



May 14, 2020

Willow Creek Pass Village Association
Steve Warnke
P.O. Box 1148
Clark, CO 80428

Job Number: 19-11514

Subject: 2020 Willow Creek Pass
Village Road and ROW Maintenance
Program, Scope of Work and Estimated
Budget, Routt County, Colorado.

Steve,

As requested by the Willow Creek Pass Village Association (WCPVA), NWCC, Inc. (NWCC) has prepared this report outlining the project schedule, proposed scope of work and estimated budget for the 2020 Willow Creek Pass Village Road and ROW Maintenance Program. This report outlines the proposed scope of work developed by NWCC, Wilderness Earthworks (WE) and yourself over the past month, as well as the estimated budget for 2020.

Project Schedule: WE anticipates mobilizing to the site and starting their work the first week of June 2020. Envirotech Services, Inc. (Envirotech) is presently scheduled to be on-site placing the magnesium chloride/road saver on June 11 and June 12, 2020.

Proposed Scope of Work and Budget: Based on our site visits this spring, discussions regarding the work completed during previous programs, the following scope of work and estimated budgets for completing the work were prepared:

- 1) WE will mobilize their equipment to the site, including motor grader, mini-trackhoe and dump trucks. The mobilization/demobilization fee has been estimated at **\$1,100**.
- 2) ROW Maintenance/Tree Removal/Culvert Cleaning and Inspections: WE estimated that it would take 2 to 4 days to complete the ditch cleaning and tree removal from the roadside ditches located within the ROW that are creating surface drainage problems, as well as to provide better access to the large culvert along Lower Beaver Canyon so that it can be inspected by NWCC, and to inspect several other culverts to determine if they need to be just cleaned or replaced. Estimated fees are for cleaning and inspection of the culverts, but does not include a fee for replacing the culverts. The majority of the ditch cleaning and culvert inspections/cleaning will be conducted along Longfellow Way, Olive Street, Frisco Place and Lower Beaver Canyon. WE estimated the total fee for completing the above work would be approximately **\$6,700**.

- 3) **Stabilize Roadway Surfaces:** In an effort to stabilize the roadway surfaces which continue to pothole, ravel, and washboard, WE will be constructing three new test sections along Golden Tide Place, Neptune Place, and at the intersection of Longfellow and Willow Gulch. Each of these test sections will be approximately 150 to 200 feet in length. The new test sections will be constructed by placing, wetting and compacting approximately 3 inches of recycled asphalt product (RAP), which consists of a mix of rotomilled asphalt and ¾ inch base coarse, after these sections of roadway have been regraded (potholes filled and compacted). The RAP will be imported from the Duckels Construction pit located west of Steamboat Springs. WE has estimated the total fee for completing the above work would be approximately **\$11,000**, with WE fee being approximately **\$6,500**, including the trucking to and from the pit, and the cost of the RAP purchased from Duckels will be approximately **\$4,500**.
- 4) **Blade Shape and Compact Roadways:** This scope of work also includes the reshaping, wetting and recompaction of all of the roadways prior to magnesium chloride placement. WE has estimated their total fee for completing the above work will be approximately **\$9,800**.
- 5) **New ABC Placement:** WE will add new/imported ABC to sections of the roadways that are lacking in sufficient ABC cover and pit run materials are exposed. The portions of the roadways requiring additional ABC will be determined after the roadways are shaped and rolled this spring and work is initiated the first week of June. Based on our recent observations, it appears that the majority of the ABC will be required along the West Wind Cul-de-sac and Clara Way. WE has estimated the total fee for completing the above work would be approximately **\$8,300**, with WE fee being approximately **\$3,000**, including trucking, and the cost of the ABC materials imported from Elam being approximately **\$5,300**.
- 6) **Magnesium Chloride Application:** After all of the ROW maintenance is completed, additional ABC materials are placed and the existing roadways are reshaped and compacted, EnviroTech of Glenwood Springs, CO will place approximately 25,000 gallons of magnesium chloride (Roadsaver) along the roadway surfaces. WE is to provide the water truck, pump, and smooth drum compactor with operator required during this process. WE has estimated their fee for completing the above work would be approximately **\$31,000**, with WE fee being approximately **\$7,600** and the cost of the Roadsaver placed by EnviroTech being approximately **\$23,400**.

Cost Breakdown: The contractor's estimated fees for completing the work at the site have been broken down for each of the line items discussed above.

1) Mobilization/Demobilization

	<u>Estimated Fees</u>
Wilderness	\$1,100

2) ROW Maintenance/Tree Removal/Culvert Access and Cleaning

	<u>Estimated Fees</u>
Wilderness	\$6,700

3) Stabilize Roadway Surfaces

	<u>Estimated Fees</u>
Wilderness	\$6,500
Duckels	<u>\$4,500</u>
	\$11,000

4) Blade Shape and Compact Roadways

	<u>Estimated Fees</u>
Wilderness	<u>\$9,800</u>
	\$9,800

5) New ABC Placement

	<u>Estimated Fees</u>
Wilderness	\$3,000
Elam	<u>\$5,300</u>
	\$8,300

6) Magnesium Chloride Placement

	<u>Estimated Fees</u>
Wilderness	\$7,600
EnviroTech	<u>\$23,400</u>
	\$31,000

The total estimated fees for each of the contractors and NWCC are shown below.

Wilderness	\$37,305*
Duckels	\$4,500
Elam	\$5,300
EnviroTech	\$23,400
<u>NWCC</u>	<u>\$10,000</u>
Total Estimated Fees	\$80,505

*Wilderness Fee includes \$2,605 for regrading work completed in May 2020.

The Unit Rates used to calculate the estimated budgets are outlined below.

Wilderness

Mobilization	\$1,200 lump sum
Motor Grader	\$165/hour
Water Truck	\$2850/week
Mini-Trackhoe	\$115/hour
Dump Truck	\$90/hour
Belly Dump	\$125/hour
Laborer	\$49/hour
Roller	\$650/day
Water Pump/Fuel	\$850 lump sum

Duckels

RAP (Millings/Base)	\$18/ton
---------------------	----------

Elam

Class 6 ABC	\$16.50/ton
-------------	-------------

NWCC

Field Engineer	\$80/hour
Principal Engineer	\$170/hour
Mileage	\$0.80/mile

If you have any questions concerning this report, or if we may be of further service, please contact this office.

Sincerely,
NWCC, INC.

DRAFT

Brian D. Len, P.E.
Principal Engineer