Timberline Special Service District Administrative Control Board - Board Report

Subject: Skid Steer and Blower Test Result
Author: The Skid Steer Testing Sub-committee – Kyle Monez and Eric Ghanem
Date: January 30, 2024
Type of Item: For information

Recommendation

Snow removal staff recommend the purchase of a skid steer with 84" blower and 84" bucket. Future attachments should be tried out on a weekly basis to evaluate their effectiveness prior to purchase.

Executive Summary

The skid steer and blower combo was used on both a solo basis and in tandem with current snow removal equipment.

Analysis

The machine rented was slightly smaller than the quoted version due to a wiring harness issue. The 320G that was rented was a standard flow model with a standard flow blower. The 320 was able to clean the entire neighborhood for a drivable lane during a snowstorm in approx. 1.5 hours. Snow removal on steep hills was mainly done on a downhill pass to help with speed and to blow with the wind. During wet heavier snow the travel speed is reduced to about 50% to allow for more efficient blowing. As a standalone piece of equipment it is more than capable of managing the snow removal for the entire neighborhood. During large storm it is ideal to augment the current snow removal equipment and split up removal areas for a quicker area clearing time. The blower is able to throw snow 40+ feet and has an elevation throw feature which is ideal for areas where there are structures or features that are close to the road.

The skid steer can negotiate steep hills without sliding and is much better at removal in tight spaces. Because the machine can turnaround within its footprint it can enter a narrow road turnaround in tight spaces and blow snow in both directions created a "loop" without having to back up and back drag snow before blowing it. It is ideally suited for areas like west balsam, balsam dr, and the entrance area. The small machine size is nice when cleaning the entrance because of heavier traffic volume and not having to put as much of the machine into Kilby rd. The bucket also useful on paved surface because it is not spring loaded and the angle can be adjusted to peal up packed snow. This can also be advantageous during the melt period to help dig out frozen ditches so runoff moves off the road. The ability to sit perpendicular to the ditch and scrape material up is not a feature of out current equipment.

The skid steer is small in horsepower, weight and size from the current equipment so its all out power to remove snow is lower however its maneuverability enables it to work faster in certain areas. It can move out of the way of vehicles easier so removal during heavy traffic times is easier. The skid steer

may also be better utilized for post storm cleanup when navigating around roadside features is needed. Due to sitting lower and not having an elevated cab that is above the blower chute, nighttime removal is more difficult due to the light reflecting off the snow being blown.

The skid steer option would be more than capable of handling the snow removal if tasked as solely responsible. It is ideally suited to work in tandem with the current equipment during large storms to clear the tighter areas more quickly and for cleanup work after storms where more precision is needed.

Exhibits

NA