January 18, 2021

Ben Wade
Water Conservation Coordinator
Colorado Department of Natural Resources
1313 Sherman Street, Suite 718
Denver, CO 80203

RE: **Martin Springs Irrigation & Storage Improvements Project - Letter of Substantial Completion**

The purpose of this letter is to summarize the status of private improvements completed with the Martin Springs Irrigation and Storage Improvements Project and serves as the WSRF Grant "Final Report". (POGG1 2021-45)

Project Objectives
This project has substantially completed the overall objectives of improving existing water storage facilities and developing a new irrigation diversion system to service pre-existing water rights in the State of Colorado.

Improvements Summary
The existing "Martin Pond" was restored to original absolute capacity of 3.5 acre-feet (Case#08CW92) by removing excess sediment from the bottom of the pond with methods of excavation. Fill material from onsite was placed in compacted lifts on the existing earthen dam to mitigate erosion and re-establish a constant grade of "freeboard" at the top of the dam. The existing 12-inch CMP outlet pipe was replaced with an 18-inch HDPE pipe to convey overflows.

In addition, a new surface water diversion was created to divert 0.6 cfs of irrigation water (Case#18CW8). A 10-inch spigot back headgate with a 10-inch HDPE culvert was installed during re-construction of the earthen dam to create a diversion from the normal surface water level of the existing to pond for the purpose of irrigation.

Lastly, a swale/ditch was constructed to convey irrigation water diverted from the headgate to an adjacent hay meadow tor the purpose of flood irrigation. A 3-inch x 12-inch Parshall Flume with Staff Gauge was constructed to accurately measure surface water flows used for irrigation.

Initial clearing and grubbing was conducted to remove excess overgrowth from the earthen dam and remove debris prior to construction. Riprap erosion control measures were installed and native grass seed mix was planted on all disturbed areas upon project completion to promote natural vegetation re-growth and to minimize erosion.

As of November 11, 2020, the following items have been confirmed for substantial completion:

- Restore and repair existing water storage facilities
- Install headgate and culvert to develop surface water diversion
- Construct water measuring device and conveyance system

This letter is accompanied by Attached Photos of the Project depicting before, during, and after construction conditions. Also, attached is an Invoice Tracking Summary by Task with breakdown of Grant Funding and Owner Match along with subsequential invoice for tracking.

Sincerely,

Zachary Henrichs, PE
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Baseline Engineering Corporation
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Attachments:

A. Construction Photographs
B. Invoice Summary by Task

P.S. This letter does not constitute a guarantee or acceptance either expressed or implied of work not in compliance with the approved documents or work not properly maintained. Nor is this a release of the Owner's or Contractor's obligation to complete work in accordance with the same or provide proper maintenance of the work.

Existing Earthen Dam

Existing 12-inch CMP Outlet Pipe

Site Preperation (Clearining and Grubbing)

Earthen Dam Improvements (Interim & Final)

Diversion Construction (Interim)

New 18-inch HDPE Outlet Pipe

New Diversion Headgate and Flume

Post-Construction Conditions (Final)