been trained in proper operation of the Compliance Measure; (iii) functional testing is complete and the Compliance Measure is functionally operational; (iv) a complete operations and maintenance manual is available on site; and (v) the City has put the Compliance

Measure into service. With respect to MBBR, putting it into service shall mean that the city has begun active and continuous processing of wastewater through the MBBR system.

y. “United States” shall mean the United States of America, acting on behalf of EPA.

V. CIVIL PENALTY

9. Within thirty (30) Days after the Effective Date of this Consent Decree, the City shall pay the sum of \$192,162.00 as a civil penalty, together with Interest accruing from July 22, 2016.

a. The City shall pay \$96,081.00 of the civil penalty plus Interest thereon accruing from July 22, 2016, to the United States at <https://www.pay.gov> by FedWire Electronic Funds Transfer (EFT) to the U.S. Department of Justice in accordance with written instructions to be provided to the City, following lodging of the Consent Decree, by the Financial Litigation Unit of the U.S. Attorney’s Office for the District of Alaska, Office of the United States Attorney, District of Alaska, 222 West 7th Ave, Rm 253, Anchorage, Alaska 99513. At the time of payment, the City shall send a copy of the EFT authorization form and the EFT transaction record, together with a transmittal letter, which shall state that the payment is for the civil penalty owed pursuant to the Consent Decree in United States v. City of Palmer, and shall reference the civil action number and DOJ case number 90-5-1-1-11214, to the United States in accordance with Section XV (Notices) of this Decree by email to cinwd_acctsreceivable@epa.gov; and by mail to:

EPA Cincinnati Finance Office
26 Martin Luther King Drive
Cincinnati, Ohio 45268

b. The City shall pay \$96,081.00 of the civil penalty plus Interest thereon accruing from July 22, 2016, to the State of Alaska by check made payable to the State of Alaska and delivered to:

ADEC Division of Water
Attn: ~~Mike Solter~~ [Tiffany Larson](#), Compliance Program Manager
~~555 Cordova St~~
~~Anchorage~~ [610 University Ave](#)
[Fairbanks](#), AK ~~99501~~ [99709](#)
Tiffany.Larson@alaska.gov

The same address shall be used for the payment of any stipulated penalties due under this Consent Decree. The State may, by written notice to the other Parties, change its designated recipient or address provided above for payment of any civil penalties or stipulated penalties due hereunder.

VI. COMPLIANCE MEASURES

10. Interim Compliance Measures. The City shall implement the following interim compliance measures:

a. Lagoon Re-circulation System. After January 1, 2016, the City shall maintain and continuously operate a re-circulation system that utilizes two pumps to cause flow to be re-circulated around Lagoon No. 1 and separately around Lagoon No. 2, so as to increase the retention of biomass in each lagoon and thus improve biological ammonia removal. One pump shall be used to recirculate flow around Lagoon No. 1 and the second pump used to recirculate flow around Lagoon No. 2. The pumps used shall be an existing 200 gallons per minute (gpm) capacity pump and a new pump of at least 380 gpm capacity. The City shall continuously operate this re-circulation system until the City installs the MBBR as required by Paragraph 11.b. below.

b. DO Probes and Concentrations.

i. No later than January 1, 2016, the City shall install, calibrate and maintain according to the probe manufacturer's recommendations at least one appropriately located dissolved oxygen (DO) probe in each lagoon. The City shall use these probes to improve and document its maintenance of DO concentrations in Lagoons Nos. 1 and 2 as described below by continuously monitoring and recording DO concentrations at these locations. The City shall use the collected data to determine the range of DO concentrations maintained in each lagoon during each calendar month and shall report that information for each month in its quarterly reports to EPA and ADEC pursuant to Section VIII (Reporting Requirements).

ii. Beginning January 1, 2016, and continuing until installation of the MBBR system as required by Paragraph 11.b below, the City shall maintain a minimum DO concentration of at least 1.0 mg/l in Lagoon No. 1 and of 2.0 mg/l in Lagoon No. 2.

c. Lagoon Dredging.

i. No later than June 1, 2016, the City shall commence dredging of accumulated solids from Lagoon Nos. 1 and 2, and shall complete dredging by September 30, 2016. Solids dredged shall be pumped to the existing sludge storage area in the southwest quarter of the Facility site for drying, lime stabilization, mixing with soil and onsite placement.

ii. Periodic Dredging. During the term of this Consent Decree, the City shall periodically dredge the Facility's lagoons as necessary to maintain sufficient depth for effective settling and compliance with the Permit's Total Suspended Solids (TSS) requirements and any TSS requirements in any subsequent NPDES/APDES permit issued by EPA or ADEC.

d. Alkalinity Feed. No later than July 15, 2016, the City shall monitor pH and alkalinity in Lagoon Nos. 2 and 3 on a weekly basis. If the alkalinity in the Lagoon No. 2

effluent drops below 50 mg/l, the City shall begin manual feeding of alkalinity in Lagoon No. 2 within 24 hours in an attempt to limit its further drop. The manual feeding shall be carried out to prevent exceedance of pH limits in the Permit or subsequent NPDES/APDES permit issued to the City by EPA or ADEC and shall continue until installation and operation of the alkalinity feed system required by Paragraph 11.a below. The City's quarterly reports to EPA and ADEC, submitted pursuant to Section VIII (Reporting Requirements) shall include the results of this pH monitoring; a description of any manual alkalinity feeding undertaken; and the results of manual feeding on alkalinity in Lagoon Nos. 2 and 3.

11. Final Compliance Measures.

a. Alkalinity Feed. No later than June 30, 2018, the City shall install and thereafter continuously operate an alkalinity feed system so as to maintain sufficient alkalinity for nitrification, while maintaining compliance with pH limits in the City's NPDES Permit or subsequent NPDES/APDES permit issued by EPA or ADEC. The City shall conduct continuous pH monitoring and report the range of pH maintained during each calendar month in its quarterly reports to EPA and ADEC pursuant to Section VIII (Reporting Requirements).

b. Moving Bed Biofilm Reactor System (MBBR).

i. MBBR Design and Installation Deadlines. The City shall design, install and operate an MBBR system at the Facility as follows.

(a) By December 5, 2016, the City shall complete the design of an MBBR system for the Facility and submit to EPA and ADEC (pursuant to 18 AAC 72) an engineering plan for the Facility that includes all the Final Compliance Measures under this paragraph (i.e., MBBR system, Solids Handling, and Secondary Clarifiers) for an opportunity to comment pursuant to Section VII below (Review of City Submissions).

(b) By March 1, 2017, the City shall select a contractor to build the MBBR system at the Facility and shall submit the name and credentials of the proposed contractor to EPA.

(c) By July 31, 2018, the City shall achieve Substantial Completion of the MBBR system at the Facility and commence operation of the MBBR system. The Performance Period shall run from July 31, 2018 through April 30, 2019.

ii. MBBR Capacity. The MBBR system at the Facility shall be constructed according to the following requirements:

(a) The MBBR system shall be initially constructed with two MBBR basins sized to support treatment of an average maximum monthly flow of 1.2 million gallons per day (MGD). Initially, the City shall install sufficient media to allow treatment of a maximum monthly flow of 0.65 MGD. The MBBR system shall be configured to allow the future addition of a third basin to support treatment of a future maximum monthly flow of 1.5 MGD.

(b) The MBBR system shall be designed and constructed in accordance with current good industry practice.

(c) After initial MBBR construction, the City shall add additional media as needed to match the City's population growth and wastewater flow up to an average maximum monthly flow of 1.2 MGD. If addition of a third basin is necessary to accommodate further increases in population growth and wastewater flow, as contemplated in Paragraph 11.b.ii(a), the City shall add additional media as needed up to an average maximum monthly flow of 1.5 MGD.

iii. Continuous Operation of MBBR. After July 31, 2018, the City shall continuously operate the MBBR system at the Facility.

c. Solids Removal. The City shall comply with the following solids removal requirements so as to maintain adequate solids removal following startup of the MBBR:

i. The City shall construct the MBBR system to discharge its effluent to Lagoons Nos. 2 and 3 for suspended solids removal until secondary clarifiers are installed in accordance with Paragraph 11.d. below.

ii. No later than July 31, 2018, the City shall construct and achieve Substantial Completion of a post-MBBR polymer feed system with equipment and capability to provide for the addition of at least 3ppm polymer on a flow paced basis prior to Lagoon No. 3. Such equipment shall be designed and constructed in accordance with current good industry practice, and shall include polymer storage, feed equipment, piping, mixing, controls and enclosures as necessary to allow effective use of polymer upon start-up of the MBBR system.

iii. If, after installation and operation of the MBBR system, the City fails to meet any TSS requirement or limit in the Permit, or any TSS requirements in any subsequent NPDES/APDES permit issued by EPA or ADEC, as soon as the City becomes aware of any violation of the TSS requirements, the City shall:

(a) Add polymer as needed at dosage rates determined by jar testing per ASTM Standard D2035-13 (Standard Practice for Coagulation-Flocculation Jar Test of Water) and operational performance to meet then-applicable TSS Permit limits and requirements in the Permit or in any subsequent NPDES/APDES permit issued by EPA or ADEC.

(b) If the addition of polymer under Paragraph 11.c.iii(a) above does not enable the City to meet TSS limits and requirements in the Permit or any subsequent NPDES/APDES permit issued by EPA or ADEC, the City shall, within sixty (60) Days of the first polymer addition, install additional temporary solids removal measures, which may include a lagoon rock filter, a disk filter, or additional chemical feed to meet applicable TSS permit limits and requirements until the Secondary Clarifiers required by Paragraph 11.d below are installed and operational.

d. Secondary Clarifiers.

i. No later than ~~August 31, 2020~~July 1, 2022, the City shall install and thereafter continuously operate two Secondary Clarifiers at the Facility of sufficient treatment and settling capacity to enable the Facility to meet all effluent limits in the Permit or in any subsequent NPDES/APDES permit issued by EPA or ADEC. The Secondary Clarifier system shall be configured to allow the future addition of a third clarifier, if necessary, to support treatment of a future maximum monthly flow of 1.5 MGD. The clarifiers shall be designed and constructed in accordance with current good industry practice.

ii. At least ninety (90) Days prior to constructing the Secondary Clarifiers, the City shall submit to EPA and ADEC (pursuant to 18 AAC 72) any necessary modifications of the engineering plan for the Facility previously submitted under Paragraph 11.b.i(a) above relating to the installation of the Secondary Clarifiers.

e. Additional Requirements Prior to Installation of Secondary Clarifiers.

Until the installation and continuous operation of Secondary Clarifiers, the City shall implement the following measures:

i. No later than September 30, 2020, the City shall implement the Solids Management Plan attached as Appendix B to this Consent Decree.

ii. No later than September 30, 2020, the City shall implement the Lagoon Dredging and Ammonia Management Plan attached as Appendix C to this Consent Decree.

iii. No later than August 30, 2020 the City shall complete dredging of Lagoon 2 in accordance with the approved Lagoon Dredging and Ammonia Management Plan attached as Appendix C to this Consent Decree.

iv. As early as possible, but no later than May 31 of each calendar year after 2020, the City shall complete dredging of Lagoon 2 in accordance with the approved Lagoon Dredging and Ammonia Management Plan attached as Appendix C to this Consent Decree.

v. The City shall use best efforts to secure funding for Secondary Clarifiers; the City acknowledges that its failure to secure funding is not a defense to non-compliance with the deadline for installing secondary clarifiers set forth in Paragraph 10.d.i above.

vi. No later than December 31, 2020, the City shall carry out jar testing and full-scale testing, in accordance with the Polymer Testing Plan attached as Appendix D to this Consent Decree and the schedule contained therein, to evaluate whether the addition of polymer would facilitate more efficient solids capture and management, and shall report the results to EPA and DEC for comment and approval within 30 Days of completion of testing, in accordance with the schedule established in Appendix D to this Consent Decree and in accordance with the requirements of Section VII of this Consent Decree.

12. Permit Compliance. The City shall comply with all terms of the Permit and with all terms of any subsequent NPDES/APDES permit issued by EPA or ADEC.

13. Permits. Where any compliance obligation under this Section requires the City to obtain a federal, state, or local permit or approval, the City shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals. Such approvals and permits include those that may be required under 18 AAC 72.200 and 18 AAC 72.235-240.

14. Pre-Entry Obligations. Obligations of the City under this Consent Decree to undertake Compliance Measures by dates that occur prior to the Effective Date of this Consent Decree, shall be legally enforceable only on and after the Effective Date of this Consent Decree. Liability for stipulated penalties, if applicable, shall accrue for violation of such obligations and payment of such stipulated penalties may be demanded by the United States or the State as provided in this Consent Decree, provided that the stipulated penalties that may have accrued from the Day compliance is due through the Effective Date of this Consent Decree may not be collected unless and until this Consent Decree is entered by the Court.

VII. REVIEW OF CITY SUBMISSIONS

15. Except for Submissions under Sections X and XI (Force Majeure and Dispute Resolution respectively) or required by Paragraph 20 below, where any provision of this Consent Decree requires that the City submit any plan, notification, report, procedure, protocol, or other deliverable (Submission) to EPA and/or ADEC for review and the opportunity to comment, or where any provision of this Consent Decree specifically references this Section VII, the Submission shall be subject to the provisions of this Section.

16. The City shall submit one copy of each Submission to EPA and one copy to the State by the means and to the addressee listed in Section XV (Notices) along with all underlying data or supporting documents.

17. Submissions Subject to EPA and/or ADEC Comment or Approval. Where any provision of this Consent Decree specifically requires that a Submission by the City is subject to EPA and/or ADEC approval or subject to EPA and/or ADEC comment, or where any provision of this Consent Decree specifically references this Section VII, the Submission shall be subject to the provisions of this Section.

a. Unless otherwise provided herein, for Submissions under any provision of this Consent Decree that are subject to EPA and/or ADEC review and opportunity to comment, EPA and/or the State may provide written comments on the Submission, in whole or in part, or may decline to comment. If EPA and/or the State provide written comments within thirty (30) Days of receiving a Submission, the City shall within fifteen (15) Days of receiving such comments either: (i) alter and implement the Submission consistent with such written comments; or (ii) submit the matter for dispute resolution under Section XI (Dispute Resolution) of this Consent Decree.

b. Unless otherwise provided herein, after thirty (30) Days from the date of such Submission, EPA and/or ADEC may nonetheless thereafter provide written comments requiring changes to the Submission which the City shall implement unless implementation of the written comments would be unduly burdensome given the degree to which the City has proceeded with implementing the deliverable, or implementation would otherwise be unreasonable. If the City determines that implementation of the written comments is unduly

burdensome or otherwise unreasonable, it shall invoke dispute resolution within sixty (60) Days of receiving EPA and/or the ADEC's comments.

c. For Submissions subject to EPA and/or ADEC approval, EPA and/or ADEC may approve the Submission or decline to approve it, in whole or in part, and may provide written comments.

i. If EPA and/or ADEC disapproves a Submission, in whole or in part, it shall state in writing the basis for such disapproval.

ii. Unless otherwise provided herein, upon receiving EPA's and/or ADEC's written comments or written notice that EPA and/or ADEC disapproves a Submission, in whole or in part, the City shall have forty-five (45) Days to: (1) alter the Submission consistent with EPA's and/or ADEC's written comments or notice of disapproval and provide the Submission to EPA and/or ADEC for final approval, or (2) to invoke Dispute Resolution under Section [XI](#) of this Consent Decree.

18. Implementation of Plans or Other Measures Pursuant to Submissions Subject to EPA or ADEC Comment or Approval. Unless otherwise provided for herein, the City shall implement each Submission in accordance with the requirements and schedule in the Submission by the following deadlines.

a. Where EPA and/or ADEC have not submitted comments on a Submission, thirty (30) Days after the City provided the Submission to EPA and ADEC for comments.

b. Where EPA and/or ADEC have [approved a Submission or](#) submitted comments on a Submission, -fifteen (15) Days after receiving EPA/ADEC [approval or](#) comments.

c. Where Defendant has invoked dispute resolution regarding any Submission under Section XI (Dispute Resolution), upon completion of any dispute resolution process.

VIII. REPORTING REQUIREMENTS

19. The City shall submit the following reports to EPA and the State by the means and to the addresses specified in Section XV (Notices):

a. Within thirty (30) Days after the end of each calendar quarter (i.e., by April 30, July 30, October 30, and January 30) after the Effective Date of this Consent Decree, until Termination of this Decree pursuant to Section XVIII, the City shall submit a written report for the preceding calendar quarter that shall describe the following: (i) the status of installation of any Compliance Measures required by Section VI of this Consent Decree (Compliance Measures); (ii) any problems encountered or anticipated, together with the required Compliance Measures; (iii) the status of permit applications or plan submissions; (iv) a summary of operation and maintenance activities related to the Facility; **and** (v) a copy of all discharge monitoring reports submitted to ADEC during the applicable calendar quarter; [\(vi\) the status on ammonia and TSS discharges, \(vii\) NPDES permit compliance, \(viii\) overall system performance, and \(ix\) planning and funding for secondary clarifiers.](#)

b. If the City violates or has reason to believe that it may violate, any requirement of this Consent Decree, the City shall report such violation and its likely duration to EPA and the State, in writing, within fifteen (15) Days of the Day the City becomes aware of the violation or likely violation. The report also shall describe any violation of the requirements of this Consent Decree and explain the violation's likely cause and the remedial steps taken, or to be taken, to prevent or minimize such violation. If the cause of a violation cannot be fully

explained at the time the report is due, the City shall so state in the report. The City shall investigate the cause of the violation and shall then submit an amendment to the report, including a full explanation of the cause of the violation, within forty-five (45) Days of the Day the City becomes aware of the cause of the violation. Nothing in this or the following Paragraph relieves the City of its obligation to provide the notice required by Section X (Force Majeure).

20. Whenever any violation of this Consent Decree or any other event affecting the City's performance under this Decree, may pose an immediate threat to public health, welfare, or the environment, the City shall notify EPA and the State orally or by electronic or facsimile transmission as soon as possible, but no later than 24 hours after the City first became aware of the violation or event. This procedure is in addition to the requirements set forth in the preceding Paragraph.

21. All required notifications and reports shall be submitted to the persons designated in Section XV (Notices).

22. Each report or notification submitted by the City under this Section shall be signed by an official of the submitting party and include the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

This certification requirement does not apply to emergency or similar notifications where compliance would be impractical.

23. The reporting requirements of this Consent Decree do not relieve the City of any reporting obligation in the CWA or its implementing regulations, or in any other federal, state, or local law, regulation, permit, or other requirement.

24. Any information provided pursuant to this Consent Decree may be used by the United States or State in any proceeding to enforce the provisions of this Consent Decree and as otherwise permitted by law.

IX. STIPULATED PENALTIES

25. The City shall be liable to the United States and State for stipulated penalties for violations of this Consent Decree as specified below, unless excused under Section X (Force Majeure), as a result of Dispute Resolution conducted in accordance with Section XI, or otherwise reduced or waived pursuant to Paragraph 33 herein. A violation includes failing to perform any obligation required by this Consent Decree according to all applicable requirements and within the specified time schedules established by or approved under this Decree.

26. Stipulated penalties under this Section shall begin to accrue on the Day after performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is completed or until the violation ceases. Stipulated penalties shall accrue simultaneously for separate violations of this Consent Decree.

27. Failure to Timely Pay a Civil Penalty. If the City fails to pay a civil penalty required to be paid under Section V (Civil Penalty) of this Decree when due, the City shall pay a stipulated penalty of \$1000 per day for each day that a payment is late. This Stipulated Penalty is in addition to the Interest due on the Civil Penalty as required by Paragraph 9.

28. Violations of Requirements Relating to Interim Compliance Measures. The following stipulated penalties shall accrue per violation per Day for each violation of a requirement and/or deadline relating to interim compliance measures set forth in Paragraph 10:

Period of Delay or Non-Compliance	Stipulated Penalty Per Violation Per Day
Days 1-30	\$500
Days 31-60	\$750
61 st Day and Beyond	\$1000

29. Violations of Requirements Relating to Final Compliance Measures.

a. MBBR Requirements.

i. **Violation of MBBR Design and Contractor Selection**

Requirements. The following stipulated penalties shall accrue per violation per Day for each of the following violations of any requirement and/or deadline set forth in Paragraphs 11.b.i(a) and 11.b.i(b):

Period of Delay or Non-Compliance	Penalty Per Violation Per Day
Days 1-30	\$300
Days 31-60	\$600
61 st Day and Beyond	\$1000

ii. **Violation of Alkalinity Feed, Substantial Completion,**

Commencement of Operation, Initial and Continuing Capacity, and MBBR Operation

Requirements. The following stipulated penalties shall accrue per violation per Day for violation of Paragraphs 11.a., 11.b.i(c), 11.b.ii, and 11.b.iii:

Period of Delay or Non-Compliance	Penalty Per Violation Per Day
Days 1-30	\$1000
Days 31-60	\$1500
61 st Day and Beyond	\$2000

b. Violations of Solids Removal Requirements. The following stipulated penalties shall accrue per violation per Day for each violation of a requirement and/or deadline related to solids handling set forth in Paragraph 11.c:

Period of Delay or Non-Compliance	Stipulated Penalty Per Violation Per Day
Days 1-30	\$500
Days 31-60	\$100
61 st Day and Beyond	\$1500

c. Violations of Requirements Relating to Secondary Clarifiers Installation and Operation. The following stipulated penalties shall accrue per violation per Day for each violation of a ~~requirements~~requirement and/or deadline related to the installation and operation of secondary clarifiers set forth in Paragraph 11.d:

Period of Delay or Non-Compliance	Stipulated Penalty Per Violation Per Day
Days 1-30	\$750
Days 31-60	\$1500
61 st Day and Beyond	\$2000

d. Violation of Additional Requirements Prior to Installation of Secondary Clarifiers. The following stipulated penalties shall accrue per violation per Day for each violation of the additional requirements prior to installation of secondary clarifiers set forth in Paragraph 11.e

<u>Period of Delay or Non-Compliance</u>	<u>Stipulated Penalty Per Violation Per Day</u>
<u>Days 1-30</u>	<u>\$500</u>
<u>Days 31-60</u>	<u>\$1,000</u>
<u>61st Day and Beyond</u>	<u>\$2,000</u>

30. Permit Violations. The following stipulated penalties shall accrue per violation per Day for each of the following violations of the Permit or of any subsequent NPDES/APDES permit issued by EPA or ADEC.

a. Unauthorized Discharges or Violation of ~~-~~Permit Effluent Limits.

i. Discharge of a pollutant not disclosed in the NPDES permit application submitted by the City to EPA on October 9, 2001 for the current NPDES Permit, or in the application for any subsequent NPDES/APDES permit issued by EPA or ADEC:

Number of Days in Violation	Stipulated Penalty Per Violation Per Day
Days 1-30	\$750
Days 31-60	\$1500
61 st Day and Beyond	\$2000

ii. Exceedance of any daily maximum ammonia or TSS limit after conclusion of the Performance Period:

Violations	Number of Days in Violation	Stipulated Penalty Per Violation Per Day
Exceedance of daily maximum limit on ammonia and/or TSS mass (pounds/day);	Days 1-30	\$1000
	Days 31-60	\$2000
	61 st Day and Beyond	\$3000
Exceedance of daily maximum limit for ammonia and/or TSS concentration (mg/l);		

iii. Exceedance of any monthly average limit on ammonia and/or TSS mass (pounds/day) and/or exceedance of any monthly average limit on ammonia and/or TSS concentration (milligrams/liter) after conclusion of the Performance Period: \$2000 per violation per month.

iv. Failure to meet the TSS percentage removal requirements after conclusion of the Performance Period: \$2500 per month.

v. Violation of a daily limit for pollutant other than TSS or ammonia:

Period of Delay or Non-compliance	Stipulated Penalty Per Violation Per Day
Days 1-30	\$750
Days 31-60	\$1500
61 st Day and Beyond	\$2000

vi. Violation of a monthly average limit for any pollutant listed in the applicable permit other than TSS or ammonia: \$2000 per month.

vii. Violation of a weekly average limit for any pollutant listed in the permit other than TSS or ammonia: \$500 per week.

b. Violation of Sampling Requirements. Violation of any permit sampling requirement:

Period of Delay or Non-compliance	Stipulated Penalty Per Violation Per Day
Days 1-30	\$750
Days 31-60	\$1500
61 st Day and Beyond	\$2000

c. Violation of Other Permit Requirements. The following stipulated penalties shall accrue per violation per Day for each violation of any requirement in the Permit other than those listed in Paragraphs ~~30~~30.a and b above:

Period of Delay or Non-compliance	Stipulated Penalty Per Violation Per Day
Days 1-30	\$350
Days 31-60	\$800
61 st Day and Beyond	\$1250

31. Other Requirements. The following stipulated penalties shall accrue per violation per Day for each violation of any other requirement of this Consent Decree not specified in Paragraphs 27-~~30~~29.~~d~~30.~~d~~ above.

Period of Delay or Non-compliance	Stipulated Penalty Per Violation Per Day
Days 1-14	\$350
Days 15-30	\$800
31 st Day and Beyond	\$1250

32. The City shall pay any stipulated penalty within thirty (30) Days of receiving the United States' or the State's written demand for stipulated penalties. Where both Plaintiffs demand the stipulated penalty, the City shall pay the United States and the State 50% of the total

stipulated penalty demanded unless Plaintiffs agree to a different percentage split.

33. The United States or State may, in the unreviewable exercise of their discretion, reduce or waive stipulated penalties otherwise due the United States or State of Alaska respectively under this Consent Decree.

34. Stipulated penalties shall continue to accrue during any period of Dispute Resolution, but need not be paid until the following:

a. If the dispute is resolved by agreement or by an EPA decision that is not appealed to the Court, the City shall pay accrued penalties determined to be owing, together with interest, within forty-five (45) Days of the effective date of the agreement or the receipt of EPA's decision.

b. If the dispute is appealed to the Court and the United States prevails in whole or in part, the City shall pay all accrued penalties determined by the Court to be owing, together with Interest, within sixty (60) Days of receiving the Court's decision or order, except as provided in subparagraph c, below.

c. If any Party appeals the District Court's decision, the City shall pay all accrued penalties determined to be owing, together with Interest, within fifteen (15) Days of receiving the final appellate court decision.

35. The City shall pay stipulated penalties owing to the United States and the State by the methods set forth in Paragraph 9 above with confirmation notices to the persons specified in Section XV (Notices) stating that the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid.

36. If the City fails to pay stipulated penalties according to the terms of this Consent Decree, the City shall be liable for Interest on such penalties accruing as of the date payment

became due. Nothing in this Paragraph shall be construed to limit the United States or State from seeking any remedy otherwise provided by law for the City's failure to pay any stipulated penalties.

37. The payment of stipulated penalties as set forth above shall not alter in any way the City's obligation to complete the performance of all activities required under this Consent Decree. The stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States or State for the City's violation of this Consent Decree or applicable law. Where a violation of this Consent Decree is also a violation of the CWA, the City shall be allowed a credit for any stipulated penalties paid against any statutory penalties imposed for such violation. [Except as provided by Paragraph 56, upon the Effective Date of this Consent Decree and any modifications thereto, the stipulated penalty provisions of this Decree shall be retroactively enforceable with regard to any and all violations of Paragraphs 11.e and 19 of this Consent Decree that occurred prior to the Effective Date of this Consent Decree or any subsequent modifications thereto provided that such stipulated penalties may not be collected unless and until this Consent Decree or any modifications thereto have been entered by the Court.](#)

X. FORCE MAJEURE

38. "Force Majeure," for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of the City, any entity controlled by the City, or the City's contractors that delays or prevents the timely performance of any obligation under this Consent Decree despite the City's best efforts to fulfill the obligation. The requirement that the City exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential Force Majeure event and best efforts to address the effects of any such event: i) as it is

occurring, and ii) after it has occurred to prevent or minimize any resulting delay to the greatest extent possible. "Force Majeure" does not include the City's financial inability to perform any obligation under this Consent Decree or any delay in performance due to the City's failure to obtain, or delay in obtaining, any state or local permits. However, Force Majeure shall include any delay in the performance of any obligation resulting from the City's failure to obtain, or a delay in obtaining, any federal or State permit or approval required to fulfill such obligation, if the City has submitted timely and complete applications and has taken all other actions necessary to obtain all such permits or approvals.

39. If any event occurs or has occurred that may delay or prevent the performance of any obligation under this Consent Decree, whether or not caused by a Force Majeure event, the City shall provide notice orally or by electronic or facsimile transmission to EPA and the State within 72 hours of when the City first became aware that the event might cause a delay or non-compliance, with a copy sent by overnight mail or by certified or registered mail, return receipt requested. Within seven (7) days thereafter, the City shall provide in writing to EPA and the State: an explanation and description of the reasons for the delay or non-compliance; the anticipated duration of the delay or non-compliance; all actions taken or to be taken to prevent or minimize the delay or non-compliance; a schedule for implementing any measures to be taken to prevent or mitigate the delay or the effect of the delay or non-compliance; the City's rationale for attributing such delay or non-compliance to a Force Majeure event if it intends to assert such a claim; and a statement as to whether, in the opinion of the City, such event may cause or contribute to an endangerment to public health, welfare, or the environment. The City shall include with any notice all available documentation supporting the claim that the delay or non-compliance was attributable to a Force Majeure event. Failure to comply with the above

requirements shall preclude the City from asserting a Force Majeure claim for that particular event. The City shall be deemed to have knowledge of any circumstances that the City, any entity controlled by the City, or the City's contractors knew or should have anticipated.

40. If EPA, after consultation with the State, agrees that the delay or non-compliance or anticipated delay or non-compliance is attributable to a Force Majeure event, the time for performing the affected Consent Decree obligations will be extended by EPA for such time as is necessary to complete those obligations and no stipulated penalties shall be due for the extension period. Such an extension shall not, of itself, extend the time for performing any other obligation. EPA will notify the City in writing of the length of the extension, if any.

41. If EPA, after consultation with the State, does not agree that the delay or anticipated delay has been or will be caused by a Force Majeure event, EPA will notify the City in writing of its decision.

42. If the City elects to invoke the dispute resolution procedures set forth in Section XI (Dispute Resolution), it shall do so by sending the United States and the State a written Notice of Dispute no later than fifteen (15) days after receipt of EPA's notice sent pursuant to Paragraphs 40-41 above. In any such proceeding, the City shall have the burden of demonstrating by a preponderance of the evidence that the non-compliance, delay or anticipated delay or non-compliance has been or will be caused by a Force Majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that the City complied with the requirements of Paragraphs 38-39 above. If the City carries this burden, the delay at issue shall be deemed not to be a violation by the City of the affected obligation(s) of this Consent Decree.

XI. DISPUTE RESOLUTION

43. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism for the City to resolve disputes arising under or with respect to this Consent Decree. The City's failure to seek dispute resolution under this Section shall preclude the City from raising any disputed issue as a defense to an action by the United States or State to enforce this Consent Decree.

44. Informal Dispute Resolution. Any dispute subject to dispute resolution under this Consent Decree shall first be the subject of informal negotiations. The dispute shall be considered to have arisen when the City sends the United States and the State a written Notice of Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed twenty (20) Days from the date the dispute arises, unless that period is modified by written agreement of the City and United States. If the City and the United States cannot resolve a dispute by informal negotiations, then the position advanced by the United States (or the State if the United States is not a party to the dispute) shall be considered binding unless, within twenty (20) Days after the conclusion of the informal negotiation period, the City invokes the formal dispute resolution procedures set forth below.

45. Formal Dispute Resolution. The City shall invoke formal dispute resolution procedures within the time period provided in the preceding Paragraph by serving on the United States and the State a written Statement of Position regarding the matter in dispute. The Statement of Position shall include, but need not be limited to, any supporting factual data, analysis, opinion, or documentation relied upon by the City.

46. The United States shall serve its Statement of Position within forty-five (45) Days of receipt of the City's Statement of Position. The United States' (or, if applicable State's)

Statement of Position shall include, but need not be limited to, any supporting factual data, analysis, opinion, or documentation relied upon by the United States. The United States' (or, if applicable State's) Statement of Position shall be binding on the City, unless the City files a motion for judicial review of the dispute in accordance with the following Paragraph.

47. The City may seek judicial review of the dispute by filing with the Court and serving on the United States and State, a motion requesting judicial resolution of the dispute. The motion must be filed within ten (10) Days of receipt of the United States' Statement of Position pursuant to the preceding Paragraph. The motion shall include a written statement of the City's position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent Decree.

48. The United States shall respond to the City's motion within the time period allowed by the Local Rules of this Court. The City may file a reply memorandum, to the extent permitted by the Local Rules.

49. Standard of Review.

a. Disputes Concerning Matters Accorded Record Review. Except as otherwise provided in this Consent Decree, in any dispute brought under this Section XI that pertains to: (i) the adequacy or appropriateness of Submissions, plans, procedures to implement plans, schedules, or any other items requiring approval or comment by EPA or the State under this Consent Decree; (ii) the adequacy of the City's compliance with the requirements set forth in Section VI of this Consent Decree (Compliance Measures), and all other disputes that are accorded review on the administrative record under applicable principles of administrative law, the City shall have the burden of demonstrating, based on the administrative record, that the

position of the United States (or, if applicable State) is arbitrary and capricious or otherwise not in accordance with law.

b. Other Disputes. Except as otherwise provided in this Consent Decree, in any other dispute brought under this Section XI (Dispute Resolution), the City shall bear the burden of demonstrating that its position complies with this Consent Decree and better furthers the objective of the Consent Decree.

50. The invocation of dispute resolution procedures under this Section XI shall not, by itself, extend, postpone, or affect in any way any obligation of the City under this Consent Decree, unless and until final resolution of the dispute so provides. Stipulated penalties with respect to the disputed matter shall continue to accrue from the first Day of non-compliance, but payment shall be stayed pending resolution of the dispute as provided in Paragraph 34. If the City does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section IX (Stipulated Penalties).

XII. INFORMATION COLLECTION AND RETENTION

51. The United States, the State and their representatives, including attorneys, contractors, and consultants, shall have the right of entry into the Facility at all reasonable times, upon presentation of credentials, to:

- a. monitor the progress of obligations required under this Consent Decree;
- b. verify any data or information submitted to the United States or the State in accordance with the terms of this Consent Decree or Permit or any subsequent NPDES or APDES permit issued by EPA or ADEC;
- c. obtain samples and, upon request, splits of any samples taken by the City or its representatives, contractors, or consultants;

- d. obtain documentary evidence, including photographs and similar data; and
- e. assess the City's compliance with this Consent Decree and Permit or any

subsequent NPDES/APDES permit issued by EPA or ADEC.

52. Upon request, the City shall provide EPA, the State or their authorized representatives splits of any samples taken by the City provided such samples are available at the time of the request.

53. Until three (3) years after Termination of this Consent Decree, the City shall retain, and shall instruct its contractors and agents to preserve, all non-identical copies of all documents, records, or other information (including documents, records, or other information in electronic form) in its or its contractors' or agents' possession or control, or that come into its or its contractors' or agents' possession or control, that relate in any manner to the City's performance of its obligations under this Consent Decree. This information-retention requirement shall apply regardless of any contrary corporate or institutional policies or procedures. At any time during this information-retention period, upon request by the United States or the State, the City shall provide copies of any documents, records, or other information required to be maintained under this Paragraph. At the conclusion of the information-retention period provided in this Paragraph, the City shall notify EPA and the State at least ninety (90) Days prior to the destruction of any documents, records, or other information subject to the requirements of this Paragraph and, upon request by EPA or State, the City shall deliver any such documents, records, or other information to EPA or the State. The City may assert that certain documents, records, or other information is privileged under the attorney-client privilege or any other privilege recognized by federal or state law, as applicable. If the City asserts such a privilege, it shall provide the following: i) the title of the document, record, or information; ii)

the date of the document, record, or information; iii) the name and title of each author of the document, record, or information; iv) the name and title of each addressee and recipient of the document, record, or information; v) a description of the subject of the document, record, or information; and vi) the privilege asserted by the City. However, no documents, records, or other information created or generated pursuant to the requirements of this Consent Decree shall be withheld on grounds of privilege.

54. The City may also assert that information required to be provided under this Section is protected as Confidential Business Information (“CBI”) under 40 C.F.R. Part 2. As to any information that the City seeks to protect as CBI, the City shall follow the procedures set forth in 40 C.F.R. Part 2.

55. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States or the State pursuant to applicable federal or state laws, regulations, or permits, nor does it limit or affect any duty or obligation of the City to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

XIII. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS

56. This Consent Decree resolves the civil claims of the United States and State for the violations alleged in the Complaint filed in this action through the Date of Lodging.

57. The United States and State reserve all legal and equitable remedies available to enforce the provisions of this Consent Decree, except as expressly stated in Paragraph 56. This Consent Decree shall not be construed to limit the rights of the United States or State to obtain penalties or injunctive relief under the Act or implementing regulations, or under other federal or state laws, regulations, or permit conditions, except as expressly stated in Paragraph 56. The

United States and State further reserve all legal and equitable remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by the Facility, whether related to the violations addressed in this Consent Decree or otherwise.

58. This Consent Decree does not limit or affect the rights of the City or of the United States or the State against any third parties not party to this Consent Decree, nor does it limit the rights of third parties not party to this Consent Decree against the City, except as otherwise provided by law and Paragraph 56 herein.

59. In any subsequent administrative or judicial proceeding initiated by the United States or the State for injunctive relief, civil penalties, or other appropriate relief relating to the Facility, the City shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States or the State in the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved pursuant to Paragraph 56 of this Section.

60. This Consent Decree is not a permit, or a modification of any permit, under any federal, state, or local laws or regulations. The City is responsible for achieving and maintaining complete compliance with all applicable federal, state, and local laws, regulations, and permits, and the City's compliance with this Consent Decree shall be no defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein. The United States and the State do not, by consent to the entry of this Consent Decree, warrant or aver in any manner that the City's compliance with any aspect of this Consent Decree will result

in compliance with provisions of the CWA, 33 U.S.C. §1251, et seq., or with any other provisions of federal, state, or local laws, regulations, or permits.

61. The City hereby acknowledges that a future NPDES or APDES permit issued for the Facility may impose requirements and limits with which the Facility cannot comply even after installation and operation of the Compliance Measures required herein. If this occurs, the City may be required by applicable federal and state law to dismantle, replace some or all of the Compliance Measures implemented under this Consent Decree. This Consent Decree provides no basis, evidence, or defense regarding the determination of the appropriate treatment methods and effluent limitations that may be imposed by future NPDES or APDES permits.

62. This Consent Decree is not a waiver or limitation of any right of the City to contest any provision of any future NPDES or APDES permit issued for the Facility. The City reserves all rights under applicable state and federal law to contest or appeal any provision of any future NPDES or APDES permit for the Facility.

63. This Consent Decree shall not be construed to create rights in, or grant any cause of action to, any third party not party to this Consent Decree.

64. The Complaint and this Consent Decree shall constitute and establish diligent prosecution by the United States as set forth in Section 505(b)(1)(B) of the CWA, 33 U.S.C. § 1365(b)(1)(B), and any other applicable federal or state law, of all matters alleged in the Complaint.

XIV. COSTS

65. The Parties shall bear their own costs of this action, including attorneys' fees, except that the United States and the State shall be entitled to collect the costs (including

attorneys' fees) incurred in any action necessary to collect any portion of the civil penalty or any stipulated penalties due but not paid by the City.

XV. NOTICES

66. Notifications, communications and Submissions shall be sent to the addressees listed below by electronic, by U.S. Mail, postage pre-paid, or private courier service, except for notices under Section X (Force Majeure) and Section XI (Dispute Resolution), which shall be sent both electronically and by overnight mail or by certified or registered mail, return receipt requested. If the date on which a notification or other communication is due falls on a Saturday, Sunday or federal holiday, the deadline for such Submission shall be the next business day. Where this Consent Decree requires that notices and Submissions be sent to the United States, they shall be sent to the United States Department of Justice and EPA offices designated below. Where this Consent Decree requires that notices and Submissions be sent to EPA, they need only be sent to the EPA offices designated below. Where this Consent Decree requires that notices and Submissions shall be sent to ADEC or the State, they shall be sent to the following persons set forth below.

To the United States:

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
Box 7611 Ben Franklin Station
Washington, DC 20044-7611
Re: DOJ No. 90-5-1-1-09888

Director, ~~Office of Enforcement and Compliance~~ and ~~Enforcement Assurance Division~~
U.S. Environmental Protection Agency
1200 Sixth Avenue, Suite ~~900, OCE-164~~ 155, 20-C04
Seattle, WA 98101

U.S. EPA Alaska Field Office
Attn: Tara Martich

222 W. 7th Ave #19,
Anchorage, AK 99513
martich.tara@epa.gov

To the State:

Alaska Department of Environmental Conservation, Division of Water
Attn: ~~Mike Solter~~ [Tiffany Larson](#), Compliance Program Manager
~~555 Cordova St~~
~~Anchorage~~ [610 University Ave](#)
[Fairbanks](#), AK ~~99501~~ [99709](#)
~~Mike.solter~~ [Tiffany.Larson@alaska.gov](#)

With a copy to:

Alaska Department of Law – Environmental Section
Attn: ~~Steven G. Ross~~ [Jennifer Currie](#), Assistant Attorney General
1031 W. 4th Avenue, Suite 200
Anchorage, AK 99501-1994
~~steven.ross~~ [Jennifer.Currie@alaska.gov](#)

To the City:

~~Nathan E. Wallace~~
[John Moosey](#)
City Manager
231 W. Evergreen Avenue
Palmer, AK 99645
~~Nwallace~~ [jmoosey@palmerak.org](#)

With a copy to:

Michael Gatti
Jermain, Dunnagan & Owens, P.C.
3000 A Street, Suite 300
Anchorage, AK 99508
[mgatti@jdolaw.com](#)

J. Ryan ~~Moyer~~ [Moyers](#)
HDR, Inc.
2525 C Street, Suite 500
Anchorage, AK 99503
[Ryan.Moyers@hdrinc.com](#)

67. Any Party may, by written notice to the other Parties, change its designated notice recipient or notice address provided above.

68. Notices submitted pursuant to this Section shall be deemed submitted upon the day they are postmarked and sent by first class mail, overnight mail or courier, or certified mail return receipt requested, unless otherwise provided in this Consent Decree or by mutual agreement of the Parties in writing.

XVI. RETENTION OF JURISDICTION

69. The Court shall retain jurisdiction over this case until termination of this Consent Decree for the purpose of resolving disputes arising under this Decree or entering orders modifying this Decree, pursuant to Sections XI and XVII, or effectuating or enforcing compliance with the terms of this Decree.

XVII. MODIFICATION

70. The terms of this Consent Decree, including any attached appendices, may be modified only by a subsequent written agreement signed by all the Parties. Where the modification constitutes a material change to this Consent Decree, it shall be effective only upon approval by the Court. Extension of any deadlines set forth herein that are less than ~~120 Days~~ 12 months shall not be considered to be a material modification.

71. Any disputes concerning modification of this Consent Decree shall be resolved pursuant to Section XI (Dispute Resolution); provided, however, that instead of the burden of proof provided by Paragraph 49, the Party seeking the modification bears the burden of demonstrating that it is entitled to the requested modification in accordance with the grounds for relief specified in Federal Rule of Civil Procedure 60(b).

XVIII. TERMINATION

72. This Consent Decree may be terminated after the City has:

- a. Paid the civil penalties and Interest required by Section V;
- b. Substantially complied with all provisions of this Consent Decree and the NPDES Permit, or any subsequent NPDES/APDES permit issued by EPA or ADEC for five (5) years from the Substantial Completion of MBBR as required by Paragraph 11.b; and
- c. Has paid any stipulated penalties and Interest owed pursuant to Section IX (Stipulated Penalties).

73. After the City has satisfied the conditions for termination set forth in Paragraph 72 above, it may serve a Request for Termination upon the United States and State. The Request for Termination shall include all necessary supporting documentation, stating that the City has satisfied the requirements set forth in Paragraph 72 above.

74. Following receipt by the United States and the State of the City's Request for Termination, the Parties shall confer informally concerning the Request and any disagreement that the Parties may have as to whether the City has complied with the requirements for termination of this Consent Decree set forth in Paragraph 72 above. If the United States, after consultation with the State, agrees that the Consent Decree may be terminated, the Parties shall submit, for the Court's approval, a joint stipulation terminating the Decree.

75. If the United States, after consultation with the State, does not agree that the Consent Decree may be terminated, the City may invoke Dispute Resolution under Section XI. However, the City shall not seek Dispute Resolution of any dispute regarding termination until sixty (60) days after service of its Request for Termination.

XIX. PUBLIC PARTICIPATION

76. This Consent Decree shall be lodged with the Court for a period of not less than thirty (30) Days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations indicating that the Consent Decree is inappropriate, improper, or inadequate. The City consents to entry of this Consent Decree without further notice and agrees not to withdraw from or oppose entry of this Consent Decree by the Court or to challenge any provision of the Decree, unless the United States has notified the City in writing that it no longer supports entry of the Decree.

XX. SIGNATORIES/SERVICE

77. Each undersigned representative of the City, the State, and the United States certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and legally bind the Party he or she represents to this document.

78. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis.

79. The City agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

80. The Parties agree that the City need not file an answer or otherwise respond to the Complaint in this action unless or until the Court expressly declines to enter this Consent Decree.

XXI. INTEGRATION

81. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Decree and

supercedes all prior agreements and understandings, whether oral or written, concerning the settlement embodied herein. Other than deliverables that are subsequently submitted and approved pursuant to this Consent Decree, no other document, nor any representation, inducement, agreement, understanding, or promise, constitutes any part of this Decree or the settlement it represents, nor shall it be used in construing the terms of this Decree.

XXII. APPENDICES

82. The following appendices are attached to and are part of this Consent Decree:

Appendix A: Diagram of Palmer Wastewater Treatment Facility.

[Appendix B: Solids Management Plan](#)

[Appendix C: Lagoon Dredging and Ammonia Management Plan](#)

[Appendix D: Polymer Testing Plan](#)

XXIII. FINAL JUDGMENT

83. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment of the Court as to the United States, the State, and the City.

Dated and entered this _____ day of _____, 2016.

UNITED STATES DISTRICT JUDGE

District of Alaska

APPENDIX B



Solids Management Plan Palmer Wastewater Treatment Facility

Palmer, Alaska

October 12, 2020 (Revised December 2, 2020)



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Acronyms and Abbreviations

BOD ₅	5-day Biochemical Oxygen Demand
DO	Dissolved Oxygen
gpm	Gallons Per Minute
HMI	Human Machine Interface
mg/L	Milligrams per Liter
mgd	Million Gallons per Day
mL	Milliliters
NH ₄	Ammonia (aqueous)
NPW	Non-Potable Plant Water
PDPS	Plant Drain Pump Station
PICS	Process Instrumentation and Control System
PLC	Programmable Logic Controller
PPD	Pounds Per Day
PWWTF	Palmer Wastewater Treatment Facility
SCADA	Supervisory Control and Data Acquisition
TSS	Total Suspended Solids
UV	Ultraviolet Light

1 Introduction

This document establishes the Solids Management Plan (SMP) for the Palmer Wastewater Treatment Facility (PWWTF). This document will establish the basis for future development of formal Standard Operating Procedures (SOPs) to be completed by January 31, 2021. HDR has reviewed and analyzed performance data, engineering drawings, and recent test results in the development of this plan.

The City of Palmer (City) currently manages solids on site at the facility. Dredged solids from Lagoons 2 and 3 are transferred to an on-site sludge drying area west of Lagoon 3. Sludge dries (through evaporation) typically for one year before it is further stabilized through lime addition. Dried, limed sludge is removed, mixed with topsoil, and used as fill on the WWTP site. This Plan outlines the roadmap for continued operation of the existing solids management process and outlines a landfill disposal contingency plan.

1.1 Regulatory Background

The PWWTF does not currently have a solids management permit and operates its solids management activities under NPDES Permit No. AK-002249-7. The NPDES permit specifies that EPA Region 10 separates wastewater and sludge permitting, but that no separate sludge-only permit has been issued to date. The permit notes:

“Until future issuance of a sludge-only permit, sludge management and disposal activities at the Palmer WWTP continue to be subject to the national sewage sludge standards at 40 CFR Part 503 and any requirements of the State’s biosolids program. The Part 503 regulations are self-implementing, which means that facilities must comply with them whether or not a permit has been issued.” – PWWTF NPDES Permit.

The Clean Water Act Amendments of 1987 required the EPA to develop new regulations pertaining to sewage sludge and solids. In February, 1993, EPA published 40 CFR Part 503 (i.e., Part 503). The Part 503 Rule is a complex, risk-based assessment of potential environmental impacts of pollutants that may be present in solids (USEPA, 1995). These guidelines regulate pollutant and pathogen concentrations as well as vector attraction reduction (VAR).

The Part 503 Rule applies to various dried solids usage and disposal routes, including placement in or on surface disposal sites. Surface disposal sites such as that used at PWWTF are subject to Subpart C (§§ 503.20 - 503.28) of the Part 503 rules. The general provisions of the rules provide basic requirements for solids applied to land including pollutant limits, management practices, operational standards, and monitoring, record keeping and reporting standards.

Based on correspondence with ADEC in June of 2020, the City of Palmer is under the understanding that a State-issued solids handling permit is not required for on-site treatment and disposal at this time and will not be required until solids are removed/disposed of off-site.

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As part of this Solids Management Plan, the City has established a Biosolids Management and Testing plan to characterize sludge prior to land application in compliance with CFR Part 503 regulations.

2 Solids Management Plan

2.1 Current On-Site Disposal Practices

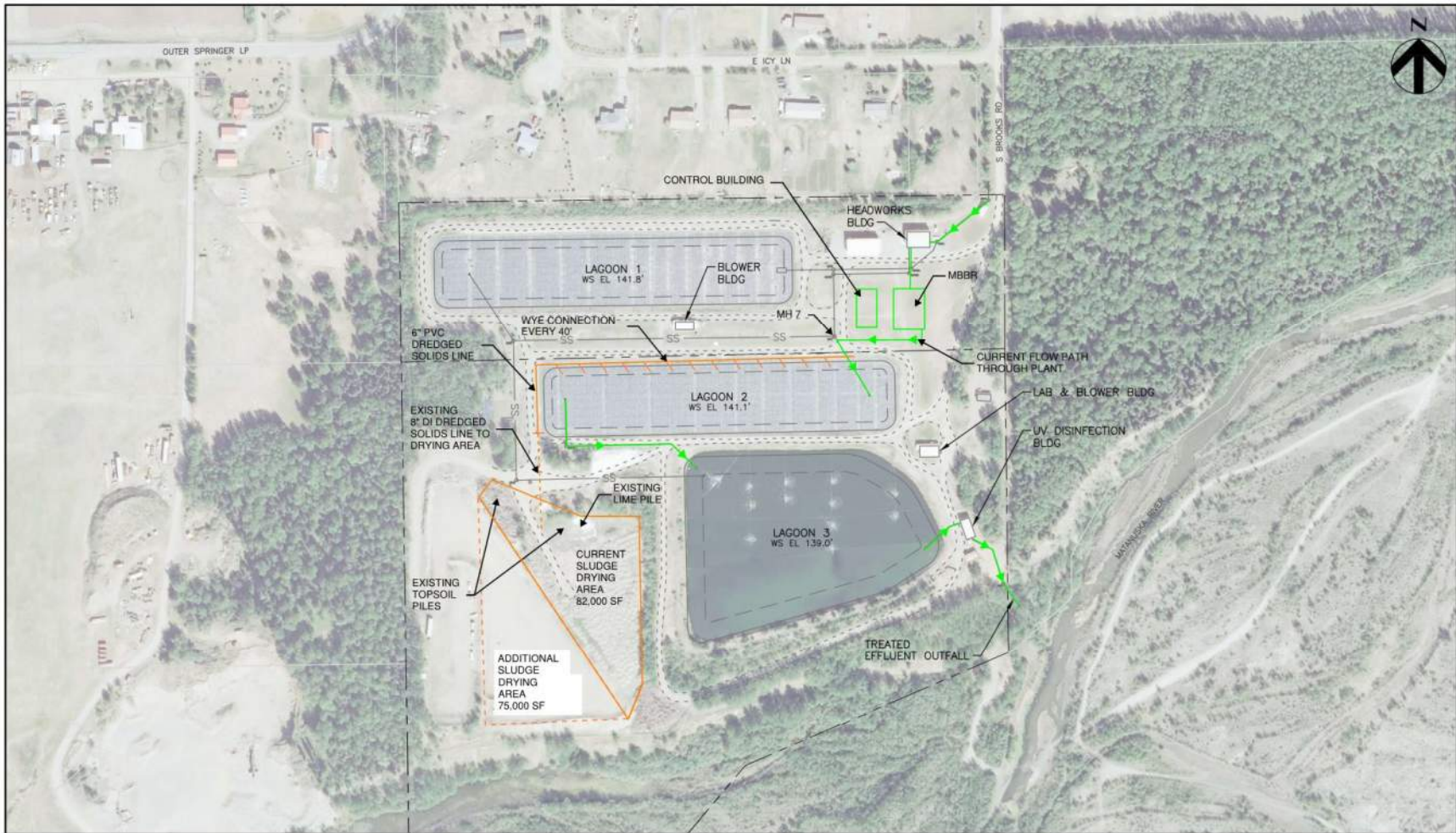
The City purchased a floating dredge in 2003 for the purposes of periodically removing the sludge and settled solids from the lagoons. Sludge is pumped to a sludge drying area located to the west of Lagoon 3. The current sludge drying area is approximately 82,000 square feet in size with a usable area of around 50,000 square feet. The drying area is surrounded with 8-10 foot high berms to provide containment of the drying area. Sludge is typically allowed to dry (through evaporation) for one year before it is further stabilized through lime addition in compliance with Part 503 Subpart C regulations. Lime is metered out by hand shoveling and then mixed using heavy equipment. Dried, limed sludge is removed, mixed with topsoil, and used as fill on the WWTP site. The facility layout and solids management process is presented in Figure 1.

As depicted in Figure 1, the dredge pumps solids through a 6" PVC line that runs along the north and west side of Lagoon 2. The PVC dredged solids line features wye attachment points every 40 feet to facilitate dredging operations. Pumped solids from this line are transferred via an 8 inch ductile iron line to the sludge drying area. Existing supplies of lime and topsoil are stored at the sludge drying area as specified in Figure 1.

Previously, settled sludge was dredged and pumped from the lagoons approximately once every five years. Dredging was a challenging task due to the presence of insulated cover panels on the lagoon. Infrequent dredging efforts resulted in low usage of the sludge drying area. The insulated covers were removed in fall of 2019 to facilitate regular dredging. Prior to removal of the insulated covers, the last known dredging of Lagoon 2 was in 2015/2016.

The PWWTF Lagoon Dredging and Ammonia Management Plan has identified excess solids accumulation in Lagoon 2 as a key contributor to ammonia exceedances in effluent during summer months. The plan specifies annual dredging of Lagoon 2 in addition to dredging of Lagoon 3 as needed based on measured sludge depths. Regular lagoon dredging will increase the capacity demands on the dredging equipment, piping, and on the sludge drying and fill areas.

Figure 1: Palmer WWTF Site Layout and Solids Management Plan



**CITY OF PALMER
WASTEWATER TREATMENT FACILITY
SOLIDS MANAGEMENT PLAN**

EXISTING SITE LAYOUT
NOT TO SCALE

DATE
JUNE 2020

FIGURE
1

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2.2 Existing Equipment

2.2.1 Dredging Equipment

The City of Palmer purchased the current dredge in 2003 to aid in periodic solids removal from the lagoons. The dredge is stored in a dedicated storage building north of Lagoon 2. The dredge has been well maintained, and the City is proactively addressing maintenance needs of the unit. The City intends to maintain an inventory of readily available wear parts for the dredge. Dredge specifications are provided in Table 1 and the dredge is pictured in Figure 2.

Table 1: Palmer WWTF Dredge Specifications

Item	Specification
Dredge Model	LWT Pit Hog RUNT Dredge
Weight	5,800 lbs
Dimensions (LxWxH)	18' x 8'10" x 6'
Pump Model	LWT Pit Hog 950 Chopper Pump
Pump Type	Centrifugal, Chopper Impeller Pump
Pump Design Point	700 GPM, 40 FT Head
Pump Power	50 HP

Figure 2: LWT Pit Hog RUNT Dredge



2.2.2 Sludge Depth Measurement

The City currently uses a 'Sludge Judge' for measurement of sludge depth in the lagoons. Measurements are taken from a boat to develop a grid across the lagoon(s). Sludge depth testing will be performed annually as specified in the Lagoon Dredging and Ammonia Management Plan.

2.2.3 Dredged Solids Line

Dredging is facilitated by the dredged solids line running along the north side of Lagoon 2. Specifications for the dredged solids line are provided in Table 2.

Table 2: Palmer WWTF Dredged Solids Line

Item	Specification
Line Length	850 FT PVC
Line Material	6" PVC
Attachments	Wye Connections, every 50 FT
Connection	Connects to 200 FT of 8" DI line routed to sludge drying area

Figure 3 (Clockwise from top left): 6" PVC Dredged Solids Line along the bank of Lagoon 2; Wye connection detail (typical); Lime deposit adjacent to sludge drying area; and connection from 6" PVC Dredged Solids Line to 8" DI Dredged Solids Line (buried).



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2.2.4 Sludge Drying Area

The current sludge drying area is located to the west of Lagoon 3. The current drying area is roughly 82,000 SF and provides 50,000 SF of useable drying space. The drying area is surrounded with berms roughly 8-10 feet in height that provide containment and an additional physical barrier between the drying area and the nearby Matanuska River. The southern end of the current drying area is located approximately 200 linear feet from the unnamed tributary below or approximately 1,000 linear feet from the main channel of the Matanuska River. The sludge drying area is pictured in Figure 4.

Table 3: Palmer WWTF Sludge Drying Area

Item	Specification
Current Drying Area	82,000 SF (50,000 SF Useable)
Additional Drying Area	75,000 SF firing range, adjacent to current drying area
2020 Solids Loading	230 Dry Tons (8,300 cubic feet)
Drying Time	1 Year
Treatment	Lime, stored and mixed on-site
Disposal	Mixed with topsoil, scraped, and used for on-site fill and grading.
Projected Bed Capacity	50 years (25 years at current bed + 25 years at additional bed)

Figure 4: Current Sludge Drying Area with Berms Providing Containment



There is an additional potential expansion area in the vicinity of the current drying area that could be used for a future expansion if more drying area is required. This expansion area is on facility property, but is currently used as a firing range for the Palmer Police Department and Federal Bureau of Investigation (FBI). The presence of bullets in the soil matrix may

indicate lead contamination. If levels exceeded allowable limits, RCRA requirements would be triggered and soil would need to be removed from the ground in the area. If the City wishes to pursue expansion of the drying area into the firing range, a firing range characterization study is recommended to be completed in order to determine the level of contamination in the area and estimate the costs to close/cleanup the range. The first step for characterization of the range would be to develop a history (length of usage, calibers used, training exercises conducted, configuration changes, etc) to help guide the characterization.

Figure 5: Potential Future On-Site Expansion Area for Sludge Drying (Current Firing Range)



2.3 Capacity Analysis

The current sludge drying area has been used successfully and has not presented capacity issues for the sporadic dredging operations to date. With the establishment of the PWWTF Lagoon Dredging and Ammonia Management Plan, regular annual dredging operations will increase solids loading on the drying area. Estimates of current dredged solids loading, future dredged solids loading, and a capacity analysis are presented in this section.

2.3.1 Estimated 2020 Dredged Solids

The estimated quantity of dredged solids expected in 2020 as result of current and ongoing dredging operations to address the multiyear accumulations of sludge in Lagoon 2 is provided in Table 4.

Table 4: 2020 Dried Sludge Quantity Estimates

Description	Specification
Dry lbs. of sludge	468,000 lbs/year
Dry tons of sludge	234 tons/year

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Volume (@2% solids)	280 cubic yards
---------------------	-----------------

These 2020 estimates are based on the following assumptions:

- Estimated average of 3 FT of solids depth in Lagoon 2 (as measured by COP staff)
- Approximate area of 125,000 SF on bottom of Lagoon 2
- Approximate 2% solids concentration for the dredged material

2.3.2 Estimated Future Annual Dredged Solids

The estimated quantity of future dredged solids as result of annual dredging operations specified in the PWWTF Lagoon Dredging and Ammonia Management Plan is provided in Table 5.

Table 5: Future Dried Sludge Quantity Estimates

Description	Specification
Dry lbs. of sludge	380,000 lbs/year
Dry tons of sludge	190 tons/year
Volume (@2% solids)	225 cubic yards

These future estimates are based on the following assumptions:

- Approximate solids concentration of MBBR effluent is 200-300 mg/l
- Annual average flow through WWTF of 0.5 MGD

2.3.3 Current Drying Bed Capacity Analysis

Based on the estimated 2020 dredged solids quantity of 234 tons and 50,000 SF of usable space for the drying beds, the expected depth of solids to be added to the drying bed in 2020 is approximately two inches, not including lime. With annual application of lime and scraping of the beds, the existing beds provide sufficient capacity to handle these demands.

Table 6: Estimated 2020 Drying Bed Depth

Description	Specification
2020 Drying Bed Depth	<6" solids depth/year

2.3.4 Future Drying Bed Capacity Analysis

Based on the estimated solids production rate of 190 tons/year after 2020 the expected depth of solids to be added to the drying bed as result of annual dredging operations is less than two inches per year.

The long term plan for the Palmer WWTF includes the installation of secondary clarifiers. The solids production rate from secondary clarifiers is projected to approximately match that of the

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planned annual lagoon dredging (the secondary clarifiers will replace Lagoon 2 to provide solids settling). With installation of the secondary clarifiers, the expected depth of solids added annually will remain less than two inches per year. There are no anticipated capacity issues for on-site disposal with either regular annual dredging or future use of secondary clarifiers.

Table 7: Estimated Future Drying Bed Depth

Description	Specification
Future Drying Bed Depth	<6" solids depth/year

2.4 Biosolids Monitoring

2.4.1 Dried Sludge Decant

An extensive review of record drawings does not indicate the existence of a lining in the current sludge drying area. On the basis of increased dredging beginning in the summer of 2020, the City will conduct a screening evaluation in the fall of 2020 and summer of 2021 along the riverbank to determine if there is an issue with decant infiltration from the sludge drying area. As the City continues to use the current sludge area for annual sludge drying, screening evaluation will continue along the riverbank while newly dredged solids are drying to determine if there is an issue. More extensive investigation will be performed if screening evaluations determine there is a potential issue.

2.5 Solids Disposal Alternative - Landfill Disposal

The PWWTF is not projected to run out of solids disposal space on-site within the planning horizon (25 years for the current disposal area). However, if future capacity issues do arise, or if other unforeseen considerations preclude disposal on-site, the backup plan is for solids disposal at the Matanuska Susitna Borough Central Landfill. Landfill disposal of solids generated at the Palmer WWTF would likely trigger the requirement for a DEC Permit.

2.5.1 Regulatory Considerations for Disposal of Solids at Landfill

Biosolids that are land filled or used as a cover material at a landfill are subject to federal requirements in 40 CFR Part 258. In addition, in order to co-dispose sewage solids with municipal solid waste at the CPL the following requirements described in 18 AAC 60.365 must be met:

1. The sewage solids must be free of hazardous wastes and polychlorinated biphenyls (PCBs) defined in 40 CFR 761.3.
2. The sewage solids must not contain "free liquids" as defined by EPA Method 9095 (Paint Filter Test).
3. The sewage solids must meet the vector reduction requirement in accordance with 40 CFR 503.33(b)(11); OR must be treated and stabilized to meet Class A or Class B pathogen reduction requirements in accordance with 40 CFR 503.32, AND vector

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attraction reduction requirements of 40 CFR 503.33 (b)(1)-(10), as adopted by reference in 18 AAC 60.505.

Correspondence with ADEC in June of 2020 indicates that off-site disposal of solid would also trigger the requirement for a DEC Permit.

2.5.2 Landfill Disposal Cost

It is anticipated that the cost of disposal of solids at the landfill would be substantially greater than the cost of the current solids disposal on-site at the PWWTF. Additionally, it is anticipated that landfill disposal would be more operationally intensive than on-site disposal. For these reasons no specific cost analysis was developed for the landfill disposal alternative.

3 Summary and Recommended Plan

This document provides the Solids Management Plan for the Palmer WWTF. The analysis indicates that the current on-site solids drying area and disposal areas provide adequate capacity to meet Palmer's current and future needs. In the near term, it is recommended that the City continue to use the existing on-site sludge drying area west of Lagoon 3 to dry sludge. If desired, the sludge drying area can be subdivided, but sludge should be applied at depths no greater than six inches annually to promote optimal drying. Sludge should be dried for a one year period before applying lime, mixing with topsoil, and using as on-site fill. In the long term, it is recommended the City repurpose one of the existing lagoons to provide a fully lined location for on-site sludge dewatering and disposal.

This document additionally establishes a Biosolids Monitoring and Testing Plan that will be implemented in the summer of 2021.

This study lastly evaluates the alternative of sludge disposal at the Matanuska Susitna Borough Central Landfill. It was determined that this alternative would be more operationally intensive, more costly, and would trigger additional permitting requirements.

APPENDIX C



Lagoon Dredging and Ammonia Management Plan

Palmer Wastewater Treatment Facility

Palmer, Alaska

October 12, 2020



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Appendices

Appendix A. 2020 Solids Management Plan

Appendix B. APDES Permit No. AK-002249

Acronyms and Abbreviations

BOD ₅	5-day Biochemical Oxygen Demand
DO	Dissolved Oxygen
gpm	Gallons Per Minute
HMI	Human Machine Interface
mg/L	Milligrams per Liter
mgd	Million Gallons per Day
mL	Milliliters
NH ₄	Ammonia (aqueous)
NPW	Non-Potable Plant Water
PDPS	Plant Drain Pump Station
PICS	Process Instrumentation and Control System
PLC	Programmable Logic Controller
PPD	Pounds Per Day
PWWTF	Palmer Wastewater Treatment Facility
SCADA	Supervisory Control and Data Acquisition
TSS	Total Suspended Solids
UV	Ultraviolet Light

1 Introduction

This document provides the Lagoon Dredging and Ammonia Management Plan (LDAMP) for the Palmer Wastewater Treatment Facility (PWWTF). The City of Palmer (COP) has developed this plan for managing the release of ammonia from the accumulated sludge in Lagoons 2 and 3. The plan includes a detailed schedule for dredging and disposing of the solids from Lagoons 2 and 3, recommendations for operational targets and conditions to optimize nitrification in the lagoons during the summer months, and a sampling protocol to monitor ammonia and related parameters throughout the Palmer WWTF process. This plan is being developed in conjunction with a Solids Management Plan (SMP) for the facility. The SMP, included in Appendix A, details the current practices for solids handling and disposal, the available land (capacity) and equipment that the COP has on-site for solids removal, and the general mechanics of the COP's dredging operation. This information is referenced in the LDAMP but has not been duplicated in this plan.

1.1 Background

The upgraded Palmer Wastewater Treatment Facility (WWTF) was brought on-line in late July 2018 in accordance with a Department of Justice (DOJ) consent decree requiring the COP to meet the current Alaska Pollutant Discharge Elimination (APDES) permit limits. The PWWTF Improvements project generally includes the addition of a Moving Bed Bioreactor (MBBR), lagoon improvements, a new control/blower building, new plant water pump station, flow monitoring flume, and significant yard piping and hydraulic improvements.

As outlined in the Palmer WWTF Performance Testing Report (HDR, April 13, 2020), the PWWTF is achieving a high level of treatment in the MBBR system with consistent MBBR effluent sBOD₅ below 5.0 mg/L and near-complete nitrification with MBBR effluent ammonia consistently below 1.0 mg/L. Phase I improvements did not include the construction of secondary clarifiers for solids removal following the MBBR. Solids removal and polishing is accomplished in the aerobic lagoons (Lagoons 2 and 3). As part of the consent decree for the facility, a polymer system was included in Phase I improvements in order to add polymer to the wastewater stream after the MBBR if solids settling needed to be improved with chemical addition. The polymer system has been installed but has not been required over the first year of operation. Solids removal through the lagoons has been consistent and the effluent TSS levels have averaged 7.8 mg/L over the period (permit requirement is 30 mg/L monthly average).

While the BOD₅ and ammonia levels are extremely low coming out of the MBBR, an increase in effluent ammonia has been occurring across the lagoons. The ammonia increase across the lagoons is believed to be due to aerobic and/or anaerobic digestion of the influent and accumulated solids. Ammonia is released when the solids are digested. If nitrification activity in the lagoons is sufficient (along with sufficient alkalinity and dissolved oxygen to support nitrification), the lagoons may effectively nitrify and keep ammonia concentrations low. If the

rate of $\text{NH}_3\text{-N}$ release from digestion is faster than the rate of nitrification, ammonia will accumulate and increase across the lagoons, as has been observed over the period from August 2018 through October 2019, prior to dredging in fall of 2019.

The upgraded Palmer WWTF has been effective in removing BOD_5 , TSS, and $\text{NH}_3\text{-N}$ to below the required limits on a consistent basis and has met all APDES effluent limits, except for ammonia during the months of July and August in 2019 when the effluent ammonia exceeded the 1.7 mg/L average monthly limit. The average effluent concentrations of BOD_5 , TSS, and $\text{NH}_3\text{-N}$ since the upgraded facility was brought on-line have been 10.7 mg/L, 7.8 mg/l, and 6.3 mg/L, respectively. These average discharge levels are consistently well below the limits required in the APDES permit for September to July. However, July and August 2019 ammonia exceeded permit limits.

After completion of the PWWTF Improvements project, the City of Palmer has taken the following actions to overcome the ammonia release from the digesting sludge in the lagoons:

- PWWTF staff conducted a sludge depth analysis of Lagoon 2 and Lagoon 3 in June/July 2019. The sludge depths recorded in Lagoon 2 show a significant accumulation of solids in the lagoon (over 3-4 feet in some areas). This large amount of accumulated solids was likely digesting and causing the ammonia increase observed in 2018-2019.
- The City began gathering additional operational data across the lagoons to help diagnose and address the ammonia release issue during the summer of 2019.
- The City made several operational changes to try to optimize conditions for nitrification in Lagoons 2 and 3. Optimized conditions include sufficient temperatures, alkalinity (>150 mg/L), and dissolved oxygen (>2-4 mg/L) to promote nitrification. Plant staff began feeding caustic at the MBBR effluent channel to raise the alkalinity going into Lagoon 2. They increased the blower operation in Lagoon 2 to try to consistently operate over 2 mg/L DO.
- The City hired a contractor (and also self-performed) to permanently remove the cover from Lagoon 2. The cover was removed in mid-September 2019 and Lagoon 2 was dredged in September-October 2019 to remove a portion of the accumulated solids from the bottom of the lagoon. The cover will remain off which will facilitate more frequent dredging of the lagoon allowing for additional solids removal.
- In April-May 2020, the City installed permanent PVC piping along the edge of Lagoon 2 to allow for dredged solids to be pumped to the sludge drying beds located on-site. Also in April 2020, the City conducted a sludge depth analysis of Lagoon 2 and determined that while the dredging accomplished in September-October 2019 had removed a portion of the accumulated solids, a significant amount of solids remained (average of approximately 3-4' sludge depth across the lagoon).

This document establishes a dredging plan to:

- Continue dredging to remove as much of the existing solids in the bottom of Lagoon 2 as possible, complete sampling and testing through the WWTF process, and complete minor upgrades of the lagoons in 2020 to prepare for successful ongoing dredging and ammonia management at the facility.
- Outline a dredging and ammonia management plan to maintain annual operation, manage incoming sludge accumulation, and maintain permit compliance after the existing sludge accumulation has been mitigated. In general, annual dredging operation will commence as soon as practicable in the spring at the breakup of surface ice, and will conclude by May 31 each year. Ongoing performance testing will guide annual dredging and ammonia management efforts.

2 Lagoon Dredging and Ammonia Management Plan

The Lagoon Dredging and Ammonia Management Plan will proceed in two phases. Phase A of the plan outlines the steps required in 2020 to remove the multiyear sludge accumulation in the lagoons in order to reach the equilibrium conditions required for successful future operation. Phase B of the plan lays out annual operations once equilibrium conditions have been reached to maintain steady-state operation, manage incoming sludge accumulation, optimize operating conditions for nitrification in the lagoons during the summer months, monitor and adjust plant performance and maintain permit compliance.

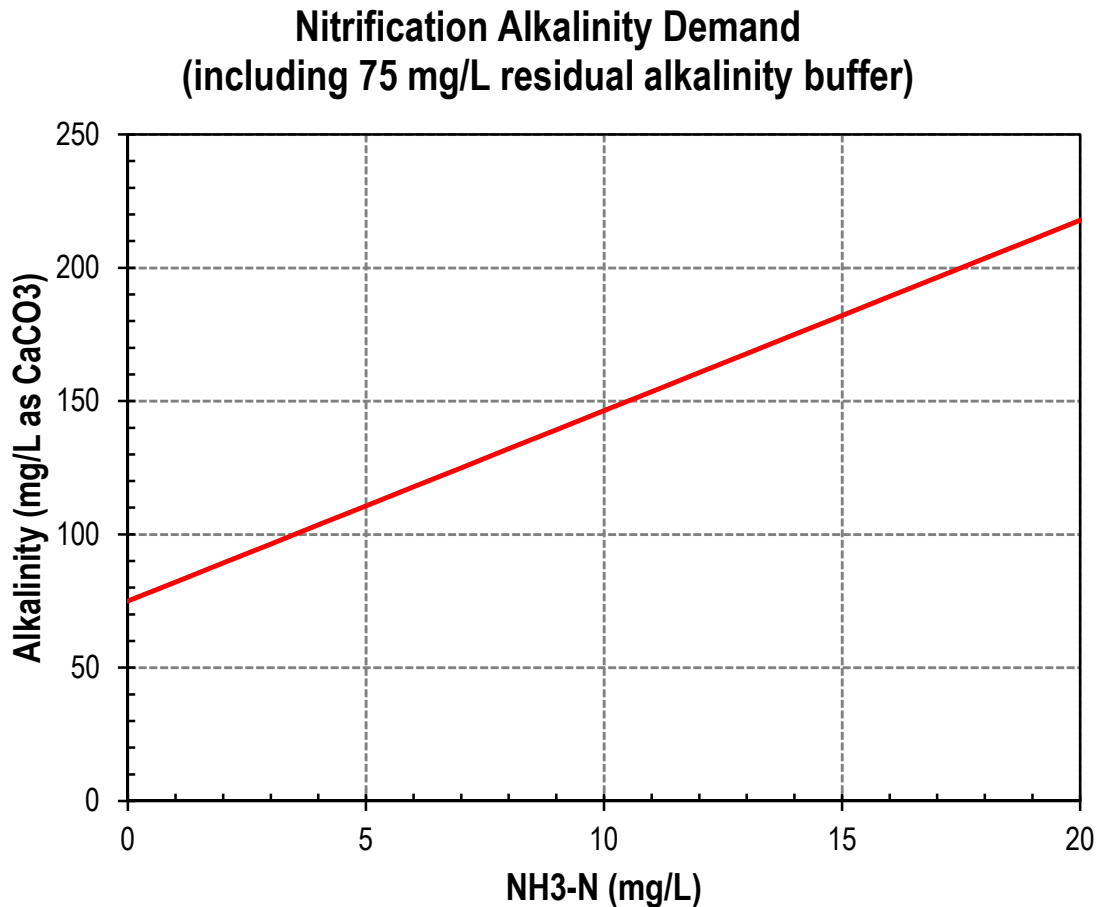
In order to maximize success in future years, the City should target a sludge depth of less than one foot at the conclusion of 2020 dredging efforts. As discussed, the large amount of solids built up on the bottom of Lagoon 2 are digesting and producing ammonia at a greater rate than the lagoon is nitrifying; which results in a net increase of ammonia across the lagoons. The amount of solids on the bottom of the lagoon not only impact the level of digestion and ammonia release, but create additional issues that make it more difficult to achieve nitrification in the lagoons. The Biolac aeration system used in the lagoons utilizes diffusers that currently sit near the bottom of Lagoon 2. The diffusers are located within the build-up of solids which limits their ability to freely 'swing' and aerate the lagoon. This makes it difficult to maintain dissolved oxygen at a level that facilitates nitrification. As the City is dredging Lagoon 2 in June/July 2020, they are raising the elevation of the diffusers in Lagoon 2 to ensure they are out of the accumulated solids on the bottom. This will improve dissolved oxygen management in the lagoon as well as keep the solids from settling on top of the diffusers in the future.

In addition to physically covering the diffusers on the bottom of the lagoon, the large build-up of solids significantly reduces the detention time in Lagoon 2. Lagoon 2 has a volume of approximately 0.63 MG/ft of liquid. Based on the new weir height at the Lagoon 2 effluent (in MH 10) and after the 2020 dredging operation is completed, the liquid depth in Lagoon 2 shall be approximately 8'. At this depth, the lagoon has a volume of approximately 5 MG and a detention time of approximately 10 days (based on an average flow of 0.5 MGD). The accumulated 3' of sludge at the bottom of the lagoon reduces the detention time through the basin to approximately 6 days. This does not allow enough time for complete nitrification. Maintaining a sludge depth of approximately 1'-1.5' will be critical not only to minimize the release of ammonia from digestion, but also to provide enough detention time in Lagoon 2 for nitrification to occur.

Lagoon 3 has a volume of approximately 9.8 MG and provides an additional 19 days of detention time. Conditions for nitrification should be maintained in Lagoon 3 as well as Lagoon 2 to take advantage of the additional polishing. A portion of the lagoon is aerated and baffled. If DO levels greater than 2.0 mg/L can be maintained, and alkalinity is sufficient than some additional ammonia removal/nitrification may be realized in Lagoon 3. Sampling and

monitoring is recommended in Lagoon 3 as discussed in the following sections. Maintaining sufficient alkalinity in Lagoon 3 will be required to nitrify. Figure 1 below provides a Nitrification Alkalinity Demand curve for Lagoon 3 (including 75 mg/L residual alkalinity buffer). Chemical feed for caustic at the MBBR effluent weir will be monitored and maintained to achieve alkalinity levels in Lagoon 3 per the demand curve based on measured ammonia concentrations at the end of Lagoon 2/influent of Lagoon 3.

Figure 1: Lagoon 3 Nitrification Alkalinity Demand



As detailed in the Solids Management Plan, solids will be dredged from Lagoon 2 annually from April through May. The sludge depth in Lagoon 3 will be measured/monitored each spring as well and dredged as needed to maintain approximately less than 1 foot of depth. Solids from the MBBR average approximately 200-300 mg/L and with an annual average flowrate of 0.5 MGD through the WWTF, the anticipated annual amount of solids to be removed from Lagoon 2 is approximately 230 dry tons/year. Reference the SMP for more detailed information on the mechanics of the dredging operation. Dredging each spring will be completed by May 31, to allow the lagoon to settle for at least a month and begin nitrifying before the lower permit limits take effect in July and August.

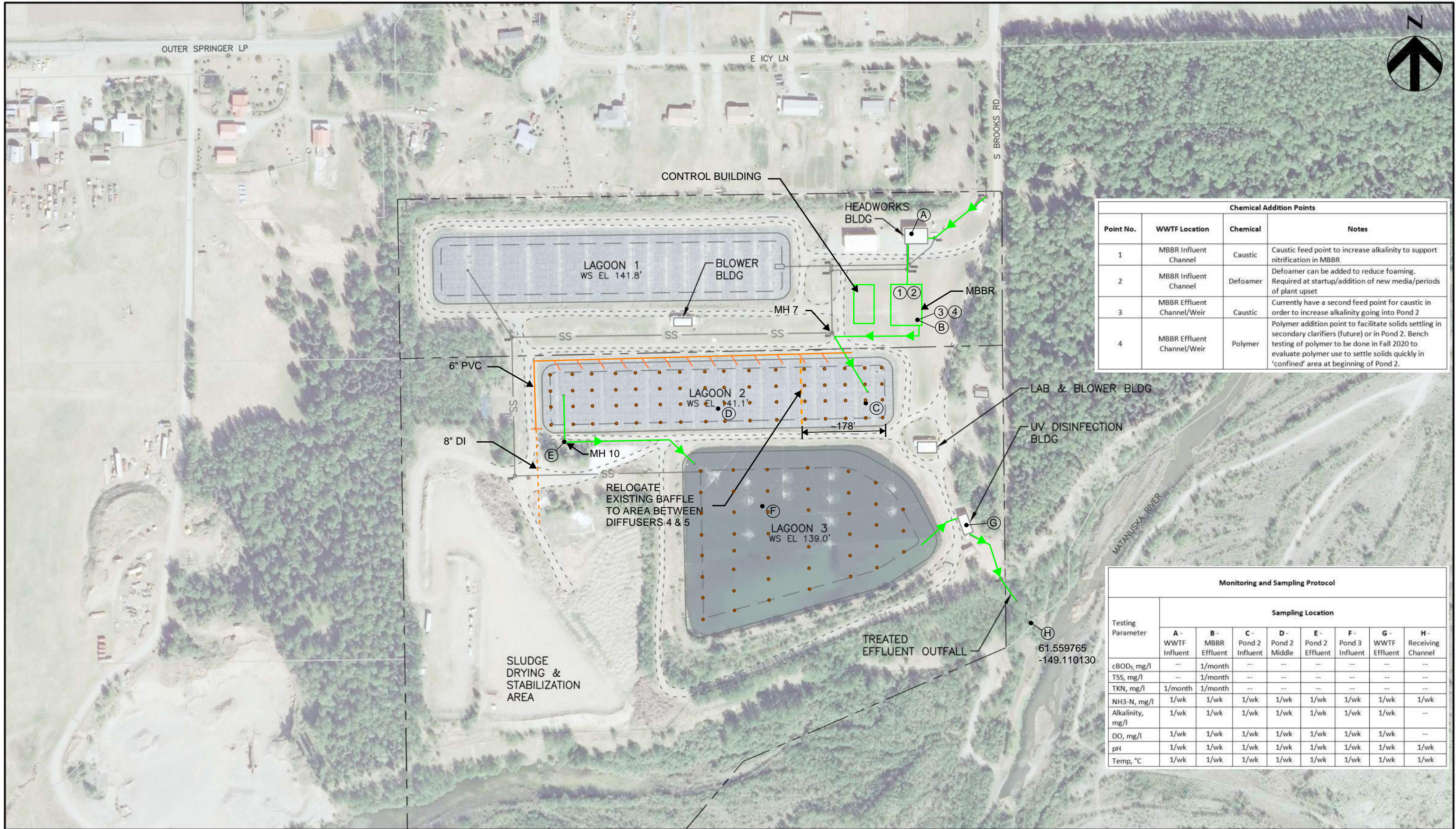
Table 1 provides Phase A of the Lagoon Dredging and Ammonia Management Plan, or proposed steps to be taken in 2020 to best position the City for handling solids accumulation, dredging, and accomplishing nitrification over the summer months in the future. Table 2 provides Phase B of the Lagoon Dredging and Ammonia Management Plan, or proposed annual steps to be taken following 2020, and Figure 2 provides a map specifying sampling locations and other site details.

Table 1: Phase A Lagoon Dredging and Ammonia Management Plan

Step No.	Recommended Improvement	Completion Status	Estimated Completion Date	Notes
Phase A – Remove Legacy Sludge Accumulation				
A1	Dredging of Lagoon 2	Summer 2020 (started in June 2020)	August 2020	The current dredging effort will continue to remove as much as possible of the accumulated sludge in Lagoon 2. The increase of ammonia across the lagoons is believed to be due to aerobic and/or anaerobic digestion of the accumulated solids. Minimizing the volume of solids accumulation is critical to reducing ammonia. The dredging effort is to continue through end of August 2020.
A2	Sludge depth testing of Lagoon 2 and Lagoon 3		Early September 2020	Sludge depth testing in Lagoons 2 and 3 will commence in Early September 2020. Sludge depth testing will begin at Lagoon 2 and then continue in Lagoon 3. Sludge depth testing locations are specified in Figure 2.
A3	Additional dredging of Lagoon 2 and/or Lagoon 3	Not completed, Trigger condition: Sludge depth from Step A2 greater than 1 foot	Sept-Oct 2020	The sludge depth testing in Step 2 may trigger additional dredging to further address legacy sludge accumulation in Lagoons 2 and 3. Average sludge depths in excess of 1 foot will trigger re-dredging of Lagoon 2 and/or dredging of Lagoon 3. If required, this dredging effort will begin in early September 2020.
A4	Relocation of Lagoon 2 Baffle		Aug-Oct 2020	The baffle in the middle of Lagoon 2 will be relocated nearer to the MBBR influent to better contain incoming solids, as specified in Figure 2. This baffle will be placed between Diffuser 4 and Diffuser 5, and will be designed to concentrate solids accumulation to a more limited area to facilitate future dredging efforts. Aeration in this area will be minimized to provide a quiescent zone for solids to settle
A5	Evaluation of polymer addition to MBBR effluent		Sept-Oct 2020 jar testing and bench testing, Implementation 2021	Jar testing will be conducted to evaluate the potential addition of polymer at the MBBR effluent to aid in settling. Bench testing will subsequently be conducted to validate jar testing. If found effective, the polymer feed will be implemented in 2021. The polymer system could further aid in limiting solids accumulation to the east (upstream) end of Lagoon 2.

Table 2: Phase B Lagoon Dredging and Ammonia Management Plan

Step No.	Recommended Improvement	Completion Status	Estimated Completion Date	Notes
Phase B – Ongoing Dredging and Ammonia Management				
B1	Annual Dredging of Lagoon 2 (and Lagoon 3, if required)		Annually, starting April 2021, and concluding May 31 each year	Lagoon 2 will be dredged annually as early as practicable in spring, and will conclude by May 31 each year to minimize the amount of sludge in the lagoons during July-August when the permit limits for ammonia are lowest for the facility and the bioactivity (digestion) is the highest in the lagoons. Lagoon 3 will be dredged when needed as required by annual sludge depth testing. Dredging will be triggered by average sludge depths greater than 1 foot.
B2	DO Management		Annually, starting in May	The DO levels in Lagoon 2 will be increased to 4-6 mg/L in May/June to facilitate nitrification in the lagoon. Additionally, DO levels greater than 2.0 mg/L will be maintained in Lagoon 3 over the summer months to facilitate additional nitrification in the polishing Lagoon.
B3	Alkalinity Management		Annually, starting in May	Caustic will be monitored and fed at the MBBR effluent channel to ensure a sufficient alkalinity going in to Lagoon 2 (>150 mg/L). Sampling points are specified in Figure 2.
B4	Sludge Depth Testing		Biannually Prior to spring dredging, again in fall.	Sludge depth testing will be performed annually before and after spring dredging in Lagoons 2. Sludge depth monitoring will be performed periodically in Lagoon 2 throughout the summer to provide improved data regarding sludge accumulation. Sludge depth testing will be performed again each fall, and include testing of Lagoon 2 and Lagoon 3. If average sludge accumulation in excess of 1 foot is detected in fall, a second fall dredging event will be triggered.



Chemical Addition Points			
Point No.	WWTF Location	Chemical	Notes
1	MBBR Influent Channel	Caustic	Caustic feed point to increase alkalinity to support nitrification in MBBR
2	MBBR Influent Channel	Defoamer	Defoamer can be added to reduce foaming. Required at startup/addition of new media/periods of plant upset
3	MBBR Effluent Channel/Weir	Caustic	Currently have a second feed point for caustic in order to increase alkalinity going into Pond 2
4	MBBR Effluent Channel/Weir	Polymer	Polymer addition point to facilitate solids settling in secondary clarifiers (future) or in Pond 2. Bench testing of polymer to be done in Fall 2020 to evaluate polymer use to settle solids quickly in 'confined' area at beginning of Pond 2.

Monitoring and Sampling Protocol								
Testing Parameter	Sampling Location							
	A - WWTF Influent	B - MBBR Effluent	C - Pond 2 Influent	D - Pond 2 Middle	E - Pond 2 Effluent	F - Pond 3 Influent	G - WWTF Effluent	H - Receiving Channel
cBOD ₅ , mg/l	--	1/month	--	--	--	--	--	--
TSS, mg/l	--	1/month	--	--	--	--	--	--
TKN, mg/l	1/month	1/month	--	--	--	--	--	--
NH ₃ -N, mg/l	1/wk	1/wk	1/wk	1/wk	1/wk	1/wk	1/wk	1/wk
Alkalinity, mg/l	1/wk	1/wk	1/wk	1/wk	1/wk	1/wk	1/wk	--
DO, mg/l	1/wk	1/wk	1/wk	1/wk	1/wk	1/wk	1/wk	--
pH	1/wk	1/wk	1/wk	1/wk	1/wk	1/wk	1/wk	1/wk
Temp, °C	1/wk	1/wk	1/wk	1/wk	1/wk	1/wk	1/wk	1/wk

Map Legend	
	Primary Process Flow Path
	Dredged Solids Line
	Sludge Depth Testing Point



**CITY OF PALMER
WASTEWATER TREATMENT FACILITY
DREDGING & AMMONIA MANAGEMENT PLAN**

EXISTING SITE LAYOUT
NOT TO SCALE

DATE
JUNE 2020

FIGURE

2

2.1 Additional Plan Details and Specifications

2.1.1 Dredging Operations

Dredging shall be accomplished in April-May and concluded no later than May 31 every year as specified in Tables 1 and 2 and described in more detail in the Solids Management Plan (Appendix A) for the facility. Sludge depth will be measured, as described in the SMP, in both lagoons before and after dredging each year to determine the effectiveness of the dredging operation.

2.1.2 Dredging Contingency Plan

The city's existing dredge is in good condition. The dredge has been well maintained, and the City is proactively addressing maintenance needs of the unit. The City intends to purchase wear parts for the dredge to have them available on the shelf in Palmer both for proactive maintenance and for repairs as needed. The City of Palmer will purchase an inventory of wear parts for the dredge in the winter of 2020/2021 to maintain on-hand at the facility. These parts will be available on-site for spring 2021 dredging operations. In the event of a mechanical failure, a backup dredge can be brought in to continue dredging operations while the primary dredge is repaired. This will reduce the turn-around time required to address mechanical issues and reduce dredge downtime.

In the event of failure of both the primary dredge and a backup dredge, the City can hire a dredging contractor to provide dredging services. The City has established contact with Merrell Bros. Inc. based in Indiana and has obtained price quotes for dredging services. Merrell Bros. has experience working in Alaska including water and sewer projects in Seward, North Pole, Dillingham, and Bethel. Merrell Bros is familiar with the logistics required to mobilize equipment to work in Alaska. This will ensure dredging operations specified in this plan proceed on schedule each year in April and May.

2.1.3 Summer Operation of Lagoons

In addition to annual dredging of Lagoon 2 to minimize the amount of solids in the bottom of the lagoon, it will be important to operate the lagoons in a manner that creates the most favorable conditions to achieve nitrification. Limiting the amount of solids in the lagoon is important as ammonia is released when the solids are digested. If nitrification activity in the lagoons is sufficient (along with sufficient alkalinity and dissolved oxygen to support nitrification), the lagoons may effectively nitrify and keep ammonia concentrations low. If the rate of ammonia release from digestion is faster than the rate of nitrification, ammonia will accumulate and increase across the lagoons. The following sections detail operational targets to maintain especially over the summer months when the permit limits for ammonia are lowest for the facility and the bioactivity (digestion) is the highest in the lagoons. Also, each year around May-June the DO levels in Lagoon 2 will be increased to 4-6 mg/L to facilitate nitrification in the lagoon. Additionally, alkalinity (caustic) will be introduced at the MBBR influent channel and monitored at the MBBR effluent to ensure a sufficient alkalinity going in

to Lagoon 2. A target alkalinity of 150 mg/L at the beginning of Lagoon 2 will be maintained to facilitate nitrification in Lagoon 2. Additionally, ammonia and alkalinity levels will be monitored in Lagoon 3 and alkalinity (caustic) added as needed at the MBBR effluent to facilitate additional nitrification in Lagoon 3.

2.1.3.1 Operational Set Points and Guidelines

The following operational targets will be maintained to facilitate nitrification in Lagoons 2 and 3 from May 1 to October 31 annually:

Table 3: Operational Set Points

Operational Set Points		
Parameter	Target	Notes
Temperature	>8°C	While not in operators' control, should be monitored with other set points to gauge ability of lagoon to nitrify.
Alkalinity	150 mg/l	Target alkalinity at the beginning of each lagoon to ensure alkalinity is not limiting nitrification.
Dissolved Oxygen	4-6 mg/l	Target DO throughout Lagoons 2 and 3 to create aerobic conditions for nitrification.
Detention time Lagoon 2	10 days	Assumes dredging completed
Detention time Lagoon 3	19 days	Assumes dredging completed

2.1.3.2 Chemical Feed Systems

The PWWTF has chemical feed systems for caustic, polymer, and defoamer.

Table 4: Available Chemical Addition Points

Chemical Addition Points			
Point No.	WWTF Location	Chemical	Notes
1	MBBR Influent Channel	Caustic	Caustic feed point to increase alkalinity to support nitrification in MBBR
2	MBBR Influent Channel	Defoamer	Defoamer can be added to reduce foaming. Required at startup/addition of new media/periods of plant upset
3	MBBR Effluent Channel/Weir	Caustic	Currently have a second feed point for caustic in order to increase alkalinity going into Lagoon 2. Should feed caustic just prior MBBR effluent weir to meet alkalinity setpoint at the beginning of Lagoon 2.

4	MBBR Effluent Channel/Weir	Polymer	Polymer addition point to facilitate solids settling in secondary clarifiers (future) or in Lagoon 2. Bench testing of polymer to be done in Fall 2020 to evaluate polymer use to settle solids in the baffled area at beginning of Lagoon 2.
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2.1.4 Monitoring and Sampling Protocol

Regular performance testing shall monitor performance of the facility annually, and specifically the lagoons through the summer months from May 1 to October 31. Samples shall be taken be at the locations indicated on Figure 2. The follow chart shows the testing parameters and frequency for each location.

Table 5: Lagoon Sampling Parameters

Monitoring and Sampling Protocol								
Testing Parameter	Sampling Location							
	A - WWTF Influent	B - MBBR Effluent	C - Lagoon 2 Influent	D - Lagoon 2 Middle	E - Lagoon 2 Effluent	F - Lagoon 3 Influent	G - WWTF Effluent	H - Receiving Channel
cBOD ₅ , mg/l	--	1/month	--	--	--	--	--	--
TSS, mg/l	--	1/month	--	--	--	--	--	--
TKN, mg/l	1/month	1/month	--	--	--	1/month	--	--
NH ₃ -N, mg/l	1/wk	1/wk	1/wk	1/wk	1/wk	1/wk	1/wk	1/wk
Alkalinity, mg/l	1/wk	1/wk	1/wk	1/wk	1/wk	1/wk	1/wk	--
DO, mg/l	1/wk	1/wk	1/wk	1/wk	1/wk	1/wk	1/wk	--
pH	1/wk	1/wk	1/wk	1/wk	1/wk	1/wk	1/wk	1/wk
Temp, °C	1/wk	1/wk	1/wk	1/wk	1/wk	1/wk	1/wk	1/wk

Additional Notes on Sampling Location and Frequency

All sampling indicated in Table 5 above shall be completed in addition to the regular sampling completed by the COP for permit compliance.

- All samples within lagoons should be taken by boat, near the center of the lagoons.
- Sample location H is located in the small receiving channel at a point downstream of the outfall but prior to the confluence with the Matanuska River. The sample location point is located at 61.559765, -149.110130.
- Gather and review the operational data and monitoring monthly to verify performance of the system.

- At the end of each year of operation in the current configuration, the City will incorporate the results of the lagoon dredging, along with the performance data collected by COP WWTF staff over the year and present the findings in an updated Performance Testing Report.

3 Summary and Conclusions

The City intends to remove/dredge solids from Lagoons 2 and 3 on an annual basis to minimize the accumulation of solids and the potential for sludge digestion/ammonia release to ammonia levels greater than the permit effluent limits. Both Lagoons 2 and 3 will be dredged annually between April-May to minimize the amount of sludge in the lagoons during July-August when the permit limits for ammonia are lowest for the facility and the bioactivity (digestion) is the highest in the lagoons. Also, each year around May-June the DO levels in Lagoon 2 will be increased to 4-6 mg/L to facilitate nitrification in the lagoon. Additionally, caustic will be fed at the MBBR influent channel and monitored at the MBBR effluent to ensure a sufficient alkalinity going in to Lagoon 2. A target alkalinity of 150 mg/L at the beginning of Lagoon 2 will be maintained to facilitate nitrification in Lagoon 2.



Solids Management Plan Palmer Wastewater Treatment Facility

Palmer, Alaska

October 12, 2020 (Revised December 2, 2020)



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Acronyms and Abbreviations

BOD ₅	5-day Biochemical Oxygen Demand
DO	Dissolved Oxygen
gpm	Gallons Per Minute
HMI	Human Machine Interface
mg/L	Milligrams per Liter
mgd	Million Gallons per Day
mL	Milliliters
NH ₄	Ammonia (aqueous)
NPW	Non-Potable Plant Water
PDPS	Plant Drain Pump Station
PICS	Process Instrumentation and Control System
PLC	Programmable Logic Controller
PPD	Pounds Per Day
PWWTF	Palmer Wastewater Treatment Facility
SCADA	Supervisory Control and Data Acquisition
TSS	Total Suspended Solids
UV	Ultraviolet Light

1 Introduction

This document establishes the Solids Management Plan (SMP) for the Palmer Wastewater Treatment Facility (PWWTF). This document will establish the basis for future development of formal Standard Operating Procedures (SOPs) to be completed by January 31, 2021. HDR has reviewed and analyzed performance data, engineering drawings, and recent test results in the development of this plan.

The City of Palmer (City) currently manages solids on site at the facility. Dredged solids from Lagoons 2 and 3 are transferred to an on-site sludge drying area west of Lagoon 3. Sludge dries (through evaporation) typically for one year before it is further stabilized through lime addition. Dried, limed sludge is removed, mixed with topsoil, and used as fill on the WWTP site. This Plan outlines the roadmap for continued operation of the existing solids management process and outlines a landfill disposal contingency plan.

1.1 Regulatory Background

The PWWTF does not currently have a solids management permit and operates its solids management activities under NPDES Permit No. AK-002249-7. The NPDES permit specifies that EPA Region 10 separates wastewater and sludge permitting, but that no separate sludge-only permit has been issued to date. The permit notes:

“Until future issuance of a sludge-only permit, sludge management and disposal activities at the Palmer WWTP continue to be subject to the national sewage sludge standards at 40 CFR Part 503 and any requirements of the State’s biosolids program. The Part 503 regulations are self-implementing, which means that facilities must comply with them whether or not a permit has been issued.” – PWWTF NPDES Permit.

The Clean Water Act Amendments of 1987 required the EPA to develop new regulations pertaining to sewage sludge and solids. In February, 1993, EPA published 40 CFR Part 503 (i.e., Part 503). The Part 503 Rule is a complex, risk-based assessment of potential environmental impacts of pollutants that may be present in solids (USEPA, 1995). These guidelines regulate pollutant and pathogen concentrations as well as vector attraction reduction (VAR).

The Part 503 Rule applies to various dried solids usage and disposal routes, including placement in or on surface disposal sites. Surface disposal sites such as that used at PWWTF are subject to Subpart C (§§ 503.20 - 503.28) of the Part 503 rules. The general provisions of the rules provide basic requirements for solids applied to land including pollutant limits, management practices, operational standards, and monitoring, record keeping and reporting standards.

Based on correspondence with ADEC in June of 2020, the City of Palmer is under the understanding that a State-issued solids handling permit is not required for on-site treatment and disposal at this time and will not be required until solids are removed/disposed of off-site.

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As part of this Solids Management Plan, the City has established a Biosolids Management and Testing plan to characterize sludge prior to land application in compliance with CFR Part 503 regulations.

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2 Solids Management Plan

2.1 Current On-Site Disposal Practices

The City purchased a floating dredge in 2003 for the purposes of periodically removing the sludge and settled solids from the lagoons. Sludge is pumped to a sludge drying area located to the west of Lagoon 3. The current sludge drying area is approximately 82,000 square feet in size with a usable area of around 50,000 square feet. The drying area is surrounded with 8-10 foot high berms to provide containment of the drying area. Sludge is typically allowed to dry (through evaporation) for one year before it is further stabilized through lime addition in compliance with Part 503 Subpart C regulations. Lime is metered out by hand shoveling and then mixed using heavy equipment. Dried, limed sludge is removed, mixed with topsoil, and used as fill on the WWTP site. The facility layout and solids management process is presented in Figure 1.

As depicted in Figure 1, the dredge pumps solids through a 6" PVC line that runs along the north and west side of Lagoon 2. The PVC dredged solids line features wye attachment points every 40 feet to facilitate dredging operations. Pumped solids from this line are transferred via an 8 inch ductile iron line to the sludge drying area. Existing supplies of lime and topsoil are stored at the sludge drying area as specified in Figure 1.

Previously, settled sludge was dredged and pumped from the lagoons approximately once every five years. Dredging was a challenging task due to the presence of insulated cover panels on the lagoon. Infrequent dredging efforts resulted in low usage of the sludge drying area. The insulated covers were removed in fall of 2019 to facilitate regular dredging. Prior to removal of the insulated covers, the last known dredging of Lagoon 2 was in 2015/2016.

The PWWTF Lagoon Dredging and Ammonia Management Plan has identified excess solids accumulation in Lagoon 2 as a key contributor to ammonia exceedances in effluent during summer months. The plan specifies annual dredging of Lagoon 2 in addition to dredging of Lagoon 3 as needed based on measured sludge depths. Regular lagoon dredging will increase the capacity demands on the dredging equipment, piping, and on the sludge drying and fill areas.

Figure 1: Palmer WWTF Site Layout and Solids Management Plan



**CITY OF PALMER
WASTEWATER TREATMENT FACILITY
SOLIDS MANAGEMENT PLAN**

EXISTING SITE LAYOUT
NOT TO SCALE

DATE	JUNE 2020
FIGURE	1

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2.2 Existing Equipment

2.2.1 Dredging Equipment

The City of Palmer purchased the current dredge in 2003 to aid in periodic solids removal from the lagoons. The dredge is stored in a dedicated storage building north of Lagoon 2. The dredge has been well maintained, and the City is proactively addressing maintenance needs of the unit. The City intends to maintain an inventory of readily available wear parts for the dredge. Dredge specifications are provided in Table 1 and the dredge is pictured in Figure 2.

Table 1: Palmer WWTF Dredge Specifications

Item	Specification
Dredge Model	LWT Pit Hog RUNT Dredge
Weight	5,800 lbs
Dimensions (LxWxH)	18' x 8'10" x 6'
Pump Model	LWT Pit Hog 950 Chopper Pump
Pump Type	Centrifugal, Chopper Impeller Pump
Pump Design Point	700 GPM, 40 FT Head
Pump Power	50 HP

Figure 2: LWT Pit Hog RUNT Dredge



2.2.2 Sludge Depth Measurement

The City currently uses a 'Sludge Judge' for measurement of sludge depth in the lagoons. Measurements are taken from a boat to develop a grid across the lagoon(s). Sludge depth testing will be performed annually as specified in the Lagoon Dredging and Ammonia Management Plan.

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2.2.3 Dredged Solids Line

Dredging is facilitated by the dredged solids line running along the north side of Lagoon 2. Specifications for the dredged solids line are provided in Table 2.

Table 2: Palmer WWTF Dredged Solids Line

Item	Specification
Line Length	850 FT PVC
Line Material	6" PVC
Attachments	Wye Connections, every 50 FT
Connection	Connects to 200 FT of 8" DI line routed to sludge drying area

Figure 3 (Clockwise from top left): 6" PVC Dredged Solids Line along the bank of Lagoon 2; Wye connection detail (typical); Lime deposit adjacent to sludge drying area; and connection from 6" PVC Dredged Solids Line to 8" DI Dredged Solids Line (buried).



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2.2.4 Sludge Drying Area

The current sludge drying area is located to the west of Lagoon 3. The current drying area is roughly 82,000 SF and provides 50,000 SF of useable drying space. The drying area is surrounded with berms roughly 8-10 feet in height that provide containment and an additional physical barrier between the drying area and the nearby Matanuska River. The southern end of the current drying area is located approximately 200 linear feet from the unnamed tributary below or approximately 1,000 linear feet from the main channel of the Matanuska River. The sludge drying area is pictured in Figure 4.

Table 3: Palmer WWTF Sludge Drying Area

Item	Specification
Current Drying Area	82,000 SF (50,000 SF Useable)
Additional Drying Area	75,000 SF firing range, adjacent to current drying area
2020 Solids Loading	230 Dry Tons (8,300 cubic feet)
Drying Time	1 Year
Treatment	Lime, stored and mixed on-site
Disposal	Mixed with topsoil, scraped, and used for on-site fill and grading.
Projected Bed Capacity	50 years (25 years at current bed + 25 years at additional bed)

Figure 4: Current Sludge Drying Area with Berms Providing Containment



There is an additional potential expansion area in the vicinity of the current drying area that could be used for a future expansion if more drying area is required. This expansion area is on facility property, but is currently used as a firing range for the Palmer Police Department and Federal Bureau of Investigation (FBI). The presence of bullets in the soil matrix may

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indicate lead contamination. If levels exceeded allowable limits, RCRA requirements would be triggered and soil would need to be removed from the ground in the area. If the City wishes to pursue expansion of the drying area into the firing range, a firing range characterization study is recommended to be completed in order to determine the level of contamination in the area and estimate the costs to close/cleanup the range. The first step for characterization of the range would be to develop a history (length of usage, calibers used, training exercises conducted, configuration changes, etc) to help guide the characterization.

Figure 5: Potential Future On-Site Expansion Area for Sludge Drying (Current Firing Range)



2.3 Capacity Analysis

The current sludge drying area has been used successfully and has not presented capacity issues for the sporadic dredging operations to date. With the establishment of the PWWTF Lagoon Dredging and Ammonia Management Plan, regular annual dredging operations will increase solids loading on the drying area. Estimates of current dredged solids loading, future dredged solids loading, and a capacity analysis are presented in this section.

2.3.1 Estimated 2020 Dredged Solids

The estimated quantity of dredged solids expected in 2020 as result of current and ongoing dredging operations to address the multiyear accumulations of sludge in Lagoon 2 is provided in Table 4.

Table 4: 2020 Dried Sludge Quantity Estimates

Description	Specification
Dry lbs. of sludge	468,000 lbs/year
Dry tons of sludge	234 tons/year

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Volume (@2% solids)	280 cubic yards
---------------------	-----------------

These 2020 estimates are based on the following assumptions:

- Estimated average of 3 FT of solids depth in Lagoon 2 (as measured by COP staff)
- Approximate area of 125,000 SF on bottom of Lagoon 2
- Approximate 2% solids concentration for the dredged material

2.3.2 Estimated Future Annual Dredged Solids

The estimated quantity of future dredged solids as result of annual dredging operations specified in the PWWTF Lagoon Dredging and Ammonia Management Plan is provided in Table 5.

Table 5: Future Dried Sludge Quantity Estimates

Description	Specification
Dry lbs. of sludge	380,000 lbs/year
Dry tons of sludge	190 tons/year
Volume (@2% solids)	225 cubic yards

These future estimates are based on the following assumptions:

- Approximate solids concentration of MBBR effluent is 200-300 mg/l
- Annual average flow through WWTF of 0.5 MGD

2.3.3 Current Drying Bed Capacity Analysis

Based on the estimated 2020 dredged solids quantity of 234 tons and 50,000 SF of usable space for the drying beds, the expected depth of solids to be added to the drying bed in 2020 is approximately two inches, not including lime. With annual application of lime and scraping of the beds, the existing beds provide sufficient capacity to handle these demands.

Table 6: Estimated 2020 Drying Bed Depth

Description	Specification
2020 Drying Bed Depth	<6" solids depth/year

2.3.4 Future Drying Bed Capacity Analysis

Based on the estimated solids production rate of 190 tons/year after 2020 the expected depth of solids to be added to the drying bed as result of annual dredging operations is less than two inches per year.

The long term plan for the Palmer WWTF includes the installation of secondary clarifiers. The solids production rate from secondary clarifiers is projected to approximately match that of the

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planned annual lagoon dredging (the secondary clarifiers will replace Lagoon 2 to provide solids settling). With installation of the secondary clarifiers, the expected depth of solids added annually will remain less than two inches per year. There are no anticipated capacity issues for on-site disposal with either regular annual dredging or future use of secondary clarifiers.

Table 7: Estimated Future Drying Bed Depth

Description	Specification
Future Drying Bed Depth	<6" solids depth/year

2.4 Biosolids Monitoring

2.4.1 Dried Sludge Decant

An extensive review of record drawings does not indicate the existence of a lining in the current sludge drying area. On the basis of increased dredging beginning in the summer of 2020, the City will conduct a screening evaluation in the fall of 2020 and summer of 2021 along the riverbank to determine if there is an issue with decant infiltration from the sludge drying area. As the City continues to use the current sludge area for annual sludge drying, screening evaluation will continue along the riverbank while newly dredged solids are drying to determine if there is an issue. More extensive investigation will be performed if screening evaluations determine there is a potential issue.

2.5 Solids Disposal Alternative - Landfill Disposal

The PWWTF is not projected to run out of solids disposal space on-site within the planning horizon (25 years for the current disposal area). However, if future capacity issues do arise, or if other unforeseen considerations preclude disposal on-site, the backup plan is for solids disposal at the Matanuska Susitna Borough Central Landfill. Landfill disposal of solids generated at the Palmer WWTF would likely trigger the requirement for a DEC Permit.

2.5.1 Regulatory Considerations for Disposal of Solids at Landfill

Biosolids that are land filled or used as a cover material at a landfill are subject to federal requirements in 40 CFR Part 258. In addition, in order to co-dispose sewage solids with municipal solid waste at the CPL the following requirements described in 18 AAC 60.365 must be met:

1. The sewage solids must be free of hazardous wastes and polychlorinated biphenyls (PCBs) defined in 40 CFR 761.3.
2. The sewage solids must not contain "free liquids" as defined by EPA Method 9095 (Paint Filter Test).
3. The sewage solids must meet the vector reduction requirement in accordance with 40 CFR 503.33(b)(11); OR must be treated and stabilized to meet Class A or Class B pathogen reduction requirements in accordance with 40 CFR 503.32, AND vector

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attraction reduction requirements of 40 CFR 503.33 (b)(1)-(10), as adopted by reference in 18 AAC 60.505.

Correspondence with ADEC in June of 2020 indicates that off-site disposal of solid would also trigger the requirement for a DEC Permit.

2.5.2 Landfill Disposal Cost

It is anticipated that the cost of disposal of solids at the landfill would be substantially greater than the cost of the current solids disposal on-site at the PWWTF. Additionally, it is anticipated that landfill disposal would be more operationally intensive than on-site disposal. For these reasons no specific cost analysis was developed for the landfill disposal alternative.

3 Summary and Recommended Plan

This document provides the Solids Management Plan for the Palmer WWTF. The analysis indicates that the current on-site solids drying area and disposal areas provide adequate capacity to meet Palmer's current and future needs. In the near term, it is recommended that the City continue to use the existing on-site sludge drying area west of Lagoon 3 to dry sludge. If desired, the sludge drying area can be subdivided, but sludge should be applied at depths no greater than six inches annually to promote optimal drying. Sludge should be dried for a one year period before applying lime, mixing with topsoil, and using as on-site fill. In the long term, it is recommended the City repurpose one of the existing lagoons to provide a fully lined location for on-site sludge dewatering and disposal.

This document additionally establishes a Biosolids Monitoring and Testing Plan that will be implemented in the summer of 2021.

This study lastly evaluates the alternative of sludge disposal at the Matanuska Susitna Borough Central Landfill. It was determined that this alternative would be more operationally intensive, more costly, and would trigger additional permitting requirements.

Appendix B. APDES Permit No. AK-002249

United States Environmental Protection Agency
Region 10
1200 Sixth Avenue
Seattle, Washington 98101

**Authorization to Discharge Under The
National Pollution Discharge Elimination System**

In compliance with the provisions of the Clean Water Act, 33 U.S.C. §1251 *et seq.*, as amended by the Water Quality Act of 1987, P.L. 100-4, the “Act”, the

**City of Palmer
Wastewater Treatment Plant**

is authorized to discharge from a facility located in Palmer, Alaska, at the following location:

Outfall	Receiving Water	Latitude	Longitude
001	Matanuska River	61° 33’ 30”N	149° 06’ 20”W

in accordance with the discharge point, effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective January 1, 2007

This permit and the authorization to discharge shall expire at midnight, December 31, 2011

The permittee shall reapply for a permit reissuance on or before May 4, 2011, 180 days before the expiration of this permit if the permittee intends to continue operations and discharges at the facility beyond the term of this permit.

Signed this 5th day of December, 2006,

 /s/ Michael F. Gearheard
Michael F. Gearheard, Director
Office of Water and Watersheds

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The following table summarizes some of the action items the permittee must complete and/or submit to EPA/ADEC during the term of the permit:

<u>Action Item</u>	<u>Due Date</u>
1. Discharge Monitoring Reports (DMRs)	DMRs are due monthly and must be postmarked by the 15 th day of the month following the monitoring month (see Part III.B.).
2. Operation and Maintenance (O&M) Plan	The Plan must be developed and implemented by March 30, 2007 (see Part II.A.). The Plan must be kept on site.
3. Quality Assurance Plan (QAP)	The Plan must be developed and implemented by March 30, 2007(see Part II.B.). The Plan must be kept on site.
4. Report of Progress	The Reports must be submitted by January 1, 2008, 2009, 2010 and 2011 (see Part I.C.).
5. Ammonia Effluent Limits	Compliance with ammonia effluent limits must be achieved by November 31, 2011 (see Part I.C.).
6. NPDES Application Renewal	The application must be submitted no later than May 4, 2011, or at least 180 days before expiration (see Part V.B.).
7. Expanded Effluent Testing, Whole Effluent Toxicity (WET) Testing & Surface Water Monitoring Report	Reports must be submitted with the NPDES renewal application by July 4, 2011 (see Part I.B., C. & E).
8. Update Industrial Waste Survey	Complete by July 3, 2007 (see Part II.C.)

I. Limitations and Monitoring Requirements

A. Discharge Authorization

During the effective period of this permit, the permittee is authorized to discharge from outfall 001 to the Matanuska River, within the limits and subject to the conditions set forth herein. This permit authorizes the discharge of only those pollutants resulting from facility processes, waste streams, and operations that have been clearly identified in the permit application process.

B. Effluent Limitations and Monitoring

1. The permittee must limit and monitor discharges from outfall 001 as specified in Table 1 below. All figures represent maximum effluent limits unless otherwise indicated. The permittee must comply with the effluent limits at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions of this permit.
2. The permittee must not discharge any floating solids, visible foam in other than trace amounts, oily wastes or petroleum hydrocarbons that produce a sheen, film or discoloration on the surface of the receiving water or adjoining shorelines.
3. Removal Requirements for BOD₅ and TSS: The monthly average effluent concentration for BOD₅ and TSS must not exceed 15 percent of the monthly average influent concentration. Percent removal of BOD₅ and TSS must be reported on the Discharge Monitoring Reports (DMRs). For each parameter, the monthly average percent removal must be calculated from the arithmetic mean of the influent concentration values and the arithmetic mean of the effluent concentration values measured during that month.
4. The permittee must collect influent samples from the influent stream prior to any treatment system and influent monitoring is required to be performed within same 24-hour period as effluent monitoring.
5. The permittee must collect effluent samples from the effluent stream after the last treatment unit prior to discharge into the receiving water.
6. Minimum Levels. For all effluent monitoring, the permittee must use methods that can achieve a minimum level (ML) less than the effluent limitation, to the extent practicable.
7. The permittee must report on the monthly DMR whether chlorine was added to the effluent for total or partial disinfection during the calendar month. If chlorine is added, the permittee must comply with the applicable conditional

residual chlorine effluent limits and monitoring requirements in Table 1.

8. The permittee must perform the expanded effluent testing required by Part D of NPDES application Form 2A (EPA Form 3510-2A, revised 1/99). The permittee must submit the results of this testing with its application for renewal of this NPDES permit. To the extent that effluent monitoring required by other conditions of this permit satisfies this requirement, these samples may be used to satisfy the requirements of this paragraph.

Table 1. Effluent and Influent Limits and Monitoring Requirements

Parameter	Units	Effluent and Influent Limits			Monitoring Requirements		
		Average Monthly Limit	Average Weekly Limit	Maximum Daily Limit	Monitoring Location	Monitoring Frequency	Sample Type
Ammonia (as N) ¹	mg/L	8.7	---	18.5	effluent	1/week	grab
	lbs/day	68.9	---	146.6			
Ammonia (as N) ¹ (July & August)	mg/L	1.7	---	3.6	effluent	1/week	grab
	lbs/day	13.5	---	28.5			
BOD ₅	mg/L	30	45	60	effluent and influent	1/week	24-hour timed composite
	lbs/day	258	357	475			
	% Removal	See I.B.3.					
DO	mg/L	≥2 at all times			effluent	1/month	grab
Fecal Coliform Bacteria ¹	FC/100 mL	100 ²	---	200	effluent	1/week	grab
Fecal Coliform Bacteria ¹ (July & August)	FC/100 mL	20 ²	---	40	effluent	1/week	grab
Flow	mgd	---	---	0.95	effluent or influent	continuous	recording
pH	s.u.	6.5-8.5 at all times			effluent	5/week	grab
TSS	mg/L	30	45	60	effluent and influent	1/week	24-hour timed composite
	lbs/day	258	357	475			
	% Removal	See Part I.B.3.					
Residue ⁵	---	See Part I.B.2.			effluent	1/week	visual
Petroleum Hydrocarbons ⁵	---	See Part I.B.2.			effluent	1/week	visual
Total Residual Chlorine ^{1,3}	µg/L	1.7	---	3.4	effluent	2/week	grab
	lbs/day	0.013	---	0.027			
Temperature	C°	---	---	---	effluent	5/week	grab
Whole Effluent Toxicity	TU _C	---	---	---	effluent	3x/5 years ⁴	grab

Table 1. Effluent and Influent Limits and Monitoring Requirements

Parameter	Units	Effluent and Influent Limits			Monitoring Requirements		
		Average Monthly Limit	Average Weekly Limit	Maximum Daily Limit	Monitoring Location	Monitoring Frequency	Sample Type
Expanded Effluent Testing	---	---	---	---	effluent	3x/5 years ⁴	grab

Footnotes:

1. Reporting is required within 24-hours if the maximum daily limit is violated.
2. Based on the geometric mean of all samples taken in that month.
3. The effluent limits for chlorine is not quantifiable using EPA approved analytical methods. The permittee will be in compliance with the effluent limits provided the total chlorine residual is at or below the compliance evaluation or minimum level of 0.100 mg/L (100µg/L). Limit and monitoring requirements only apply when chlorine disinfection is being used.
4. To be performed in August 2007, May 2008 and January 2009. Expanded effluent testing and WET testing must occur on the same day, and results reported with the application for renewal.
5. Residue and petroleum hydrocarbon monitoring (see Part I.B.2.) must occur at Outfall 001.

C. Schedule of Compliance

1. The permittee must achieve compliance with ammonia limitations (September through June) of Part 1.B. (Table 1) by November 31, 2011. In the interim, the following ammonia effluent limitations must be met:

Average Monthly Limit: 34 mg/L (269 lbs/day)
Maximum Daily Limit: 71 mg/L (562 lbs/day)

2. Until compliance with the ammonia effluent limits are achieved, the permittee must submit annual Report of Progress which outlines the progress made towards reaching the compliance dates. A 1-year, 2-year, 3-year, and 4-year Report of Progress must be submitted by January 1, 2008, 2009, 2010 and 2011. At a minimum, the Reports of Progress must include:
 - a) An assessment of the previous 1 year of ammonia data, and a comparison to effluent limitations.
 - b) A discussion of progress made towards meeting the effluent limitations.
 - c) Further actions and milestones targeted for the upcoming year.

D. Whole Effluent Toxicity Testing Requirements

The permittee must conduct chronic toxicity tests on effluent samples from outfall 001. Testing must be conducted in accordance with subsections 1 through 4, below.

1. Toxicity testing must be conducted as grab sampling, and must be performed on the same day as expanded effluent testing.
2. Chronic Test Species and Methods
 - a) A total of three chronic tests must be conducted: in January 2008, May 2009 and August 2010.
 - b) The permittee must conduct short-term tests with the water flea, *Ceriodaphnia dubia* (survival and reproduction test), and the fathead minnow, *Pimephales promelas* (larval survival and growth test).
 - c) The presence of chronic toxicity must be determined as specified in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Fourth Edition, EPA/821-R-02-013, October 2002.
 - d) The permittee shall identify and report the following endpoints:
 - a. The no observable effect concentration (NOEC)
 - b. Chronic toxicity units (TU_C)
 - c. The IC₂₅
 - d. The LC₅₀
3. Quality Assurance
 - a) The toxicity testing on each organism must include a series of five test dilutions and a control. Dilution series must be selected in accordance with *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Fourth Edition, EPA/821-R-02-013, October 2002.
 - b) All quality assurance criteria and statistical analyses used for chronic tests and reference toxicant tests must be in accordance with *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Fourth Edition, EPA/821-R-02-013, October 2002, and individual test protocols.
 - c) In addition to those quality assurance measures specified in the

methodology, the following quality assurance procedures must be followed:

- (i) If organisms are not cultured in-house, concurrent testing with reference toxicants must be conducted. If organisms are cultured in-house, monthly reference toxicant testing is sufficient. Reference toxicant tests must be conducted using the same test conditions as the effluent toxicity tests.
- (ii) If either of the reference toxicant tests or the effluent tests do not meet all test acceptability criteria as specified in the test methods manual, the permittee must re-sample and re-test within 14 days of receipt of the test results.
- (iii) Control and dilution water must be receiving water or lab water, as appropriate, as described in the manual. If the dilution water used is different from the culture water, a second control, using culture water must also be used. Receiving water may be used as control and dilution water upon notification of EPA and ADEC. In no case shall water that has not met test acceptability criteria be used for either dilution or control.

4. Reporting

- a) The permittee must submit the results of the toxicity tests with the application for permit renewal, no later than July 4, 2011
- b) The report of toxicity test results must include all relevant information outlined in Section 10, Report Preparation, of *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Fourth Edition, EPA/821-R-02-013, October 2002. In addition to toxicity test results, the permittee must report: dates of sample collection and initiation of each test, flow rate at the time of sample collection, and the results of expanded effluent testing as required in Part I. B.

E. Surface Water Monitoring

The permittee must conduct surface water monitoring in accordance with the following requirements. Surface water monitoring must begin within 30 days after the effect date of the permit and continue until the next permit issuance becomes effective. The program must meet the following requirements:

1. Monitoring stations must be established in the Matanuska River at the following locations:

- a) one location upstream of Outfall 001 in the actual discharge channel.
 - b) two locations downstream of the discharge at the edge of the mixing zone (or as close to the edge of the mixing zone as is practical due to site and access limitations).
2. Monitoring stations must be approved in writing by ADEC.
 3. To the extent practicable, surface water sample collection must occur on the same day as effluent sample collection.
 4. The flow rate must be measured as near as practicable to the time that other ambient parameters are sampled.
 5. Samples must be analyzed for the parameters listed in Table 2, and must achieve MLs that are equivalent to or less than those listed in Table 2. The permittee may request different MLs. The request must be in writing and must be approved by EPA. Once approved, these MLs supersede the maximum MLs in Table 2.
 6. Quality assurance/quality control plans for all the monitoring must be documented in the Quality Assurance Plan required under Part II. B., "Quality Assurance Plan".
 7. All surface water monitoring results must be submitted to EPA and ADEC with the application for permit renewal no later than July 4, 2011. This data shall be submitted in both hard copy and electronic (i.e., spreadsheet) format. At a minimum, the report must include the following:
 - a) Date of sample collection and analyses.
 - b) Results of sample analysis.
 - c) Relevant quality assurance/quality control (QA/QC) information.

Table 2. Receiving Water Monitoring Requirements

Parameter	Units	Sample Frequency	Sample Location	Sample Type	Maximum ML
Ammonia, total (as N)	mg/L	3/year ¹	downstream ⁴	grab	0.05
Ammonia, total (as N)	mg/L	1/month for 2 years 1/3 month thereafter	upstream	grab	0.05
DO	mg/L	3/year	downstream ⁴	grab	---
Fecal Coliform Bacteria (May 1 - September 31)	FC/100 mL	1/month ^{6,7}	upstream & downstream ⁴	grab	1.0
Fecal Coliform Bacteria (October 1 - April 30)	FC/100 mL	3/6 months ^{2,7}	upstream & downstream ⁴	grab	1.0

Table 2. Receiving Water Monitoring Requirements

Parameter	Units	Sample Frequency	Sample Location	Sample Type	Maximum ML
Flow	mgd or cfs and ft/sec.	1/month	upstream	grab	---
Hardness (as CaCO ₃)	mg/L	3/week ⁵	downstream	grab	10
pH	s.u.	3/year ³	upstream & downstream ⁴	grab	---
Residue	---	1/quarter ⁸	downstream ⁴	visual	---
Temperature	°C	3/year ³	upstream & downstream ⁴	grab	---

Footnote:

- 1 This monitoring shall occur during the months of February, May, and August.
- 2 During the 6-month period from October 1 – April 30, a total of 3 samples shall be collected. Each sampling event shall be approximately every other month.
- 3 This monitoring must occur on the same day as ammonia ambient monitoring.
- 4 See Part I.E.1.b. and I.E.2.
- 5 Sampling shall be conducted for one week during the months of February 2007 and August 2007.
- 6 During the 6-month period from May 1 – September 31, a total of 3 samples shall be collected, one in each of the following months: May, June, and September.
- 7 Sampling may be discontinued after two years if the results indicate that Alaska Water Quality Standards have not been exceeded. Sampling must resume if the method of disinfection is changed, and may also be discontinued after two years if water quality standards have not been exceeded on the outside edge of the mixing zone.
- 8 Quarterly sampling shall occur during the months of February, May, August, and November.

II. Special Conditions

A. Operation and Maintenance

1. In addition to the requirements specified in Section III.E. of this permit (Proper Operation and Maintenance), by March 30, 2007, the permittee shall review its operation and maintenance (O&M) plan and ensure that it includes appropriate best management practices (BMPs); the plan must be reviewed annually thereafter. BMPs include measures which prevent or minimize the potential for the release of pollutants to the Matanuska River. The O&M Plan shall be retained on site and made available to EPA and ADEC upon request.
2. The permittee shall develop or update a description of pollution prevention measures and controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in the O&M Plan shall reflect identified potential sources of pollutants at the facility. The description of BMPs shall address, to the extent practicable, the following minimum

components:

- a) Spill prevention and control;
- b) Optimization of chemical usage;
- c) Preventive maintenance program;
- d) Minimization of pollutant inputs from industrial users;
- e) Research, develop and implement a public information and education program to control the introduction of household hazardous materials to the sewer system; and
- f) Water conservation.

B. Quality Assurance Plan (QAP)

The permittee must develop a Quality Assurance Plan (QAP) for all monitoring required by this permit by March 30, 2007. Any existing QAP may be modified for use under this section. The QAP may be incorporated as part of the facilities O&M manual.

1. The QAP must be designed to assist in planning for the collection and analysis of effluent and receiving water samples in support of this permit and in explaining data anomalies when they occur.
2. Throughout all sample collection and data analysis activities, the permittee must use the EPA-approved QA/QC and chain-of-custody procedures described in *Requirements for Quality Assurance Project Plans* (EPA/QA/R-5) and *Guidance for Quality Assurance Project Plans* (EPA/QA/G-5). The QAP must be prepared in the format that is specified in these documents.
3. At a minimum, the QAP must include the following:
 - a) Details on the number of samples, type of sample containers, preservation of samples, holding times, analytical methods, analytical detection and quantitation limits for each target compound, type and number of quality assurance field samples, precision and accuracy requirements, sample preparation requirements, sample shipping methods, and laboratory data delivery requirements.
 - b) Map(s) indicating the location of each sampling point.
 - c) Qualification and training of personnel.
 - d) Names(s), address(es) and telephone number(s) of the laboratories used by or proposed to be used by the permittee.
4. The permittee is responsible for reviewing and updating the QAP to ensure all

material is still current and applicable.

5. The permittee must amend the QAP whenever there is a modification in sample collection, sample analysis, or other procedure addressed by the QAP.
6. Copies of the QAP shall be kept on site and shall be made available to EPA and/or ADEC upon request.

C. Pretreatment Requirements

1. The permittee must update the Sewer Use Ordinance to comply with current federal pretreatment regulations and guidance. A copy of the revised ordinance shall be kept on site and made available to EPA and/or ADEC upon request.
2. The permittee shall update the Industrial Waste Survey to ensure proper identification of non-domestic users subject to pretreatment standards. Such a survey shall be completed by July 3, 2007.
3. The permittee shall perform annual inspections, surveillance, and monitoring of non-domestic users to determine compliance with applicable pretreatment standards and requirements.
4. Under no circumstances shall the permittee allow introduction of the following wastes into the waste treatment system:
 - a) Wastes which will create a fire or explosion hazard in the treatment works;
 - b) Wastes which will cause corrosive structural damage to the treatment works, but in no case, wastes with a pH lower than 5.0, unless the works is designed to accommodate such wastes;
 - c) Solid or viscous substances in amounts which cause obstructions to the flow in sewers, or interference with the proper operation of the treatment works;
 - d) Wastewaters at a flow rate and/or pollutant discharge rate which is excessive over relatively short time periods so that there is a treatment process upset and subsequent loss of treatment efficiency;
 - e) Any pollutant, including oxygen demanding pollutants (e.g., BOD₅) released in a discharge of such volume or strength as to cause interference in the treatment works;

- f) Heat in amounts which inhibit biological activity in the treatment works resulting in interference, but in no case heat in such quantities that the temperature at the POTW exceeds 40 °C (104 °F) unless EPA Region 10, upon request of the POTW, approves alternate temperature limits;
 - g) Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;
 - h) Wastes which result in the presences of toxic gases, vapors, or fumes within the treatment works in quantities that may cause acute worker health and safety problems; and
 - i) Any trucked or hauled pollutants, except at discharge points designated by the treatment works.
- 5. The permittee must require any industrial user of its treatment works to comply with any applicable requirements of Sections 204(b), 307, and 308 of the CWA, including any requirements established under 40 CFR § 403.
 - 6. The permittee must require any industrial user of its treatment works to comply with applicable requirements in 40 CFR § 405 through 471.

D. Sludge Management Requirements

The permittee shall ensure that an updated biosolids permit application (Form 2S) is on file with the EPA.

E. Signage

- 1. **Outfall Location Signs.** The permittee must maintain a sign, or signs on the shoreline near the mixing zone and outfall line. The sign, or signs, shall:
 - a) state that treated domestic wastewater is being discharged, the name and owner of the facility, and the approximate location and size of the mixing zone;
 - b) inform the public that certain activities, such as the harvesting of shellfish for raw consumption and contact recreation should not take place in the mixing zone; and
 - c) give a contact telephone number for additional information.

III. Monitoring, Recording and Reporting Requirements

A. Representative Sampling (Routine and Non-Routine Discharges)

Samples and measurements must be representative of the volume and nature of the monitored discharge.

In order to ensure that the effluent limits set forth in this permit are not violated at times other than when routine samples are taken, the permittee must collect additional samples at the appropriate outfall whenever any discharge occurs that may reasonably be expected to cause or contribute to a violation that is unlikely to be detected by a routine sample. The permittee must analyze the additional samples for those parameters limited in Part I.B. of this permit that are likely to be affected by the discharge.

The permittee must collect such additional samples as soon as the spill, discharge, or bypassed effluent reaches the outfall. The samples must be analyzed in accordance with paragraph III.C. (“Monitoring Procedures”). The permittee must report all additional monitoring in accordance with paragraph III.D. (“Additional Monitoring by Permittee”).

B. Reporting of Monitoring Results

1. Effluent Monitoring Results: The permittee must summarize effluent monitoring results from Part I.B (Table 1) each month on the Discharge Monitoring Report (DMR) from (EPA No. 3320-1) or equivalent. Monitoring results greater than the minimum detection level (MDL) shall be reported as the actual value measured and monitoring results less than the MDL shall be reported as “[MDL value]”. The permittee must submit reports monthly, postmarked by the 15th day of the following month. The permittee must sign and certify all DMRs, and all other reports, in accordance with the requirements of Part V.E. of this permit (“Signatory Requirements”). The permittee must submit the legible originals of these documents to the Director, Office of Compliance and Enforcement, with copies to ADEC at the following addresses:

U.S. EPA Region 10
Attn: PCS Data Entry Team
1200 Sixth Avenue, OCE-133
Seattle, Washington 98101

Alaska Department of Environmental Conservation
Division of Air and Water Quality
555 Cordova Street
Anchorage, Alaska 99503

- a) **Surface Water Monitoring Results:** The permittee must summarize the results of all surface water monitoring as outlined in Part I.E. (Table 2) in a report to be submitted along with the application for permit renewal no later than May 4, 2011. This information shall be provide in both hard copy and electronic spreadsheet form, and submitted to EPA at the following address:

U.S. EPA Region 10
Attn: NPDES Permits Unit Manager
1200 Sixth Avenue, OWW-133
Seattle, Washington 98101

A copy of the surface water monitoring results must also be provided to ADEC.

C. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR 136, unless other test procedures have been specified in this permit or approved by EPA as an alternate test procedure under 40 CFR 136.5.

D. Additional Monitoring by Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136 or as specified in this permit, the permittee must include the results of this monitoring in the calculation and reporting of the data submitted on the DMR. Such increased frequency shall also be indicated.

Upon request by EPA, the permittee must submit results of any other sampling, regardless of the test method used.

E. Records Contents

Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements;
2. The individual(s) who performed the sampling or measurements;
3. The date(s) analyses were performed;

4. The individual(s) who performed the analyses;
5. The analytical techniques or methods used; and
6. The results of such analyses.

F. Retention of Records

1. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least five years from the date of the sample, measurement, report, or application. This period may be extended by request of the Director at any time. Data collected on-site, copies of DMRs, and a copy of this NPDES permit must be maintained on-site during the duration of activity at the permitted location.
2. The permittee is required under 40 CFR §503 to retain sludge records for a period of five years.

G. Twenty-four Hour Notice of Noncompliance Reporting

1. The permittee must report the following occurrences of noncompliance by telephone within 24 hours from the time the permittee becomes aware of the circumstances:
 - a) any noncompliance that may endanger health or the environment;
 - b) any unanticipated bypass that exceeds any effluent limitation in the permit (See Part IV.F., “Bypass of Treatment Facilities”);
 - c) any upset that exceeds any effluent limitation in the permit (See Part IV.G., “Upset Conditions”); or
 - d) any violation of a maximum daily discharge limitation for those toxic or hazardous pollutants identified within Table 1 of Part I.B.
 - e) any overflow prior to the treatment works, whether or not such overflow endangers health or the environment or exceeds any effluent limitation in the permit.
2. The permittee must also provide a written submission within five days of the time that the permittee becomes aware of any event required to be reported

under subpart 1 above. The written submission must contain:

- a) a description of the noncompliance and its cause;
 - b) the period of noncompliance, including exact dates and times;
 - c) the estimated time noncompliance is expected to continue if it has not been corrected; and
 - d) steps taken or planned to reduce, eliminate, and prevent re-occurrence of the noncompliance.
3. The Director of the Office of Compliance and Enforcement may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the NPDES Compliance Unit in Seattle, Washington, by phone, (206) 553-1846.
 4. Reports shall be submitted to the addresses in Part III.B (“Reporting of Monitoring Results”).

H. Other Noncompliance Reporting

The permittee must report all instances of noncompliance, not required to be reported within 24 hours, at the time that monitoring reports for Part III.B (“Reporting of Monitoring Results”) are submitted. The reports shall contain the information listed in Part III.G.2 of this permit (“Twenty-four Hour Notice of Noncompliance Reporting”).

I. Notice of New Introduction of Toxic Pollutants

The permittee must notify the Director of the Office of Water and Watersheds and ADEC of:

1. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to Sections 301 or 306 of the Act if it were directly discharging those pollutants; and
2. Any substantial change in the volume or character of pollutants being introduced into the POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
3. For the purposes of this section, adequate notice must include information on:

- a) the quality and quantity of effluent to be introduced into the POTW, and
 - b) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
4. The permittee must notify the Director of the Office of Water and Watersheds at the following address:

U.S. EPA Region 10
Attn: NPDES Permits Unit Manager
1200 6th Avenue, OWW-130
Seattle, WA 98101

J. Compliance Schedule

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date.

IV. Compliance Responsibilities

A. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application

B. Penalties for Violations of Permit Conditions

1. Civil and Administrative Penalties. Pursuant to 40 CFR Part 19 and the Act, any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed the maximum amounts authorized by Section 309(d) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently \$32,500 per day for each violation).
2. Administrative Penalties. Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any

of such sections in a permit issued under section 402 of this Act. Pursuant to 40 CFR 19 and the Act, administrative penalties for Class I violations are not to exceed the maximum amounts authorized by Section 309(g)(2)(A) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently \$11,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$32,500). Pursuant to 40 CFR 19 and the Act, penalties for Class II violations are not to exceed the maximum amounts authorized by Section 309(g)(2)(B) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently \$11,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$157,500).

3. Criminal Penalties.

- (a) Negligent Violations. The Act provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than 2 years, or both.
- (b) Knowing Violations. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both.
- (c) Knowing Endangerment. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case

of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the Act, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.

(d) False Statements. The Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both. The Act further provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

C. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with this permit.

D. Duty to Mitigate

The permittee must take all reasonable steps to minimize, or prevent, any discharge, or sludge use or disposal, in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

E. Proper Operation and Maintenance

The permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed, or used, by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and quality assurance procedures. This provision requires the operation of back-up or

auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

F. Bypass of Treatment Facilities

1. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2 and 3 of this Part.
2. Notice.
 - a) Anticipated Bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Director, if possible, at least 10 days before the date of the bypass.
 - b) Unanticipated Bypass. The permittee shall submit notice of an unanticipated bypass as required under Part III.G (“Twenty-four Hour Notice of Noncompliance Reporting”).
3. Prohibition of bypass.
 - a) Bypass is prohibited and the Director of the Office of Compliance and Enforcement may take enforcement action against a permittee for a bypass, unless:
 - (i) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (ii) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (iii) The permittee submitted notices as required under paragraph 2 of this Part.
 - b) The Director of the Office of Compliance and Enforcement may approve an anticipated bypass, after considering its adverse effects, if the Director determined that it will meet the three conditions listed

above in paragraph 3.a. of this Part.

G. Upset Conditions

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph 2 of this Part are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
2. Necessary upset demonstration conditions. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a) An upset occurred and that the permittee can identify the cause(s) of the upset;
 - b) The permitted facility was at the time being properly operated;
 - c) The permittee submitted notice of the upset as required under Part III.G, "Twenty-four Hour Notice of Noncompliance Report;" and
 - d) The permittee complied with any remedial measures required under Part IV.D, "Duty to Mitigate."
3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

H. Toxic Pollutants

The permittee must comply with effluent standards or prohibitions established under Section 307(a) of the Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

I. Removed Substances

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of waste waters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.

J. Planned Changes

The permittee must give notice to the Director of the Office of Water and Watersheds as specified in part III.I.3. and ADEC as soon as possible of any planned physical alterations or additions to the permitted facility whenever:

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source as determined in 40 CFR 122.29(b); or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this permit.
3. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application site.

K. Anticipated Noncompliance

The permittee shall give advance notice to the Director of the Office of Compliance and Enforcement and ADEC of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

V. General Provisions

A. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR 122.62, 122.64, or 124.5. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

B. Duty to Reapply

If the permittee intends to continue an activity regulated by this permit after the

expiration date of this permit, the permittee must apply for and obtain a new permit. In accordance with 40 CFR 122.21(d), and unless permission for the application to be submitted at a later date has been granted by the Regional Administrator, the permittee must submit a new application at least 180 days before the expiration date of this permit.

C. Duty to Provide Information

The permittee must furnish to EPA and ADEC, within the time specified in the request, any information that EPA or ADEC may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee must also furnish to EPA or ADEC, upon request, copies of records required to be kept by this permit.

D. Other Information

When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or that it submitted incorrect information in a permit application or any report to EPA or ADEC, it must promptly submit the omitted facts or corrected information.

E. Signatory Requirements

All applications, reports, or information submitted to EPA and ADEC must be signed and certified as follows.

1. All permit applications must be signed as follows:
 - c) For a corporation: by a responsible corporate officer.
 - d) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.
 - e) For a municipality, state, federal, Indian tribe, or other public agency: by either a principal executive officer or ranking elected official.
2. All reports required by the permit and other information requested by EPA or ADEC must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a) The authorization is made in writing by a person described above;
 - b) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or

position having overall responsibility for environmental matters for the company; and,

c) The written authorization is submitted to the Director of the Office of Compliance and Enforcement and ADEC.

2. Changes to authorization. If an authorization under Part V.E.2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part V.E.2. must be submitted to the Director of the Office of Compliance and Enforcement and ADEC prior to or together with any reports, information, or applications to be signed by an authorized representative.
3. Certification. Any person signing a document under this Part must make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations”.

F. Availability of Reports

In accordance with 40 CFR 2, information submitted to EPA pursuant to this permit may be claimed as confidential by the permittee. In accordance with the Act, permit applications, permits and effluent data are not considered confidential. Any confidentiality claim must be asserted at the time of submission by stamping the words “confidential business information” on each page containing such information. If no claim is made at the time of submission, EPA may take the information available to the public without further notice to the permittee. If a claim is asserted, the information will be treated in accordance with the procedures in 40 CFR 2, Subpart B (Public Information) and 41 Fed. Reg. 36902 through 36924 (September 1, 1976), as amended.

G. Inspection and Entry

The permittee must allow the Director of the Office of Compliance and Enforcement, EPA Region 10; ADEC; or an authorized representative (including

an authorized contractor acting as a representative of the Administrator), upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

H. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to persons or property or invasion of other private rights, nor any infringement of federal, tribal, state or local laws or regulations.

I. Transfers

This permit is not transferable to any person except after notice to the Director of the Office of Water and Watersheds as specified in part III.I.3. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Act. (See 40 CFR 122.61; in some cases, modification or revocation and reissuance is mandatory).

J. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by section 510 of the Act.

VI. Definitions

1. “Act” means the Clean Water Act or the Federal Water Pollution Control Act, as Amended (33 U.S.C. 466 et seq.).
2. “ADEC” means the Alaska Department of Environmental Conservation.
3. “Average monthly discharge limitation” means the highest allowable average of “daily discharges” over a calendar month, calculated as the sum of all “daily discharges” measured during a calendar month divided by the number of “daily discharges” measured during that month.
4. “Average weekly discharge limitation” means the highest allowable average of “daily discharges” over a calendar week, calculated as the sum of all “daily discharges” measured during a calendar week divided by the number of “daily discharges” measured during that week.
5. “Best Management Practices” (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage areas.
6. “Bypass” means the intentional diversion of waste streams from any portion of a treatment facility.
7. “Chronic toxic unit” (“TUc”) is a measure of chronic toxicity. TUc is the reciprocal of the effluent concentration that causes no observable effect on the test organisms by the end of the chronic exposure period (i.e., $100/\text{“NOEC”}$ or $100/\text{“IC}_{25}$ ”).
8. “Categorical Industrial User (CIU)” is a discharger to a POTW which carries out specific categories of industrial activity identified in 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N.
9. “Daily discharge” means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the “daily discharge” is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in

other units of measurement, the “daily discharge” is calculated as the average measurement of the pollutant over the day.

10. “Director of the Office of Compliance and Enforcement” means the Director of the Office of Compliance and Enforcement, EPA Region 10, or an authorized representative.
11. “Director of the Office of Water and Watersheds” means the Director of the Office of Water and Watersheds, EPA Region 10, or an authorized representative.
12. “DMR” means discharge monitoring report
13. “Geometric mean” means the “n”th root of the product of “n” samples collected during the month, where n refers to the number of samples collected in the month.
14. “Grab” is a single sample or measurement taken at a specific time or over as short a period of time as is feasible.
15. “Inhibition concentration” (IC_p) is a point estimate of the toxicant concentration that causes a given percent reduction (p) in a non-quantal biological measurement (e.g., reproduction or growth) calculated from a continuous model (e.g., Interpolation Method).
16. “Maximum daily discharge limitation” means the highest allowable “daily discharge”.
17. “Method detection limit (MDL)” is the minimum concentration of an analyte that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero as determined by a specific laboratory method (40 CFR 136).
18. “Minimum level (ML)” is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes and processing steps have been followed.
19. “NOEC means no observed effect concentration. The NOEC is the highest concentration of toxicant (e.g., effluent) to which organisms are exposed in a

chronic toxicity test [full life-cycle or partial life-cycle (short term) test], that causes no observable adverse effects on the test organisms (i.e., the highest concentration of effluent in which the values for the observed responses are not statistically significantly different from the controls).

20. “NPDES ” means National Pollutant Discharge Elimination System, the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits . . . under sections 307, 402, 318, and 405 of the CWA.
21. “Pollutant”, for the purposes of this permit, is an organic substance, an inorganic substance, a combination of organic and inorganic substances, or pathogenic organisms that, after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism either directly from the environment or indirectly by ingestion through the food-chain, could, on the basis of information available to the Administrator of EPA, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunction in reproduction), or physical deformations in either organisms or offspring of the organisms.
22. “POTW means Publicly Owned Treatment Works, as defined at 40 CFR 403.3(o).
23. “Sewage sludge” means solid, semi-solid, or liquid residue generated during the treatment of domestic sewage and/or a combination of domestic sewage and industrial waste of a liquid nature in a Treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the incineration of sewage sludge or grit and screenings generated during preliminary treatment of domestic sewage in a Treatment Works. These must be disposed of in accordance with 40 CFR 258.
24. A “Significant Industrial User (SIU)” means a categorical industrial user that discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling and boiler blowdown wastewater), contributes a process wastestream that make up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW, or is designated as such by the Control Authority (the City of Palmer) as defined in 40 CFR 403.12(a) on the basis that the industrial user has a reasonable potential for adversely affecting the POTW’s operation or for violating any pretreatment standard or requirement. The Control Authority

has the option to determine an industrial user meeting the above criteria as a non-significant industrial user if the industrial user's discharge does not have reasonable potential to adversely affect the POTW's operation or violate any pretreatment standard or requirement.

25. A "24-hour composite" sample shall mean a flow-proportioned mixture of not less than eight discrete aliquots. Each aliquot shall be a grab sample of not less than 100 mL and shall be collected and stored in accordance with procedures prescribed in the most recent edition of *Standard Methods for the Examination of Water and Wastewater*.
26. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

APPENDIX D

Appendix D

Palmer Polymer Addition Study

Introduction

1. Palmer shall carry out both benchtop and full-scale studies to characterize the benefits of polymer addition to the MBBR effluent as it relates to the settleability of solids within Lagoon #2.
2. As part of the upgrade to the Palmer wastewater treatment plant, polymer addition equipment was installed; however, Palmer has not utilized this capability to-date.
3. Palmer is evaluating the possibility of (i) not constructing secondary clarification; (ii) relying upon the existing lagoons to effect solids removal, and (iii) relying upon enhanced lagoon solids removal practices to allow continuous compliance with all effluent permit limitations, including ammonia.
4. The intent of this polymer study is to determine if polymer addition to the MBBR effluent would allow for measurably more effective lagoon solids removal practices, by causing solids settling to occur in a smaller localized area of Lagoon #2. This may facilitate more efficient and frequent removal by dredging of solids from Lagoon # 2, and thus reduce the organic nitrogen available for digestion and potentially improve facility ammonia control.

Testing

Jar Testing

1. Palmer shall first utilize the process known as “jar testing.” Jar testing is a benchtop evaluation of polymer addition on MBBR effluent solids settling rates. Palmer shall complete this jar testing by September 30, 2020.
2. In general, for the jar testing, Palmer shall:
 - a. Utilize standard 6-cell/ gang mixer jar testing apparatus;
 - b. Carry out testing in general accordance with ASTM-2035;
 - c. Test at least four polymers, each across its manufacturer’s recommended dosage range;
 - d. Utilize visual observation, turbidity and TSS samples to quantify the relative performance of the various polymer-dosage combinations.
 - e. Employ a “blank” cell in each test, to allow assessment of the improvement in MBBR effluent settling rates.
3. Document the results of the benchtop jar test study in a report, to be submitted to EPA and DEC by October 30, 2020 for review and approval.

Full-scale Testing

4. Based upon the results of the benchtop study, carry out full-scale testing of the most promising polymer/dosage combination(s). This full-scale testing shall utilize (i) laboratory settleometer/settled sludge volume testing; and (ii) monthly sludge depth measurements to characterize the impact of the polymer on the solids accumulation pattern in Lagoon #2. Based on the schedule for implementation of the full-scale testing, Palmer will likely only be able to conduct sludge depth measurements in Lagoon #2 for 1-2 months before the end of 2020. Testing will not be performed when ice is on the lagoons due to safety concerns. Sludge depth measurement in Lagoon #2 will continue as is safe from December 2020 through March 2021 based on the ice conditions on the lagoon and will continue measurement in April 2021.
5. Establish a baseline for solids settling prior to starting full-scale testing.
6. Conduct settleometer testing at a single point at the Lagoon #2 influent, after the polymer has been added during full-scale testing on a frequency of 1 sample per week during the time period when there is ice build-up in the lagoon.
7. In general, for the settleometer testing, Palmer shall:
 - a. Utilize standard settleometer and paddle stirring device;
 - b. Carry out testing in general accordance with Standard Methods for Wastewater;
8. Document the results of the full-scale study in a report, to be provided to EPA and DEC by February 1, 2021 for review and approval. This report shall include the results of the study, sludge depth profiles, and settleometer readings as well as recommendations regarding use of polymer.
9. Incorporate approved recommendation into facility operations by February 28, 2021.

NOTICE TO PROCEED

Owner: _____ Owner's Project No.: _____
Engineer: _____ Engineer's Project No.: _____
Contractor: _____ Contractor's Project No.: _____
Project: _____
Contract Name: _____
Effective Date of Contract: _____

Owner hereby notifies Contractor that the Contract Times under the above Contract will commence to run on _____, 20__.

On that date, Contractor shall start performing its obligations under the Contract Documents. No Work will be done at the Site prior to such date.

In accordance with the Agreement:

The date by which Substantial Completion must be achieved is July 1, 2022, and the date by which readiness for final payment must be achieved is November 30, 2022.

Before starting any Work at the Site, Contractor must comply with the following:

1. Provide the Owner and Engineer with copies of the Contractor's Safety Plan
2. Provide Owner and Engineer with the Contractor's Preliminary Schedule, Preliminary Schedule of Submittals

Owner: _____ [Full formal name of Owner]
By (signature): _____
Name (printed): _____
Title: _____
Date Issued: _____

Copy: Engineer

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PERFORMANCE BOND

<p>Contractor</p> <p>Name: [Full formal name of Contractor]</p> <p>Address (<i>principal place of business</i>): [Address of Contractor's principal place of business]</p>	<p>Surety</p> <p>Name: [Full formal name of Surety]</p> <p>Address (<i>principal place of business</i>): [Address of Surety's principal place of business]</p>
<p>Owner</p> <p>Name: City of Palmer, Alaska</p> <p>Mailing address (<i>principal place of business</i>): 231 W Evergreen Avenue. Palmer, Alaska 99645</p>	<p>Contract</p> <p>Description (<i>name and location</i>): City of Palmer Wastewater Treatment Facility Improvements Projects Phase II</p> <p>Contract Price: [Amount from Contract]</p> <p>Effective Date of Contract: [Date from Contract]</p>
<p>Bond</p> <p>Bond Amount: [Amount]</p> <p>Date of Bond: [Date]</p> <p><i>(Date of Bond cannot be earlier than Effective Date of Contract)</i></p> <p>Modifications to this Bond form: <input type="checkbox"/> None <input type="checkbox"/> See Paragraph 16</p>	
<p>Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth in this Performance Bond, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.</p>	
Contractor as Principal	Surety
_____ <i>(Full formal name of Contractor)</i>	_____ <i>(Full formal name of Surety) (corporate seal)</i>
By: _____ <i>(Signature)</i>	By: _____ <i>(Signature)(Attach Power of Attorney)</i>
Name: _____ <i>(Printed or typed)</i>	Name: _____ <i>(Printed or typed)</i>
Title: _____	Title: _____
Attest: _____ <i>(Signature)</i>	Attest: _____ <i>(Signature)</i>
Name: _____ <i>(Printed or typed)</i>	Name: _____ <i>(Printed or typed)</i>
Title: _____	Title: _____
<p><i>Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party is considered plural where applicable.</i></p>	

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.
2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Paragraph 3.
3. If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond will arise after:
 - 3.1. The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice may indicate whether the Owner is requesting a conference among the Owner, Contractor, and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Paragraph 3.1 will be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor, and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement does not waive the Owner's right, if any, subsequently to declare a Contractor Default;
 - 3.2. The Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and
 - 3.3. The Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.
4. Failure on the part of the Owner to comply with the notice requirement in Paragraph 3.1 does not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.
5. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:
 - 5.1. Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;
 - 5.2. Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;
 - 5.3. Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owners concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or
 - 5.4. Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:

- 5.4.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or
 - 5.4.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.
6. If the Surety does not proceed as provided in Paragraph 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Paragraph 5.4, and the Owner refuses the payment, or the Surety has denied liability, in whole or in part, without further notice, the Owner shall be entitled to enforce any remedy available to the Owner.
7. If the Surety elects to act under Paragraph 5.1, 5.2, or 5.3, then the responsibilities of the Surety to the Owner will not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety will not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication for:
 - 7.1. the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
 - 7.2. additional legal, design professional, and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 5; and
 - 7.3. liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.
8. If the Surety elects to act under Paragraph 5.1, 5.3, or 5.4, the Surety's liability is limited to the amount of this Bond.
9. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price will not be reduced or set off on account of any such unrelated obligations. No right of action will accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.
10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
11. Any proceeding, legal or equitable, under this Bond must be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and must be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum periods of limitations available to sureties as a defense in the jurisdiction of the suit will be applicable.
12. Notice to the Surety, the Owner, or the Contractor must be mailed or delivered to the address shown on the page on which their signature appears.
13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement will be deemed deleted therefrom and provisions conforming to such

statutory or other legal requirement will be deemed incorporated herein. When so furnished, the intent is that this Bond will be construed as a statutory bond and not as a common law bond.

14. Definitions

- 14.1. *Balance of the Contract Price*—The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made including allowance for the Contractor for any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.
 - 14.2. *Construction Contract*—The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.
 - 14.3. *Contractor Default*—Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.
 - 14.4. *Owner Default*—Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
 - 14.5. *Contract Documents*—All the documents that comprise the agreement between the Owner and Contractor.
15. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond will be deemed to be Subcontractor and the term Owner will be deemed to be Contractor.
16. Modifications to this Bond are as follows: None

PAYMENT BOND

<p>Contractor</p> <p>Name: [Full formal name of Contractor]</p> <p>Address (<i>principal place of business</i>): [Address of Contractor's principal place of business]</p>	<p>Surety</p> <p>Name: [Full formal name of Surety]</p> <p>Address (<i>principal place of business</i>): [Address of Surety's principal place of business]</p>
<p>Owner</p> <p>Name: City of Palmer, Alaska</p> <p>Mailing address (<i>principal place of business</i>): 231 W Evergreen Avenue Palmer, Alaska 99645</p>	<p>Contract</p> <p>Description (<i>name and location</i>): City of Palmer Wastewater Treatment Facility Improvements Projects Phase II</p> <p>Contract Price: [Amount, from Contract]</p> <p>Effective Date of Contract: [Date, from Contract]</p>
<p>Bond</p> <p>Bond Amount: [Amount]</p> <p>Date of Bond: [Date]</p> <p><i>(Date of Bond cannot be earlier than Effective Date of Contract)</i></p> <p>Modifications to this Bond form: <input type="checkbox"/> None <input type="checkbox"/> See Paragraph 18</p>	
<p>Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth in this Payment Bond, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.</p>	
<p>Contractor as Principal</p>	<p>Surety</p>
<p>_____ <i>(Full formal name of Contractor)</i></p>	<p>_____ <i>(Full formal name of Surety) (corporate seal)</i></p>
<p>By: _____ <i>(Signature)</i></p>	<p>By: _____ <i>(Signature)(Attach Power of Attorney)</i></p>
<p>Name: _____ <i>(Printed or typed)</i></p>	<p>Name: _____ <i>(Printed or typed)</i></p>
<p>Title: _____</p>	<p>Title: _____</p>
<p>Attest: _____ <i>(Signature)</i></p>	<p>Attest: _____ <i>(Signature)</i></p>
<p>Name: _____ <i>(Printed or typed)</i></p>	<p>Name: _____ <i>(Printed or typed)</i></p>
<p>Title: _____</p>	<p>Title: _____</p>
<p><i>Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party is considered plural where applicable.</i></p>	

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.
2. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.
3. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond will arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.
4. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.
5. The Surety's obligations to a Claimant under this Bond will arise after the following:
 - 5.1. Claimants who do not have a direct contract with the Contractor
 - 5.1.1. have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
 - 5.1.2. have sent a Claim to the Surety (at the address described in Paragraph 13).
 - 5.2. Claimants who are employed by or have a direct contract with the Contractor have sent a Claim to the Surety (at the address described in Paragraph 13).
6. If a notice of non-payment required by Paragraph 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.1.1.
7. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:
 - 7.1. Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and
 - 7.2. Pay or arrange for payment of any undisputed amounts.
 - 7.3. The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 will not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.1 or 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.
8. The Surety's total obligation will not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond will be credited for any payments made in good faith by the Surety.
9. Amounts owed by the Owner to the Contractor under the Construction Contract will be used for the performance of the Construction Contract and to satisfy claims, if any, under any

construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfying obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.

10. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.
11. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
12. No suit or action will be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit will be applicable.
13. Notice and Claims to the Surety, the Owner, or the Contractor must be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, will be sufficient compliance as of the date received.
14. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement will be deemed deleted here from and provisions conforming to such statutory or other legal requirement will be deemed incorporated herein. When so furnished, the intent is that this Bond will be construed as a statutory bond and not as a common law bond.
15. Upon requests by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.
16. Definitions
 - 16.1. *Claim*—A written statement by the Claimant including at a minimum:
 - 16.1.1. The name of the Claimant;
 - 16.1.2. The name of the person for whom the labor was done, or materials or equipment furnished;
 - 16.1.3. A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;
 - 16.1.4. A brief description of the labor, materials, or equipment furnished;
 - 16.1.5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
 - 16.1.6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;
 - 16.1.7. The total amount of previous payments received by the Claimant; and
 - 16.1.8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.
 - 16.2. *Claimant*—An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials, or equipment for use in the

performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond is to include without limitation in the terms of "labor, materials, or equipment" that part of the water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.

- 16.3. *Construction Contract*—The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.
- 16.4. *Owner Default*—Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
- 16.5. *Contract Documents*—All the documents that comprise the agreement between the Owner and Contractor.
17. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond will be deemed to be Subcontractor and the term Owner will be deemed to be Contractor.
18. Modifications to this Bond are as follows: None

Contractor's Application for Payment

Owner: _____	Owner's Project No.: _____
Engineer: _____	Engineer's Project No.: _____
Contractor: _____	Contractor's Project No.: _____
Project: _____	
Contract: _____	
Application No.: _____	Application Date: _____
Application Period: From _____	to _____

1. Original Contract Price	\$	-
2. Net change by Change Orders	\$	-
3. Current Contract Price (Line 1 + Line 2)	\$	-
4. Total Work completed and materials stored to date (Sum of Column G Lump Sum Total and Column J Unit Price Total)	\$	-
5. Retainage		
a. _____ X \$ - Work Completed =	\$	-
b. _____ X \$ - Stored Materials =	\$	-
c. Total Retainage (Line 5.a + Line 5.b)	\$	-
6. Amount eligible to date (Line 4 - Line 5.c)	\$	-
7. Less previous payments (Line 6 from prior application)		
8. Amount due this application	\$	-
9. Balance to finish, including retainage (Line 3 - Line 4 + Line 5.c)	\$	-

Contractor's Certification

The undersigned Contractor certifies, to the best of its knowledge, the following:

(1) All previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with the Work covered by prior Applications for Payment;

(2) Title to all Work, materials and equipment incorporated in said Work, or otherwise listed in or covered by this Application for Payment, will pass to Owner at time of payment free and clear of all liens, security interests, and encumbrances (except such as are covered by a bond acceptable to Owner indemnifying Owner against any such liens, security interest, or encumbrances); and

(3) All the Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.

Contractor: _____

Signature: _____ **Date:** _____

Recommended by Engineer	Approved by Owner
By: _____	By: _____
Title: _____	Title: _____
Date: _____	Date: _____
Approved by Funding Agency	
By: _____	By: _____
Title: _____	Title: _____
Date: _____	Date: _____

Progress Estimate - Lump Sum Work

Contractor's Application for Payment

Owner: _____	Owner's Project No.: _____
Engineer: _____	Engineer's Project No.: _____
Contractor: _____	Contractor's Project No.: _____
Project: _____	
Contract: _____	

Application No.: _____ Application Period: From _____ to _____ Application Date: _____

A	B	C	D		E	F	G	H	I
Item No.	Description	Scheduled Value (\$)	Work Completed		Materials Currently Stored (not in D or E) (\$)	Work Completed and Materials Stored to Date (D + E + F) (\$)	% of Scheduled Value (G / C) (%)	Balance to Finish (C - G) (\$)	
			(D + E) From Previous Application (\$)	This Period (\$)					
Original Contract									
							-		-
							-		-
							-		-
							-		-
							-		-
							-		-
							-		-
							-		-
							-		-
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							-		-
							-		-
							-		-
							-		-
							-		-
							-		-
							-		-
Original Contract Totals		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -

Progress Estimate - Lump Sum Work

Contractor's Application for Payment

Owner: _____	Owner's Project No.: _____
Engineer: _____	Engineer's Project No.: _____
Contractor: _____	Contractor's Project No.: _____
Project: _____	
Contract: _____	

Application No.: _____ Application Period: From _____ to _____ Application Date: _____

A	B	C	D		E	F	G	H	I
Item No.	Description	Scheduled Value (\$)	Work Completed		Materials Currently Stored (not in D or E) (\$)	Work Completed and Materials Stored to Date (D + E + F) (\$)	% of Scheduled Value (G / C) (%)	Balance to Finish (C - G) (\$)	
			(D + E) From Previous Application (\$)	This Period (\$)					
Change Orders									
							-		-
							-		-
							-		-
							-		-
							-		-
							-		-
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							-		-
							-		-
							-		-
							-		-
Change Order Totals		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -
Original Contract and Change Orders									
Project Totals		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -

Progress Estimate - Unit Price Work

Contractor's Application for Payment

Owner: _____
 Engineer: _____
 Contractor: _____
 Project: _____
 Contract: _____

Owner's Project No.: _____
 Engineer's Project No.: _____
 Contractor's Project No.: _____

Application No.: _____ Application Period: From _____ to _____ Application Date: _____

A	B	C	D	E	F	G	H	I	J	K	L
Bid Item No.	Description	Contract Information				Work Completed		Materials Currently Stored (not in G) (\$)	Work Completed and Materials Stored to Date (H + I) (\$)	% of Value of Item (J / F) (%)	Balance to Finish (F - J) (\$)
		Item Quantity	Units	Unit Price (\$)	Value of Bid Item (C X E) (\$)	Estimated Quantity Incorporated in the Work	Value of Work Completed to Date (E X G) (\$)				
Original Contract											
					-		-		-		-
					-		-		-		-
					-		-		-		-
					-		-		-		-
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					-		-		-		-
					-		-		-		-
					-		-		-		-
					-		-		-		-
Original Contract Totals					\$	-		\$	-	\$	-

Progress Estimate - Unit Price Work

Contractor's Application for Payment

Owner: _____
 Engineer: _____
 Contractor: _____
 Project: _____
 Contract: _____

Owner's Project No.: _____
 Engineer's Project No.: _____
 Contractor's Project No.: _____

Application No.: _____ Application Period: From _____ to _____ Application Date: _____

A	B	C	D	E	F	G	H	I	J	K	L		
Bid Item No.	Description	Contract Information				Work Completed		Materials Currently Stored (not in G) (\$)	Work Completed and Materials Stored to Date (H + I) (\$)	% of Value of Item (J / F) (%)	Balance to Finish (F - J) (\$)		
		Item Quantity	Units	Unit Price (\$)	Value of Bid Item (C X E) (\$)	Estimated Quantity Incorporated in the Work	Value of Work Completed to Date (E X G) (\$)						
Change Orders													
					-		-		-		-		
					-		-		-		-		
					-		-		-		-		
					-		-		-		-		
					-		-		-		-		
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					-		-		-		-		
					-		-		-		-		
					-		-		-		-		
Change Order Totals					\$	-		\$	-	\$	-	\$	-
Original Contract and Change Orders													
Project Totals					\$	-		\$	-	\$	-	\$	-

Stored Materials Summary

Contractor's Application for Payment

Owner: _____	Owner's Project No.: _____
Engineer: _____	Engineer's Project No.: _____
Contractor: _____	Contractor's Project No.: _____
Project: _____	
Contract: _____	

Application No.: _____ Application Period: From _____ to _____ Application Date: _____

A	B	C	D	E	F	G	H	I	J	K	L	M	
Item No. (Lump Sum Tab) or Bid Item No. (Unit Price Tab)	Supplier Invoice No.	Submittal No. (with Specification Section No.)	Description of Materials or Equipment Stored	Storage Location	Application No. When Materials Placed in Storage	Materials Stored			Incorporated in Work			Materials Remaining in Storage (I-L) (\$)	
						Previous Amount Stored (\$)	Amount Stored this Period (\$)	Amount Stored to Date (G+H) (\$)	Amount Previously Incorporated in the Work (\$)	Amount Incorporated in the Work this Period (\$)	Total Amount Incorporated in the Work (J+K) (\$)		
Totals						\$	-	\$	-	\$	-	\$	-

CERTIFICATE OF SUBSTANTIAL COMPLETION

Owner: _____ Owner's Project No.: _____
Engineer: _____ Engineer's Project No.: _____
Contractor: _____ Contractor's Project No.: _____
Project: _____
Contract Name: _____

This Preliminary Final Certificate of Substantial Completion applies to:

All Work The following specified portions of the Work:

[Describe the portion of the work for which Certificate of Substantial Completion is issued]

Date of Substantial Completion: *[Enter date, as determined by Engineer]*

The Work to which this Certificate applies has been inspected by authorized representatives of Owner, Contractor, and Engineer, and found to be substantially complete. The Date of Substantial Completion of the Work or portion thereof designated above is hereby established, subject to the provisions of the Contract pertaining to Substantial Completion. The date of Substantial Completion in the final Certificate of Substantial Completion marks the commencement of the contractual correction period and applicable warranties required by the Contract.

A punch list of items to be completed or corrected is attached to this Certificate. This list may not be all-inclusive, and the failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

Amendments of contractual responsibilities recorded in this Certificate should be the product of mutual agreement of Owner and Contractor; see Paragraph 15.03.D of the General Conditions.

The responsibilities between Owner and Contractor for security, operation, safety, maintenance, heat, utilities, insurance, and warranties upon Owner's use or occupancy of the Work must be as provided in the Contract, except as amended as follows:

Amendments to Owner's Responsibilities: None As follows:

[List amendments to Owner's Responsibilities]

Amendments to Contractor's Responsibilities: None As follows:

[List amendments to Contractor's Responsibilities]

The following documents are attached to and made a part of this Certificate:

[List attachments such as punch list; other documents]

This Certificate does not constitute an acceptance of Work not in accordance with the Contract Documents, nor is it a release of Contractor's obligation to complete the Work in accordance with the Contract Documents.

Engineer

By *(signature)*: _____

Name *(printed)*: _____

Title: _____

This page intentionally left blank.

GUIDELINES FOR USE OF EJCDC® C-700, STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

See HDR's "[C-000](#)": [HDR Guidelines for using the 2018 EJCDC Construction Documents](#) for an introduction on how to use this document.

PURPOSE AND INTENDED USE OF THE DOCUMENT

EJCDC® C-700, Standard General Conditions of the Construction Contract (2018), is the foundation document for the EJCDC Construction Series. The General Conditions define the basic rights, responsibilities, risk allocations, and contractual relationship of the Owner and Contractor, and establish how the Contract is to be administered.

2.0 OTHER DOCUMENTS

EJCDC documents are intended to be used as a system and changes in one EJCDC document may require a corresponding change in other documents. Other EJCDC documents may also serve as a reference to provide insight or guidance for the preparation of this document.

These General Conditions have been prepared for use with either EJCDC® C-520, Agreement Between Owner and Contractor for Construction Contract (Stipulated Price), or EJCDC® C-525, Agreement Between Owner and Contractor for Construction Contract (Cost-Plus-Fee) (2018 Editions). The provisions of the General Conditions and the Agreement are interrelated, and a change in one may necessitate a change in the other.

To prepare supplementary conditions that are coordinated with the General Conditions, use EJCDC® C-800, Supplementary Conditions of the Construction Contract (2018).

The full EJCDC Construction series of documents is discussed in the EJCDC® C-001, Commentary on the 2018 EJCDC Construction Documents (2018).

3.0 ORGANIZATION OF INFORMATION

All parties involved in a construction project benefit significantly from a standardized approach in the location of subject matter throughout the documents. Experience confirms the danger of addressing the same subject matter in more than one location; doing so frequently leads to confusion and unanticipated legal consequences. Careful attention should be given to the guidance provided in EJCDC® N-122/AIA® A521, Uniform Location of Subject Matter (2012 Edition) when preparing documents. EJCDC® N-122/AIA® A521 is available at no charge from the EJCDC website, www.ejcdc.org, and from the websites of EJCDC's sponsoring organizations.

If CSI MasterFormat™ is used for organizing the Project Manual, consult CSI MasterFormat™ for the appropriate document number (e.g., under 00 11 00, Advertisements and Invitations), and accordingly number the document and its pages.

4.0 EDITING THIS DOCUMENT

HDR's ENG MSS team has already removed the cover page and made the Guidelines for Use hidden text.

Although it is permissible to revise the Standard EJCDC Text of C-700 (the content beginning at page 1 and continuing to the end), it is common practice to leave the Standard EJCDC Text of C-700 intact and unaltered, with modifications and supplementation of C-700's provisions set forth in EJCDC® C-800, Supplementary Conditions of the Construction Contract (2018). If the Standard Text itself is revised, the user must comply with the terms of the License Agreement, Paragraph 4.0, Document-Specific Provisions, concerning the tracking or highlighting of revisions. The following is a summary of the relevant License Agreement provisions:

1. The term "Standard EJCDC Text" for C-700 refers to all text prepared by EJCDC in the main body of the document. Document covers, logos, footers, instructions, or copyright notices are not Standard EJCDC Text for this purpose.
2. During the drafting or negotiating process for C-700, it is important that the two contracting parties are both aware of any changes that have been made to the Standard EJCDC Text. Thus, if a draft or version of C-700 purports to be or appears to be an EJCDC document, the user must plainly show all changes to the Standard EJCDC Text, using "Track Changes" (redline/strikeout), highlighting, or other means of clearly indicating additions and deletions.
3. If C-700 has been revised or altered and is subsequently presented to third parties (such as potential bidders, grant agencies, lenders, or sureties) as an EJCDC document, then the changes to the Standard EJCDC Text must be shown, or the third parties must receive access to a version that shows the changes.
4. Once the document is ready to be finalized (and if applicable executed by the contracting parties), it is no longer necessary to continue to show changes to the Standard EJCDC Text. The user may produce a final version of the document in a format in which all changes are accepted, and the document at that point does not need to include any "Track Changes," redline/strikeout, highlighting, or other indication of additions and deletions to the Standard EJCDC Text.

5.0 LICENSE AGREEMENT

This document is subject to the terms and conditions of the **License Agreement, 2018 EJCDC® Construction Series Documents**. A copy of the License Agreement was furnished at the time of purchase of this document, and is available for review at www.ejcdc.org and the websites of EJCDC's sponsoring organizations, and HDR's [ENG MSS portal](#).

STANDARD GENERAL CONDITIONS

OF THE CONSTRUCTION CONTRACT

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STANDARD GENERAL CONDITIONS

OF THE CONSTRUCTION CONTRACT

ARTICLE 1—DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

- A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
 2. *Agreement*—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
 3. *Application for Payment*—The document prepared by Contractor, in a form acceptable to Engineer, to request progress or final payments, and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 5. *Bidder*—An individual or entity that submits a Bid to Owner.
 6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
 7. *Bidding Requirements*—The Advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
 8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
 9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.
 10. *Claim*
 - a. A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment of Contract Price or Contract Times; contesting an initial decision by Engineer concerning the

- requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract.
- b. A demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal, or seeking resolution of a contractual issue that Engineer has declined to address.
 - c. A demand or assertion by Owner or Contractor, duly submitted in compliance with the procedural requirements set forth herein, made pursuant to Paragraph 12.01.A.4, concerning disputes arising after Engineer has issued a recommendation of final payment.
 - d. A demand for money or services by a third party is not a Claim.
11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), lead-based paint (as defined by the HUD/EPA standard), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to Laws and Regulations regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
12. *Contract*—The entire and integrated written contract between Owner and Contractor concerning the Work.
13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents.
15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
17. *Cost of the Work*—See Paragraph 13.01 for definition.
18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.
20. *Electronic Document*—Any Project-related correspondence, attachments to correspondence, data, documents, drawings, information, or graphics, including but not limited to Shop Drawings and other Submittals, that are in an electronic or digital format.
21. *Electronic Means*—Electronic mail (email), upload/download from a secure Project website, or other communications methods that allow: (a) the transmission or communication of Electronic Documents; (b) the documentation of transmissions, including sending and receipt; (c) printing of the transmitted Electronic Document by the

recipient; (d) the storage and archiving of the Electronic Document by sender and recipient; and (e) the use by recipient of the Electronic Document for purposes permitted by this Contract. Electronic Means does not include the use of text messaging, or of Facebook, Twitter, Instagram, or similar social media services for transmission of Electronic Documents.

22. *Engineer*—The individual or entity named as such in the Agreement.
23. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
24. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto.
 - a. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated into the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, is not a Hazardous Environmental Condition.
 - b. The presence of Constituents of Concern that are to be removed or remediated as part of the Work is not a Hazardous Environmental Condition.
 - c. The presence of Constituents of Concern as part of the routine, anticipated, and obvious working conditions at the Site, is not a Hazardous Environmental Condition.
25. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and binding decrees, resolutions, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
26. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
27. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date, or by a time prior to Substantial Completion of all the Work.
28. *Notice of Award*—The written notice by Owner to a Bidder of Owner's acceptance of the Bid.
29. *Notice to Proceed*—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.
30. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
31. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising Contractor's plan to accomplish the Work within the Contract Times.
32. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.

33. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative (RPR) includes any assistants or field staff of Resident Project Representative.
34. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
35. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer’s review of the submittals.
36. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor’s Applications for Payment.
37. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.
38. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands or areas furnished by Owner which are designated for the use of Contractor.
39. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
40. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
41. *Submittal*—A written or graphic document, prepared by or for Contractor, which the Contract Documents require Contractor to submit to Engineer, or that is indicated as a Submittal in the Schedule of Submittals accepted by Engineer. Submittals may include Shop Drawings and Samples; schedules; product data; Owner-delegated designs; sustainable design information; information on special procedures; testing plans; results of tests and evaluations, source quality-control testing and inspections, and field or Site quality-control testing and inspections; warranties and certifications; Suppliers’ instructions and reports; records of delivery of spare parts and tools; operations and maintenance data; Project photographic documentation; record documents; and other such documents required by the Contract Documents. Submittals, whether or not approved or accepted by Engineer, are not Contract Documents. Change Proposals, Change Orders, Claims, notices, Applications for Payment, and requests for interpretation or clarification are not Submittals.
42. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion of such Work.

43. *Successful Bidder*—The Bidder to which the Owner makes an award of contract.
44. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.
45. *Supplier*—A manufacturer, fabricator, supplier, distributor, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
46. *Technical Data*
- a. Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (1) existing subsurface conditions at or adjacent to the Site, or existing physical conditions at or adjacent to the Site including existing surface or subsurface structures (except Underground Facilities) or (2) Hazardous Environmental Conditions at the Site.
 - b. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then Technical Data is defined, with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06, as the data contained in boring logs, recorded measurements of subsurface water levels, assessments of the condition of subsurface facilities, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical, environmental, or other Site or facilities conditions report prepared for the Project and made available to Contractor.
 - c. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data, and instead Underground Facilities are shown or indicated on the Drawings.
47. *Underground Facilities*—All active or not-in-service underground lines, pipelines, conduits, ducts, encasements, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or systems at the Site, including but not limited to those facilities or systems that produce, transmit, distribute, or convey telephone or other communications, cable television, fiber optic transmissions, power, electricity, light, heat, gases, oil, crude oil products, liquid petroleum products, water, steam, waste, wastewater, storm water, other liquids or chemicals, or traffic or other control systems. An abandoned facility or system is not an Underground Facility.
48. *Unit Price Work*—Work to be paid for on the basis of unit prices.
49. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.
50. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

1.02 Terminology

- A. The words and terms discussed in Paragraphs 1.02.B, C, D, and E are not defined terms that require initial capital letters, but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
- B. *Intent of Certain Terms or Adjectives:* The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.
- C. *Day:* The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.
- D. *Defective:* The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
 - 1. does not conform to the Contract Documents;
 - 2. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
 - 3. has been damaged prior to Engineer’s recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or Paragraph 15.04).
- E. *Furnish, Install, Perform, Provide*
 - 1. The word “furnish,” when used in connection with services, materials, or equipment, means to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
 - 2. The word “install,” when used in connection with services, materials, or equipment, means to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
 - 3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, means to furnish and install said services, materials, or equipment complete and ready for intended use.
 - 4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words “furnish,” “install,” “perform,” or “provide,” then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.

- F. *Contract Price or Contract Times*: References to a change in “Contract Price or Contract Times” or “Contract Times or Contract Price” or similar, indicate that such change applies to (1) Contract Price, (2) Contract Times, or (3) both Contract Price and Contract Times, as warranted, even if the term “or both” is not expressed.
- G. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2—PRELIMINARY MATTERS

2.01 *Delivery of Performance and Payment Bonds; Evidence of Insurance*

- A. *Performance and Payment Bonds*: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner the performance bond and payment bond (if the Contract requires Contractor to furnish such bonds).
- B. *Evidence of Contractor’s Insurance*: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each additional insured (as identified in the Contract), the certificates, endorsements, and other evidence of insurance required to be provided by Contractor in accordance with Article 6, except to the extent the Supplementary Conditions expressly establish other dates for delivery of specific insurance policies.
- C. *Evidence of Owner’s Insurance*: After receipt of the signed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each additional insured (as identified in the Contract), the certificates and other evidence of insurance required to be provided by Owner under Article 6.

2.02 *Copies of Documents*

- A. Owner shall furnish to Contractor four printed copies of the Contract (including one fully signed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.
- B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.

2.03 *Before Starting Construction*

- A. *Preliminary Schedules*: Within 10 days after the Effective Date of the Contract (or as otherwise required by the Contract Documents), Contractor shall submit to Engineer for timely review:
 - 1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
 - 2. a preliminary Schedule of Submittals; and
 - 3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work

into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.04 *Preconstruction Conference; Designation of Authorized Representatives*

- A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work, and to discuss the schedules referred to in Paragraph 2.03.A, procedures for handling Shop Drawings, Samples, and other Submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.
- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.05 *Acceptance of Schedules*

- A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review the schedules submitted in accordance with Paragraph 2.03.A. No progress payment will be made to Contractor until acceptable schedules are submitted to Engineer.
 - 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
 - 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
 - 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.
 - 4. If a schedule is not acceptable, Contractor will have an additional 10 days to revise and resubmit the schedule.

2.06 *Electronic Transmittals*

- A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may send, and shall accept, Electronic Documents transmitted by Electronic Means.
- B. If the Contract does not establish protocols for Electronic Means, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. Subject to any governing protocols for Electronic Means, when transmitting Electronic Documents by Electronic Means, the transmitting party makes no representations as to long-term compatibility, usability, or readability of the Electronic Documents resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the Electronic Documents.

ARTICLE 3—CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

- A. The Contract Documents are complementary; what is required by one Contract Document is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents.
- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic versions of the Contract Documents (including any printed copies derived from such electronic versions) and the printed record version, the printed record version will govern.
- D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.
- F. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation will be deemed stricken, and all remaining provisions will continue to be valid and binding upon Owner and Contractor, which agree that the Contract Documents will be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.
- G. Nothing in the Contract Documents creates:
 - 1. any contractual relationship between Owner or Engineer and any Subcontractor, Supplier, or other individual or entity performing or furnishing any of the Work, for the benefit of such Subcontractor, Supplier, or other individual or entity; or
 - 2. any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity, except as may otherwise be required by Laws and Regulations.

3.02 *Reference Standards*

- A. *Standards Specifications, Codes, Laws and Regulations*
 - 1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, means the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
 - 2. No provision of any such standard specification, manual, reference standard, or code, and no instruction of a Supplier, will be effective to change the duties or responsibilities of Owner, Contractor, or Engineer from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner or Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility

inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

3.03 *Reporting and Resolving Discrepancies*

A. *Reporting Discrepancies*

1. *Contractor's Verification of Figures and Field Measurements:* Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict, error, ambiguity, or discrepancy is resolved by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.
2. *Contractor's Review of Contract Documents:* If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.
3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

B. *Resolving Discrepancies*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:
 - a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or
 - b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Requirements of the Contract Documents*

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer in writing all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work.

- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.
- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly notify Owner and Contractor in writing that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 *Reuse of Documents*

- A. Contractor and its Subcontractors and Suppliers shall not:
 - 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media versions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or
 - 2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein precludes Contractor from retaining copies of the Contract Documents for record purposes.

ARTICLE 4—COMMENCEMENT AND PROGRESS OF THE WORK

4.01 *Commencement of Contract Times; Notice to Proceed*

- A. The Contract Times will commence to run on the 30th day after the Effective Date of the Contract or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Contract. In no event will the Contract Times commence to run later than the 60th day after the day of Bid opening or the 30th day after the Effective Date of the Contract, whichever date is earlier.

4.02 *Starting the Work*

- A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work may be done at the Site prior to such date.

4.03 *Reference Points*

- A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the

established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.04 *Progress Schedule*

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.
 - 1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.
 - 2. Proposed adjustments in the Progress Schedule that will change the Contract Times must be submitted in accordance with the requirements of Article 11.
- B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work will be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

4.05 *Delays in Contractor's Progress*

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Such an adjustment will be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:
 - 1. Severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
 - 2. Abnormal weather conditions;
 - 3. Acts or failures to act of third-party utility owners or other third-party entities (other than those third-party utility owners or other third-party entities performing other work at or adjacent to the Site as arranged by or under contract with Owner, as contemplated in Article 8); and
 - 4. Acts of war or terrorism.

- D. Contractor's entitlement to an adjustment of Contract Times or Contract Price is limited as follows:
1. Contractor's entitlement to an adjustment of the Contract Times is conditioned on the delay, disruption, or interference adversely affecting an activity on the critical path to completion of the Work, as of the time of the delay, disruption, or interference.
 2. Contractor shall not be entitled to an adjustment in Contract Price for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor. Such a concurrent delay by Contractor shall not preclude an adjustment of Contract Times to which Contractor is otherwise entitled.
 3. Adjustments of Contract Times or Contract Price are subject to the provisions of Article 11.
- E. Each Contractor request or Change Proposal seeking an increase in Contract Times or Contract Price must be supplemented by supporting data that sets forth in detail the following:
1. The circumstances that form the basis for the requested adjustment;
 2. The date upon which each cause of delay, disruption, or interference began to affect the progress of the Work;
 3. The date upon which each cause of delay, disruption, or interference ceased to affect the progress of the Work;
 4. The number of days' increase in Contract Times claimed as a consequence of each such cause of delay, disruption, or interference; and
 5. The impact on Contract Price, in accordance with the provisions of Paragraph 11.07.
- Contractor shall also furnish such additional supporting documentation as Owner or Engineer may require including, where appropriate, a revised progress schedule indicating all the activities affected by the delay, disruption, or interference, and an explanation of the effect of the delay, disruption, or interference on the critical path to completion of the Work.
- F. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5, together with the provisions of Paragraphs 4.05.D and 4.05.E.
- G. Paragraph 8.03 addresses delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.

ARTICLE 5—SITE; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 *Availability of Lands*

- A. Owner shall furnish the Site. Owner shall notify Contractor in writing of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.

- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

5.02 *Use of Site and Other Areas*

A. *Limitation on Use of Site and Other Areas*

1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas, or to improvements, structures, utilities, or similar facilities located at such adjacent lands or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.
 2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.13, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or in a court of competent jurisdiction; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.
- B. *Removal of Debris During Performance of the Work:* During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris will conform to applicable Laws and Regulations.
 - C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment

and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

- D. *Loading of Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

5.03 *Subsurface and Physical Conditions*

- A. *Reports and Drawings:* The Supplementary Conditions identify:

1. Those reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data;
2. Those drawings of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data; and
3. Technical Data contained in such reports and drawings.

- B. *Underground Facilities:* Underground Facilities are shown or indicated on the Drawings, pursuant to Paragraph 5.05, and not in the drawings referred to in Paragraph 5.03.A. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data.

- C. *Reliance by Contractor on Technical Data:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b.

- D. *Limitations of Other Data and Documents:* Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto;
2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings;
3. the contents of other Site-related documents made available to Contractor, such as record drawings from other projects at or adjacent to the Site, or Owner's archival documents concerning the Site; or
4. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

5.04 *Differing Subsurface or Physical Conditions*

- A. *Notice by Contractor:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site:
1. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate;
 2. is of such a nature as to require a change in the Drawings or Specifications;
 3. differs materially from that shown or indicated in the Contract Documents; or
 4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

- B. *Engineer's Review:* After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine whether it is necessary for Owner to obtain additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- C. *Owner's Statement to Contractor Regarding Site Condition:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.
- D. *Early Resumption of Work:* If at any time Engineer determines that Work in connection with the subsurface or physical condition in question may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the condition in question has been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.
- E. *Possible Price and Times Adjustments*
1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in

Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

- a. Such condition must fall within any one or more of the categories described in Paragraph 5.04.A;
 - b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,
 - c. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E.
2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
- a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise;
 - b. The existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
 - c. Contractor failed to give the written notice required by Paragraph 5.04.A.
3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.
4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.
- F. *Underground Facilities; Hazardous Environmental Conditions*: Paragraph 5.05 governs rights and responsibilities regarding the presence or location of Underground Facilities. Paragraph 5.06 governs rights and responsibilities regarding Hazardous Environmental Conditions. The provisions of Paragraphs 5.03 and 5.04 are not applicable to the presence or location of Underground Facilities, or to Hazardous Environmental Conditions.

5.05 *Underground Facilities*

- A. *Contractor's Responsibilities*: Unless it is otherwise expressly provided in the Supplementary Conditions, the cost of all of the following are included in the Contract Price, and Contractor shall have full responsibility for:
1. reviewing and checking all information and data regarding existing Underground Facilities at the Site;
 2. complying with applicable state and local utility damage prevention Laws and Regulations;

3. verifying the actual location of those Underground Facilities shown or indicated in the Contract Documents as being within the area affected by the Work, by exposing such Underground Facilities during the course of construction;
 4. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
 5. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.
- B. *Notice by Contractor:* If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated on the Drawings, or was not shown or indicated on the Drawings with reasonable accuracy, then Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing regarding such Underground Facility.
- C. *Engineer's Review:* Engineer will:
1. promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated on the Drawings, or was not shown or indicated with reasonable accuracy;
 2. identify and communicate with the owner of the Underground Facility; prepare recommendations to Owner (and if necessary issue any preliminary instructions to Contractor) regarding the Contractor's resumption of Work in connection with the Underground Facility in question;
 3. obtain any pertinent cost or schedule information from Contractor; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and
 4. advise Owner in writing of Engineer's findings, conclusions, and recommendations.

During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

- D. *Owner's Statement to Contractor Regarding Underground Facility:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.
- E. *Early Resumption of Work:* If at any time Engineer determines that Work in connection with the Underground Facility may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the Underground Facility in question and conditions affected by its presence have been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.
- F. *Possible Price and Times Adjustments*
1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, to the extent that any existing Underground Facility at the Site that was not shown

or indicated on the Drawings, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

- a. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;
 - b. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E; and
 - c. Contractor gave the notice required in Paragraph 5.05.B.
2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.
 3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.
 4. The information and data shown or indicated on the Drawings with respect to existing Underground Facilities at the Site is based on information and data (a) furnished by the owners of such Underground Facilities, or by others, (b) obtained from available records, or (c) gathered in an investigation conducted in accordance with the current edition of ASCE 38, Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data, by the American Society of Civil Engineers. If such information or data is incorrect or incomplete, Contractor's remedies are limited to those set forth in this Paragraph 5.05.F.

5.06 *Hazardous Environmental Conditions at Site*

A. *Reports and Drawings*: The Supplementary Conditions identify:

1. those reports known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site;
2. drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and
3. Technical Data contained in such reports and drawings.

B. *Reliance by Contractor on Technical Data Authorized*: Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures

- of construction to be employed by Contractor, and safety precautions and programs incident thereto;
2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.
- D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.
- E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.
- F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.
- G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, as a result of such Work stoppage, such special conditions under which Work is agreed to be resumed by Contractor, or any costs or expenses incurred in response to the Hazardous Environmental Condition, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off. Entitlement to any such adjustment is subject to the provisions of Paragraphs 4.05.D, 4.05.E, 11.07, and 11.08.
- H. If, after receipt of such written notice, Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special

conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.

- I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.I obligates Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.J obligates Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6—BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

- A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of Contractor's obligations under the Contract. These bonds must remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the terms of a prescribed bond form, the Supplementary Conditions, or other provisions of the Contract.
- B. Contractor shall also furnish such other bonds (if any) as are required by the Supplementary Conditions or other provisions of the Contract.
- C. All bonds must be in the form included in the Bidding Documents or otherwise specified by Owner prior to execution of the Contract, except as provided otherwise by Laws or

Regulations, and must be issued and signed by a surety named in “Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies” as published in Department Circular 570 (as amended and supplemented) by the Bureau of the Fiscal Service, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual’s authority to bind the surety. The evidence of authority must show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.

- D. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue bonds in the required amounts.
- E. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer in writing and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which must comply with the bond and surety requirements above.
- F. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner’s termination rights under Article 16.
- G. Upon request to Owner from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Owner shall provide a copy of the payment bond to such person or entity.
- H. Upon request to Contractor from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Contractor shall provide a copy of the payment bond to such person or entity.

6.02 *Insurance—General Provisions*

- A. Owner and Contractor shall obtain and maintain insurance as required in this article and in the Supplementary Conditions.
- B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized in the state or jurisdiction in which the Project is located to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.
- C. Alternative forms of insurance coverage, including but not limited to self-insurance and “Occupational Accident and Excess Employer’s Indemnity Policies,” are not sufficient to meet the insurance requirements of this Contract, unless expressly allowed in the Supplementary Conditions.
- D. Contractor shall deliver to Owner, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Contractor has obtained and is maintaining the policies and coverages required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, full disclosure of all relevant exclusions, and evidence of insurance required to be purchased and maintained by

Subcontractors or Suppliers. In any documentation furnished under this provision, Contractor, Subcontractors, and Suppliers may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those applicable to this Contract.

- E. Owner shall deliver to Contractor, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Owner has obtained and is maintaining the policies and coverages required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, and full disclosure of all relevant exclusions. In any documentation furnished under this provision, Owner may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those relevant to this Contract.
- F. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, will not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.
- G. In addition to the liability insurance required to be provided by Contractor, the Owner, at Owner's option, may purchase and maintain Owner's own liability insurance. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.
- H. Contractor shall require:
 - 1. Subcontractors to purchase and maintain worker's compensation, commercial general liability, and other insurance that is appropriate for their participation in the Project, and to name as additional insureds Owner and Engineer (and any other individuals or entities identified in the Supplementary Conditions as additional insureds on Contractor's liability policies) on each Subcontractor's commercial general liability insurance policy; and
 - 2. Suppliers to purchase and maintain insurance that is appropriate for their participation in the Project.
- I. If either party does not purchase or maintain the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.
- J. If Contractor has failed to obtain and maintain required insurance, Contractor's entitlement to enter or remain at the Site will end immediately, and Owner may impose an appropriate set-off against payment for any associated costs (including but not limited to the cost of purchasing necessary insurance coverage), and exercise Owner's termination rights under Article 16.
- K. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect (but is in no way obligated) to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price will be adjusted accordingly.

- L. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests. Contractor is responsible for determining whether such coverage and limits are adequate to protect its interests, and for obtaining and maintaining any additional insurance that Contractor deems necessary.
- M. The insurance and insurance limits required herein will not be deemed as a limitation on Contractor's liability, or that of its Subcontractors or Suppliers, under the indemnities granted to Owner and other individuals and entities in the Contract or otherwise.
- N. All the policies of insurance required to be purchased and maintained under this Contract will contain a provision or endorsement that the coverage afforded will not be canceled, or renewal refused, until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured and Engineer.

6.03 *Contractor's Insurance*

- A. *Required Insurance:* Contractor shall purchase and maintain Worker's Compensation, Commercial General Liability, and other insurance pursuant to the specific requirements of the Supplementary Conditions.
- B. *General Provisions:* The policies of insurance required by this Paragraph 6.03 as supplemented must:
 - 1. include at least the specific coverages required;
 - 2. be written for not less than the limits provided, or those required by Laws or Regulations, whichever is greater;
 - 3. remain in effect at least until the Work is complete (as set forth in Paragraph 15.06.D), and longer if expressly required elsewhere in this Contract, and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract;
 - 4. apply with respect to the performance of the Work, whether such performance is by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable; and
 - 5. include all necessary endorsements to support the stated requirements.
- C. *Additional Insureds:* The Contractor's commercial general liability, automobile liability, employer's liability, umbrella or excess, pollution liability, and unmanned aerial vehicle liability policies, if required by this Contract, must:
 - 1. include and list as additional insureds Owner and Engineer, and any individuals or entities identified as additional insureds in the Supplementary Conditions;
 - 2. include coverage for the respective officers, directors, members, partners, employees, and consultants of all such additional insureds;
 - 3. afford primary coverage to these additional insureds for all claims covered thereby (including as applicable those arising from both ongoing and completed operations);

4. not seek contribution from insurance maintained by the additional insured; and
5. as to commercial general liability insurance, apply to additional insureds with respect to liability caused in whole or in part by Contractor's acts or omissions, or the acts and omissions of those working on Contractor's behalf, in the performance of Contractor's operations.

6.04 *Builder's Risk and Other Property Insurance*

- A. *Builder's Risk*: Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the Work's full insurable replacement cost (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). The specific requirements applicable to the builder's risk insurance are set forth in the Supplementary Conditions.
- B. *Property Insurance for Facilities of Owner Where Work Will Occur*: Owner is responsible for obtaining and maintaining property insurance covering each existing structure, building, or facility in which any part of the Work will occur, or to which any part of the Work will attach or be adjoined. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, providing coverage consistent with that required for the builder's risk insurance, and will be maintained until the Work is complete, as set forth in Paragraph 15.06.D.
- C. *Property Insurance for Substantially Complete Facilities*: Promptly after Substantial Completion, and before actual occupancy or use of the substantially completed Work, Owner will obtain property insurance for such substantially completed Work, and maintain such property insurance at least until the Work is complete, as set forth in Paragraph 15.06.D. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, and provide coverage consistent with that required for the builder's risk insurance. The builder's risk insurance may terminate upon written confirmation of Owner's procurement of such property insurance.
- D. *Partial Occupancy or Use by Owner*: If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work, as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will provide advance notice of such occupancy or use to the builder's risk insurer, and obtain an endorsement consenting to the continuation of coverage prior to commencing such partial occupancy or use.
- E. *Insurance of Other Property; Additional Insurance*: If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, then the entity or individual owning such property item will be responsible for insuring it. If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.04, it may do so at Contractor's expense.

6.05 *Property Losses; Subrogation*

- A. The builder's risk insurance policy purchased and maintained in accordance with Paragraph 6.04 (or an installation floater policy if authorized by the Supplementary Conditions), will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against

Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors.

1. Owner and Contractor waive all rights against each other and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils, risks, or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all individuals or entities identified in the Supplementary Conditions as builder's risk or installation floater insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused.
 2. None of the above waivers extends to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.
- B. Any property insurance policy maintained by Owner covering any loss, damage, or consequential loss to Owner's existing structures, buildings, or facilities in which any part of the Work will occur, or to which any part of the Work will attach or adjoin; to adjacent structures, buildings, or facilities of Owner; or to part or all of the completed or substantially completed Work, during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06, will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them, and that the insured is allowed to waive the insurer's rights of subrogation in a written contract executed prior to the loss, damage, or consequential loss.
1. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from fire or any of the perils, risks, or causes of loss covered by such policies.
- C. The waivers in this Paragraph 6.05 include the waiver of rights due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other insured peril, risk, or cause of loss.
- D. Contractor shall be responsible for assuring that each Subcontract contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from fire or other peril, risk, or cause of loss covered by builder's risk insurance, installation floater, and any other property insurance applicable to the Work.

6.06 *Receipt and Application of Property Insurance Proceeds*

- A. Any insured loss under the builder's risk and other policies of property insurance required by Paragraph 6.04 will be adjusted and settled with the named insured that purchased the policy. Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.
- B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.04 shall maintain such proceeds in a segregated account, and distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.
- C. If no other special agreement is reached, Contractor shall repair or replace the damaged Work, using allocated insurance proceeds.

ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

7.01 *Contractor's Means and Methods of Construction*

- A. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. If the Contract Documents note, or Contractor determines, that professional engineering or other design services are needed to carry out Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures, or for Site safety, then Contractor shall cause such services to be provided by a properly licensed design professional, at Contractor's expense. Such services are not Owner-delegated professional design services under this Contract, and neither Owner nor Engineer has any responsibility with respect to (1) Contractor's determination of the need for such services, (2) the qualifications or licensing of the design professionals retained or employed by Contractor, (3) the performance of such services, or (4) any errors, omissions, or defects in such services.

7.02 *Supervision and Superintendence*

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who will not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

7.03 *Labor; Working Hours*

- A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall maintain good discipline and order at the Site.

- B. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of Contractor's employees; of Suppliers and Subcontractors, and their employees; and of any other individuals or entities performing or furnishing any of the Work, just as Contractor is responsible for Contractor's own acts and omissions.
- C. 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 will be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.

7.04 *Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.
- B. All materials and equipment incorporated into the Work must be new and of good quality, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications will expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- C. All materials and equipment must be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

7.05 *"Or Equals"*

- A. *Contractor's Request; Governing Criteria:* Whenever an item of equipment or material is specified or described in the Contract Documents by using the names of one or more proprietary items or specific Suppliers, the Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or equal" item is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material, or items from other proposed Suppliers, under the circumstances described below.
 - 1. If Engineer in its sole discretion determines that an item of equipment or material proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer will deem it an "or equal" item. For the purposes of this paragraph, a proposed item of equipment or material will be considered functionally equal to an item so named if:
 - a. in the exercise of reasonable judgment Engineer determines that the proposed item:
 - 1) is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;

- 2) will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
 - 3) has a proven record of performance and availability of responsive service; and
 - 4) is not objectionable to Owner.
- b. Contractor certifies that, if the proposed item is approved and incorporated into the Work:
- 1) there will be no increase in cost to the Owner or increase in Contract Times; and
 - 2) the item will conform substantially to the detailed requirements of the item named in the Contract Documents.
- B. *Contractor's Expense*: Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.
- C. *Engineer's Evaluation and Determination*: Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Engineer will be the sole judge of acceptability. No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal," which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.
- D. *Effect of Engineer's Determination*: Neither approval nor denial of an "or-equal" request will result in any change in Contract Price. The Engineer's denial of an "or-equal" request will be final and binding, and may not be reversed through an appeal under any provision of the Contract.
- E. *Treatment as a Substitution Request*: If Engineer determines that an item of equipment or material proposed by Contractor does not qualify as an "or-equal" item, Contractor may request that Engineer consider the item a proposed substitute pursuant to Paragraph 7.06.

7.06 *Substitutes*

- A. *Contractor's Request; Governing Criteria*: Unless the specification or description of an item of equipment or material required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material under the circumstances described below. To the extent possible such requests must be made before commencement of related construction at the Site.
1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of equipment or material from anyone other than Contractor.
 2. The requirements for review by Engineer will be as set forth in Paragraph 7.06.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.

3. Contractor shall make written application to Engineer for review of a proposed substitute item of equipment or material that Contractor seeks to furnish or use. The application:
 - a. will certify that the proposed substitute item will:
 - 1) perform adequately the functions and achieve the results called for by the general design;
 - 2) be similar in substance to the item specified; and
 - 3) be suited to the same use as the item specified.
 - b. will state:
 - 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times;
 - 2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and
 - 3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.
 - c. will identify:
 - 1) all variations of the proposed substitute item from the item specified; and
 - 2) available engineering, sales, maintenance, repair, and replacement services.
 - d. will contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.
- B. *Engineer's Evaluation and Determination*: Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.
- C. *Special Guarantee*: Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- D. *Reimbursement of Engineer's Cost*: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.

- E. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute at Contractor's expense.
- F. *Effect of Engineer's Determination*: If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request will be final and binding, and may not be reversed through an appeal under any provision of the Contract. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.06.D, by timely submittal of a Change Proposal.

7.07 *Concerning Subcontractors and Suppliers*

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner. The Contractor's retention of a Subcontractor or Supplier for the performance of parts of the Work will not relieve Contractor's obligation to Owner to perform and complete the Work in accordance with the Contract Documents.
- B. Contractor shall retain specific Subcontractors and Suppliers for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor or Supplier to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within 5 days.
- E. Owner may require the replacement of any Subcontractor or Supplier. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors or Suppliers for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor or Supplier so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor or Supplier.
- F. If Owner requires the replacement of any Subcontractor or Supplier retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.
- G. No acceptance by Owner of any such Subcontractor or Supplier, whether initially or as a replacement, will constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.

- H. On a monthly basis, Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.
- I. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors and Suppliers.
- J. The divisions and sections of the Specifications and the identifications of any Drawings do not control Contractor in dividing the Work among Subcontractors or Suppliers, or in delineating the Work to be performed by any specific trade.
- K. All Work performed for Contractor by a Subcontractor or Supplier must be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract for the benefit of Owner and Engineer.
- L. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor for Work performed for Contractor by the Subcontractor or Supplier.
- M. Contractor shall restrict all Subcontractors and Suppliers from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed in this Contract.

7.08 *Patent Fees and Royalties*

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If an invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights will be disclosed in the Contract Documents.
- B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.
- C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

7.09 *Permits*

- A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits, licenses, and certificates of occupancy. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

7.10 *Taxes*

- A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

7.11 *Laws and Regulations*

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work or other action. It is not Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this does not relieve Contractor of its obligations under Paragraph 3.03.
- C. Owner or Contractor may give written notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such written notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

7.12 *Record Documents*

- A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

7.13 *Safety and Protection*

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations.
- B. Contractor shall designate a qualified and experienced safety representative whose duties and responsibilities are the prevention of Work-related accidents and the maintenance and supervision of safety precautions and programs.
- C. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
 - 1. all persons on the Site or who may be affected by the Work;
 - 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 - 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- D. All damage, injury, or loss to any property referred to in Paragraph 7.13.C.2 or 7.13.C.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
- E. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection.
- F. Contractor shall notify Owner; the owners of adjacent property; the owners of Underground Facilities and other utilities (if the identity of such owners is known to Contractor); and other contractors and utility owners performing work at or adjacent to the Site, in writing, when Contractor knows that prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.
- G. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. Any Owner's safety programs that are applicable to the Work are identified or included in the Supplementary Conditions or Specifications.
- H. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.

- I. Contractor's duties and responsibilities for safety and protection will continue until all the Work is completed, Engineer has issued a written notice to Owner and Contractor in accordance with Paragraph 15.06.C that the Work is acceptable, and Contractor has left the Site (except as otherwise expressly provided in connection with Substantial Completion).
- J. Contractor's duties and responsibilities for safety and protection will resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.14 *Hazard Communication Programs*

- A. Contractor shall be responsible for coordinating any exchange of safety data sheets (formerly known as material safety data sheets) or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

7.15 *Emergencies*

- A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused by an emergency, or are required as a result of Contractor's response to an emergency. If Engineer determines that a change in the Contract Documents is required because of an emergency or Contractor's response, a Work Change Directive or Change Order will be issued.

7.16 *Submittals*

A. *Shop Drawing and Sample Requirements*

- 1. Before submitting a Shop Drawing or Sample, Contractor shall:
 - a. review and coordinate the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
 - b. determine and verify:
 - 1) all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect to the Submittal;
 - 2) the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - 3) all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto;
 - c. confirm that the Submittal is complete with respect to all related data included in the Submittal.
- 2. Each Shop Drawing or Sample must bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that Submittal, and that Contractor approves the Submittal.

3. With each Shop Drawing or Sample, Contractor shall give Engineer specific written notice of any variations that the Submittal may have from the requirements of the Contract Documents. This notice must be set forth in a written communication separate from the Submittal; and, in addition, in the case of a Shop Drawing by a specific notation made on the Shop Drawing itself.
- B. *Submittal Procedures for Shop Drawings and Samples:* Contractor shall label and submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals.
1. *Shop Drawings*
 - a. Contractor shall submit the number of copies required in the Specifications.
 - b. Data shown on the Shop Drawings must be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide, and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.C.
 2. *Samples*
 - a. Contractor shall submit the number of Samples required in the Specifications.
 - b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the Submittal for the limited purposes required by Paragraph 7.16.C.
 3. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.
- C. *Engineer's Review of Shop Drawings and Samples*
1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the accepted Schedule of Submittals. Engineer's review and approval will be only to determine if the items covered by the Submittals will, after installation or incorporation in the Work, comply with the requirements of the Contract Documents, and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
 2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction, or to safety precautions or programs incident thereto.
 3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
 4. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will

document any such approved variation from the requirements of the Contract Documents in a Field Order or other appropriate Contract modification.

5. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for complying with the requirements of Paragraphs 7.16.A and B.
6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, will not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
7. Neither Engineer's receipt, review, acceptance, or approval of a Shop Drawing or Sample will result in such item becoming a Contract Document.
8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.C.4.

D. Resubmittal Procedures for Shop Drawings and Samples

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous Submittals.
2. Contractor shall furnish required Shop Drawing and Sample submittals with sufficient information and accuracy to obtain required approval of an item with no more than two resubmittals. Engineer will record Engineer's time for reviewing a third or subsequent resubmittal of a Shop Drawing or Sample, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges.
3. If Contractor requests a change of a previously approved Shop Drawing or Sample, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

E. Submittals Other than Shop Drawings, Samples, and Owner-Delegated Designs

1. The following provisions apply to all Submittals other than Shop Drawings, Samples, and Owner-delegated designs:
 - a. Contractor shall submit all such Submittals to the Engineer in accordance with the Schedule of Submittals and pursuant to the applicable terms of the Contract Documents.
 - b. Engineer will provide timely review of all such Submittals in accordance with the Schedule of Submittals and return such Submittals with a notation of either Accepted or Not Accepted. Any such Submittal that is not returned within the time established in the Schedule of Submittals will be deemed accepted.
 - c. Engineer's review will be only to determine if the Submittal is acceptable under the requirements of the Contract Documents as to general form and content of the Submittal.

- d. If any such Submittal is not accepted, Contractor shall confer with Engineer regarding the reason for the non-acceptance, and resubmit an acceptable document.
 2. Procedures for the submittal and acceptance of the Progress Schedule, the Schedule of Submittals, and the Schedule of Values are set forth in Paragraphs 2.03, 2.04, and 2.05.
- F. Owner-delegated Designs: Submittals pursuant to Owner-delegated designs are governed by the provisions of Paragraph 7.19.

7.17 Contractor's General Warranty and Guarantee

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer is entitled to rely on Contractor's warranty and guarantee.
- B. Owner's rights under this warranty and guarantee are in addition to, and are not limited by, Owner's rights under the correction period provisions of Paragraph 15.08. The time in which Owner may enforce its warranty and guarantee rights under this Paragraph 7.17 is limited only by applicable Laws and Regulations restricting actions to enforce such rights; provided, however, that after the end of the correction period under Paragraph 15.08:
 1. Owner shall give Contractor written notice of any defective Work within 60 days of the discovery that such Work is defective; and
 2. Such notice will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the notice.
- C. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
 1. abuse, or improper modification, maintenance, or operation, by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 2. normal wear and tear under normal usage.
- D. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents is absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents, a release of Contractor's obligation to perform the Work in accordance with the Contract Documents, or a release of Owner's warranty and guarantee rights under this Paragraph 7.17:
 1. Observations by Engineer;
 2. Recommendation by Engineer or payment by Owner of any progress or final payment;
 3. The issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
 4. Use or occupancy of the Work or any part thereof by Owner;
 5. Any review and approval of a Shop Drawing or Sample submittal;
 6. The issuance of a notice of acceptability by Engineer;
 7. The end of the correction period established in Paragraph 15.08;
 8. Any inspection, test, or approval by others; or

9. Any correction of defective Work by Owner.
- E. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract will govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

7.18 *Indemnification*

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from losses, damages, costs, and judgments (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising from third-party claims or actions relating to or resulting from the performance or furnishing of the Work, provided that any such claim, action, loss, cost, judgment or damage is attributable to bodily injury, sickness, disease, or death, or to damage to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable.
- B. In any and all claims against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A will not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

7.19 *Delegation of Professional Design Services*

- A. Owner may require Contractor to provide professional design services for a portion of the Work by express delegation in the Contract Documents. Such delegation will specify the performance and design criteria that such services must satisfy, and the Submittals that Contractor must furnish to Engineer with respect to the Owner-delegated design.
- B. Contractor shall cause such Owner-delegated professional design services to be provided pursuant to the professional standard of care by a properly licensed design professional, whose signature and seal must appear on all drawings, calculations, specifications, certifications, and Submittals prepared by such design professional. Such design professional must issue all certifications of design required by Laws and Regulations.
- C. If a Shop Drawing or other Submittal related to the Owner-delegated design is prepared by Contractor, a Subcontractor, or others for submittal to Engineer, then such Shop Drawing or other Submittal must bear the written approval of Contractor's design professional when submitted by Contractor to Engineer.

- D. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, and approvals performed or provided by the design professionals retained or employed by Contractor under an Owner-delegated design, subject to the professional standard of care and the performance and design criteria stated in the Contract Documents.
- E. Pursuant to this Paragraph 7.19, Engineer's review, approval, and other determinations regarding design drawings, calculations, specifications, certifications, and other Submittals furnished by Contractor pursuant to an Owner-delegated design will be only for the following limited purposes:
 - 1. Checking for conformance with the requirements of this Paragraph 7.19;
 - 2. Confirming that Contractor (through its design professionals) has used the performance and design criteria specified in the Contract Documents; and
 - 3. Establishing that the design furnished by Contractor is consistent with the design concept expressed in the Contract Documents.
- F. Contractor shall not be responsible for the adequacy of performance or design criteria specified by Owner or Engineer.
- G. Contractor is not required to provide professional services in violation of applicable Laws and Regulations.

ARTICLE 8—OTHER WORK AT THE SITE

8.01 *Other Work*

- A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.
- B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any third-party utility work that Owner has arranged to take place at or adjacent to the Site, Owner shall provide such information to Contractor.
- C. Contractor shall afford proper and safe access to the Site to each contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work.
- D. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.

- E. If the proper execution or results of any part of Contractor's Work depends upon work performed by others, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.
- F. The provisions of this article are not applicable to work that is performed by third-party utilities or other third-party entities without a contract with Owner, or that is performed without having been arranged by Owner. If such work occurs, then any related delay, disruption, or interference incurred by Contractor is governed by the provisions of Paragraph 4.05.C.3.

8.02 *Coordination*

- A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:
 - 1. The identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;
 - 2. An itemization of the specific matters to be covered by such authority and responsibility; and
 - 3. The extent of such authority and responsibilities.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

8.03 *Legal Relationships*

- A. If, in the course of performing other work for Owner at or adjacent to the Site, the Owner's employees, any other contractor working for Owner, or any utility owner that Owner has arranged to perform work, causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment will take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract, and any remedies available to Contractor under Laws or Regulations concerning utility action or inaction. When applicable, any such equitable adjustment in Contract Price will be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times or Contract Price is subject to the provisions of Paragraphs 4.05.D and 4.05.E.

- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site.
 - 1. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this Paragraph 8.03.B.
 - 2. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due Contractor.
- C. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such damage, delay, disruption, or interference.

ARTICLE 9—OWNER'S RESPONSIBILITIES

9.01 *Communications to Contractor*

- A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

9.02 *Replacement of Engineer*

- A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer's status under the Contract Documents will be that of the former Engineer.

9.03 *Furnish Data*

- A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

9.04 *Pay When Due*

- A. Owner shall make payments to Contractor when they are due as provided in the Agreement.

- 9.05 *Lands and Easements; Reports, Tests, and Drawings*
- A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.
 - B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.
 - C. Article 5 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.
- 9.06 *Insurance*
- A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.
- 9.07 *Change Orders*
- A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.
- 9.08 *Inspections, Tests, and Approvals*
- A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.
- 9.09 *Limitations on Owner's Responsibilities*
- A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- 9.10 *Undisclosed Hazardous Environmental Condition*
- A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.
- 9.11 *Evidence of Financial Arrangements*
- A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract (including obligations under proposed changes in the Work).
- 9.12 *Safety Programs*
- A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
 - B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

ARTICLE 10—ENGINEER'S STATUS DURING CONSTRUCTION

10.01 *Owner's Representative*

- A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract.

10.02 *Visits to Site*

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe, as an experienced and qualified design professional, the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
- B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.07. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 *Resident Project Representative*

- A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in the Supplementary Conditions and in Paragraph 10.07.
- B. If Owner designates an individual or entity who is not Engineer's consultant, agent, or employee to represent Owner at the Site, then the responsibilities and authority of such individual or entity will be as provided in the Supplementary Conditions.

10.04 *Engineer's Authority*

- A. Engineer has the authority to reject Work in accordance with Article 14.
- B. Engineer's authority as to Submittals is set forth in Paragraph 7.16.
- C. Engineer's authority as to design drawings, calculations, specifications, certifications and other Submittals from Contractor in response to Owner's delegation (if any) to Contractor of professional design services, is set forth in Paragraph 7.19.
- D. Engineer's authority as to changes in the Work is set forth in Article 11.

E. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.05 *Determinations for Unit Price Work*

A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

10.06 *Decisions on Requirements of Contract Documents and Acceptability of Work*

A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.07 *Limitations on Engineer's Authority and Responsibilities*

A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, will create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. Engineer's review of the final Application for Payment and accompanying documentation, and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Contractor under Paragraph 15.06.A, will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.

E. The limitations upon authority and responsibility set forth in this Paragraph 10.07 also apply to the Resident Project Representative, if any.

10.08 *Compliance with Safety Program*

A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs of which Engineer has been informed.

ARTICLE 11—CHANGES TO THE CONTRACT

11.01 *Amending and Supplementing the Contract*

- A. The Contract may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
- B. If an amendment or supplement to the Contract includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order.
- C. All changes to the Contract that involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, must be supported by Engineer's recommendation. Owner and Contractor may amend other terms and conditions of the Contract without the recommendation of the Engineer.

11.02 *Change Orders*

- A. Owner and Contractor shall execute appropriate Change Orders covering:
 - 1. Changes in Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
 - 2. Changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
 - 3. Changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.05, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters; and
 - 4. Changes that embody the substance of any final and binding results under: Paragraph 11.03.B, resolving the impact of a Work Change Directive; Paragraph 11.09, concerning Change Proposals; Article 12, Claims; Paragraph 13.02.D, final adjustments resulting from allowances; Paragraph 13.03.D, final adjustments relating to determination of quantities for Unit Price Work; and similar provisions.
- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of Paragraph 11.02.A, it will be deemed to be of full force and effect, as if fully executed.

11.03 *Work Change Directives*

- A. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.07 regarding change of Contract Price.

- B. If Owner has issued a Work Change Directive and:
 - 1. Contractor believes that an adjustment in Contract Times or Contract Price is necessary, then Contractor shall submit any Change Proposal seeking such an adjustment no later than 30 days after the completion of the Work set out in the Work Change Directive.
 - 2. Owner believes that an adjustment in Contract Times or Contract Price is necessary, then Owner shall submit any Claim seeking such an adjustment no later than 60 days after issuance of the Work Change Directive.

11.04 *Field Orders*

- A. Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly.
- B. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

11.05 *Owner-Authorized Changes in the Work*

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Changes involving the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters will be supported by Engineer's recommendation.
- B. Such changes in the Work may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work must be performed under the applicable conditions of the Contract Documents.
- C. Nothing in this Paragraph 11.05 obligates Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.06 *Unauthorized Changes in the Work*

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.C.2.

11.07 *Change of Contract Price*

- A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment of Contract Price must comply with the provisions of Article 12.
- B. An adjustment in the Contract Price will be determined as follows:

1. Where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03);
 2. Where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.07.C.2); or
 3. Where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.07.C).
- C. *Contractor's Fee:* When applicable, the Contractor's fee for overhead and profit will be determined as follows:
1. A mutually acceptable fixed fee; or
 2. If a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. For costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee will be 15 percent;
 - b. For costs incurred under Paragraph 13.01.B.3, the Contractor's fee will be 5 percent;
 - c. Where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.07.C.2.a and 11.07.C.2.b is that the Contractor's fee will be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of 5 percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted Work the maximum total fee to be paid by Owner will be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the Work;
 - d. No fee will be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
 - e. The amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in Cost of the Work will be the amount of the actual net decrease in Cost of the Work and a deduction of an additional amount equal to 5 percent of such actual net decrease in Cost of the Work; and
 - f. When both additions and credits are involved in any one change or Change Proposal, the adjustment in Contractor's fee will be computed by determining the sum of the costs in each of the cost categories in Paragraph 13.01.B (specifically, payroll costs, Paragraph 13.01.B.1; incorporated materials and equipment costs, Paragraph 13.01.B.2; Subcontract costs, Paragraph 13.01.B.3; special consultants costs, Paragraph 13.01.B.4; and other costs, Paragraph 13.01.B.5) and applying to each such cost category sum the appropriate fee from Paragraphs 11.07.C.2.a through 11.07.C.2.e, inclusive.

11.08 *Change of Contract Times*

- A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment in the Contract Times must comply with the provisions of Article 12.
- B. Delay, disruption, and interference in the Work, and any related changes in Contract Times, are addressed in and governed by Paragraph 4.05.

11.09 *Change Proposals*

- A. *Purpose and Content:* Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; contest an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; challenge a set-off against payment due; or seek other relief under the Contract. The Change Proposal will specify any proposed change in Contract Times or Contract Price, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents. Each Change Proposal will address only one issue, or a set of closely related issues.

- B. *Change Proposal Procedures*

- 1. *Submittal:* Contractor shall submit each Change Proposal to Engineer within 30 days after the start of the event giving rise thereto, or after such initial decision.
- 2. *Supporting Data:* The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal.
 - a. Change Proposals based on or related to delay, interruption, or interference must comply with the provisions of Paragraphs 4.05.D and 4.05.E.
 - b. Change proposals related to a change of Contract Price must include full and detailed accounts of materials incorporated into the Work and labor and equipment used for the subject Work.

The supporting data must be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event.

- 3. *Engineer's Initial Review:* Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal. If in its discretion Engineer concludes that additional supporting data is needed before conducting a full review and making a decision regarding the Change Proposal, then Engineer may request that Contractor submit such additional supporting data by a date specified by Engineer, prior to Engineer beginning its full review of the Change Proposal.
- 4. *Engineer's Full Review and Action on the Change Proposal:* Upon receipt of Contractor's supporting data (including any additional data requested by Engineer), Engineer will conduct a full review of each Change Proposal and, within 30 days after such receipt of the Contractor's supporting data, either approve the Change Proposal in whole, deny it in whole, or approve it in part and deny it in part. Such actions must be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change

Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.

5. *Binding Decision*: Engineer's decision is final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- C. *Resolution of Certain Change Proposals*: If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties in writing that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice will be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.
- D. *Post-Completion*: Contractor shall not submit any Change Proposals after Engineer issues a written recommendation of final payment pursuant to Paragraph 15.06.B.

11.10 *Notification to Surety*

- A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

ARTICLE 12—CLAIMS

12.01 *Claims*

- A. *Claims Process*: The following disputes between Owner and Contractor are subject to the Claims process set forth in this article:
 1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents;
 3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters; and
 4. Subject to the waiver provisions of Paragraph 15.07, any dispute arising after Engineer has issued a written recommendation of final payment pursuant to Paragraph 15.06.B.
- B. *Submittal of Claim*: The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim rests with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge

and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.

- C. *Review and Resolution*: The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim will be stated in writing and submitted to the other party, with a copy to Engineer.
- D. *Mediation*
 - 1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate will stay the Claim submittal and response process.
 - 2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process will resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal and decision process will resume as of the date of the conclusion of the mediation, as determined by the mediator.
 - 3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.
- E. *Partial Approval*: If the party receiving a Claim approves the Claim in part and denies it in part, such action will be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.
- F. *Denial of Claim*: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim will be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.
- G. *Final and Binding Results*: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim will be incorporated in a Change Order or other written document to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13—COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.01 *Cost of the Work*

- A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
 - 1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or

2. When needed to determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
- B. *Costs Included:* Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work will be in amounts no higher than those commonly incurred in the locality of the Project, will not include any of the costs itemized in Paragraph 13.01.C, and will include only the following items:
1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor in advance of the subject Work. Such employees include, without limitation, superintendents, foremen, safety managers, safety representatives, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work will be apportioned on the basis of their time spent on the Work. Payroll costs include, but are not limited to, salaries and wages plus the cost of fringe benefits, which include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, will be included in the above to the extent authorized by Owner.
 2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts will accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment will accrue to Owner, and Contractor shall make provisions so that they may be obtained.
 3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, which will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee will be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.
 4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed or retained for services specifically related to the Work.
 5. Other costs consisting of the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, which are

consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.

- 1) In establishing included costs for materials such as scaffolding, plating, or sheeting, consideration will be given to the actual or the estimated life of the material for use on other projects; or rental rates may be established on the basis of purchase or salvage value of such items, whichever is less. Contractor will not be eligible for compensation for such items in an amount that exceeds the purchase cost of such item.

c. *Construction Equipment Rental*

- 1) Rentals of all construction equipment and machinery, and the parts thereof, in accordance with rental agreements approved by Owner as to price (including any surcharge or special rates applicable to overtime use of the construction equipment or machinery), and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs will be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts must cease when the use thereof is no longer necessary for the Work.
- 2) Costs for equipment and machinery owned by Contractor or a Contractor-related entity will be paid at a rate shown for such equipment in the equipment rental rate book specified in the Supplementary Conditions. An hourly rate will be computed by dividing the monthly rates by 176. These computed rates will include all operating costs.
- 3) With respect to Work that is the result of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price ("changed Work"), included costs will be based on the time the equipment or machinery is in use on the changed Work and the costs of transportation, loading, unloading, assembly, dismantling, and removal when directly attributable to the changed Work. The cost of any such equipment or machinery, or parts thereof, must cease to accrue when the use thereof is no longer necessary for the changed Work.

- d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
- e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
- f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of builder's risk or other property insurance established in accordance with Paragraph 6.04), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses will be included in the Cost of the Work for the purpose of determining Contractor's fee.

- g. The cost of utilities, fuel, and sanitary facilities at the Site.
- h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.
- i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.

C. *Costs Excluded*: The term Cost of the Work does not include any of the following items:

- 1. Payroll costs and other compensation of Contractor's officers, executives, principals, general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.
- 2. The cost of purchasing, renting, or furnishing small tools and hand tools.
- 3. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
- 4. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
- 5. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
- 6. Expenses incurred in preparing and advancing Claims.
- 7. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.

D. *Contractor's Fee*

- 1. When the Work as a whole is performed on the basis of cost-plus-a-fee, then:
 - a. Contractor's fee for the Work set forth in the Contract Documents as of the Effective Date of the Contract will be determined as set forth in the Agreement.
 - b. for any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work, Contractor's fee will be determined as follows:
 - 1) When the fee for the Work as a whole is a percentage of the Cost of the Work, the fee will automatically adjust as the Cost of the Work changes.
 - 2) When the fee for the Work as a whole is a fixed fee, the fee for any additions or deletions will be determined in accordance with Paragraph 11.07.C.2.
- 2. When the Work as a whole is performed on the basis of a stipulated sum, or any other basis other than cost-plus-a-fee, then Contractor's fee for any Work covered by a Change

Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work will be determined in accordance with Paragraph 11.07.C.2.

- E. *Documentation and Audit*: Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor and pertinent Subcontractors will establish and maintain records of the costs in accordance with generally accepted accounting practices. Subject to prior written notice, Owner will be afforded reasonable access, during normal business hours, to all Contractor's accounts, records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data relating to the Cost of the Work and Contractor's fee. Contractor shall preserve all such documents for a period of three years after the final payment by Owner. Pertinent Subcontractors will afford such access to Owner, and preserve such documents, to the same extent required of Contractor.

13.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.
- B. *Cash Allowances*: Contractor agrees that:
1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment for any of the foregoing will be valid.
- C. *Owner's Contingency Allowance*: Contractor agrees that an Owner's contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor for Work covered by allowances, and the Contract Price will be correspondingly adjusted.

13.03 Unit Price Work

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision

thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, and the final adjustment of Contract Price will be set forth in a Change Order, subject to the provisions of the following paragraph.

E. *Adjustments in Unit Price*

1. Contractor or Owner shall be entitled to an adjustment in the unit price with respect to an item of Unit Price Work if:
 - a. the quantity of the item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and
 - b. Contractor's unit costs to perform the item of Unit Price Work have changed materially and significantly as a result of the quantity change.
2. The adjustment in unit price will account for and be coordinated with any related changes in quantities of other items of Work, and in Contractor's costs to perform such other Work, such that the resulting overall change in Contract Price is equitable to Owner and Contractor.
3. Adjusted unit prices will apply to all units of that item.

ARTICLE 14—TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

14.01 *Access to Work*

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply with such procedures and programs as applicable.

14.02 *Tests, Inspections, and Approvals*

- A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work will be governed by the provisions of Paragraph 14.05.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.

- D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
 2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
 3. by manufacturers of equipment furnished under the Contract Documents;
 4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
 5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests will be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

- E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering will be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to cover the same and Engineer had not acted with reasonable promptness in response to such notice.

14.03 *Defective Work*

- A. *Contractor's Obligation:* It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority:* Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. *Notice of Defects:* Prompt written notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement:* Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.
- E. *Preservation of Warranties:* When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. *Costs and Damages:* In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs,

losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 *Acceptance of Defective Work*

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work will be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

14.05 *Uncovering Work*

- A. Engineer has the authority to require additional inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.
- B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.
 1. If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
 2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.06 *Owner May Stop the Work*

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work,

or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work will not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

14.07 Owner May Correct Defective Work

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace defective Work as required by Engineer, then Owner may, after 7 days' written notice to Contractor, correct or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.
- C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.
- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

ARTICLE 15—PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 Progress Payments

- A. *Basis for Progress Payments:* The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments for Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.
- B. *Applications for Payments*
 - 1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents.
 - 2. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment must also be accompanied by: (a) a bill of sale, invoice, copies of subcontract or purchase order payments, or other documentation

establishing full payment by Contractor for the materials and equipment; (b) at Owner's request, documentation warranting that Owner has received the materials and equipment free and clear of all Liens; and (c) evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.

3. Beginning with the second Application for Payment, each Application must include an affidavit of Contractor stating that all previous progress payments received by Contractor have been applied to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
4. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

C. *Review of Applications*

1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
 - a. the Work has progressed to the point indicated;
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
 - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
 - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or
 - b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.

4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
 - a. to supervise, direct, or control the Work;
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto;
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work;
 - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid by Owner; or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.
6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
 - a. the Work is defective, requiring correction or replacement;
 - b. the Contract Price has been reduced by Change Orders;
 - c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or
 - e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.

D. *Payment Becomes Due*

1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.

E. *Reductions in Payment by Owner*

1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
 - a. Claims have been made against Owner based on Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages resulting from Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;

- b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
 - c. Contractor has failed to provide and maintain required bonds or insurance;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
 - e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
 - f. The Work is defective, requiring correction or replacement;
 - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - h. The Contract Price has been reduced by Change Orders;
 - i. An event has occurred that would constitute a default by Contractor and therefore justify a termination for cause;
 - j. Liquidated or other damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
 - k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens; or
 - l. Other items entitle Owner to a set-off against the amount recommended.
2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed will be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.
3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld will be treated as an amount due as determined by Paragraph 15.01.D.1 and subject to interest as provided in the Agreement.

15.02 *Contractor's Warranty of Title*

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than 7 days after the time of payment by Owner.

15.03 *Substantial Completion*

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time

submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.

- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which will fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have 7 days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.
- E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

15.04 *Partial Use or Occupancy*

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without

significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:

1. At any time, Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through 15.03.E for that part of the Work.
2. At any time, Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.04 regarding builder's risk or other property insurance.

15.05 *Final Inspection*

- A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

15.06 *Final Payment*

A. *Application for Payment*

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents (as provided in Paragraph 7.12), and other documents, Contractor may make application for final payment.
2. The final Application for Payment must be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents;
 - b. consent of the surety, if any, to final payment;
 - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.

- d. a list of all duly pending Change Proposals and Claims; and
 - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.
- B. *Engineer's Review of Final Application and Recommendation of Payment:* If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within 10 days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the final Application for Payment to Owner for payment. Such recommendation will account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.
- C. *Notice of Acceptability:* In support of its recommendation of payment of the final Application for Payment, Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to stated limitations in the notice and to the provisions of Paragraph 15.07.
- D. *Completion of Work:* The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment and issuance of notice of the acceptability of the Work.
- E. *Final Payment Becomes Due:* Upon receipt from Engineer of the final Application for Payment and accompanying documentation, Owner shall set off against the amount recommended by Engineer for final payment any further sum to which Owner is entitled, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions of this Contract with respect to progress payments. Owner shall pay the resulting balance due to Contractor within 30 days of Owner's receipt of the final Application for Payment from Engineer.

15.07 *Waiver of Claims*

- A. By making final payment, Owner waives its claim or right to liquidated damages or other damages for late completion by Contractor, except as set forth in an outstanding Claim,

appeal under the provisions of Article 17, set-off, or express reservation of rights by Owner. Owner reserves all other claims or rights after final payment.

- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted as a Claim, or appealed under the provisions of Article 17.

15.08 *Correction Period*

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the Supplementary Conditions or the terms of any applicable special guarantee required by the Contract Documents), Owner gives Contractor written notice that any Work has been found to be defective, or that Contractor's repair of any damages to the Site or adjacent areas has been found to be defective, then after receipt of such notice of defect Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 - 1. correct the defective repairs to the Site or such adjacent areas;
 - 2. correct such defective Work;
 - 3. remove the defective Work from the Project and replace it with Work that is not defective, if the defective Work has been rejected by Owner, and
 - 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting from the corrective measures.
- B. Owner shall give any such notice of defect within 60 days of the discovery that such Work or repairs is defective. If such notice is given within such 60 days but after the end of the correction period, the notice will be deemed a notice of defective Work under Paragraph 7.17.B.
- C. If, after receipt of a notice of defect within 60 days and within the correction period, Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others). Contractor's failure to pay such costs, losses, and damages within 10 days of invoice from Owner will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the failure to pay.
- D. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- E. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

- F. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph are not to be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16—SUSPENSION OF WORK AND TERMINATION

16.01 *Owner May Suspend Work*

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times directly attributable to any such suspension. Any Change Proposal seeking such adjustments must be submitted no later than 30 days after the date fixed for resumption of Work.

16.02 *Owner May Terminate for Cause*

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
 - 1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment, or failure to adhere to the Progress Schedule);
 - 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
 - 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
 - 4. Contractor's repeated disregard of the authority of Owner or Engineer.
- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) 10 days' written notice that Owner is considering a declaration that Contractor is in default and termination of the Contract, Owner may proceed to:
 - 1. declare Contractor to be in default, and give Contractor (and any surety) written notice that the Contract is terminated; and
 - 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within 7 days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects,

attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.

- F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond will govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 *Owner May Terminate for Convenience*

- A. Upon 7 days' written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
 - 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
 - 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
 - 3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid for any loss of anticipated profits or revenue, post-termination overhead costs, or other economic loss arising out of or resulting from such termination.

16.04 *Contractor May Stop Work or Terminate*

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon 7 days' written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, 7 days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The

provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17—FINAL RESOLUTION OF DISPUTES

17.01 *Methods and Procedures*

- A. *Disputes Subject to Final Resolution:* The following disputed matters are subject to final resolution under the provisions of this article:
1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full, pursuant to Article 12; and
 2. Disputes between Owner and Contractor concerning the Work, or obligations under the Contract Documents, that arise after final payment has been made.
- B. *Final Resolution of Disputes:* For any dispute subject to resolution under this article, Owner or Contractor may:
1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions;
 2. agree with the other party to submit the dispute to another dispute resolution process; or
 3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

ARTICLE 18—MISCELLANEOUS

18.01 *Giving Notice*

- A. Whenever any provision of the Contract requires the giving of written notice to Owner, Engineer, or Contractor, it will be deemed to have been validly given only if delivered:
1. in person, by a commercial courier service or otherwise, to the recipient's place of business;
 2. by registered or certified mail, postage prepaid, to the recipient's place of business; or
 3. by e-mail to the recipient, with the words "Formal Notice" or similar in the e-mail's subject line.

18.02 *Computation of Times*

- A. When any period of time is referred to in the Contract by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

18.03 *Cumulative Remedies*

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.04 *Limitation of Damages*

- A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 *No Waiver*

- A. A party's non-enforcement of any provision will not constitute a waiver of that provision, nor will it affect the enforceability of that provision or of the remainder of this Contract.

18.06 *Survival of Obligations*

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination of the Contract or of the services of Contractor.

18.07 *Controlling Law*

- A. This Contract is to be governed by the law of the state in which the Project is located.

18.08 *Assignment of Contract*

- A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party to this Contract of any rights under or interests in the Contract will be binding on the other party without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract.

18.09 *Successors and Assigns*

- A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

18.10 *Headings*

- A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

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SUPPLEMENTARY CONDITIONS

OF THE CONSTRUCTION CONTRACT

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SUPPLEMENTARY CONDITIONS

OF THE CONSTRUCTION CONTRACT

These Supplementary Conditions amend or supplement EJCDC® C-700, Standard General Conditions of the Construction Contract (2018). The General Conditions remain in full force and effect except as amended.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms, if any, used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

The paragraph address system used in these Supplementary Conditions is the same as the paragraph address system used in the General Conditions, with the prefix "SC" added—for example, "Paragraph SC-4.05."

ARTICLE 1—DEFINITIONS AND TERMINOLOGY

SC-1.01.A.8—Add the following at the end of the Paragraph:

The Change Order form to be used on this Project is EJCDC C-941 (2018). Agency approval is required before Change Orders are effective.

SC-1.01.A.16 Add the following to Paragraph 1.01.A.16:

When the Project is to be constructed under multiple direct Contracts awarded by the Owner, the term "Contractor" shall mean the appropriate prime contractor. Whenever a specific prime Contractor is referred to, terms such as "General Contractor", "Electrical Contractor", "Plumbing Contractor", "HVAC Contractor", or other appropriate Contract-indicating term will be used.

SC-1.01.A.30—Add the following at the end of the Paragraph:

For the purposes of Rural Development, this term is synonymous with the term "applicant" as defined in 7 CFR 1780.7 (a) (1), (2) and (3) and is an entity receiving financial assistance from the federal programs.

SC-1.01.A.40 Add the following to Paragraph 1.01.A.40:

Trucking, shipping, delivery firms, consultants, and entities performing testing or inspection retained by Contractor or any Subcontractor are considered to be Subcontractors.

SC-1.01.A.45 Add the following to Paragraph 1.01.A.45:

Entities that rent construction equipment or machinery, but are not incorporated into the Work, are considered to be Suppliers. If such rental entity furnishes both equipment and one or more personnel to operate and maintain the equipment, such entity is a Subcontractor.

SC-1.01.A.50—Add the following at the end of the Paragraph:

The Work Change Directive form to be used on this Project is EJCDC C-940 (2018). Agency approval is required before a Work Change Directive is issued.

SC-1.01.A.51 – Add the following new paragraph immediately after Paragraph 1.01.A.50:

51. Agency - The Project is financed in whole or in part by USDA Rural Utilities Service pursuant to the Consolidated Farm and Rural Development Act (7 USC Section 1921 et seq.). The Rural Utilities Service programs are administered through the USDA Rural Development offices; therefore, the Agency for these documents is USDA Rural Development.

SC-1.01.A.52 – Add the following new paragraph with the title “American Iron and Steel Definitions” immediately after Paragraph 1.01.A.51:

52.a American Iron and Steel (AIS) - Requirements mandated by Section 746 of Title VII of the Consolidated Appropriations Act of 2017 (Division A - Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2017) and subsequent statutes mandating domestic preference for “iron and steel products,” meaning the following products, if made primarily of iron or steel: lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and Construction Materials. AIS requirements apply in each of the several states, the District of Columbia, and each federally recognized Tribe, but not the U.S. Territories.

52.b Coating - A covering that is applied to the surface of an object. If a Coating is applied to the external surface of a domestic iron or Steel component, and the application takes place outside of the United States, said product would be considered a compliant product under the AIS requirements. Any Coating processes that are applied to the external surface of Iron and Steel components that would otherwise be AIS compliant would not disqualify the product from meeting the AIS requirements regardless of where the Coating processes occur, provided that final assembly of the product occurs in the United States. This exemption only applies to Coatings on the external surface of Iron and Steel components. It does not apply to Coatings or linings on internal surfaces of Iron and Steel products, such as the lining of lined pipes. All Manufacturing Processes for lined pipes, including the application of pipe lining, must occur in the United States for the product to be compliant with AIS requirements.

52.c Construction Materials - Those articles, materials, or supplies made primarily of iron and/or steel, that are permanently incorporated into the project, not including mechanical and/or electrical components, equipment and systems. Some of these products may overlap with what is also considered “structural steel”. Note: Mechanical and electrical components, equipment and systems are not considered Construction Materials. See definitions of Mechanical Equipment and Electrical Equipment.

52.d Contractor’s Certification - Documentation submitted by the Contractor upon Substantial Completion of the Contract that all Iron and Steel products installed were Produced in the United States.

52.e De Minimis - Various miscellaneous, incidental low-cost components that are essential for, but incidental to, the construction and are incorporated into the physical structure of the project. Examples of De Minimis components could include small washers, screws, fasteners (such as “off the shelf” nuts and bolts), miscellaneous wire, corner bead, ancillary tube, signage, trash bins, door hardware etc. Costs for such De

Minimis components cumulatively may comprise no more than a total of five percent of the total cost of the materials used in and incorporated into a project; the cost of an individual item may not exceed one percent of the total cost of the materials used in and incorporated into a project.

52.f *Electrical Equipment* - Typically any machine powered by electricity and includes components that are part of the electrical distribution system. AIS does not apply to Electrical Equipment.

52.g *Engineer's Certification* - Documentation submitted by the Engineer that Drawings, Specifications, and Bidding Documents comply with AIS.

52.h *Iron and Steel products* - The following products made primarily of iron or steel: lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and Construction Materials. Only items on the above list made primarily of iron or steel, permanently incorporated into the project must be Produced in the United States. For example, trench boxes, scaffolding or equipment, which are removed from the project site upon completion of the project, are not required to be made of U.S. iron or steel.

52.i *Manufacturer* - A Supplier, fabricator, distributor, materialman, or vendor is an entity with which the Owner, Contractor or any subcontractor has contracted to furnish materials or equipment to be incorporated in the project by the Owner, Contractor or a subcontractor.

52. j *Manufacturer's Certification* - Documentation provided by the Manufacturer stating that the Iron and Steel products to be used in the project are produced in the United States in accordance with American Iron and Steel (AIS) Requirements. If items are purchased via a Supplier, distributor, vendor, etc. from the Manufacturer directly, then the Supplier, distributor, vendor, etc. will be responsible for obtaining and providing these certifications to the parties purchasing the products.

52.k *Manufacturing Processes* - Processes such as melting, refining, pouring, forming, rolling, drawing, finishing, and fabricating. Further, if a domestic Iron and Steel product is taken out of the United States for any part of the manufacturing process, it becomes foreign source material. However, raw materials such as iron ore, limestone and iron and steel scrap are not covered by the AIS requirement, and the material(s), if any, being applied as a Coating are similarly not covered. Non-iron or Steel components of an Iron and Steel product may come from non-US sources. For example, for products such as valves and hydrants, the individual non-Iron and Steel components do not have to be of domestic origin. Raw materials, such as iron ore, limestone, scrap iron, and scrap steel, can come from non-U.S. sources.

52.l *Mechanical Equipment* - Typically equipment which has motorized parts and/or is powered by a motor. AIS does not apply to Mechanical Equipment.

52.m *Minor Components* - Components within an iron and/or Steel product otherwise compliant with the American Iron and Steel requirements; this waiver is typically used by Manufacturers. It differs from the De Minimis definition in that De Minimis pertains to the entire project and the minor component definition pertains to a single product. This waiver allows use of non-domestically produced miscellaneous Minor Components

comprising up to five percent of the total material cost of an otherwise domestically produced Iron and Steel product. However, unless a separate waiver for a product has been approved, all other Iron and Steel components in said product must still meet the AIS requirements. This waiver does not exempt the whole product from the AIS requirements only Minor Components within said product and the iron or Steel components of the product must be produced domestically. Valves and hydrants are also subject to the cost ceiling requirements described here. Examples of Minor Components could include items such as pins and springs in valves/hydrants, bands/straps in couplings, and other low-cost items such as small fasteners etc.

52.n *Municipal Castings* - Cast iron or Steel infrastructure products that are melted and cast. They typically provide access, protection, or housing for components incorporated into utility owned drinking water, storm water, wastewater, and solid waste infrastructure.

52.o *Primarily Iron or Steel* - A product is made of greater than 50 percent iron or Steel on a materials cost basis. An exception to this definition is reinforced precast concrete (see Definitions). All technical specifications and applicable industry standards (e.g. NIST, NSF, AWWA) must be met. If a product is determined to be less than 50 percent iron and/or steel, the AIS requirements do not apply. For example, the cost of a fire hydrant includes:

Y The cost of materials used for the iron portion of a fire hydrant (e.g. bonnet, body and shoe); and

Y The cost to pour and cast to create those components (e.g. labor and energy).
Not included in the cost are:

Y The additional material costs for the non-iron or Steel internal workings of the hydrant (e.g. stem, coupling, valve, seals, etc.); and

Y The cost to assemble the internal workings into the hydrant body.

52.p *Produced in the United States* - The production in the United States of the iron or Steel products used in the project requires that all Manufacturing Processes must take place in the United States, with the exception of metallurgical processes involving refinement of steel additives.

52.q *Reinforced Precast Concrete* – Reinforced Precast Concrete structures must comply with AIS, regardless of whether it consists of at least 50 percent iron or steel. The reinforcing bar and wire must be Produced in the United States and meet the same standards as for any other iron or Steel product. Additionally, the casting of the concrete product must take place in the United States. The cement and other raw materials used in concrete production are not required to be of domestic origin. If the reinforced concrete is cast at the construction site, the reinforcing bar and wire are considered Construction Materials and must be Produced in the United States.

52.r *Steel* - An alloy that includes at least 50 percent iron, between 0.02 and 2 percent carbon, and may include other elements. Metallic elements such as chromium, nickel, molybdenum, manganese, and silicon may be added during the melting of Steel for the purpose of enhancing properties such as corrosion resistance, hardness, or strength. The definition of Steel covers carbon steel, alloy steel, stainless steel, tool steel, and other specialty steels.

52.s Structural Steel - Rolled flanged shapes, having at least one dimension of their cross-section three inches or greater, which are used in the construction of bridges, buildings, ships, railroad rolling stock, and for numerous other constructional purposes. Such shapes are designated as wide-flange shapes, standard I-beams, channels, angles, tees, and zees. Other shapes include but are not limited to, H-piles, sheet piling, tie plates, cross ties, and those for other special purposes.

ARTICLE 2—PRELIMINARY MATTERS

2.01 *Delivery of Bonds and Evidence of Insurance*

SC-2.01 Delete Paragraphs 2.01.B. and C. in their entirety and insert the following in their place:

- B. *Evidence of Contractor's Insurance:* When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner copies of the policies (including all endorsements, and identification of applicable self-insured retentions and deductibles) of insurance required to be provided by Contractor in this Contract. Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.

2.02 *Copies of Documents*

SC-2.02 Amend the first sentence of Paragraph 2.02.A to read as follows:

Owner shall furnish to Contractor **five** paper copies of the Contract Documents (including one fully signed counterpart of the Agreement), and one copy in electronic portable document format (PDF).

SC-2.02 Delete Paragraph 2.02.A in its entirety and insert the following new paragraph in its place:

- A. Conformed documents incorporate and integrate Addenda and amendments negotiated prior to the Effective Date of the Contract. The conformed documents are produced for the convenience of the user and are not binding on the Owner nor do conformed documents take the place of the Contract Documents.**

SC-2.05.A. Add the following language to the end of 2.05.A:

2.05.A.4 Before Starting Construction, a preliminary schedule of payments showing projected cash flow over the duration of the Project.

2.06 *Electronic Transmittals*

SC-2.06 Delete in its entirety Paragraph 2.06.B and replace with the **term (Deleted)**

ARTICLE 3—CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

SC-3.01 Add the following language at the end of Paragraph 3.01.A:

The Order of Precedence of the Contract Documents shall be as stated in the Agreement.

SC-3.01 Delete Paragraph 3.01.C in its entirety.

SC-3.01 Add the following new paragraphs immediately after Paragraph 3.01.E:

- F. The Specifications and other verbal components of the Contract Documents may vary in form, format, and style. Some Specification sections are written in varying degrees of streamlined or declarative style and some Specifications sections may, in comparison, employ a more-narrative style. Omissions of such words and phrases as "Contractor shall," "in conformity with," "as shown," or "as specified" are intentional in streamlined language in the Contract Documents. Omitted words and phrases are incorporated by inference. Similar types of provisions may appear in various parts of a Specifications section or elsewhere in the Contract Documents. Contractor shall not attempt to take advantage of any variation of form, format or style in Change Proposal(s) and Claim(s).
- G. Cross referencing of Specification sections in a Specifications section's heading "Related Sections includes, but are not necessarily limited to: "and elsewhere within each Specifications section is provided as an aid and convenience to Contractor. Contractor shall not rely on cross referencing indicated and is responsible for coordinating the entire Work and providing a complete Project whether or not cross referencing is provided in each Specifications section or whether or not cross referencing is complete.

ARTICLE 4—COMMENCEMENT AND PROGRESS OF THE WORK

SC-4.01.A – Delete the last sentence of paragraph.

SC-4.05 *Delays in Contractor's Progress*

SC-4.05.C Amend Paragraph 4.05.C by adding the following subparagraphs:

5. Weather-Related Delays

- a. If "abnormal weather conditions" as set forth in Paragraph 4.05.C.2 of the General Conditions are the basis for a request for an equitable adjustment in the Contract Times, such request must be documented by data substantiating each of the following: (1) that weather conditions were abnormal for the period of time in which the delay occurred, (2) that such weather conditions could not have been reasonably anticipated, and (3) that such weather conditions had an adverse effect on the Work on the critical path at the time of the delay. Extreme or unusual weather that is typical for a given region, elevation, or season should not be considered abnormal weather conditions. Requests for time extensions due to abnormal weather conditions will be submitted to the Engineer within five days of the end of the abnormal weather condition event. It is the responsibility of the Contractor to provide the information listed in SC 4.05.C.5.b.

ARTICLE 5—B. SITE, SUBSURFACE AND PHYSICAL CONDITIONS, HAZARDOUS ENVIRONMENTAL CONDITIONS

5.03 *Subsurface and Physical Conditions*

SC-5.03 Add the following new paragraphs immediately after Paragraph 5.03.D:

E. The following reports of explorations and tests of subsurface conditions at or adjacent to the Site are known to Owner:

- 1. Report dated October 2016, prepared by Shannon & Wilson, Consulting Engineers, AK, entitled: "Palmer WWTP Improvements Report", consisting of 33 pages. The Technical Data contained in such report upon whose accuracy Contractor may rely are those indicated in the definition of Technical Data in the General Conditions.**
- 2. Report dated April 6, 2009, prepared by HDL, Engineering Consultants, Inc., Anchorage, AK, entitled: "Geotechnical Report, WWTP Subsurface Discharge System", consisting of 39 pages. The Technical Data contained in such report upon whose accuracy Contractor may rely are as indicated in the definition of Technical Data in the General Conditions.**

F. The following drawings of physical conditions relating to existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities) are known to Owner:

- 1. Drawings dated April, 1984, prepared by Datum Engineering & Surveying, PO Box 500, Palmer, AK, entitled: "City of Palmer Sewage Lagoon Expansion", consisting of 7 sheets numbered 1 to 7, inclusive.**
- 2. Drawings dated April, 1988, prepared by NHawthorne Engineering, 7127 Old Seward Highway, Anchorage, Alaska, entitled: "City of Palmer Sewage Treatment Plant 1988 Improvements", consisting of 6 sheets numbered 1 to 6, inclusive.**
- 3. Drawings dated November, 1988, prepared by Datum Engineering and Surveying, PO Box 500 Anchorage, Alaska, entitled: "City of Palmer Sewage Outfall Line", consisting of 14 sheets numbered 1 to 14, inclusive.**
- 4. Drawings dated February 2002, prepared by LCMF, Anchorage, Alaska, entitled: "City of Palmer Wastewater Treatment Plant Improvements", consisting of 52 sheets numbered 1 to 52, inclusive.**
- 5. Drawings dated June 2017, prepared by HDR, Anchorage, Alaska, entitled: "City of Palmer Wastewater Treatment Facility Improvements Project – 2017 – Conformed Documents", consisting of 119 sheets numbered 1 to 119, inclusive.**

G. Upon request, given a minimum of 3 days advance notice, Contractor may examine copies of reports and drawings identified in SC-5.03.E and SC-5.03.F that were not included with the Bidding Documents at **City of Palmer City Hall, Palmer, Alaska** during regular business hours, or may request copies from Engineer.

SC-5.04.A Add the following new paragraph immediately after Paragraph 5.04.A.4:

5. Contractor encounters human remains, recognizes the existence of burial markers, archaeological sites, historical sites, artifacts of potential archaeological or historical interest, or wetlands not shown or indicated in the Contract Documents, Contractor shall immediately cease operations

that may disturb such area(s) and secure the adjacent Work; and Owner shall promptly take any action necessary to obtain governmental authorization required to resume the operations (Contractor shall continue to suspend such operations until otherwise instructed by Owner but shall continue with all other operations that do not affect those remains or features);

SC-5.03 and

SC-5.04 Delete in their entirety Paragraphs 5.03 and 5.04.

5.06 *Hazardous Environmental Conditions*

SC 5.06 Delete Paragraphs 5.06.A and 5.06.B in their entirety and insert the following:

- A. No reports or drawings related to Hazardous Environmental Conditions at the Site are known to Owner.**
- B. The Contractor's Scope of Work:**
 - 1. The Contractor's scope of Work shall include implementation of all necessary safety, public health and environmental procedures and requirements relating to sanitary sewage encountered during the work.**
 - 2. The Contractor's Scope of Work shall include necessary environmental requirements for handling and disposal of Asbestos Pipe removed from service or excavated during the course of the Work.**

ARTICLE 6—BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

SC-6.01 Add the following paragraphs immediately after Paragraph 6.01.A:

- 1. *Required Performance Bond Form:* The performance bond that Contractor furnishes will be in the form of EJCDC® C-610, Performance Bond (2010, 2013, or 2018 edition).
- 2. *Required Payment Bond Form:* The payment bond that Contractor furnishes will be in the form of EJCDC® C-615, Payment Bond (2010, 2013, or 2018 edition).

6.02 *Insurance—General Provisions*

Make changes only when directed by the Owner **SC-6.02 Add the following language at the end of Paragraph 6.02.A:**

“Surety and Insurance companies from which the bonds and insurance for this Project are purchased shall possess a financial strength rating of at least A- and a financial size category of VII or higher from A.M. or an equivalent rating service, in addition to the other requirements specified herein.

SC-6.02 Add the following paragraph immediately after Paragraph 6.02.B:

- 1. Contractor may obtain worker's compensation insurance from an insurance company that has not been rated by A.M. Best, provided that such company (a) is domiciled in the state in which the Project is located, (b) is certified or authorized as a worker's compensation insurance provider by the appropriate state agency, and (c) has been

accepted to provide worker’s compensation insurance for similar projects by the state within the last 12 months.

The Owner shall direct all HDR revisions in this provision, if any 6.03 *Contractor’s Insurance*

SC 6.03 Add the following new paragraph immediately after Paragraph 6.03.B.5:

6. Ensure Contractor provides the Owner with the valid Certificate of Insurance and amendatory endorsements or copies of the applicable policy language affecting coverage, in advance of the performance of any work and as soon as possible, prior to or upon renewal, exhibiting coverage as required by the Contract and the Supplementary Conditions.

SC-6.03 Supplement Paragraph 6.03 with the following provisions after Paragraph 6.03.C:

D. *Other Additional Insureds:* As a supplement to the provisions of Paragraph 6.03.C of the General Conditions, the commercial general liability, automobile liability, umbrella or excess, pollution liability, and unmanned aerial vehicle liability policies must include as additional insureds (in addition to Owner and Engineer) the following:

- a) **CRW Engineering, Inc 3940 Arctic Blvd #300, Anchorage, AK 99503**
- b) **Shannon & Wilson, Inc, 5430 Fairbanks St #3, Anchorage, Alaska**
- c) **Materials Testing Firm hired by the Owner**

E. *Workers’ Compensation and Employer’s Liability:* Contractor shall purchase and maintain workers’ compensation and employer’s liability insurance, including, as applicable, United States Longshoreman and Harbor Workers’ Compensation Act, Jones Act, stop-gap employer’s liability coverage for monopolistic states, and foreign voluntary workers’ compensation (from available sources, notwithstanding the jurisdictional requirement of Paragraph 6.02.B of the General Conditions).

Workers’ Compensation and Related Policies	Policy limits of not less than:
Workers’ Compensation	
State	Statutory
Applicable Federal (e.g., Longshoreman’s)	Statutory
Foreign voluntary workers’ compensation (employer’s responsibility coverage), if applicable	Statutory
Jones Act (if applicable)	
Bodily injury by accident—each accident	\$Statutory
Bodily injury by disease—aggregate	\$Statutory
Employer’s Liability	
Each accident	\$1,000,000
Each employee	\$1,000,000

Workers' Compensation and Related Policies	Policy limits of not less than:
Policy limit	\$1,000,000
Stop-gap Liability Coverage	
For work performed in monopolistic states, stop-gap liability coverage must be endorsed to either the worker's compensation or commercial general liability policy with a minimum limit of:	\$Statutory

- F. *Commercial General Liability—Claims Covered:* Contractor shall purchase and maintain commercial general liability insurance, covering all operations by or on behalf of Contractor, on an occurrence basis, against claims for:
1. damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees,
 2. damages insured by reasonably available personal injury liability coverage, and
 3. damages because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom.
- G. *Commercial General Liability—Form and Content:* Contractor's commercial liability policy must be written on a 1996 (or later) Insurance Services Organization, Inc. (ISO) commercial general liability form (occurrence form) and include the following coverages and endorsements:
1. Products and completed operations coverage.
 - a. Such insurance must be maintained for three years after final payment.
 - b. Contractor shall furnish Owner and each other additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract) evidence of continuation of such insurance at final payment and three years thereafter.
 2. Blanket contractual liability coverage, including but not limited to coverage of Contractor's contractual indemnity obligations in Paragraph 7.18.
 3. Severability of interests and no insured-versus-insured or cross-liability exclusions.
 4. Underground, explosion, and collapse coverage.
 5. Personal injury coverage.
 6. Additional insured endorsements that include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together). If Contractor demonstrates to Owner that the specified ISO endorsements are not commercially available, then Contractor may satisfy this requirement by providing equivalent endorsements.
 7. For design professional additional insureds, ISO Endorsement CG 20 32 07 04 "Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured" or its equivalent.

Automobile Liability	Policy limits of not less than:
Combined Single Limit (Bodily Injury and Property Damage)	\$2,000,000

- K. *Umbrella or Excess Liability:* Contractor shall purchase and maintain umbrella or excess liability insurance written over the underlying employer’s liability, commercial general liability, and automobile liability insurance described in the Paragraphs above. The coverage afforded must be at least as broad as that of each and every one of the underlying policies.

Excess or Umbrella Liability	Policy limits of not less than:
Each Occurrence	\$2,000,000
General Aggregate	\$2,000,000

- L. *Using Umbrella or Excess Liability Insurance to Meet CGL and Other Policy Limit Requirements:* Contractor may meet the policy limits specified for employer’s liability, commercial general liability, and automobile liability through the primary policies alone, or through combinations of the primary insurance policy’s policy limits and partial attribution of the policy limits of an umbrella or excess liability policy that is at least as broad in coverage as that of the underlying policy, as specified herein. If such umbrella or excess liability policy was required under this Contract, at a specified minimum policy limit, such umbrella or excess policy must retain a minimum limit of \$[specify amount] after accounting for partial attribution of its limits to underlying policies, as allowed above.
- M. *Contractor’s Pollution Liability Insurance:* Contractor shall purchase and maintain a policy covering third-party injury and property damage, including cleanup costs, as a result of pollution conditions arising from Contractor’s operations and completed operations. This insurance must be maintained for no less than three years after final completion.

Contractor’s Pollution Liability	Policy limits of not less than:
Each Occurrence/Claim	\$2,000,000
General Aggregate	\$2,000,000

- N. *Contractor’s Professional Liability Insurance:* If Contractor will provide or furnish professional services under this *Contract*, through a delegation of professional design services or otherwise, then Contractor shall be responsible for purchasing and maintaining applicable professional liability insurance. This insurance must cover negligent acts, errors, or omissions in the performance of professional design or related services by the insured or others for whom the insured is legally liable. The insurance must be maintained throughout the duration of the Contract and for a minimum of two years after Substantial Completion. The retroactive date on the policy must pre-date the commencement of furnishing services on the Project.

Contractor's Professional Liability	Policy limits of not less than:
Each Claim	\$2,000,000
Annual Aggregate	\$2,000,000

6.04 *Builder's Risk and Other Property Insurance*

SC-6.04 Delete Paragraph 6.04.A and substitute the following in its place:

A. *Installation Floater*

1. Contractor shall provide and maintain installation floater insurance on a broad form or "all risk" policy providing coverage for materials, supplies, machinery, fixtures, and equipment that will be incorporated into the Work ("Covered Property"). Coverage under the Contractor's installation floater will include loss from covered "all risk" causes (perils) to Covered Property:
 - a. of the Contractor, and Covered Property of others that is in Contractor's care, custody, and control;
 - b. while in transit to the Site, including while at temporary storage sites;
 - c. while at the Site awaiting and during installation, erection, and testing;
 - d. continuing at least until the installation or erection of the Covered Property is completed, and the Work into which it is incorporated is accepted by Owner.
2. The installation floater coverage cannot be contingent on an external cause or risk, or limited to property for which the Contractor is legally liable.
3. The installation floater coverage will be in an amount sufficient to protect Contractor's interest in the Covered Property. The Contractor will be solely responsible for any deductible carried under this coverage.
4. This policy will include a waiver of subrogation applicable to Owner, Contractor, Engineer, all Subcontractors, and the officers, directors, partners, employees, agents and other consultants and subcontractors of any of them.

ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

7.02 *Supervision and Superintendence*

SC-7.02.B. Amend Paragraph 7.02.B to add the following sentences: "The Contractor shall identify their representative at the Site that shall have authority to act on behalf of Contractor. All communications given to or received from this representative shall be binding on Contractor. Any replacement proposed by the Contractor for the Contractor's superintendent shall be a competent superintendent and shall be subject to the approval of the Owner. The Contractor's superintendent shall be present at the site at all times while Work is in progress and shall be available by phone for emergencies 24 hours a day, 7 days per week. If at any time the superintendent leaves the Project Site while Work is in progress, the Engineer and Owner shall be notified and provided with the name and contact information for the Contractor's representative having responsible charge."

SC-7.02.C. Add the following new paragraph immediately after Paragraph 7.01.B:

Any superintendent or other personnel, who repeatedly fails to follow the Engineer's or Owner's written or oral orders, directions, instructions, or determinations, shall be subject to removal from the project. Upon the written request of the Engineer, the Contractor shall immediately remove such superintendent or other personnel and name a replacement in writing. Noncompliance with the Engineer's request to remove and replace personnel at any level shall be grounds for terminating the Contract.

SC-7.02 Add the following to Paragraph 7.02, following Paragraph 7.02.C:

- D. Unless Owner otherwise agrees in writing, the superintendent will be Contractor's representative at the Site and shall have authority to act on behalf of Contractor. All communications given to or received from the superintendent shall be binding on Contractor.

7.03 *Labor; Working Hours*

SC-7.03 Add the following new subparagraphs immediately after Paragraph 7.03.C:

1. Regular working hours will be **between 7:00 am and 5:00 pm, excluding Saturdays and Sundays and legal holidays.**
2. Owner's legal holidays are.

New Year's Day

Washington's Birthday (3rd Monday in February)

Memorial Day (Last Monday in May)

Veteran's Day

Thanksgiving (4th Thursday in November)

Christmas Day

SC-7.03 Add the following new paragraph immediately after Paragraph 7.03.C:

- D. Contractor shall be responsible for the cost of overtime (premium) pay and other expense incurred by Owner for Engineer's services (including those of the Resident Project Representative, if any), Owner's representative, and construction observation services, occasioned by the performance of Work on Saturday, Sunday, any legal holiday, or as overtime on any regular work day. If Contractor is responsible but does not pay, or if the parties are unable to agree as to the amount owed, then Owner may impose a reasonable set-off against payments due under Article 15.

SC-7.03 Add the following new subparagraph immediately after Paragraph SC-7.03.D:

1. For purposes of administering the foregoing requirement, **Engineer's labor costs shall be estimated average of \$150 per hour, additional overtime costs shall include**

expenses for materials, equipment, supplies, transportation and subsistence as actual cost plus a 10 percent markup.

SC-7.04.D Add the following new paragraph immediately after Paragraph 7.04.C:

D. All Iron and Steel products must meet American Iron and Steel requirements.

SC-7.04.E Add the following new paragraph immediately after Paragraph 7.04.D:

E. For projects utilizing a De Minimis waiver, Contractor shall maintain an itemized list of non domestically produced iron or steel incidental components and ensure that the cost is less than 5% of total materials cost for project.

SC-7.05.A Amend the third sentence of paragraph by striking out the following words:

Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item is permitted,

SC-7.05.A.1.a.3 Amend the last sentence of Paragraph a.3 by striking out "and;" and adding a period at the end of Paragraph a.3.

SC-7.05.A.1.a.4 Delete paragraph in its entirety and insert "Deleted."

SC-7.05.B Add the following at the end of paragraph:

Contractor shall include a Manufacturer's Certification letter for compliance with American Iron and Steel requirements in support data, if applicable. Refer to Manufacturer's Certification Letter provided in these Contract Documents.

SC-7.06.A.3.a.2 Remove "and" from the end of paragraph.

SC-7.06.A.3.a.3 Add "; and" to the end of paragraph.

SC-7.06.A.3.a.4 Add the following new paragraph immediately after Paragraph 7.06.A.3.a.3:

1. Comply with American Iron and Steel by providing Manufacturer's Certification letter of American Iron and Steel compliance, if applicable. Refer to Manufacturer's Certification Letter provided in these Contract Documents.

SC-7.07.A Amend by adding the following to the end of the paragraph:

The total amount of work subcontracted by the Contractor shall not exceed fifty percent of the Contract price without prior approval from the Owner, Engineer and Agency.

SC-7.07.B Delete paragraph in its entirety and insert "Deleted".

SC-7.07.E Delete the second sentence of paragraph and insert the following in its place: Owner may not require that Contractor use a specific replacement.

7.10 Taxes

SC-7.10 Add a new paragraph immediately after Paragraph 7.10.A:

- A. Owner is exempt from payment of sales and compensating use taxes of the State of **Alaska** and of cities and counties thereof on all materials to be incorporated into the Work.
 1. Owner will furnish the required certificates of tax exemption to Contractor for use in the purchase of materials and equipment to be incorporated into the Work.

2. Owner's exemption does not apply to construction tools or machinery, construction equipment, or other property purchased by or leased by Contractor, or to supplies or materials not incorporated into the Work.

7.11 *Laws and Regulations*

SC-7.11 Add the following new paragraph immediately after Paragraph 7.10.C:

- D. Refer to Article SC-19, for Laws and Regulations that, by terms of said Laws and Regulations, are to be included in the Contract Documents. The failure to include in Article SC-19 any Law or Regulation applicable to the performance of the Work does not diminish Contractor's responsibility to comply with all Laws and Regulations applicable to the performance of the Work.

SC-7.12.A Amend paragraph by adding the following after "written interpretations and clarifications,":

Manufacturers' Certifications,

7.13 *Safety and Protection*

7.14 *Hazard Communication Programs*

SC-7.14 Add the following new paragraph immediately after Paragraph 7.14.A:

- B *Single Prime Contract*: Contractor shall be responsible for coordinating exchange of safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws and Regulations. Contractor shall provide a centralized location for the maintenance of the safety data sheets or other hazard communication information required to be made available by any employer on the Site. Location of the material safety data sheets or other hazard communication information shall be readily accessible to the employees of employers on the Site.

SC-7.16.A.1.c—Amend paragraph by deleting the last period and adding:

, including Manufacturer's Certification letter for any item in the submittal subject to American Iron and Steel requirements and include the Certificate in the submittal. Refer to Manufacturer's Certification Letter provided in these Contract Documents.

SC-7.16.C.9—Add new paragraph immediately after Paragraph 7.16.C.8:

9. Engineer's review and approval of a Shop Drawing or Sample shall include review of Manufacturers' Certifications in order to document compliance with American Iron and Steel requirements, as applicable.

SC-7.17.F—Add new paragraph immediately after Paragraph 7.17.E:

F. Contractor shall certify upon Substantial Completion that all Work and Materials have complied with American Iron and Steel requirements as mandated by Section 746 of Title VII of the Consolidated Appropriations Act of 2017 (Division A - Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2017) and subsequent statutes mandating domestic preference. Contractor shall provide said

Certification to Owner. Refer to General Contractor's Certification Letter provided in these Contract Documents.

ARTICLE 8—OTHER WORK AT THE SITE

8.02 *Coordination*

SC-8.02 Add the following new Paragraph 8.02.C immediately after Paragraph 8.02.B:

- C. Owner intends to contract with others for the performance of other work at or adjacent to the Site, which is indicated in Specifications Section 01 11 00 – Summary of Work
 - 1. **City of Palmer** shall have authority and responsibility for coordination of the various contractors and work forces at the Site;
 - 2. The following specific matters are to be covered by such authority and responsibility: ***Installation of a second blower within the existing Control Building scheduled to be completed June 2021-September 2021***
 - 3. The extent of such authority and responsibilities is: ***Installation of blower equipment including electrical, instrumentation, process piping and associated work in the area within in and immediately outside the existing Control Building.***

ARTICLE 9—OWNER'S RESPONSIBILITIES

9.13 *Owner's Site Representative*

SC-9.13 Add the following new paragraph immediately after Paragraph 9.12 of the General Conditions:

9.13 *Owner's Site Representative*

- A. Owner will furnish an "Owner's Site Representative" (OSR) to represent Owner at the Site and assist Owner in observing the progress and quality of the Work. The Owner's Site Representative is not Engineer's consultant, agent, or employee. Owner's Site Representative will be [here identify individual or entity]. The authority and responsibilities of Owner's Site Representative follow: [Here describe the duties and activities of the Owner's Site Representative.]

ARTICLE 10—ENGINEER'S STATUS DURING CONSTRUCTION

10.03 *Resident Project Representative*

SC-10.03 Add the following new paragraphs immediately after Paragraph 10.03.B:

- C. The Resident Project Representative (RPR) will be Engineer's representative at the Site. RPR's dealings in matters pertaining to the Work in general will be with Engineer and Contractor. RPR's dealings with Subcontractors will only be through or with the full knowledge or approval of Contractor. The RPR will:
 - 1. ***Conferences and Meetings:*** Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences, and other Project-related meetings

(but not including Contractor's safety meetings), and as appropriate prepare and circulate copies of minutes thereof.

2. *Safety Compliance:* Comply with Site safety programs, as they apply to RPR, and if required to do so by such safety programs, receive safety training specifically related to RPR's own personal safety while at the Site.
3. *Liaison*
 - a. Serve as Engineer's liaison with Contractor. Working principally through Contractor's authorized representative or designee, assist in providing information regarding the provisions and intent of the Contract Documents.
 - b. Assist Engineer in serving as Owner's liaison with Contractor when Contractor's operations affect Owner's on-Site operations.
 - c. Assist in obtaining from Owner additional details or information, when required for Contractor's proper execution of the Work.
4. *Review of Work; Defective Work*
 - a. Conduct on-Site observations of the Work to assist Engineer in determining, to the extent set forth in Paragraph 10.02, if the Work is in general proceeding in accordance with the Contract Documents.
 - b. Observe whether any Work in place appears to be defective. This does not impose on either RPR or Engineer any obligation to find all, or any specific element of, defective Work, for which Contractor remains solely responsible.
 - b. Observe whether any Work in place should be uncovered for observation, or requires special testing, inspection or approval.
5. *Inspections and Tests*
 - a. Observe Contractor-arranged inspections required by Laws and Regulations, including but not limited to (1) code-required tests and special inspections, and (2) those performed by public or other agencies having jurisdiction over the Work.
 - b. Observe specific tests, inspections, and other field quality control required by the Contract Documents and performed by Contractor, Subcontractor, Supplier, or by testing or laboratories retained by any of them, .
 - c. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Work.
6. *Payment Requests:* Review Applications for Payment with Contractor and advise Contractor regarding quantities or extent of the Work eligible for payment.
7. *Completion*
 - a. Participate in Engineer's visits regarding inspection for Substantial Completion.
 - b. Assist in the augmenting or amending the punch list of items to be completed or corrected prior to final inspection.
 - c. *Final Inspection:* Participate in Engineer's visit to the Site, in the company of Owner and Contractor, regarding completion of the Work, and prepare a final punch list (if any) of items to be completed or corrected by Contractor.

- d. Observe whether items on the final punch list have been completed or corrected.
 - d. *Record Documents*: Periodically during the Work, review with Contractor the status of Contractor's record documents required by the Contract Documents and advise Contractor on whether such record documents appear to comply with the Contract's requirements for record documents. Review final record documents submitted by Contractor.
- D. The RPR will not:
1. Authorize any deviation from the Contract Documents or substitution of materials, equipment (including "or-equal" items), or procedures or sequences indicated in the Contract Documents.
 2. Exceed limitations of Engineer's authority as set forth in the Contract Documents.
 3. Undertake any of the responsibilities of Contractor, Subcontractors, or Suppliers.
 4. Advise on, issue directions relative to, or assume control or responsibility over any aspect of the means, methods, techniques, sequences or procedures of construction.
 5. Advise on, issue directions regarding, or assume control over security protection, or safety practices, precautions, and programs in connection with the activities or operations of Owner or Contractor.
 6. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by Engineer.
 7. Authorize Owner to occupy the Project in whole or in part.

ARTICLE 11—CHANGES TO THE CONTRACT

SC-11.02.C—Add new paragraph immediately after Paragraph 11.02.B:

C. The Engineer or Owner shall contact the Agency for concurrence on each Change Order prior to issuance. All Contract Change Orders must be concurred on (signed) by Agency before they are effective.

SC-11.03.A.2 - Add new Paragraph 11.03.A.2 immediately after Paragraph 11.03.A, which shall be renamed Paragraph 11.03.A.1:

2. The Engineer or Owner shall contact the Agency for concurrence on each Work Change Directive prior to issuance. Once authorized by Owner, a copy of each Work Change Directive shall be provided by Engineer to the Agency.

SC-11.05.B—Add the following at the end of this paragraph:

For Owner-authorized changes in the Work, the Contractor will provide the Manufacturer's Certification(s) for materials subject to American Iron and Steel requirements except when sole- source is specified, in which case the Engineer will provide the Manufacturer's Certification(s).

SC-11.09.B.2.c—Add new paragraph immediately after Paragraph 11.09.B.2.b:

c. Change orders involving materials subject to American Iron and Steel requirements shall include supporting data (name of Manufacturer, city and state where the product was

manufactured, description of product, signature of authorized Manufacturer's representative) in the Manufacturer's Certification Letter, as applicable.

ARTICLE 12—CLAIMS

12.01.B Delete Paragraph 12.01.B in its entirety and replace with the following:

B. Submittal of a Claim: Written notice stating the general nature of each Claim shall be delivered by the claimant to Engineer and the other party to the Contract promptly (but no event later than 10 days) after the start of the event giving rise thereto. The responsibility to substantiate a Claim shall rest with the party making the Claim. Notice of the amount or extent of the Claim, with supporting data shall be delivered to the Engineer and the other party to the Contract within 20 days after the start of such event (unless Engineer allows additional time for claimant to submit additional or more accurate data in support of such Claim). A Claim for an adjustment in Contract Times shall be prepared in accordance with the provision of Paragraph 11.01.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to Engineer and the claimant

ARTICLE 13—COST OF WORK; ALLOWANCES, UNIT PRICE WORK

13.01 *Cost of the Work*

SC-13.01.B.5.c.(1) Supplement Paragraph 13.01.B.5.c.(1) by adding the following subparagraphs:

- a) Prior to commencing Work at the Site, submit to Owner, through Engineer, copies of the equipment rental agreements for Owner's approval.
- b) Should Contractor perform Work using rented construction equipment or machinery without Owner's written approval of the associated rental agreement and the parties subsequently disagree on the applicable rental rates, use of such construction equipment and machinery will be compensated on the basis of the rental rate book indicated in Paragraph SC-13.01.B.5.c.(2).
- c) When the rental rate book is used basis for determining compensation for construction equipment and machinery leased from a rental firm, the hourly rate for such equipment shall be determined in accordance with Paragraph 13.01.B.5.(2) of the General Conditions.

SC-13.01.B.5.c.(2) Supplement Paragraph 13.01.B.5.c.(2) by adding the following sentence:

The equipment rental rate book that governs the included costs for the rental of machinery and equipment owned by Contractor (or a related entity) under the Cost of the Work provisions of this Contract is the most current edition of **Rental Rate Blue Book**.

SC-13.01.B.5.c Supplement Paragraph 13.01.B.5.c by adding the following subparagraphs:

- 4) *Inactive Equipment and Machinery:* Rental of construction equipment and machinery shall cease when the use thereof is no longer necessary for the Work. Periods of inactivity for such construction equipment or machinery will not be compensable unless agreed upon in writing by Owner, unless the costs of disassembly, removal, transportation, reassembly, and remobilization, as submitted to and accepted by

Owner (with advice of Engineer) would exceed the cost of continuing to rent the item(s) during the period(s) of inactivity. Contractor is responsible for obtaining Owner's written approval for compensation for construction equipment and machinery for periods of inactivity. Owner is not responsible for retroactively approving such inactivity. "Period of inactivity" for such items includes periods when the construction equipment or machinery is not used or necessary for the logical and efficient progression of the Work, or when other, available equipment or machinery is suitable for performing the given task.

- 5) *Condition of Equipment and Machinery*: Construction equipment and machinery will be compensable only for serviceable construction equipment and machinery capable of efficiently performing its intended function at the Site. Construction equipment and machinery not in compliance with this Paragraph SC-13.01.B.5.c.5) is not eligible for compensation.
- 6) *Capped Compensation*: Compensation paid Contractor for a given item of Contractor-owned construction equipment or machinery will be capped at, and shall not exceed, the comparable purchase price of such item of equal or comparable capacity and capability.

SC-13.01.C.2 Supplement Paragraph 13.01.C.2 by adding the following definition of small tools and hand tools:

a. For purposes of this paragraph, "small tools and hand tools" means items in one or more of the following categories: (1) Items that are ordinarily required for the performing worker's job function, including but not limited to equipment which ordinarily has no associated licensing, insurance, or substantive storage costs; such as hammers, wrenches, socket tools, manual saws, power saws, chainsaws, common power tools, impact drills, threaders, benders, transits and theodolites and related equipment, and other tools transportable by hand, regardless of ownership of such items; (2) Items such as gang-boxes, ladders, hand carts and similar wheeled items manually operated by workers, extension cords, and similar items; (3) common testing equipment such as insulation testers (megger-testing equipment), amp meters, gas detectors, pressure gauges, and similar items; (4) A purchase price (if purchased new, at retail) of \$500, although such limit is not absolute, and certain items may be deemed by Owner or Engineer as "small tools or hand tools" (and not eligible for compensation) even though such item may have a purchase price greater than the amount indicated in this Paragraph 13.01.C.2.

SC-13.02.C – Delete paragraph in its entirety and insert "Deleted".

HDR Guidance Note—VEQ Clause SC-13.03 Delete Paragraph 13.03.E in its entirety and insert the following in its place:

E. *Adjustments in Unit Price*

1. Contractor or Owner shall be entitled to an adjustment in the unit price with respect to an item of Unit Price Work if:
 - a. the extended price of a particular item of Unit Price Work amounts to **five** percent or more of the Contract Price (based on estimated quantities at the time of Contract formation) and the variation in the quantity of that particular item of Unit Price Work actually furnished or performed by Contractor differs by more than **fifteen** percent from the estimated quantity of such item indicated in the Agreement; and

- b. Contractor's unit costs to perform the item of Unit Price Work have changed materially and significantly as a result of the quantity change.
2. The adjustment in unit price will account for and be coordinated with any related changes in quantities of other items of Work, and in Contractor's costs to perform such other Work, such that the resulting overall change in Contract Price is equitable to Owner and Contractor.
3. Adjusted unit prices will apply to all units of that item.

ARTICLE 14—TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

SC 14.02 Add the following language at the end of Paragraph 14.02.A

“Contractor shall establish an inspection program and a testing plan acceptable to the Engineer and shall maintain complete inspection and testing records and make these available to the Engineer upon Written request”

SC 14.02.B Delete Paragraph 14.02.B and its subparagraphs in their entirety and replace with the following:

B. The Owner shall employ and pay for the services of an independent testing laboratory or the Engineer to perform all inspections, tests, or approvals required by the Contract Documents to satisfy the Special Inspections requirements of the International Building Code (IBC) adopted by the City. Contractor shall pay for all other inspections, tests, or approvals required by the Contract Documents, including:

- 1. Inspections, Tests or approvals covered by Paragraph 14.02.C and 14.02. D.**
- 2. Costs incurred with connections of tests or inspections conducted pursuant to Paragraph 14.05 and**
- 3. As otherwise specifically noted in the Contract Documents.**

SC - 14.03 Defective Work

14.03.D. Add the following language and subparagraphs at the end of Paragraph 14.03.D:

Tests required by Contract Documents to be performed by Contractor and that require test certificates be submitted to Owner or Engineer for acceptance shall be made by an independent testing laboratory or agency licensed or certified in accordance with Laws and Regulations and applicable state and local statutes. In the event state license or certification is not required, testing laboratories or agencies shall meet following applicable requirements:

- 1. Basic requirements of ASTM E329, Standard Specification for Agencies Engaged in the Testing and/or Inspection of Materials as Used in Construction and ASTM D3666, Standard Specification for Minimum Requirements for Agency Testing and Inspecting Bituminous Paving Materials, as applicable.**
- 2. Calibrate testing equipment at reasonable intervals by devices of accuracy traceable to either the National Bureau of Standards or accepted values of natural physical constants.**

SC-14.03.G – Add new paragraph immediately after Paragraph 14.03.F:

G. Installation of materials that are non-compliant with American Iron and Steel requirements shall be considered defective work.

ARTICLE 15—PAYMENTS TO CONTRACTOR, SET OFFS; COMPLETIONS; CORRECTION PERIOD

15.01 *Progress Payments*

SC-15.01.B.4 – Add the following language at the end of paragraph:

No payments will be made that would deplete the retainage, place in escrow any funds that are required for retainage or invest the retainage for the benefit of the Contractor.

SC-15.01.B.5 – Add new paragraph immediately after Paragraph 15.01.B.4:

5. The Application for Payment form to be used on this Project is EJCDC® C-620. The Agency must approve all Applications for Payment before payment is made.

SC-15.01.B.6 – Add new paragraph immediately after Paragraph 15.01.B.5:

6. By submitting an Application for Payment based in whole or in part on furnishing equipment or materials, Contractor certifies that such equipment and materials are compliant with American Iron and Steel requirements. Manufacturer’s Certification letter for materials satisfy this requirement. Refer to Manufacturer’s Certification Letter provided in these Contract Documents.

SC-15.01.C.2.d – Add the following new paragraph immediately after Paragraph 15.01.C.2.c:

d. The materials presented for payment in an Application for Payment comply with American Iron and Steel requirements.

SC-15.01.D.1 – Delete paragraph in its entirety and insert the following in its place:

The Application for Payment with Engineer’s recommendations will be presented to the Owner and Agency for consideration. If both the Owner and Agency find the Application for Payment acceptable, the recommended amount less any reduction under the provisions of Paragraph 15.01.E will become due twenty (20) days after the Application for Payment is presented to the Owner, and the Owner will make payment to the Contractor.

SC-15.02.A – Amend paragraph by striking out the following text: “7 days after”.

15.03 *Substantial Completion*

SC-15.03.A – Modify by adding the following after the last sentence:

Contractor shall also submit the General (Prime) Contractor’s Certification of Compliance certifying that to the best of the Contractor’s knowledge and belief all substitutes, equals, and all Iron and Steel products proposed in the Shop Drawings, Change Orders, and Partial Payment Estimates, and those installed for the Project, are either Produced in the United States or are the subject of an approved waiver under Section 746 of Title VII of the Consolidated Appropriations Act of 2017 (Division A - Agriculture, Rural Development,

Food and Drug Administration, and Related Agencies Appropriations Act, 2017) and subsequent statutes mandating domestic preference.

SC-15.03.B Add the following new subparagraph to Paragraph 15.03.B:

1. If some or all of the Work has been determined by Engineer not to be at a point of Substantial Completion and will require re-inspection or re-testing by Engineer or other entity retained by Owner, the cost of such re-inspection or re-testing, including the cost of time, travel and living expenses, will be paid by Contractor to Owner. If Contractor does not pay, or the parties are unable to agree as to the amount owed, then Owner may impose a reasonable set-off against payments due under this Article 15.

SC-15.07 Waiver of Claims

SC-15.07.B. Amend Paragraph 15.07.B to state "The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner and/or Engineer other than those pending matters that have been duly submitted or appealed under the provisions of Article 17."

ARTICLE 16—SUSPENSION OF WORK AND TERMINATION

No Supplementary Conditions in this Article.

ARTICLE 17—FINAL RESOLUTIONS OF DISPUTES

17.02 *Arbitration*

SC-17.02 Add the following new paragraph immediately after Paragraph 17.01.

SC-17.02 *Arbitration*

- A. All matters subject to final resolution under this Article will be settled by arbitration administered by the American Arbitration Association] in accordance with [its Construction Industry Arbitration Rules (subject to the conditions and limitations of this Paragraph SC-17.02). Any controversy or claim in the amount of \$100,000 or less will be settled in accordance with [the American Arbitration Association's supplemental rules for Fixed Time and Cost Construction Arbitration]. This agreement to arbitrate will be specifically enforceable under the prevailing law of any court having jurisdiction.
- B. The demand for arbitration will be filed in writing with the other party to the Contract and with the selected arbitration administrator, and a copy will be concurrently sent to Engineer for information. The demand for arbitration will be made within the specific time required in Article 17, or, if no specified time is applicable, within a reasonable time after the matter in question has arisen, and in no event will any such demand be made after the date when institution of legal or equitable proceedings based on such matter in question would be barred by the applicable statute of limitations.
- C. The arbitration will be held in a location as directed by the Owner

- D. The arbitrator(s) must be licensed engineers, contractors, attorneys, or construction managers. Hearings will take place pursuant to the standard procedures of the [Construction Arbitration Rules] that contemplate in-person hearings. The arbitrator(s) will have no authority to award punitive or other damages not measured by the prevailing party's actual damages, except as may be required by statute or the Contract. Any award in an arbitration initiated under this clause will be limited to monetary damages and include no injunction or direction to any party other than the direction to pay a monetary amount.
- E. The Arbitrator(s) will have the authority to allocate the costs of the arbitration process among the parties, but will only have the authority to allocate attorneys' fees if a specific Law or Regulation or this Contract permits them to do so.
- F. The award of the arbitrator(s) must be accompanied by a reasoned written opinion and a concise breakdown of the award. The written opinion will cite the Contract provisions deemed applicable and relied on in making the award.
- G. The parties agree that failure or refusal of a party to pay its required share of the deposits for arbitrator compensation or administrative charges will constitute a waiver by that party to present evidence or cross-examine witness. In such event, the other party shall be required to present evidence and legal argument as the arbitrator(s) may require for the making of an award. Such waiver will not allow for a default judgment against the non-paying party in the absence of evidence presented as provided for above.
- H. No arbitration arising out of or relating to the Contract will include by consolidation, joinder, or in any other manner any other individual or entity (including Engineer, and Engineer's consultants and the officers, directors, partners, agents, employees or consultants of any of them) who is not a party to this Contract unless:
 - 1. the inclusion of such other individual or entity will allow complete relief to be afforded among those who are already parties to the arbitration;
 - 2. such other individual or entity is substantially involved in a question of law or fact which is common to those who are already parties to the arbitration, and which will arise in such proceedings;
 - 3. such other individual or entity is subject to arbitration under a contract with either Owner or Contractor, or consents to being joined in the arbitration; and
 - 4. the consolidation or joinder is in compliance with the arbitration administrator's procedural rules.
- I. The award will be final. Judgment may be entered upon it in any court having jurisdiction thereof, and it will not be subject to modification or appeal, subject to provisions of the Laws and Regulations relating to vacating or modifying an arbitral award.
- J. Except as may be required by Laws or Regulations, neither party nor an arbitrator may disclose the existence, content, or results of any arbitration hereunder without the prior written consent of both parties, with the exception of any disclosure required by Laws and Regulations or the Contract. To the extent any disclosure is allowed pursuant to the exception, the disclosure must be strictly and narrowly limited to maintain confidentiality to the extent possible.

17.03 *Attorneys' Fees*

SC-17.03 Add the following new paragraph immediately after Paragraph 17.02.

SC-17.03 *Attorneys' Fees*

- A. For any matter subject to final resolution under this Article, the prevailing party shall be entitled to an award of its attorneys' fees incurred in the final resolution proceedings, in an equitable amount to be determined in the discretion of the court, arbitrator, arbitration panel, or other arbiter of the matter subject to final resolution, taking into account the parties' initial demand or defense positions in comparison with the final result.

ARTICLE 18—MISCELLANEOUS

SC-18.11 Add a new paragraph immediately after Paragraph 18.10:

SC-18.11 *Tribal Sovereignty*

- A. **No provision of this Agreement will be construed by any of the signatories as abridging or debilitating any sovereign powers of the *Knik Tribal Council*; affecting the trust- beneficiary relationship between the Secretary of the Interior, Tribe, and Indian landowner(s); or interfering with the government-to-government relationship between the United States and the Tribe.**

SC-18.12 Add a new paragraph immediately after Paragraph 18.11, to read as follows:

SC-18.12 *Publicity*

- A. Contractor shall not disclose to any third party the nature of its Work on the Project, nor engage in publicity or public media disclosures with respect to the Project without the prior written consent of Owner.

SC-19 Add new article immediately after Article 18, to read as follows:

ARTICLE SC-19—FEDERAL REQUIREMENTS

19.01 *Agency Not a Party*

- A. **This Contract is expected to be funded in part with funds provided by Agency. Neither Agency, nor any of its departments, entities, or employees, is a party to this Contract.**

19.02 *Contract Approval*

- A. **Owner and Contractor will furnish Owner's attorney such evidence as required so that Owner's attorney can complete and execute the "Certificate of Owner's Attorney" (Exhibit G of this Bulletin) before Owner submits the executed Contract Documents to Agency for approval.**
- B. **Agency concurrence is required on both the Bid and the Contract before the Contract is effective.**

19.03 *Conflict of Interest*

- A. **Contractor may not knowingly contract with a Supplier or Manufacturer if the individual or entity who prepared the Drawings and Specifications has a corporate or financial affiliation with the Supplier or Manufacturer. Owner's officers, employees, or agents shall not engage in the**

award or administration of this Contract if a conflict of interest, real or apparent, would be involved. Such a conflict would arise when: (i) the employee, officer or agent; (ii) any member of their immediate family; (iii) their partner or (iv) an organization that employs, or is about to employ, any of the above, has a financial interest or other interest in or a tangible personal benefit from the Contractor. Owner's officers, employees, or agents shall neither solicit nor accept gratuities, favors or anything of monetary value from Contractor or subcontractors.

19.04 *Gratuities*

A. If Owner finds after a notice and hearing that Contractor, or any of Contractor's agents or representatives, offered or gave gratuities (in the form of entertainment, gifts, or otherwise) to any official, employee, or agent of Owner or Agency in an attempt to secure this Contract or favorable treatment in awarding, amending, or making any determinations related to the performance of this Contract, Owner may, by written notice to Contractor, terminate this Contract. Owner may also pursue other rights and remedies that the law or this Contract provides. However, the existence of the facts on which Owner bases such findings shall be an issue and may be reviewed in proceedings under the dispute resolution provisions of this Contract.

B. In the event this Contract is terminated as provided in paragraph 19.04.A, Owner may pursue the same remedies against Contractor as it could pursue in the event of a breach of this Contract by Contractor. As a penalty, in addition to any other damages to which it may be entitled by law, Owner may pursue exemplary damages in an amount (as determined by Owner) which shall not be less than three nor more than ten times the costs Contractor incurs in providing any such gratuities to any such officer or employee.

19.05 *Small, Minority and Women's Businesses*

A. If Contractor intends to let any subcontracts for a portion of the work, Contractor will take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible. Affirmative steps will include:

1. Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
2. Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
3. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
4. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;
5. Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.

19.06 *Anti-Kickback*

A. Contractor shall comply with the Copeland Anti-Kickback Act (40 USC 3145) as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Buildings or Public Works Financed in Whole or in Part by Loans or Grants of the United States").

The Act provides that Contractor or subcontractor shall be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public facilities, to give up any part of the compensation to which they are otherwise entitled. Owner shall report all suspected or reported violations to Agency.

19.07 Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended

A. Contractor to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387). Violations must be reported to the federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

19.08 Equal Employment Opportunity

A. The Contract is considered a federally assisted construction contract. Except as otherwise provided under 41 CFR Part 60, all contracts that meet the definition of “federally assisted construction contract” in 41 CFR Part 60-1.3 must include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, “Equal Employment Opportunity” (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, “Amending Executive Order 11246 Relating to Equal Employment Opportunity,” and implementing regulations at 41 CFR part 60, “Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor.”

19.09 Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)

A. Contractors that apply or bid for an award exceeding \$100,000 must file the required certification (RD Instruction 1940-Q Exhibit A-1). The Contractor certifies to the Owner and every subcontractor certifies to the Contractor that it will not and has not used federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining the Contract if it is covered by 31 U.S.C. 1352. The Contractor and every subcontractor must also disclose any lobbying with non-federal funds that takes place in connection with obtaining any federal award. Such disclosures are forwarded from tier to tier up to the Owner. Necessary certification and disclosure forms shall be provided by Owner.

19.10 Environmental Requirements

A. When constructing a Project involving trenching and/or other related earth excavations, Contractor shall comply with the following environmental conditions:

1. Wetlands – When disposing of excess, spoil, or other Construction Materials on public or private property, Contractor shall not fill in or otherwise convert wetlands.
2. Floodplains – When disposing of excess, spoil, or other Construction Materials on public or private property, Contractor shall not fill in or otherwise convert 100-year floodplain areas (Standard Flood Hazard Area) delineated on the latest Federal Emergency Management Agency Floodplain Maps, or other appropriate maps, e.g., alluvial soils on NRCS Soil Survey Maps.
3. Historic Preservation - Applicants shall ensure that Contractors maintain a copy of the following inadvertent discovery plan onsite for review:

a. If during the course of any ground disturbance related to any Project, any post review discovery, including but not limited to, any artifacts, foundations, or other indications of past human occupation of the area are uncovered, shall be protected by complying with 36 CFR § 800.13(b)(3) and (c) and shall include the following:

i. All Work, including vehicular traffic, shall immediately stop within a 50 ft. radius around the area of discovery. The Contractor shall ensure barriers are established to protect the area of discovery and notify the Engineer to contact the appropriate RD personnel. The Engineer shall engage a Secretary of the Interior (SOI) qualified professional archeologist to quickly assess the nature and scope of the discovery; implement interim measures to protect the discovery from looting and vandalism; and establish broader barriers if further historic and/or precontact properties, can reasonably be expected to occur.

ii. The RD personnel shall notify the appropriate RD environmental staff member, the Federal Preservation Officer (FPO), and State Historic Preservation Office (SHPO) immediately. Indian tribe(s) or Native Hawaiian Organization (NHOs) that have an interest in the area of discovery shall be contacted immediately. The SHPO may require additional tribes or NHOs who may have an interest in the area of discovery also be contacted. The notification shall include an assessment of the discovery provided by the SOI qualified professional archeologist.

iii. When the discovery contains burial sites or human remains, the Contractor shall immediately notify the appropriate RD personnel who will contact the RD environmental staff member, FPO, and the SHPO. The relevant law enforcement authorities shall be immediately contacted by onsite personnel to reduce delay times, in accordance with tribal, state, or local laws including 36 CFR Part 800.13; 43 CFR Part 10, Subpart B; and the Advisory Council on Historic Preservation's Policy Statement Regarding treatment of Burial Sites, Human Remains, or Funerary Objects (February 23, 2007).

iv. When the discovery contains burial sites or human remains, all construction activities, including vehicular traffic shall stop within a 100 ft. radius of the discovery and barriers shall be established. The evaluation of human remains shall be conducted at the site of discovery by a SOI qualified professional. Remains that have been removed from their primary context and where that context may be in question may be retained in a secure location, pending further decisions on treatment and disposition. RD may expand this radius based on the SOI professional's assessment of the discovery and establish broader barriers if further subsurface burial sites, or human remains can reasonably be expected to occur. RD, in consultation with the SHPO and interested tribes or NHOs, shall develop a plan for the treatment of native human remains.

v. Work may continue in other areas of the undertaking where no historic properties, burial sites, or human remains are present. If the inadvertent discovery appears to be a consequence of illegal activity such as looting, the onsite personnel shall contact the appropriate legal authorities immediately if the landowner has not already done so.

vi. Work may not resume in the area of the discovery until a notice to proceed has been issued by RD. RD shall not issue the notice to proceed until it has determined that the appropriate local protocols and consulting parties have been consulted.

vii. Inadvertent discoveries on federal and tribal land shall follow the processes required by the federal or tribal entity.

4. Endangered Species – Contractor shall comply with the Endangered Species Act, which provides for the protection of endangered and/or threatened species and critical habitat. Should any evidence of the presence of endangered and/or threatened species or their critical habitat be brought to the attention of Contractor, Contractor will immediately report this evidence to Owner and a representative of Agency. Construction shall be temporarily halted pending the notification process and further directions issued by Agency after consultation with the U.S. Fish and Wildlife Service.

5. Mitigation Measures – The following environmental mitigation measures are required on this Project: None.

19.11 Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708)

A. Where applicable, for contracts awarded by the Owner in excess of \$100,000 that involve the employment of mechanics or laborers, the Contractor will comply with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, the Contractor will compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic will be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

19.12 Debarment and Suspension (Executive Orders 12549 and 12689)

A. A contract award (see 2 CFR 180.220) must not be made to parties listed on the governmentwide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

19.13 Procurement of recovered materials

A. The Contractor will comply with 2 CFR Part 200.322, "Procurement of recovered materials."

19.14 American Iron and Steel

A. Section 746 of Title VII of the Consolidated Appropriations Act of 2017 (Division A - Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2017) and subsequent statutes mandating domestic preference applies an American Iron and Steel requirement to this project. All iron and steel products used in this project must be produced in the United States. The term “iron and steel products” means the following products made primarily of iron or steel: lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and Construction Materials.

B. The following waivers apply to this Contract:

- 1. De Minimis,**
- 2. Minor Components,**
- 3. Pig iron and direct reduced iron, and**

ARTICLE SC-20 – STATUTORY REQUIREMENTS

SC-19.01 This article contains portions of certain Laws or Regulations which, by provision of Laws or Regulations, are required to be included in the Contract Documents. The matters addressed in this Article SC-19 may not be complete or current. Contractor’s obligation to comply with all Laws and Regulations is set forth in Paragraph 7.11 of the General Conditions.

SC-19.02 []

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WORK CHANGE DIRECTIVE NO.: _____

Owner: _____ Owner's Project No.: _____
Engineer: _____ Engineer's Project No.: _____
Contractor: _____ Contractor's Project No.: _____
Project: _____
Contract Name: _____
Date Issued: _____ Effective Date of Work Change Directive: _____

Contractor is directed to proceed promptly with the following change(s):

Description:

[Description of the change to the Work]

Attachments:

[List documents related to the change to the Work]

Purpose for the Work Change Directive:

[Describe the purpose for the change to the Work]

Directive to proceed promptly with the Work described herein, prior to agreeing to change in Contract Price and Contract Time, is issued due to:

Notes to User—Check one or both of the following

Non-agreement on pricing of proposed change. Necessity to proceed for schedule or other reasons.

Estimated Change in Contract Price and Contract Times (non-binding, preliminary):

Contract Price: \$ _____ [increase] [decrease] [not yet estimated].

Contract Time: _____ days [increase] [decrease] [not yet estimated].

Basis of estimated change in Contract Price:

Lump Sum Unit Price Cost of the Work Other

Recommended by Engineer

Authorized by Owner

By: _____

Title: _____

Date: _____

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CHANGE ORDER NO.: _____

Owner:
 Engineer:
 Contractor:
 Project:
 Contract Name:
 Date Issued:

Owner's Project No.:
 Engineer's Project No.:
 Contractor's Project No.:

 Effective Date of Change Order:

The Contract is modified as follows upon execution of this Change Order:

Description:

Attachments:
[List documents related to the change]

Change in Contract Price	Change in Contract Times [State Contract Times as either a specific date or a number of days]
Original Contract Price: \$ _____	Original Contract Times: Substantial Completion: _____ Ready for final payment: _____
[Increase] [Decrease] from previously approved Change Orders No. 1 to No. [Number of previous Change Order]: \$ _____	[Increase] [Decrease] from previously approved Change Orders No.1 to No. [Number of previous Change Order]: Substantial Completion: _____ Ready for final payment: _____
Contract Price prior to this Change Order: \$ _____	Contract Times prior to this Change Order: Substantial Completion: _____ Ready for final payment: _____
[Increase] [Decrease] this Change Order: \$ _____	[Increase] [Decrease] this Change Order: Substantial Completion: _____ Ready for final payment: _____
Contract Price incorporating this Change Order: \$ _____	Contract Times with all approved Change Orders: Substantial Completion: _____ Ready for final payment: _____

Recommended by Engineer (if required) By: _____ Title: _____ Date: _____	Authorized by Owner _____ _____ _____
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Authorized by Owner By: _____ Title: _____ Date: _____	Approved by Funding Agency (if applicable) _____ _____ _____
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FIELD ORDER NO.: _____

Owner: _____ Owner's Project No.: _____
Engineer: _____ Engineer's Project No.: _____
Contractor: _____ Contractor's Project No.: _____
Project: _____
Contract Name: _____
Date Issued: _____ Effective Date of Field Order: _____

Contractor is hereby directed to promptly perform the Work described in this Field Order, issued in accordance with Paragraph 11.04 of the General Conditions, for minor changes in the Work without changes in Contract Price or Contract Times. If Contractor considers that a change in Contract Price or Contract Times is required, submit a Change Proposal before proceeding with this Work.

Reference:

Specification Section(s): _____
Drawing(s) / Details (s): _____

Description:

[Description of the change to the Work]

Attachments:

[List documents supporting change]

Issued by Engineer

By: _____
Title: _____
Date: _____

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CERTIFICATE OF OWNER’S ATTORNEY AND AGENCY CONCURRENCE

CERTIFICATE OF OWNER’S ATTORNEY

PROJECT NAME:

CONTRACTOR NAME:

I, the undersigned, _____, the duly authorized and acting legal representative of _____, do hereby certify as follows: I have examined the attached Contract(s) and performance and payment bond(s) and the manner of execution thereof, and I am of the opinion that each of the aforesaid agreements is adequate and has been duly executed by the proper parties thereto acting through their duly authorized representatives; that said representatives have full power and authority to execute said agreements on behalf of the respective parties named thereon; and that the foregoing agreements constitute valid and legally binding obligations upon the parties executing the same in accordance with the terms, conditions, and provisions thereof.

Name

Date

AGENCY CONCURRENCE

As lender or insurer of funds to defray the costs of this Contract, and without liability for any payments thereunder, the Agency hereby concurs in the form, content, and execution of this Agreement.

Agency Representative

Date

Name

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CERTIFICATION FOR CONTRACTS, GRANTS AND LOANS

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant or Federal loan, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant or loan.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant or loan, the undersigned shall complete and submit Standard Form - LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.

3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including contracts, subcontracts, and subgrants under grants and loans) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

(name)

(date)

(title)

oOo

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United States Department of Agriculture

AD-1048

**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
 Lower Tier Covered Transactions**

The following statement is made in accordance with the Privacy Act of 1974 (5 U.S.C. § 552(a), as amended). This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, and 2 C.F.R. §§ 180.300, 180.355, Participants' responsibilities. The regulations were amended and published on August 31, 2005, in 70 Fed. Reg. 51865-51880. Copies of the regulations may be obtained by contacting the Department of Agriculture agency offering the proposed covered transaction.

According to the Paperwork Reduction Act of 1995 an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0505-0027. The time required to complete this information collection is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The provisions of appropriate criminal and civil fraud privacy, and other statutes may be applicable to the information provided.

(Read Instructions On Page Two Before Completing Certification)

- A. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency;
- B. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

ORGANIZATION NAME

PR/AWARD NUMBER OR PROJECT NAME

NAME(S) AND TITLE(S) OF AUTHORIZED REPRESENTATIVE(S)

SIGNATURE(S)

DATE

Instructions for Certification

- (1) By signing and submitting this form, the prospective lower tier participant is providing the certification set out on page 1 in accordance with these instructions.
- (2) The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension or debarment.
- (3) The prospective lower tier participant shall provide immediate written notice to the person(s) to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- (4) The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549, at 2 C.F.R. Parts 180 and 417. You may contact the department or agency to which this proposal is being submitted for assistance in obtaining a copy of those regulations.
- (5) The prospective lower tier participant agrees by submitting this form that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- (6) The prospective lower tier participant further agrees by submitting this form that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- (7) A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the System for Award Management (SAM) database.
- (8) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- (9) Except for transactions authorized under paragraph (5) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

COMPLIANCE STATEMENT

This statement relates to a proposed contract with _____

(Name of borrower or grantee)

who expects to finance the contract with assistance from either the Rural Housing Service (RHS), Rural Business-Cooperative Service (RBS), or the Rural Utilities Service (RUS) or their successor agencies, United States Department of Agriculture (whether by a loan, grant, loan insurance, guarantee, or other form of financial assistance). I am the undersigned bidder or prospective contractor, I represent that:

1. I have have not, participated in a previous contract or subcontract subject to Executive Order 11246 (regarding equal employment opportunity) or a preceding similar Executive Order.
2. If I have participated in such a contract or subcontract, I have, have not, filed all compliance reports that have been required to file in connection with the contract or subcontract.
 If the proposed contract is for \$50,000 or more: or if the proposed nonconstruction contract is for \$50,000 or more and I have 50 or more employees, I also represent that:
3. I have, have not previously had contracts subject to the written affirmative action programs requirements of the Secretary of Labor.
4. If I have participated in such a contract or subcontract, I have, have not developed and placed on file at each establishment affirmative action programs as required by the rules and regulations of the Secretary of Labor.

I understand that if I have failed to file any compliance reports that have been required of me, I am not eligible and will not be eligible to have my bid considered or to enter into the proposed contract unless and until I make an arrangement regarding such reports that is satisfactory to either the RHS, RBS or RUS, or to the office where the reports are required to be filed.

I also certify that I do not maintain or provide for my employees any segregated facilities at any of my establishments, and that I do not permit my employees to perform their services at any location, under my control, where segregated facilities are maintained. I certify further that I will not maintain or provide for my employees any segregated facilities at any of my establishments, and that I will not permit my employees to perform their services at any location, under my control, where segregated facilities are maintained. I agree that a breach of this certification is a violation of the Equal Opportunity clause in my contract. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and wash rooms, restaurants and other eating areas time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color, or national origin, because of habit, local custom, or otherwise. I further agree that (except where I have obtained identical certifications for proposed subcontractors for specific time periods) I will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause; that I will retain such certifications in my files; and that I will forward the following notice to such proposed subcontractors (except where the proposed subcontractors have submitted identical certifications for specific time periods):

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays the valid OMB control number. The valid OMB control number for this information collection is 0575-0018. The time required to complete this information collection is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

**NOTICE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENTS FOR
CERTIFICATIONS OF NON-SEGREGATED FACILITIES**

A certification of Nonsegregated Facilities, as required by the May 9, 1967, order (32F.R. 7439, May 19, 1967) on Elimination of Segregated Facilities, by the Secretary of Labor, must be submitted prior to the award of a subcontract exceeding \$ 10,000 which is not exempt from the provisions of the Equal Opportunity clause. The certification may be submitted either for each subcontract or for all subcontracts during a period (i.e., quarterly, semiannually, or annually).

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

Date _____

(Signature of Bidder or Prospective Contractor)

Address (including Zip Code)

GENERAL (PRIME) CONTRACTOR'S CERTIFICATION OF COMPLIANCE WITH PROVISIONS OF THE AMERICAN IRON AND STEEL REQUIREMENTS OF SECTION 746 OF TITLE VII OF THE CONSOLIDATED APPROPRIATIONS ACT OF 2017 (DIVISION A - AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES APPROPRIATIONS ACT, 2017) AND SUBSEQUENT STATUTES MANDATING DOMESTIC PREFERENCE

DATE:

RE: PROJECT NAME
APPLICANT
CONTRACT NUMBER

I hereby certify that to the best of my knowledge and belief all iron and steel products installed for this project by my company and by any and all subcontractors and manufacturers my company has contracted with for this project comply with Section 746 of Title VII of the Consolidated Appropriations Act of 2017 (Division A - Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2017) and subsequent statutes mandating domestic preference or are the subject of a waiver approved by the Secretary of Agriculture or designee.

This certification is to be submitted upon completion of the project to the project engineer.

Name of Construction Company (PRINT)

By Authorized Representative (SIGNATURE)

Title

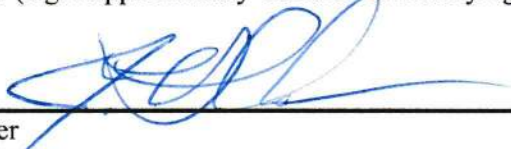
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ENGINEER'S CERTIFICATION OF FINAL PLANS AND SPECIFICATIONS

PROJECT NAME: PALMER WWTF IMPROVEMENTS - PHASE II

The final Drawings and Specifications, other assembled Construction Contract Documents, bidding-related documents (or requests for proposals or other construction procurement documents), and any other Final Design Phase deliverables, comply with all requirements of the U.S. Department of Agriculture, Rural Utilities Service, to the best of my knowledge and professional judgment.

If the Engineers Joint Contract Documents Committee (EJCDC) documents have been used, all modifications required by RUS Bulletin 1780-26 have been made in accordance with the terms of the license agreement, which states in part that the Engineer "must plainly show all changes to the Standard EJCDC Text, using 'Track Changes' (redline/strikeout), highlighting, or other means of clearly indicating additions and deletions." Such other means may include attachments indicating changes (e.g. Supplementary Conditions modifying the General Conditions).

 5/25/2021
Engineer Date

J. RYAN MOYERS, PE - PROJECT MANAGER

Name and Title

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EXAMPLE OF A MANUFACTURER'S CERTIFICATION LETTER OF COMPLIANCE WITH PROVISIONS OF THE AMERICAN IRON AND STEEL (AIS) REQUIREMENTS OF SECTION 746 OF TITLE VII OF THE CONSOLIDATED APPROPRIATIONS ACT OF 2017 (DIVISION A - AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES APPROPRIATIONS ACT, 2017) AND SUBSEQUENT STATUTES MANDATING DOMESTIC PREFERENCE

Date:

Company Name:

Company Address:

Subject: AIS Step Certification for Project (X), Owner's Name, and Contract Number

I, (company representative), certify that the (melting, bending, galvanizing, cutting, etc.) processes for (manufacturing or fabricating) the following products and/or material shipped or provided for the subject project is in full compliance with the AIS requirement as mandated by Section 746 of Title VII of the Consolidated Appropriations Act of 2017 (Division A - Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2017) and subsequent statutes mandating domestic preference.

Item, Products and/or Materials, and location of delivery (City, State):

- 1.
- 2.

Such processes for AIS took place at the following location:

(City, State)

This certification is to be submitted upon request to interested parties (e.g. municipalities, consulting engineers, general contractors, etc.)

If any of the above compliance statements change while providing materials to this project, please immediately notify the person(s) who is requesting to use your product(s).

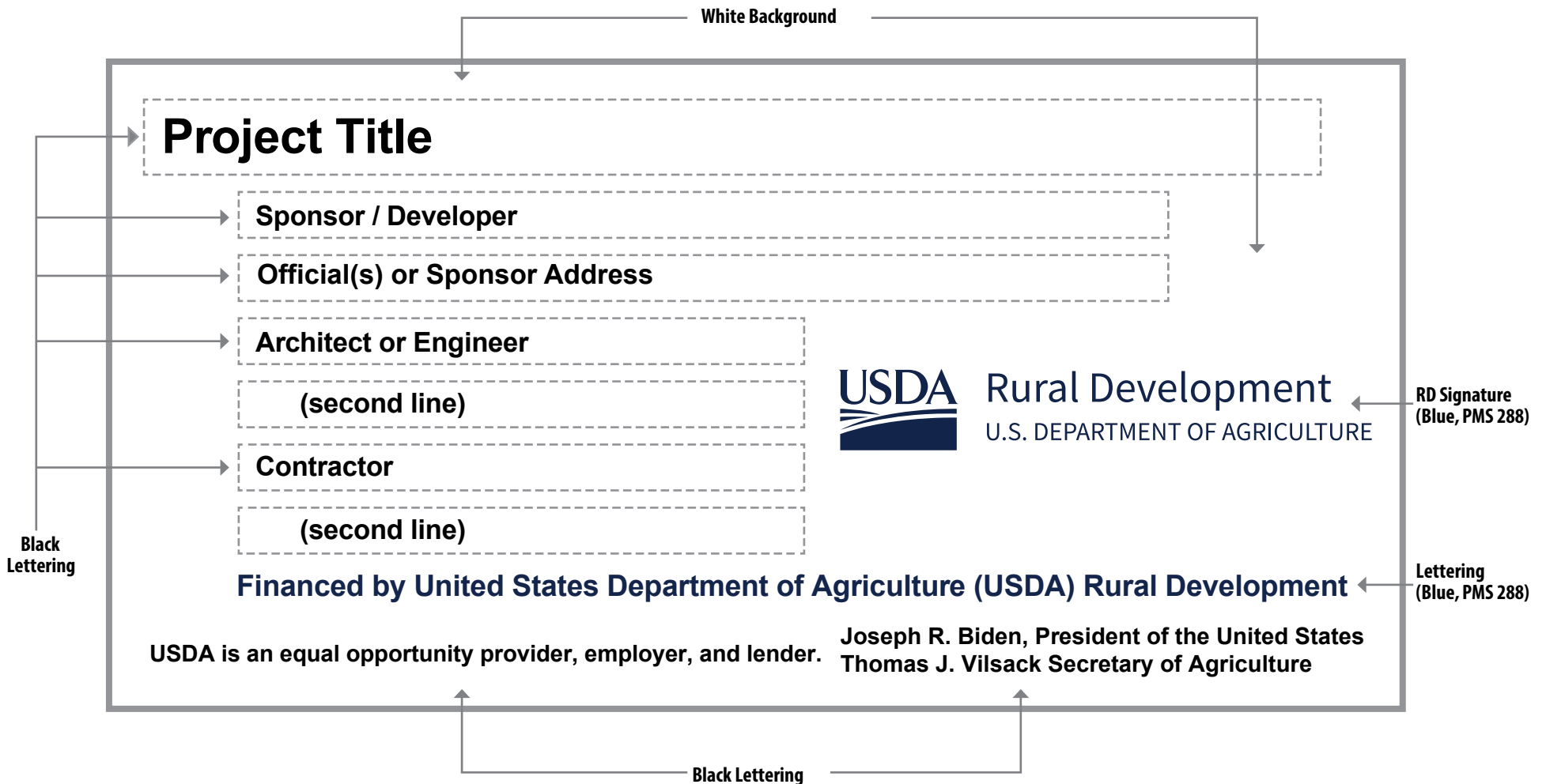
Authorized Company Representative Signature

(Note: *Authorized signature shall be manufacturer's representative not the material distributor or supplier*)

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TEMPORARY CONSTRUCTION SIGN FOR RURAL DEVELOPMENT PROJECTS

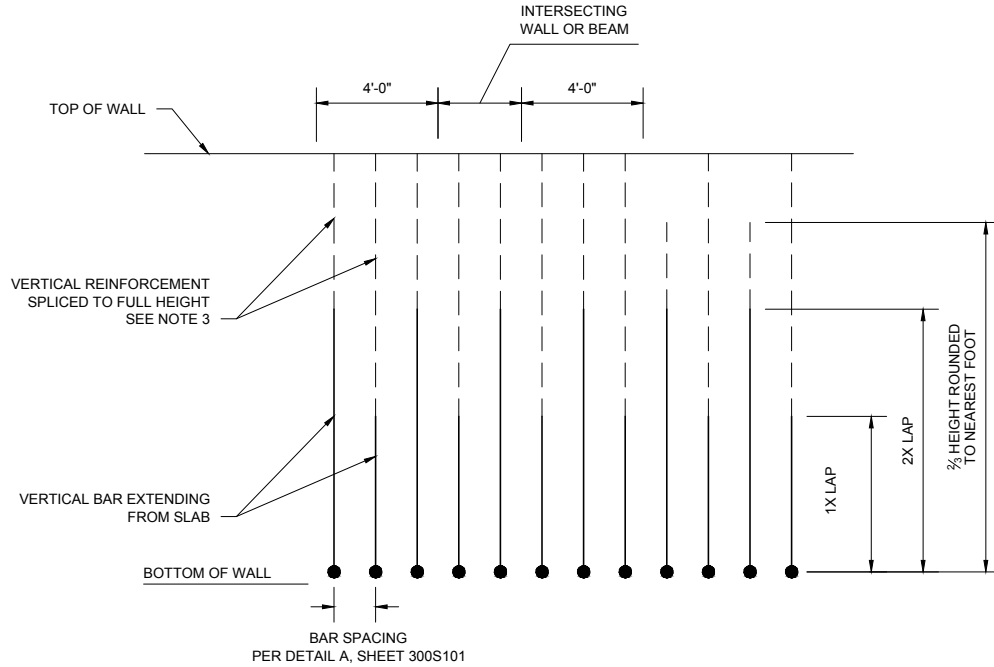
Recommended Fonts: Helvetica or Arial



SIGN DIMENSIONS : 1200 mm x 2400 mm x 19 mm (approx. 4' x 8' x 3/4")
PLYWOOD PANEL (APA RATED A-B GRADE-EXTERIOR)

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FILE NAME: j:\JobsData\71810.02 PWWTF Design Update And CA Phase II\00 CADD 2019\01 Working Set\05 Structural\Figure ADD1-S1.dwg



NOTES:

1. ELEVATION DEPICTS VERTICAL REBAR WITH LAPPED SPLICES.
2. SPLICES OF ALTERNATING VERTICAL BARS SHALL BE STAGGERED.
3. ALL VERTICAL REBAR SHALL EXTEND TO FULL WALL HEIGHT WITHIN 4'-0" OF INTERSECTING WALLS OR BEAMS (INCLUDING STEEL BEAMS). BEYOND THIS LENGTH, ALTERNATING VERTICAL REBAR MAY BE TERMINATED AT SHORTER LENGTH AS SHOWN, PROVIDED THAT REQUIRED LAP STAGGERING IS MAINTAINED.



TYPICAL CLARIFIER WALL REINFORCEMENT ELEVATION

NTS



CITY OF PALMER
WWTF IMPROVEMENTS PROJECT PHASE II

ADDENDUM 1

Project No:	71810.02
Drawn By:	KEG
Scale:	NTS
Date:	JUNE 2021
Figure:	ADD1-S1