



ADDENDUM NO. 1

TO THE PLANS, SPECIFICATIONS, PROPOSAL AND CONTRACT FOR THE CITY OF LACEY

LIFT STATION 6 REPLACEMENT

LACEY CONTRACT NO. PW 2022-08

TO ALL PLAN HOLDERS:

You are hereby notified of the following changes, revisions, deletions, additions, corrections and/or clarifications to the plans, specifications, and contract documents for the Lift Station 6 Replacement project. This addendum is made part of these contract documents as though it was originally included in the Contract. The Contractor shall note the location of the Addenda Receipt Acknowledgement on Page B-4 of the Contract Proposal.

Issued this 2nd day of April 2026.

ADDITIONS, MODIFICATIONS, AND/OR DELETIONS TO THE PLANS AND SPECIFICATIONS

ITEM NO. 1:

Specifications Page D-143 and 144,

Replace Section 9-15.3: Automatic Controllers with the following:

9-15.3 Automatic Controllers

(***)**

Modify this section with the following:

Automatic Irrigation Controller shall be Irritrol RD600-EXT-R Controller or Engineer approved equal, pedestal mounted, with surge protection.

ITEM NO. 2:

Technical Specification Section 00 01 10,

Replace Section 00 01 10 – Table of Contents with the attached Section 00 01 10 - Table of Contents.

ITEM NO. 3:

Technical Specification Section 01 41 20,

Add Technical Specification Section 01 41 20 – Seismic Requirements for Non-Structural Components. The attached section supersedes the seismic design criteria listed in section 26 32 13.

ITEM NO. 4:

Technical Specification Section 01 75 00,

Add Technical Specification Section 01 75 00 – Testing, Training, and Commissioning.

ITEM NO. 5:

Plan Sheet LS-1 (12 of 53)

Replace sheet LS-1 with the attached sheet LS-1, clarifying additional bollards for removal.



Scott Egger, P.E.
Public Works Director

**SECTION 00 01 10 – TABLE OF CONTENTS
FOR
LIFT STATION NO. 6 REHABILITATION
FOR
CITY OF LACEY**

Section	Person Responsible	Title
TECHNICAL SPECIFICATIONS		
Division 01 – General Requirements		
01 41 20	RJB	Seismic Requirements for Non-Structural Components
01 75 00	RJB	Testing, Training, and Commissioning
Division 02 thru Division 25 NOT USED		
Division 26 - Electrical		
26 05 00	MEW	General Requirements for Electrical Work
26 05 19	MEW	Low-Voltage Conductors, Wires and Cables
26 05 26	MEW	Grounding System
26 05 29	MEW	Hangers and Supports for Electrical Systems
26 05 33	MEW	Raceways, Boxes, & Fittings
26 05 73	MEW	Power System Studies
26 05 85	MEW	Utility Coordination
26 08 00	MEW	Commissioning of Electrical Systems
26 27 26	MEW	Wiring Devices
26 28 16.13	MEW	Enclosed Circuit Breakers
26 29 13.13	MEW	Across the Line Motor Controllers
26 32 13	MEW	Diesel Engine Generators
26 36 23	MEW	Automatic Transfer Switches
26 56 13	MEW	Lighting Poles and Standards
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Division 27 – Division 39		
33 44 16	RJB	Utility Trench Drains
Division 40 - Process Integration		
40 06 70	MEW	Schedules of Instrumentation for Process Systems
40 61 13	MEW	Process Control Systems General Provisions
40 61 21	MEW	Process Control Systems Testing
40 62 63	MEW	Operator Interface Terminals (OIT)
40 63 43	MEW	Programmable Logic Controllers
40 67 16	MEW	Control Panels
40 67 33	MEW	Panel Wiring
40 71 13	MEW	Magnetic Flow Meters
40 71 77	MEW	Check Valve Limit Switch
40 72 13	MEW	Ultrasonic Level Meters

40 72 76	MEW	Level Switches
40 73 26	MEW	Gauge Pressure Transmitters
40 78 19	MEW	Switches, Pushbutton and Indicating Lights
40 78 53	MEW	Relays and Terminal Blocks
40 78 56	MEW	Intrinsically-Safe Barriers and Relays
40 78 59	MEW	Power Supplies and Line Conditioners

Division 41 – Material Processing and Handling Equipment

NOT USED

Division 43 – Process Gas & Liquid Handling

43 21 00	RJB	General Requirements for Pumps
43 21 39	RJB	Submersible Sewage Pumps

DRAWINGS

See Sheet G-1 for Drawing Index

SUPPLEMENTARY INFORMATION

END OF SECTION

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SECTION 01 41 20 - SEISMIC REQUIREMENTS FOR NON-STRUCTURAL COMPONENTS

PART 1 GENERAL

1.1 SUMMARY

- A. This section contains seismic design requirements for non-structural equipment, components and systems. The components and systems indicated below are required for immediate re-occupancy and minimization of disruption to operations following a seismic event. All elements shall meet the requirements of this section and Chapter 13 of ASCE 7-16.
- B. Applicable Specification Divisions include those with:
 - 1. Components that are part of the Designate Seismic Systems as covered in the **2021 IBC** Section 1705.13.3 and subject to the requirements of ASCE 7 Section 13.2.2.
 - 2. Components weighing more than 400 pounds that have a center of mass located 4-feet or less above the adjacent floor or roof level that supports the component.
 - 3. Components weighing more than 20 pounds, or more than 5 lbs./ft. in the case of distributed systems, located more than 4-feet above the adjacent floor or roof level that supports the component.
 - 4. Exceptions:
 - a. Furniture
 - b. Temporary or movable equipment

1.2 RELATED SECTIONS:

- A. City of Lacey Section D: Amendments and Special Provisions, requirements for submittals.
- B. General provisions within other Specification Divisions related to hangars, anchors, supports and seismic restraint or seismic control.

1.3 ACCEPTED STANDARDS

- A. ASCE 7-16 Section 13.2.2 requires certification be provided for mechanical, electrical, and containment and storage equipment that is identified as being assigned to the Designate Seismic System. This designation requires said systems to remain operable and functional following the design earthquake ground motion. Documentation confirming suitability shall be provided as outlined in the Submittal Section.
- B. ASCE 7-16 Section 13.1.7 allows for the use of reference documents or standards for industry specific systems or components which represent acceptable procedures for seismic design and construction. The use of these documents or standards does not alleviate the Contractor from submitting calculations, drawings and product data that show conformance to the requirements of this section.
- C. Pre-approved details meeting the requirements of ASCE 7-16 Section 13.3 may be used for this project without submitting calculations indicating compliance with the design criteria specified

in Section 1.6 Design Criteria. The Contractor shall provide shop drawings detailing the product and specifying the pre-approved detail(s) to be used and their locations along with supporting documentation.

1.4 SUBMITTALS

- A. Special Certifications for the Designated Seismic System:
1. For active Mechanical and Electrical Equipment, submit one of the following forms of documentation for each main component of the system.
 - a. Approved Shake Table Test results per ASCE 7 Section 13.2.5
 - b. Experience Data per ASCE 7 Section 13.2.6
 - c. Inherent Ruggedness per ASCE 7 Section 13.2.5
 2. For non-active Mechanical and Electrical Equipment, submit one of the following forms of documentation for each main component of the system.
 - a. Analysis per ASCE 7 Section 13.2.2
 - b. Approved Shake Table Test results per ASCE 7 Section 13.2.5
 - c. Experience Data per ASCE 7 Section 13.2.6
 3. For component with hazardous substances, submit one of the following forms of documentation for each main component of the system.
 - a. Analysis per ASCE 7 Section 13.2.2
 - b. Approved Shake Table Test results per ASCE 7 Section 13.2.5
 - c. Experience Data per ASCE 7 Section 13.2.6
- B. Product data: Illustrate and indicate style, material, strength, fastening provision and finish for each type and size of seismic restraint component used.
- C. Shop drawings: Submit shop drawing plans and details indicating horizontal and vertical location (with respect to floor level and grids) layout, spacing, sizes and types of seismic restraint and gravity supports for each system or component requiring bracing. The connection details shall be on similar size plan sheets and clearly presented in the electronic submittal document. Indicate materials and dimensions and identify hardware, including attachment and anchorage devices. Shop drawings shall be stamped by a registered Professional Engineer in the State of Washington. The shop drawings must be clearly organized and presented such that they can be readily interpreted by the CONTRACTOR for installation and the Special Inspector. Include the following:
1. Fabricated Support: representations of field-fabricated supports not detailed on the Shop Drawings.
 2. Seismic Restraints: Detail anchorage and bracing not defined by other details or charts on the Shop Drawings. Include the following:
 3. Design: To support selection and arrangement of seismic restraints, include calculations of combined tensile, compressive and shear loads. NOTE: Anchorage to concrete shall comply with ACI 318-14, Chapter 17 assuming cracked concrete conditions.

4. Details: Detail fabrication and arrangement. Detail attachments of restraints to the restrained items and to the structure. Show attachment locations, methods and spacing. Identify components, list their strengths and indicate directions and values of forces transmitted to the structure during seismic events.
- D. Calculations: Calculations shall be submitted together with the Shop Drawings. Calculations shall substantiate the design of the sizes, thicknesses, and types of seismic-restraint connections, gravity support connections, fabrication, and attachment (fastening, anchorage, welding, etc.) to the structure, including all fasteners. Calculations shall clearly indicate the loads imposed on the primary building structure, including magnitude, direction and location. Calculations shall be based upon the design requirements in Section 1.6 Design Criteria shall be stamped by a registered Structural Engineer in the State of Washington.
- E. Welding certificates of welders performing component or system installation.
- F. Field Quality Control Reports
- G. Field Observation Reports from the Special Inspector

1.5 QUALITY ASSURANCE

- A. Comply with seismic-restraint requirements in ASCE 7-16 unless requirements in this Section are more Stringent.

1.6 DESIGN CRITERIA

- A. General. Seismic Demands on Non-Structural Components per ASCE 7-16 Section 13.3 are supplemented by site specific design criteria below. Conform to all other Sections of ASCE 7-16 Chapter 13.
 1. Soil Class D (per the project Geotechnical Report)
 2. Risk Category: IV
 3. Component Importance Factor: 1.5
 4. S_{ds} (g): 0.92
 5. S_{d1} (g): 0.60

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 75 00 - TESTING, TRAINING, AND COMMISSIONING

PART 1 GENERAL

1.1 SCOPE

This section specifies equipment and system testing and start-up, services of Manufacturer's representatives, training of City's personnel, and final testing requirements for the complete facility.

1.2 CONTRACT REQUIREMENTS

- A. Testing, training, pre startup, and start-up are requisite to the satisfactory completion of the Contract.
- B. Complete all testing, training, and start-ups within the Contract Time(s).
- C. Furnish all necessary labor, power, chemicals, tools, equipment, instruments, and services required for and incidental to completing functional testing, performance testing, and operational testing.
- D. Provide competent, experienced technical representatives of Equipment Manufacturers for assembly, installation, testing, and operator training.

1.3 START-UP PLAN

- A. Submit pre-startup start-up plan for each piece of equipment and each system not less than 2 weeks prior to planned initial equipment or system start-up.
- B. Provide detailed Start-up Progress Schedule with the following activities identified:
 - 1. Manufacturer's services
 - 2. Installation certifications
 - 3. Operator training
 - 4. Submission of operation and maintenance manual
 - 5. Functional testing
 - 6. Performance testing
 - 7. Operational testing
- C. Provide testing plan with test logs for each item of equipment and/or system. Include testing of alarms, control circuits, capacities, speeds, flows, pressures, vibrations, sound levels, and other parameters.
- D. Provide summary of shutdown requirements for existing systems if required, which are necessary to complete start-up of new equipment and systems.
- E. Revise and update start-up plan based upon review comments, actual progress, or to accommodate changes in the sequence of activities.

1.4 GENERAL START-UP AND TESTING PROCEDURES

A. Mechanical Systems:

1. Remove rust preventatives and oils applied to protect equipment during construction.
2. Flush lubrication systems and dispose of flushing oils. Recharge lubrication system with lubricant recommended by Manufacturer.
3. Flush fuel system and provide fuel for testing and start-up.
4. Install and adjust packing, mechanical seals, O-rings, and other seals. Replace defective seals.
5. Remove temporary supports, bracing, or other foreign objects installed to prevent damage during shipment, storage, and erection.
6. Check rotating machinery for correct direction of rotation and for freedom of moving parts before connecting driver.
7. Perform cold alignment and hot alignment to Manufacturer's tolerances.
8. Adjust V-belt tension and variable pitch sheaves.
9. Inspect hand and motorized valves for proper adjustment. Tighten packing glands to ensure no leakage but permit valve stems to rotate without galling. Verify valve seats are positioned for proper flow direction.
10. Tighten leaking flanges or replace flange gasket. Inspect screwed joints for leakage.
11. Install gratings, safety chains, handrails, shaft guards, and sidewalks prior to operational testing.

B. Electrical Systems

1. Perform insulation resistance tests on wiring except 120-volt lighting, wiring, and control wiring inside electrical panels.
2. Perform continuity tests on grounding systems.
3. Test and set switchgear and circuit breaker relays for proper operation.
4. Perform direct current high potential tests on all cables that will operate at more than 2,000 volts. Obtain services of independent testing lab to perform tests.
5. Check motors for actual full load amperage draw. Compare to nameplate value.

C. Instrumentation Systems

1. Bench or field calibrate instruments and make required adjustments and control point settings.
2. Leak test pneumatic controls and instrument air piping.
3. Energize transmitting and control signal systems, verify proper operation, ranges, and settings.

1.5 FUNCTIONAL TESTING

- A. Functionally test mechanical and electrical equipment for proper operation after general start-up and testing tasks have been completed.
- B. Demonstrate proper rotation, alignment, speed, flow, pressure, vibration, sound level, adjustments, and calibration. Perform initial checks in the presence of and with the assistance of the Manufacturer's representative.
- C. Demonstrate proper operation of each instrument loop function including alarms, local and remote controls, instrumentation, and other equipment functions. Generate signals with test equipment to simulate operating conditions in each control mode.
- D. Conduct continuous test under full load conditions during a typical 8-hour work day. Replace parts which operate improperly.

1.6 CERTIFICATE OF PROPER INSTALLATION

- A. At completion of functional testing, furnish written report prepared and signed by Manufacturer's authorized representative, certifying equipment:
 1. Has been properly installed, aligned, adjusted, and lubricated.
 2. Is free of any stresses imposed by connecting piping or anchor bolts.
 3. Is suitable for satisfactory full-time operation under full load conditions.
 4. Operates within the allowable limits for vibration.
 5. Controls, protective devices, instrumentation, and control panels furnished as part of the equipment package are properly installed, calibrated, and functioning.
 6. Control logic for start-up, shutdown, sequencing, interlocks, and emergency shutdown has been tested and is properly functioning.

- B. Furnish written report prepared and signed by the electrical and/or instrumentation subcontractor certifying:
 - 1. Motor control logic that resides in motor control centers, control panels, and circuit boards furnished by the electrical and/or instrumentation subcontractor has been calibrated and tested and is properly operating.
 - 2. Control logic for equipment start-up, shutdown, sequencing, interlocks, and emergency shutdown has been tested and is properly operating.
- C. Co-sign the reports along with the Manufacturer's representative and subcontractors.

1.7 TRAINING OF CITY'S PERSONNEL

- A. Contractor shall arrange/schedule with City training sessions 2 weeks prior to training date.
- B. Provide operations and maintenance training for items of mechanical, electrical, and instrumentation equipment. Utilize Manufacturer's representatives to conduct training sessions.
- C. Coordinate training schedule with City staff. Coordinate training sessions to prevent overlapping sessions. Arrange sessions so that individual operators and maintenance technicians do not attend more than two sessions per week.
- D. Provide Operation and Maintenance Manual for specific pieces of equipment or systems 2 weeks prior to training session for that piece of equipment or system.
- E. Satisfactorily complete functional testing before beginning operator training.
- F. The City may videotape the training for later use with the City's personnel.

1.8 MINIMUM SERVICE SCHEDULE

Minimum services as specified shall be provided in accordance with the following schedule:

Specification Section	Equipment	Minimum On-Site Time Requirements		
		1) Equipment Installation	2) Equipment Testing	3) Operator Training
7-17	Hydraulic Valves	0.5 CWD per valve	0.5 CWD per valve	0.25 CWD per valve
40 61 13	Process Control System	5 CWD	4 CWD	2 CWD
40 71 13	Magnetic Flow Meters	1 CWD	0.5 CWD	0.25 CWD
43 21 39	Submersible Pumps	2 CWD	3 CWD	1 CWD

NOTE: CWD is defined as a consecutive working day consisting of 8 hours each from 7:00 a.m. to 3:00 p.m.

1.9 OPERATIONAL TESTING

- A. Conduct operational test of the entire facility after completion of operator training. Demonstrate satisfactory operation of equipment and systems in actual operation.

- B. Conduct operational test for continuous 7-day period.
- C. City will provide operations personnel, power, fuel, and other consumables for duration of test.
- D. Immediately correct defects in material, workmanship, or equipment which became evident during operational test.
- E. Repeat operational test when malfunctions or deficiencies cause shutdown or partial operation of the facility or results in performance that is less than specified.

1.10 RECORD KEEPING

- A. Maintain and submit to Engineer the following records generated during start-up and testing phase of Project:
 - 1. Daily logs of equipment testing identifying all tests conducted and outcome.
 - 2. Logs of time spent by Manufacturer's representatives performing services on the job site.
 - 3. Equipment lubrication records.
 - 4. Electrical phase, voltage, and amperage measurements.
 - 5. Insulation resistance measurements.
 - 6. Pump torsional and lateral vibration analysis report.
 - 7. Data sheets of control loop testing including testing and calibration of instrumentation devices and set points.

END OF SECTION

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