



City of Homer

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Public Works

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Memorandum 21-023

TO: MAYOR CASTNER AND HOMER CITY COUNCIL
THROUGH: ROB DUMOUCHEL, CITY MANAGER
FROM: JANETTE KEISER, DIRECTOR OF PUBLIC WORKS
DATE: JANUARY 27, 2021
SUBJECT: FLEET REPLACEMENT – GRADER AND SANDING TRUCKS

Issue: The Fleet Replacement Schedule shown in the FY 20/21 approved budget called for the replacement of a grader. We seek approval to acquire the grader, with a snow gate and snow blade, as well as two other pieces of mission critical equipment.

Background: The approved Fleet Replacement Schedule for FY 20/21 identified the replacement of a grader. In addition to the grader, we have asked for replacement of a work truck for Parks as well as two sanding trucks. In view of funding constraints, we've re-evaluated our need for these vehicles. We believe we can defer the purchase of the new work vehicle for Parks without compromising mission-critical functions. We request approval to procure the grader, and appurtenances as well as the sanding trucks, because they support mission critical activities.

The Grader. Public Works has four graders, two of which, including Unit E150, the one we need to replace, are 35+ years old. The AK DOT/PF's policy is to replace graders at 15 years and a running life is 12,000 hours. Unit E150 has had a running life of 13,500 hours. To date, we have spent over \$150,000 in labor/materials to keep the Unit E150 running. Currently, the engine and transmission are weak, likely requiring a rebuild sometime soon. The Anchorage School District had a similar machine, which was only 25 years old, with 11,000 hours of running life. They recently rebuilt their machine at the costs of \$145,000. We've been told the cost of rebuilding our machine could cost approximately \$150,000 - \$175,000, because it requires more extensive repairs. Unit E150 is currently in our shop undergoing repairs, due to broken parts. It will cost several thousand dollars and a week of down time to replace the parts.

Even if we could rebuild Unit E150, there is another problem. The unit is undersized and does not have all wheel drive, meaning it does not handle Homer's heavy wet snow well, especially in the remoter parts of the City. Last week, it had to be returned to the shop and traded in for a heavier grader, which does have all wheel drive.

The cost to procure a suitable grader, with an accompanying snow gate and blade, is \$315,000, from the AK DOT/PF's bid sheet. The 2020/21 Budget showed a price of \$200,000 for a new graders. This

was an estimate compiled by the Administration, without the benefit of researching actual current prices. Plus, it did not necessarily include the cost of the accessories, without which the grader is practically useless to us.

The Sanding Trucks.

- a. Unit E 135 is eight years old and one of our two heavy-duty sanding trucks, which run all around the City sanding roads in the winter and as general service trucks in the summer. When sanding, it carries a full load of sand and plow, which stresses its capacity. The road sand contains calcium chloride. While this is a good de-icer, which keeps the sand pourable, it causes corrosion. Plus, these trucks are ridden hard! As an example, the brake pads on a normal work truck need to be replaced every 3 years. We replace the brake pads on the sanding trucks every year. This truck has spent more than its fair share of time in the shop. To date, we have spent \$44,088 in labor and materials for repair and service costs. Our estimated cost for a new truck chassis \$50,000.
- b. Unit E 116 is a 15-year old sanding truck, which services the airport – the tarmac and parking area. It’s a 1-ton truck, which, when fully loaded with sand and a plow, is at, or beyond, capacity. This stresses the drive train and all other mechanical elements, but it works at airport because of terrain is flat. That’s why this truck has lasted longer than if it were operating on City roads. Still according to our asset management software program, we have spent \$43,358 in labor/materials so far to repair this vehicle. It’s at the end of its useful life as a sanding truck and we need to replace it. The estimated cost of a new replacement truck chassis is \$50,000.

Funding:

That Unit 150, the grader, with snow gate and snow blade, and Units E 135 and E 116, sanding trucks, be replaced.

	Original Approved Budget/Request	New Estimated Costs
Unit E150, grader	\$200,000	\$315,000
Unit E135, sanding truck	\$ 48,000	\$ 50,000
Unit E116, sanding truck	<u>\$ 45,000</u>	<u>\$ 50,000</u>
	\$293,000	\$415,000

Public Works has \$142,800 in its Fleet CARMA account, meaning supplemental funds need to come from another account. I recommend accessing the HART-Roads Fund for the balance of \$272,200.

As of a report dated 12-31-20, the HART- Roads Fund was worth \$6,472,383.66, subject to change upon final audit results. Since then, \$1,278,678 has been spent or obligated, leaving \$6,200,183.6 in the Fund.

Recommendation:

That the City Council authorize the procurement of a replacement grader, with snow gate and snow blade, as well as two replacement sanding trucks, \$142,400 appropriated from the Public Works Fleet CARMA account and \$272,200 appropriated from the HART-Roads Fund.