

**Exhibit A-1**  
**Statement of Work**

**WATER ACTIVITY NAME – Ordway Cattle Feeders Water Line Extension, Phase II**

**GRANT RECIPIENT – Crowley County**

**FUNDING SOURCE – Water Supply Reserve Account 10% of total project costs**  
**CWCB Water Projects Loan Program 90% of total project costs**

**INTRODUCTION AND BACKGROUND**

Provide a brief description of the project. (Please limit to **no more than 200 words**; this will be used to inform reviewers and the public about your proposal).

This project completes a waterline that will provide water to the Ordway Cattle Feeders feedlot from wells located on a local ranch owned by the company. The Ordway Cattle Feeders already has in place a battery of four wells, two booster stations and 4.2 miles of pipe at the west end of the proposed system. Phase I, funded by Ordway Cattle Feeders in its entirety, includes the re-establishing easements and the rehabilitation of the existing stretch of pipeline, wells and booster stations. Phase 2 completes the project with an additional booster station, 10.5 miles of water pipeline, 2 back-up generators, and a monitoring/control system. WSRA funding will be dedicated to Phase 2, and a partner CWCB loan will fund the bulk of the project.

**OBJECTIVES**

List the objectives of the project

The primary purpose of this project is to provide a consistent, viable supply of livestock drinking water, dust abatement, and compost conditioning water for the Feedyard. The Feedyard also intends to use this new water source to serve their feed mill in the future. This water supply will also provide a source of water for fighting farmstead and wild land fires in the area from Crowley to Ordway.

The water needs of the Feedyard are roughly equivalent to the needs of a town with a population of 5,500 people, using approximately 1,500 acre feet of water per year. Currently, two thirds of that water is purchased on the spot market from Front Range cities. In addition, the Feedyard owns approximately 500 acre feet of water rights. Water is delivered from Pueblo Reservoir, stored in Lake Henry and then piped to the Feedyard.

There are several problems with the historic supply regimen, and corresponding opportunities provided by the proposed project. Evaporative loss from Pueblo Reservoir to Lake Henry is 26%. The evaporative loss from Lake Henry is approximately 50%. This pipeline project eliminates those evaporation and transit losses. The current water supply is not secure. The majority of Lake Henry water rights are held by Front Range cities. As water supply needs increase for the Front Range, less water will be available for purchase on the spot market, and Front Range providers will likely hold their water closer to home. With less water being stored in Lake Henry, evaporation rates will be even higher. In the 2002 drought, the Feedyard was forced to install a floating pump in Lake Henry in order to get required water from the Lake. With use of the wells, augmentation water could be stored at higher elevation reservoirs, greatly reducing evaporative loss. Finally, water quality from project wells is of higher quality than water that is currently being used. This higher quality and consistent water source

will allow the Feedyard to convert their feed mill and reduce their potable water demand by approximately 14 acre feet per year.

## **TASKS**

### **TASK 1 – Final Design**

#### Description of Task

This task includes survey work and final design of a 10.5 mile stretch of pipeline and related booster station.

#### Method/Procedure

Kidd Engineering will perform final design and construction documents.

#### Deliverable

Final Design drawings and maps.

### **TASK 2 – Pipeline**

#### Description of Task

Installation of 54,500 linear feet of pipeline, with 10 fire hydrants, and two State Highway bored crossings.

#### Method/Procedure

Ordway Cattle Feeders will solicit proposals for construction of the pipeline and enter into a construction services contract. Kidd Engineering will provide construction QA/QC services.

#### Deliverable

Completed improvements. As-built drawings.

### **TASK 3 – Booster Station and Emergency Stand-by Generators**

#### Description of Task

Construction and installation of Booster Station C. Furnish and install emergency stand-by generators at the three booster stations and Well #20.

#### Method/Procedure

Ordway Cattle Feeders will solicit proposals and enter into a contract for construction of the booster station and installation of the pump, with variable frequency drive. Kidd Engineering will provide construction QA/QC services. Kidd Engineering will provide a performance specification for the four generators. Ordway Cattle Feeders will solicit proposals and enter into a contract to furnish and install the emergency stand-by generators.

#### Deliverable

Completed improvements.

### **TASK 4 – Supervisory Control and Data System**

#### Description of Task

Furnish and install a Supervisory Control and Data System for three booster stations, four well pumps, and electronic controlled valving.

#### Method/Procedure

Kidd Engineering will provide a performance specification for the SCADA system. Ordway Cattle Feeders will solicit proposals and enter into a contract to furnish and install the SCADA system.

#### Deliverable

Completed improvements.

## REPORTING AND FINAL DELIVERABLE

Reporting: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion of the tasks identified in the statement of work including a description of any major issues that have occurred and any corrective action taken to address these issues.

Final Deliverable: At completion of the project, the applicant shall provide the CWCB a final report that summarizes the project and documents how the project was completed. This report may contain photographs, summaries of meetings and engineering reports/designs.

## Exhibit A-2

### BUDGET

<b>TASK 1 - FINAL DESIGN</b>					
1	PROFESSIONAL ENGINEER	64	HR	125.00	8,000
2	EIT ENGINEER	120	HR	90.00	10,800
3	CAD TECHNICIAN	160	HR	62.00	9,920
4	SURVEY CREW	32	HR	245.00	7,840
5	MILEAGE	270	MI	1.10	297
6	PRINTING COSTS	920	SF	0.90	828
<b>TASK 2 - PIPELINE</b>					
7	FURNISH 15" DIA, CLASS 80 PVC PIPE	54,500	LF	9.97	543,365
8	INSTALL 15" DIA, CLASS 80 PVC PIPE	54,500	LF	24.95	1,359,775
9	FURNISH & INSTALL 15" DIA 90 ELLS	5	EA	887.13	4,436
10	FURNISH & INSTALL 15" DIA 45 ELLS	28	EA	709.64	19,870
11	FURNISH & INSTALL 15X15 TEES	12	EA	815.22	9,783
12	FURNISH & INSTALL 15" BF VALVES	7	EA	2,000.00	14,000
13	FURNISH & INSTALL BLOW-OFF ASSEMBLIES	2	EA	2,000.00	4,000
14	FURNISH & INSTALL 8" ALTITUDE VALVES	3	EA	6,641.50	19,925
15	FURNISH & INSTALL FIRE HYDRANTS	10	EA	3,700.00	37,000
16	BORE CROSSING HWY 207-INSTALL 24" CASING	1	EA	18,000.00	18,000
17	BORE CROSSING HWY 71-INSTALL 24" CASING	1	EA	24,500.00	24,500
18	CASING PROVIDED BY L&M UNDERGROUND	250	LF	82.53	20,632
<b>TASK 3 - BOOSTER STATION C</b>					
19	FURNISH & INSTALL 15X8 REDUCERS	2	EA	600.00	1,200
20	FURNISH & INSTALL PIPING PER PLAN	1	LS	1,440.00	1,440
<b>SPECIALTIES</b>					
21	FURNISH & INSTALL 8" CHECK VALVE	1	EA	6,641.50	6,642
22	FURNISH & INSTALL 8" BF VALVES	2	EA	1,380.00	2,760
23	FURNISH & INSTALL 6" FLOW METER WITH 5-20 ma OUTPUT	1	EA	6,000.00	6,000
24	FURNISH & INSTALL SUCTION AND DISCHARGE PRESSURE TRANSDUCERS WITH 5-20 ma OUTPUT	2	EA	150.00	300
25	FURNISH & INSTALL 8" GATE VALVE	1	EA	1,380.00	1,380
26	FURNISH & INTALL 1" AIR-VAC VALVE	1	EA	948.38	948
27	FURNISH & INSTALL 100 HP BOOSTER PUMP	1	EA	50,334.00	50,334
28	FURNISH 125 KVA GENERATOR	3	EA	70,700.00	212,100
29	FURNISH 100 KVA GENERATOR	1	EA	49,250.00	49,250
30	INSTALL GENERATORS	4	EA	10,000.00	40,000
31	FREIGHT FOR GENERATORS (2 TRUCKS*1300 MI)	2600	MILES	3.00	7,800
32	BUILDING FOR BOOSTER STATION C	1	EA	17,100.00	17,100
<b>TASK 4 - MISCELLANEOUS</b>					
33	SUPERVISORY CONTROL AND DATA SYSTEM FOR 3 BOOSTER STATIONS, 4 WELL PUMPS & ELECTRIC SHUT-OFF VALVE	1	EA	82,133.00	82,133
34	PROJECT MANAGEMENT & ADMIN			12,000.00	12,000
35	CONTINGENCY (<7% OF CONSTRUCTION)			175,643.00	175,643
<b>TOTAL PHASE II</b>				<b>\$</b>	<b>2,780,000</b>

### **Exhibit A-3**

#### **SCHEDULE**

<b>Project Schedule</b>	<b>Start Date</b>	<b>Finish Date</b>
Final Design	NTP	NTP + 45 days
Proposal Solicitations	NTP + 45 days	NTP + 60 days
Pipeline Construction	NTP + 75 days	NTP + 365 days
Booster Station Construction	NTP + 75 days	NTP + 170 days
Emergency Standby Generators	NTP + 120 days	NTP + 365 days
SCADA Installation	NTP + 170 days	NTP + 365 days

#### **PAYMENT**

Payment will be made based on actual expenditures and invoicing by the applicant. Invoices from any other entity (i.e. subcontractors) cannot be processed by the State. The request for payment must include a description of the work accomplished by major task, and estimate of the percent completion for individual tasks and the entire water activity in relation to the percentage of budget spent, identification of any major issues and proposed or implemented corrective actions. The last 5 percent of the entire water activity budget will be withheld until final project/water activity documentation is completed. All products, data and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to Basin Roundtables and the general public and help promote the development of a common technical platform.