

GLA Long Term Maintenance Report

A planning session was held by the Road Committee (RC) members Monday May. 1 to develop recommendations for long-term planning. This report describes those results. This meeting was called as a result of the previous road meeting of April 6, where RC members realized a more time would be needed to look at the prioritizing and financing of long-term maintenance (LTM) for the roads, and due to the delayed asphalt road assessment by Wharton Asphalt of Billings. All RC members present at Liberty Hall, save for Jaylyn, who called in.

The committee prioritized LTM projects in this order, based on current needs:

1. Asphalt roads: Base, cracks, chip seal, ditching
2. Gravel roads: Base repair, ditching.
3. New guardrail installation project
4. Gemini Road hill.

I. Asphalt:

John and Pouwel met with Ed Wharton of Wharton Asphalt Billings to assess the asphalt roads and offer bids on Saturday, April 29. John had contacted Apex and High County asphalt companies in Bozeman, but they were not interested in bidding. Wharton is the largest asphalt contractor in Montana and does extensive work in Billings and Yellowstone County, and throughout the state.

Wharton gave the following information and recommendations based on that assessment meeting:

1. The chip-seal is in condition and does not need to be re-sealed immediately. This can wait 3-5 years. There are no areas of bare asphalt, a sign a chip deterioration.
2. Cracks form on all asphalt roads more or less and is independent of base and asphalt condition (see extensive cracking on highway 89, which has optimal base and asphalt).
3. Wharton no longer does base and asphalt replacement in areas where there are potholes, depressions, and/or alligating. (except for extreme damage) When asphalt is patched, they have found that the adjoining old asphalt deteriorates faster than the repair section, requiring more patching. Their new method is a process of skim coating. This special mastick mixture is applied directly over damaged areas, after holes are filled with conventional asphalt, and leveled to the existing road conditions. This can last 5-8 years, depending on traffic.
4. Sirius Rd. is in worse condition than Aries and Capricorn. The "bump" section will need to be completely removed and new asphalt applied. Aries is in the best condition. All asphalt roads are in relatively good condition for their age, due to relatively low amounts of traffic.
5. Wharton recommended crack-sealing and repairing all damaged areas with rubber mastick coating on cracks and skim coat application on depression/alligating and provided bids for this work.

Based on this new information and maintenance techniques, the RC made the following recommendations:

1. The total bid for all asphalt repairs is approx. \$46,795, excluding chip-sealing. The RC recommended doing this work this summer. Wharton would be able to do it in August. This bid includes repairing the “bump”. It also includes repairing a total of 11 pothole/depression/alligator areas.
2. The RC recommends waiting for 3-4 years before chip sealing.
3. The RC recommends allocating \$20,000 for gravel base repairs, based on rough estimates. Standish did not have exact bids in for base repair at meeting time. Bids could be more or less than the \$20,000. This would be done before the fall maintenance.
4. The RC recommends creating a mechanism that would set aside funds annually for both future chip-sealing and crack sealing, and for gravel base maintenance. **This could potentially avoid special assessments for such work.** This is only possible now due to not needing immediate chip-sealing.
5. Create 3 funds: Chip seal, crack seal, and gravel base repairs:
 1. Chip seal fund: \$50,000 annually for four years or until the next chip seal, most likely 2027. Restart the next chip seal fund for 15 years at \$13,500 per year.
 2. Crack seal fund: \$6000 annually for 4 years or until the next crack seal. Restart the next crack seal for four more years, etc.
 3. Gravel base fund: \$1000 annually to make base repairs as needed. See table below for funds allocation.

Fund:	2023 Potential Initial Outlay	2023 Fund set-aside:	2024	2025	2026 Crack Seal	2027 Chip Seal	2028	2029	2030....2040
Chip seal	0	50,000	50,000	50,000	50,000	13,500	13,500	13,500	13,500	13,500
Crack Seal, repairs	46,795	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
Gravel Base	15,000 Estimate	1000	1000	1000	1000	1000	1000	1000	1000	1000
Gemini Hill	32,000	0	0	0	0	0	0	0	0	0
Guardrails	TBD									
Total:	94,000	57,000	57,000	57,000	57,000	20,500	20,500	20,500	20,500	20,500

II. Gravel roads:

1. Improve ditching and repair base as needed. See above. Also, the RC will look into PermaZyne, a treatment for gravel roads, that extends road life.

III: New guardrail project:

1. The RC will determine exact locations of new guardrail placement and get bids for cost of installation. It also recommends that future planning and funding for the project be a matter of discussion and deliberation by the Board. The RC noted there is some disagreement among LO's in high South over location of guardrails.

IV. Gemini Hill widening:

Discussion on widening the narrow, steep Gemini Hill, which is around 1200 ft. long. The original widening bid was \$98,000. Standish has said he can do the entire project for \$32,000. This leaves out new base and road mix. He said the rock and soil from the hillside widening would be compacted into the road base and would be as stable as the road is currently. This compaction would be a result of heavy equipment going over the road hundreds of times in the widening process. New gravel would be added incrementally in future years.

The RC recommended doing this project as a priority as a safety measure for the increased traffic from new residents and ongoing development on upper Gemini lots, and agreed the price is a bargain and would only increase in the future.