BIKE/PED MAINTENANCE PLAN
for the
CITY OF WHITEFISH

Project:	Path Maintenance Plan
Location:	Whitefish, MT 59937
Purpose:	City Paved Trail Maintenance
Date:	May 30, 2025
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Contents

INTRODUCTION

The City of Whitefish owns, operates, and maintains a well-connected network of shared use paths throughout its city limits. Most of the paths are asphalt surfaced, but some are concrete. The city also has several pedestrian bridges and boardwalks that cross/parallel waterways and wetlands. There are also several private paths within the City's limits that are not included within this report.

This report will largely focus on the maintenance needs of the asphalt shared use paths, but additional information is provided at the end of the report for non-asphalt surfaces. This report will not focus on concrete as heavily as asphalt paths because concrete paths do not deteriorate like asphalt paths and in most situations, preventative maintenance options are limited. Typically, when a concrete path shows signs of failure, the path must be removed and replaced. For the asphalt paths, a PASER rating system was used to assess the current condition of these paths and to further provide maintenance recommendations. By utilizing the ratings from this method, appropriate maintenance measures can be recommended, along with their associated costs, and an overall maintenance plan can be formed. This understanding allows the city to establish budgets for maintenance treatments and develop a maintenance plan for the paths they are responsible for maintaining.

Overview

The City of Whitefish is responsible for maintaining over 8 miles of bike and pedestrian asphalt paths and about 6 miles of concrete paths within the City's limits. Most path segments have been built at different times and are therefore in varying physical conditions resulting in individual maintenance and repair needs. The PASER asphalt rating system, developed by the Transportation Information Center of the University of Wisconsin-Madison, was used to rank path segments on a 10-1 scale, with "10" having an "Excellent" rating and "1" having a "Failed" Rating. This scoring system can then be used to create a schedule of projects with cost estimates to best understand what the financial burden is to satisfy these maintenance and repair needs. Please see **Appendix A** for a copy of the PASER asphalt evaluation manual.

Plan Objective

The overall goal of this report is to provide the City with a strategy for budgeting their maintenance dollars in an efficient manner that best improves the functionality of the overall path network, best protects the current path network investment, but also maximizes the taxpayer's funds over a 10-year duration. Factors such as popularity, public input, and/or City maintenance staff requests can influence the final sequencing of these efforts.

Overview Sheet

Please see **Appendix B** for an overview sheet that shows the entirety of the City's shared use path network.

Overview Table

Please see the table below that details the asphalt shared use path network currently maintained by the City of Whitefish.

Table 1 - Path Overview

Path #	Trail Name	Length [FT]	Width [FT]
1	River Trail	586	8
2	River Trail	2,757	8-10
3	Monegan/Rocksund	3,823	8-10
4	Monegan/Rocksund	1,807	8

5	River Trail	1,524	8-10
6	River Trail	114	10
7A	River Trail	3572	10
7B	City Beach Loop	200	10
7C	City Beach Loop	132	10
7D	City Beach Loop	2757	10
8	North Side Paths	1627	8
9	East Side Paths	642	10
10	East Side Paths	211	8-10
11A	River Trail	2185	8-10
11B	River Trail	250	8
11C	River Trail	837	8
11D	River Trail	813	8
11E	River Trail	422	8
11F	River Trail	1630	10
11G	River Trail	149	10
12	West Side Paths	2366	10
13	West Side Paths	1688	8
14	North Side Paths	12486	8-10
15	River Trail	498	8
16	East Side Paths	1655	10-12
17	East Side Paths	2605	5-10

ASSESSMENT & PASER RATINGS

Pavement Surface Evaluation and Rating (PASER) can be used to better understand the needs of the City's paths such that a cost can be assigned. It uses visual inspection to understand different pavement distress and what caused them. PASER ratings allow many path maintenance projects and repairs to be compared against each other to better prioritize treatment. Please see the PASER asphalt evaluation manual in **Appendix A** for additional information.

The first step in understanding the City's path maintenance needs was to walk each individual path and inventory the conditions using the PASER rating system. Because path conditions change periodically along its length, a new "segment" was created each time a rating changed. This effort resulted in an independent PASER rating for each path segment which was then weight averaged across the entire path length. Please see the table below showing the weight averaged PASER ratings for each asphalt path.

Table 2 - Summary of Field Findings

Path #	Trail Name	PASER Rating	Summary of Defect Notes
1	River Trail	7.5	Cracking and settlement
2	River Trail	5.4	Cracking, settlement, root damage
3	Monegan/Rocksund	7.3	Cracking, settlement, slope failure
4	Monegan/Rocksund	7.9	Small section of cracking and thin asphalt
5	River Trail	5.8	Cracking, settlement, root damage, severe slope failure
6	River Trail	7.0	Slight cracking
7A	River Trail	7.7	Recent fog seal. Small sections cracking and settlement
7B	City Beach Loop	8.0	Root damage

7C	City Beach Loop	3.7	Cracking, edge depression from possible slope failure
7D	City Beach Loop	7.0	Patchy asphalt overlaps and alligator cracking
8	North Side Paths	6.6	Cracking
9	East Side Paths	8.8	A few cracks and utility trench patches
10	East Side Paths	8.0	Surface worn, no visible cracking
11A	River Trail	6.2	Cracking, settlement, and edge depression
11B	River Trail	6.1	Cracking and slight root humps
11C	River Trail	5.8	Settlement and root damage
11D	River Trail	6.1	Cracking and root humps
11E	River Trail	5.6	Cracking, settlement, vegetation in cracks
11F	River Trail	8.3	Small sections of settlement and root damage
11G	River Trail	8.4	Small section of root damage
12	West Side Paths	8.5	Small areas with slight cracking starting
13	West Side Paths	8.0	Early stages of longitudinal cracking
14	North Side Paths	7.7	Small sections of settlement, cracking, and root humps
15	River Trail	7.5	Start of edge cracking.
16	East Side Paths	8.0	Small sections of cracking and severe root humps
17	East Side Paths	8.3	Combination of cracking and new sections

Please see **Appendix B** for path assessment overview sheets that further show the location of each path and how the segments were identified.

PATH MAINTENANCE & REPAIR EFFORTS

When comparing available options for preserving the integrity of paths, there are two overarching categories to consider: Maintenance and Repair. The maintenance category consists of smaller items such as crack sealing and fog sealing the paths. Generally, maintenance options will be utilized on paths that have PASER rating greater than or equal to 7.

Repair, on the other hand, is reserved for more severe pavement failure situations that require an overlay or complete subsurface reconstruction to restore the path to a condition that can be maintained for decades to come.

Common intuition would be to perform repair projects (i.e. overlays and reconstructions) prior to fog and crack sealing projects to attempt to create a uniform and sealed surface. However, as discussed in the PASER manual, the “Best First” methodology (i.e. fog and crack seals) are typically recommended first. See the Maintenance and Repair Strategies section further in this report for more information regarding the methodology of project sequencing and scheduling.

Path #1 – River Trail

This asphalt path is 8 feet wide and ~590 feet long and generally parallels River Lakes Parkway just south of the large circular pond to the southeast of The Springs assisted care facility. The overall condition of the path is great, but the PASER rating for this path is 7.5 due to smaller segments that are experiencing transverse cracking, block cracking, and drainage issues that appeared to be caused by settlement. This path would benefit from a fog and crack seal maintenance effort. There are a couple of isolated sections that would benefit from overlays and reconstruction repairs. Please see Sheets 1-4, in **Appendix C** for additional information on the identified maintenance and repair efforts associated with this path.

Path #2 – River Trail

This asphalt path begins just north of The Springs assisted care facility and extends north at a length of ~2,800 feet and ends near the Lenna Joy Drive Cul-de-sac. The path is 8-foot wide for the first 700 feet and then turns to 10-foot wide after JP Road intersection. The JP Road path intersection crossing does not appear to meet current ADA requirements. The PASER rating for this path is 5.4 due to consistent cracking and settlement issues. This path also had segments that appeared to have root related issues around 1,300 feet. This path would benefit from a fog and crack seal maintenance effort. There are many isolated sections that would benefit from overlays and reconstruction repairs. Please see Sheets 5-11, in **Appendix C** for additional information on the identified maintenance and repair efforts associated with this path.

Path #3 – Rocksund Trail

This asphalt path begins on the east side of the bridge that crosses the Whitefish River near Jenna Joy Drive and ends ~3,800 feet later at Monegan Road just south of Trailview Way. The path is 8-foot wide for the first ~2,300 feet and switches to 10-foot wide near where the path crosses the wastewater treatment plant access road. The PASER rating for this path is 7.3 and is generally in good condition with small segments of settlement and various types of cracking. There is a section ~600 feet from the beginning of this path that appears to have slid slightly towards the river due to an apparent slope stability issue. This path would benefit from a fog and crack seal maintenance effort as well as several isolated sections that would benefit from overlays and reconstruction repairs. Please see Sheets 12-15, in **Appendix C** for additional information on the identified maintenance and repair efforts associated with this path.

Path #4 – Rocksund Trail

This asphalt path begins where it intersects Path #3 near Monegan Rd and extends ~1,800 feet to the north to the intersection of Voerman Road and Creekwood Drive. The path is 8-foot wide throughout its entire length and has a PASER rating of 7.9. The path appears to be about 3 years old, according to when the development took place. There was one segment of this path that had a rating of 6 due to some transverse cracking, alligator cracking, and a very thin asphalt layer around 1,500 feet from the beginning. This path would benefit from a fog and light crack seal maintenance effort and a smaller section that would benefit from an overlay. Please see Sheets 16-18, in **Appendix C** for additional information on the identified maintenance and repair efforts associated with this path.

Path #5 – River Trail

This asphalt path begins across from Spruce Court and was evaluated to the south, paralleling the Whitefish River, where it ends across from Bonita Circle. The path is 10-foot wide for the first ~1,250 feet and then turns into 8-foot for ~800 feet before returning to 10-foot for the last ~350 feet on the lower path. The path wyes off in two directions approximately 1,300 feet from the beginning. The alignment seen in the **Appendix B** exhibit follows the path that turns up to Rock Creek Court and the alignment restarts along the lower path which continues to parallel the river to the south. The PASER rating is 5.8 for this path due to consistent cracking, root damage, and settlement. This path would benefit from a fog and crack seal maintenance effort. There are several isolated sections that would benefit from overlays and reconstruction repairs. There is a severely failed section of this path that appears to be sloughing off towards the Whitefish River. A separate cost estimate and repair plan was prepared for this section in the past by RPA Engineering. Please see Sheets 19-23, in **Appendix C**, for additional information on the identified maintenance and repair efforts associated with this path.

Path #6 – River Trail

This asphalt path begins just east of the Duck Inn Lodge and extends ~115 feet to the south on the west side of the Whitefish River. It is 10-foot wide and has a PASER Rating of 7 due to the presence of some small cracks. This path does not have enough deterioration to justify any overlays or reconstruction.

Please see Sheets 24-25, in **Appendix C** for additional information on the identified maintenance and repair efforts associated with this path.

Path #7A – River Trail

This asphalt path begins near the intersection of Baker Ave and Railway St just south of the viaduct. The path then continues to the west ~4,650 feet where it terminates at Birch Point Road Cul-de-sac after crossing the pedestrian bridge. The path is 10-foot wide, with one section as wide as 11 feet and another only 9-foot wide. This path generally follows along the north side of the Whitefish River. The PASER rating for this path is 7.7 with the majority being in very good condition, around a rating of 8, and smaller sections settlement and cracking. This path appears to have been recently sealed and will likely not need an immediate fog and crack seal maintenance effort. There are a couple sections that would benefit from overlays and a few that would benefit from reconstruction repairs. The path is also undermined at the east side of the first wooden pedestrian bridge as the base material is sloughing off towards the river. Please see Sheets 26-32, in **Appendix C** for additional information on the identified maintenance and repair efforts associated with this path.

Path #7B – City Beach Loop

This asphalt path begins near the north end of the pedestrian bridge along Path 7A. It extends up towards Whitefish City Beach about 200 feet. It is a 10-foot-wide path that has a PASER rating of 8 when excluding some humps that appeared to be caused by roots. This path would benefit from a fog and crack seal maintenance effort but does not require any further repair efforts at this time. Please see Sheets 33-34, in **Appendix C** for additional information on the identified maintenance and repair efforts associated with this path.

Path #7C – City Beach Loop

This asphalt path begins near the three-way pedestrian intersection to the east of the pedestrian bridge from Path 7A. It then extends up ~130 feet to Washington Avenue. The path is 10-foot wide and has a PASER rating of 3.7 due to consistent longitudinal cracking and the SW side being depressed as if a slope failure is occurring. Previous attempts to seal the cracks and path have failed and so it makes sense to delay the fog seal maintenance for this path until the necessary reconstruction repair takes place. Please see Sheets 35-37, in **Appendix C** for additional information on the identified maintenance and repair efforts associated with this path.

Path #7D – City Beach Loop

This asphalt path begins at the three-way pedestrian intersection to the east of the pedestrian bridge from Path 7A. It then continues to the east for another ~2,800 feet before ending at the north end of the viaduct. The path is 10-foot wide and has a PASER rating of 7.0. The first 2,200 feet of this path has a rating of 6 or better, and the segments of 6 are shorter than those of 7 or 8 ratings, demonstrating that its condition is good overall. Between 2,200 and 2,400 feet the quality drops significantly relative to the rest of the path due patchy asphalt work and alligator cracking. This path would benefit from a fog and crack seal maintenance effort to help preserve the majority of the path before a few overlay and reconstruction repair projects can be completed. There were individual offshoot paths that connect path 7D to Edgewood Place. The individual offshoots occur at 1,027, 1,365, and 1,736 feet, each with PASER ratings of 7. With that score, these offshoots are included in the fog and crack seal maintenance cost estimate. Please see Sheets 38-41, in **Appendix C** for additional information on the identified maintenance and repair efforts associated with this path.

Path #8 – North Side Paths

This asphalt path begins at the intersection of Edgewood Place and Wisconsin Avenue and continues ~1,600 feet to the east where it ends across from Texas Avenue. The path is 8-foot wide and has a PASER rating of 6.6. The first half of the path maintains a rating higher than 6, but the second half features more

ratings of 6 due to longitudinal cracking starting. This path would benefit from a fog and crack seal maintenance effort as well as a couple overlay projects. Please see Sheets 42-44, in **Appendix C** for additional information on the identified maintenance and repair efforts associated with this path.
The viaduct offshoot is located 550 feet into the length of this path and received a PASER Rating of 7. As such, it was included in the maintenance cost estimate for this path. It is also important to mention that this viaduct offshoot is steeper than a 12:1 slope and does not meet ADA. There is also a boardwalk at the very end of this path that starts at 1,627 feet. There is a concrete path at the other end of this boardwalk that leads to Texas Avenue.

Path #9 – East Side Paths
This asphalt path begins at the intersection of E 7th Street and Pine Avenue and continues north ~400 feet and then stops until the intersection of 5th and Pine where it then continues north ~300 feet to E 4th and Pine Intersection. The path is 10-foot wide and has a PASER rating of 8.8. The path was recently sealed, and it only featured a couple cracks and a couple utility trenches that brought the score down. This path was recently fog sealed and will not need another one immediately. No overlay or reconstruction repairs are necessary for this path. Please see Sheets 45-46, in **Appendix C** for additional information on the identified maintenance and repair efforts associated with this path.

Path #10 – East Side Paths
This asphalt path crosses Cow Creek along E Second St. The path was analyzed from west to east and with a length of about 300 feet. The path is 8-foot wide on the west side of the bridge and 10-foot wide on the east side of the bridge. The PASER rating is 8 as the surface appears to be slightly worn but did not have any cracking starting. This path would benefit from a fog and crack seal maintenance effort and does not require any repair work. Please see Sheets 47-48, in **Appendix C** for additional information on the identified maintenance and repair efforts associated with this path.

Path #11A – River Trail
This asphalt path begins just south of the Pine Lodge and continues north ~2,200 feet along the eastern bank of the Whitefish River to where it ends at Baker Park. The path has a ~550-foot section in the middle that is gravel surfaced. The path is 8-foot wide before (south) of the gravel section and then widens to 10-foot wide after the gravel section. The PASER rating for this path is 6.2 due to consistent settlement, cracking, and edge depression. The Baker Park "Offshoot", at about 1,816 feet into this trail, received a PASER rating of 4 due to the presence of large transverse cracks and significant root hump damage. This path would benefit from a fog and crack seal maintenance effort. There are several isolated sections that would benefit from overlays and reconstruction repairs. Please see Sheets 49-57, in **Appendix C** for additional information on the identified maintenance and repair efforts associated with this path.

Path #11B – River Trail
This asphalt path is just a small 250-foot section within Baker Park that runs from the east side of the crosswalk down the "S" trail to the water's edge. The path is 8-foot wide and received a PASER rating of 6 due to the presence of slight root humps, but there is no cracking otherwise. This path would benefit from a fog and crack seal maintenance effort. There is one section that would benefit from reconstruction repairs. Please see Sheets 47-59, in **Appendix C** for additional information on the identified maintenance and repair efforts associated with this path.

Path #11C – River Trail
This asphalt path begins at the west side of the sidewalk across from Baker Park and continues west until it crosses the pedestrian bridge to the south to Scott Avenue. The path is 8-foot wide and approximately 1,050 feet long. It has a PASER rating of 5.8 due to settlement and frequent root damage. This path would benefit from a fog and crack seal maintenance effort. There are several isolated sections that would

benefit from overlays. Please see Sheets 60-63, in **Appendix C** for additional information on the identified maintenance and repair efforts associated with this path.

Path #11D – River Trail
This asphalt path begins at the north side of the pedestrian bridge mentioned in Path 11C and wraps clockwise around the pond. The path ends ~800 feet later where it ties back into Path 11C. This path has a PASER rating of 6.1 due to the presence of cracks and root humps. The root humps were concentrated on the second half of this path, after the offshoot to Path 11E. This path would benefit from a fog and crack seal maintenance effort. There are several isolated sections that would benefit from overlays and reconstruction repairs. Please see Sheets 63-66, in **Appendix C** for additional information on the identified maintenance and repair efforts associated with this path.

Path #11E – River Trail
This asphalt path begins about 395 feet into Path 11D and heads up the hill to the east to tie into Baker Avenue about 400 feet later. The path is 8-foot wide a has a PASER rating of 5.6 due to a combination of cracking, settlement, and vegetation growth in cracks. This path would benefit from a fog and crack seal maintenance effort as well as one overlay project. Please see Sheets 67-69, in **Appendix C** for additional information on the identified maintenance and repair efforts associated with this path.

Path #11F – River Trail
This asphalt path begins at the north side of the pedestrian bridge mentioned in Path 11C and continues to the northwest and then to the north about 1,600 feet to Kay Beller Park. The path is 10-foot wide along this section and received a PASER rating of 8.3. Where the path picks back up south of Mountain View Manor the path has been recently fog sealed. Most of this path does not even require a fog seal but there were smaller sections of root damage and some settlement that brought down the average rating. Due to this path recently being fog sealed, there is no immediate need for sealing this path. There are a couple isolated sections that would benefit from overlays and reconstruction repairs. Please see Sheet 70-73, in **Appendix C** for additional information on the identified maintenance and repair efforts associated with this path.

Path #11G – River Trail
This asphalt path begins around 1,540’ into Path 11F and branches off to the west for about 150 feet before terminating at the south side of the wooden pedestrian walkway under Veterans Memorial Bridge. The path section is 10-foot wide and has a PASER rating of 8.4, which was only brought down by the large root humps found at the first 20’ feet of this path. Due to this path recently being fog sealed, there is no immediate need for sealing this path. There is one section of this path that would benefit from a reconstruction project. Please see Sheets 74-76, in **Appendix C** for additional information on the identified maintenance and repair efforts associated with this path.

Path #12 – West Side Paths
This asphalt path begins at the intersection of 7th St W and Karrow Avenue and continues to the east about 2,400 feet where it ends at Flint Avenue. The path is 10-food wide and has a PASER rating of 8.5. As the score suggests, the path is in very good condition and only had small areas with a score of 7 due to slight cracking. This path would benefit from a fog and crack seal maintenance effort. There is no need for overlays or reconstruction repairs. Please see Sheets 77-78, in **Appendix C** for additional information on the identified maintenance and repair efforts associated with this path.

Path #13 – West Side Paths
This asphalt path begins at the north side of the westernmost pedestrian underpass under Hwy 93 across from Grouse Mountain Lodge. It continues to the west where it terminates ~1,700 feet later near Lion Mountain Loop Road. The path has a width of 8 feet and a PASER rating of 8.0. The very early stages of

longitudinal cracking were starting to appear which makes this path a priority for a fog seal, though it has lower utilization than most City paths. There are valve boxes sticking up as tripping hazards about 150 feet from the start of this path. This path would benefit from a fog and crack seal maintenance effort. There is no need for overlays, but a short reconstruction repair would be beneficial around the valve boxes. Please see Sheets 79-81, in **Appendix C** for additional information on the identified maintenance and repair efforts associated with this path.

Path #14 – North Side Paths

This asphalt path begins at the intersection of Edgewood Place and Wisconsin Avenue and continues north 12,500 feet to Alpine Court. Along the way the path varies in width from 8-foot for the first ~4,700 feet and transitions to 10 feet wide for the remainder of the path. The path scored a PASER rating of 7.7. Overall, the path was in good condition and only featured smaller segments that would benefit from more significant maintenance or reconstruction. This path would benefit from a fog and crack seal maintenance effort. There are several isolated sections that would benefit from overlays and reconstruction repairs. Please see Sheets 82-86, in **Appendix C** for additional information on the identified maintenance and repair efforts associated with this path.

Path #15 – East Side Paths

This asphalt path begins south of the Ashar Avenue traffic circle, parallels Creekview Drive, and ends in front of 1012 Creekview Drive. The path is 8-foot wide and received a PASER rating of 7.5 due to edge cracking that was starting along the second two thirds of the ~500 length. This path would benefit from a fog and crack seal maintenance effort. There is no need for overlays or reconstruction repairs. Please see Sheets 87-88, in **Appendix C** for additional information on the identified maintenance and repair efforts associated with this path.

Path #16 – East Side Paths

This asphalt path begins near the south side of the Dave Olseth Skatepark and then parallels Dodger Ln to the intersection of Dodger Ln and E Second St. The path is a combination of 10-foot and 12-foot wide and received a PASER rating of 8.0 due to cracking and severe root damage paired with otherwise very good overall path condition. This path would benefit from a fog and crack seal maintenance effort as well as a small reconstruction effort due to root damage. Please see Sheets 89-91, in **Appendix C** for additional information on the identified maintenance and repair efforts associated with this path.

Path #17 – East Side Paths

This asphalt path begins near the south side of the Dave Olseth Skatepark and then wraps clockwise around Armory Park. The path is a mix of 5 feet, 7 feet, and 10 feet wide and received a PASER rating of 8.3 due to a combination of older asphalt this is beginning to crack and much newer asphalt. This path would benefit from an overlay to renew the older section of asphalt and eventually would benefit from a fog seal to help preserve the portion that currently received a 9 rating. Please see Sheets 92-94, in **Appendix C** for additional information on the identified maintenance and repair efforts associated with this path.

PATH MAINTENANCE AND REPAIR COSTS

Once the paved paths have been rated, the recommended treatments can be identified, and cost estimates can be developed. The estimated costs provided in this **Bike and Pedestrian Path Maintenance Plan** are based on 2025 Dollars and will likely escalate over time. For the purposes of this report, an annual escalation rate of 2.8% was used (2025 ASCE Innovative Strategies for Accurate Cost Forecasting). The unit prices for treatments are based on similar past projects and reflect the “average” bid prices for the

type of work. The unit prices also assume larger projects, or a bundle of several smaller projects (typically around $100,000), where an “economy of scale” can be achieved. A series of interactive spreadsheets have been developed that will allow plan administrators the ability to update, revise, and adjust unit costs as price changes are observed over time. This plan is intended to be a dynamic document, and the spreadsheets will provide an effective tool to estimate treatment costs for each individual project well into the future.

It is believed that some of the paths, primarily Path 11, have sustained damage due to root growth. When reconstructions are performed to address these areas, there is a wide range of treatments that can be performed to minimize future root damage, such as, but not limited to:

- Tree removal
- New path section with fabric (including root removal)
- Root barrier at fabric elevation on reconstructed path sections

It is unclear at this point what the exact needs of each path will be. With that uncertainty, costs to repair and mitigate root damage were not included in the cost estimates generated with this report. Based on research of various root barrier products, we believe that the unit cost for root barrier products will be approximately $2.00/SF, if the city chooses to utilize that product.

Estimated Unit Prices for maintenance treatments (2025 Dollars):

- **Fog Seal**: $0.30 per SF
- **Asphalt Removal**: $2.50 per SF
- **Excavation**: $60.00 per CY
- **Fabric**: $0.35 per SF
- **Base Course Gravel**: $100.00 per CY
- **Pavement**: $250.00 per Ton
- **Topsoil**: $100.00 per CY
- **Hydroseeding** $0.50 per SF
- **Root Barrier** $2.00 per LF
- **Crack Seal** $1.50 per LF

ADA Ramp Unit Prices:

- **Concrete Removal**: $5.00 per SF
- **Excavation:** $60.00 per CY
- **Base Course Gravel:** $100.00 per CY
- **Concrete Flatwork**: $20.00 per SF
- **Detectable Warnings**: $100.00 per SF
- **Topsoil**: $100 per CY
- **Hydroseeding**: $0.50 per SF

Table 3 - Path Maintenance & Repair Costs

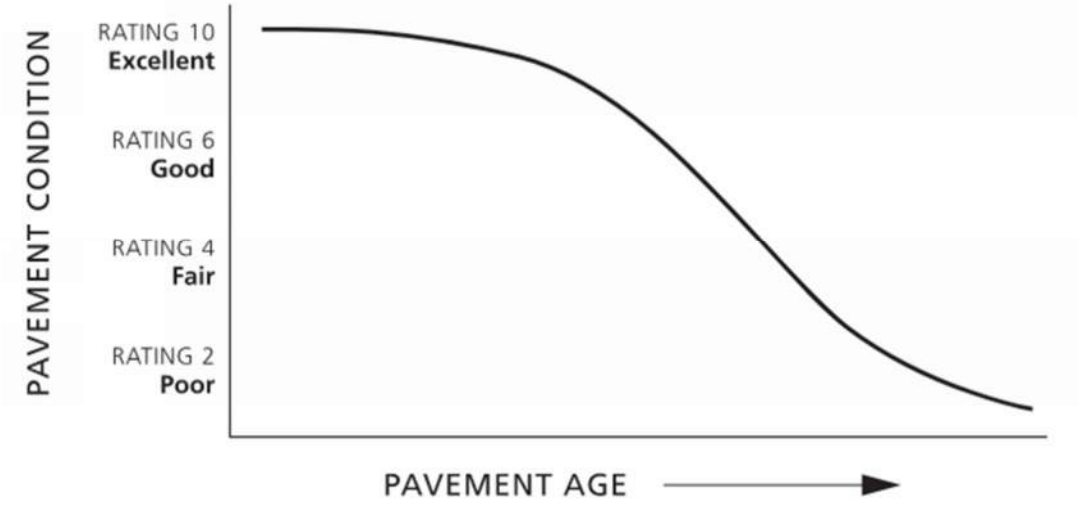
Path Maintenance & Repair Costs			
	Maintenance (Fog & Crack Seals)	**Repair (Overlays & Reconstructs)**	
	$	**Description**	**$**
Path #1	$ 1,933.80	1 Overlay, 1 Reconstruct	$ 6,115.00
Path #2	$ 10,344.90	6 Overlays, 4 Reconstructs	$ 101,978.10
Path #3	$ 13,507.50	2 Overlays, 1 Reconstruct	$ 26,812.50
Path #4	$ 5,963.10	1 Overlay, 0 Reconstructs	$ 1,500.00
Path #5	$ 7,820.70	4 Overlays, 2 Reconstructs	$ 79,519.00
Path #6	$ 444.60	0 Overlays, 0 Reconstructs	$ -
Path #7A	$ 16,269.30	2 Overlays, 4 Reconstructs	$ 55,376.50
Path #7B	$ 780.00	0 Overlays, 0 Reconstructs	$ -
Path #7C	$ 514.80	0 Overlays, 1 Reconstruct	$ 14,692.40
Path #7D	$ 11,883.30	3 Overlays, 1 Reconstruct	$ 18,466.40
Path #8	$ 6,012.60	2 Overlays, 0 Reconstructs	$ 16,250.00
Path #9	$ 1,926.00	0 Overlays, 0 Reconstructs	$ -
Path #10	$ 737.70	0 Overlays, 0 Reconstructs	$ -
Path #11A	$ 5,827.50	1 Overlay, 4 Reconstructs	$ 85,538.80
Path #11B	$ 825.00	1 Overlay, 0 Reconstructs	$ 2,250.00
Path #11C	$ 2,762.10	2 Overlays, 0 Reconstructs	$ 7,250.00
Path #11D	$ 2,682.90	2 Overlays, 1 Reconstructs	$ 9,085.00

Path #11E	$ 1,392.60	1 Overlay, 0 Reconstructs	$ 3,500.00
Path #11F	$ 6,357.00	1 Overlay, 1 Reconstruct	$ 15,997.60
Path #11G	$ 581.10	0 Overlays, 1 Reconstruct	$ 2,710.40
Path #12	$ 7,098.00	0 Overlays, 0 Reconstructs	$ -
Path #13	$ 4,051.20	0 Overlays, 1 Reconstructs	$ 2,440.00
Path #14	$ 46,115.70	2 Overlays, 2 Reconstruct	$ 9,918.50
Path #15	$ 1,643.40	0 Overlays, 0 Reconstructs	$ -
Path #16	$ 6,603.90	0 Overlays, 1 LRPs	$ 3,850.00
Path #17	$ 9,315.30	1 Overlays, 0 LRPs	$ -
Totals (2025 Dollars) =	$ 173,394.00		$ 454,046.20

MAINTENANCE & REPAIR STRATEGIES

As can be seen in the following figure from the PASER Manual in Appendix B, pavement deterioration does not occur at the same rate throughout its lifecycle. Early on, the pavement deterioration rate is very slow because the surface is well sealed and does not allow moisture infiltration to damage the pavement. As the pavement deteriorates, more opportunities are made for moisture to enter the pavement and accelerate the deterioration. Understanding this leads to the "Best First" methodology of pavement maintenance. If the pavement condition of a path can be maintained above a 7-8 range on the PASER scale, the deterioration can be greatly reduced.

Because the relationship is that a higher deterioration rate requires a higher spending rate to maintain, it is the most cost effective for the City to maintain all paths in a condition with a low deterioration rate. In summary, by maintaining a high rating for paths with continual maintenance and then performing more in-depth repairs as budget allows, the city can most cost effectively maintain its path network investment.



Generally, it is recommended that each path be crack sealed and fog sealed every **3 years** to help prolong the life of the pavement. This is a general recommendation that is dependent upon, but not limited to, factors such as the popularity of the path, weather exposure, and subsurface conditions. Because these

variables are unique to each path and can change on a year-to-year basis, it is important to monitor the condition of the paths to determine when the next maintenance is needed for each path individually. It is very likely that some of the higher trafficked paths, such as 7 and 11, would benefit from a fog seal every 2 years while path 13 may only need a fog seal every 5 years or so.

In the following tables, an annual escalation rate of 2.8% was applied to the total cost estimates in order to translate the present value of the projects to the estimated value in whatever year the projects are slated to take place. However, this escalation value was not applied to the budget, which should result in a more conservative estimate. Given the consideration discussed in this report, the following tables illustrate the suggested maintenance and repair schedule for the City of Whitefish over the course of the next 10 years.

2025 Budget & Project List

In 2025, the city will have approximately $100,000 to spend on path maintenance items. This number was determined by the annual maintenance budget of approximately $150,000 minus $50,000 the city intends to spend on new equipment. In future years, the annual budget will be reduced to be $125,000 to account for miscellaneous maintenance spending and to be overall conservative.

The intent for 2025 is to fog seal as many paths as possible to help seal the surfaces against water intrusion and therefore significantly decrease the deterioration rate. It should be the focus of the City to fog and crack seal as many of the paths as possible, as budget allows, in 2025 and 2026.

Table 4 - 2025 Annual Budget and Project List

2025 Annual Budget: $ 100,000.00				
Path	**Trail Name**	**Maintenance (Fog & Crack Seal)**	**Repair (Overlays & Reconstructs)**	
1	River Trail	$ -		$ -
2	River Trail	$ 10,344.90		$ -
3	Monegan/Rocksund	$ 13,507.50		$ -
4	Monegan/Rocksund	$ 5,963.10		$ -
5	River Trail	$ 7,820.70		$ -
6	River Trail	$ 444.60		$ -
7A	River Trail	$ 16,269.30		$ -
7B	City Beach Loop	$ 780.00		$ -
7C	City Beach Loop	$ -		$ -
7D	City Beach Loop	$ 11,883.30		$ -
8	North Side Paths	$ 6,012.60		$ -
9	East Side Paths	$ -		$ -
10	East Side Paths	$ -		$ -
11A	River Trail	$ 5,827.50		$ -
11B	River Trail	$ 825.00		$ -
11C	River Trail	$ 2,762.10		$ -
11D	River Trail	$ 2,682.90		$ -
11E	River Trail	$ 1,392.60		$ -
11F	River Trail	$ -		$ -
11G	River Trail	$ -		$ -
12	West Side Paths	$ 7,098.00		$ -
13	West Side Paths	$ 4,051.20		$ -
14	North Side Paths	$ -		$ -
15	River Trail	$ 1,643.40		$ -
16	East Side Paths	$ -		$ -
17	East Side Paths	$ -		$ -
		Total (2025 Dollars):		**$ 99,308.70**
		Running Balance:		**$ 691.30**

2026 Budget & Project List

The focus for 2026 is to finish out whatever maintenance projects did not make it into 2025. Specifically, path 14 maintenance will be done on its own year because it is a large project that is difficult to fit into the budget and it is large enough to likely generate some economy of scale on its own. Now that all current paths have been sealed, some reconstruction projects should be started.

Table 5 - 2026 Annual Budget and Project List

2026 Annual Budget: $ 125,000.00				
Path	**Trail Name**	**Maintenance (Fog & Crack Seals)**	**Repair (Overlays and Reconstructs)**	
1	**River Trail**	**$ 1,933.80**	1 Overlay, 1 Reconstruct	**$ -**
2	**River Trail**	**$ -**		**$ -**
3	**Monegan/Rocksund**	**$ -**		**$ -**
4	**Monegan/Rocksund**	**$ -**	1 Overlay, 0 Reconstructs	**$ 1,500.00**
5	**River Trail**	**$ -**		**$ -**
6	**River Trail**	**$ -**		**$ -**
7A	**River Trail**	**$ -**		**$ -**
7B	**City Beach Loop**	**$ -**		**$ -**
7C	**City Beach Loop**	**$ -**	0 Overlays, 1 Reconstruct	**$ 14,692.40**
7D	**City Beach Loop**	**$ -**	3 Overlay, 1 Reconstruct	**$ 18,466.40**
8	**North Side Paths**	**$ -**		**$ -**
9	**East Side Paths**	**$ -**		**$ -**
10	**East Side Paths**	**$ 737.70**		**$ -**
11A	**River Trail**	**$ -**		**$ -**
11B	**River Trail**	**$ -**		**$ -**
11C	**River Trail**	**$ -**		**$ -**
11D	**River Trail**	**$ -**		**$ -**
11E	**River Trail**	**$ -**		**$ -**
11F	**River Trail**	**$ -**		**$ -**
11G	**River Trail**	**$ -**		**$ -**
12	**West Side Paths**	**$ -**		**$ -**
13	**West Side Paths**	**$ -**	0 Overlays, 1 Reconstructs	**$ 2,440.00**
14	**North Side Paths**	**$ 46,115.70**	2 Overlays, 2 Reconstruct	**$ 9,918.50**
15	**River Trail**	**$ -**		**$ -**
16	**East Side Paths**	**$ 6,603.90**		**$ -**
17	**East Side Paths**	**$ -**		**$ -**
		Total (2025 Dollars):		**$ 102,408.40**
		Total (2026 Dollars):		**$ 105,275.84**
		Running Balance:		**$ 20,415.46**

2027 Budget

In 2027, the object was to try to minimize mobilization and generate some economy of scale by grouping together local reconstruction projects that are on the same path network. No maintenance items are anticipated this year.

Table 6 - 2027 Annual Budget and Project List

2027 Annual Budget $ 125,000.00				
Path		**Maintenance (Fog and Crack Seals)**	**Repair (Overlays and Reconstructs)**	
1	**River Trail**	**$ -**		**$ -**
2	**River Trail**	**$ -**		**$ -**
3	**Monegan/Rocksund**	**$ -**		**$ -**
4	**Monegan/Rocksund**	**$ -**		**$ -**
5	**River Trail**	**$ -**		**$ -**
6	**River Trail**	**$ -**		**$ -**
7A	**River Trail**	**$ -**		**$ -**
7B	**City Beach Loop**	**$ -**		**$ -**
7C	**City Beach Loop**	**$ -**		**$ -**
7D	**City Beach Loop**	**$ -**		**$ -**
8	**North Side Paths**	**$ -**		**$ -**
9	**East Side Paths**	**$ -**		**$ -**
10	**East Side Paths**	**$ -**		**$ -**
11A	**River Trail**	**$ -**	1 Overlay, 4 Reconstructs	**$ 85,538.80**
11B	**River Trail**	**$ -**	1 Overlay, 0 Reconstructs	**$ 2,250.00**
11C	**River Trail**	**$ -**	2 Overlays, 0 Reconstructs	**$ 7,250.00**
11D	**River Trail**	**$ -**	2 Overlays, 1 Reconstruct	**$ 9,085.00**
11E	**River Trail**	**$ -**	1 Overlay, 0 Reconstructs	**$ 3,500.00**
11F	**River Trail**	**$ -**	1 Overlay, 1 Reconstruct	**$ 15,997.60**
11G	**River Trail**	**$ -**	0 Overlays, 1 Reconstruct	**$ 2,710.40**
12	**West Side Paths**	**$ -**		**$ -**
13	**West Side Paths**	**$ -**		**$ -**
14	**North Side Paths**	**$ -**		**$ -**
15	**River Trail**	**$ -**		$ -
16	**East Side Paths**	**$ -**		**$ -**
17	**East Side Paths**	**$ -**		**$ -**
		Total (2025 Dollars):		**$ 126,331.80**
		Total (2027 Dollars):		**$ 133,505.42**
		Running Balance		**$ 11,910.04**

2028 Budget

This is the first year that the City will maintain the every 3 year fog seal recommendation on its more highly used paths. Due to budget considerations, paths that see relatively little traffic at this point in time were pushed off to the 2031 year until the City can complete more of the repair projects. It is important for the City to start saving money this year in anticipation of large repair projects in the next couple years and a major maintenance project in 2031.

Table 7 - 2028 Annual Budget and Project List

2028 Annual Budget $ 125,000.00				
Path	**Trail Name**	**Maintenance (Fog and Crack Seals)**	**Repair (Overlays and Reconstructs)**	
1	River Trail	$ 1,933.80		$ -
2	River Trail	$ 10,344.90		$ -
3	Monegan/Rocksund	$ -		$ -
4	Monegan/Rocksund	$ -		$ -
5	River Trail	$ 7,820.70		$ -
6	River Trail	$ 444.60		$ -
7A	River Trail	$ 16,269.30		$ -
7B	City Beach Loop	$ 780.00		$ -
7C	City Beach Loop	$ 514.80		$ -
7D	City Beach Loop	$ 11,883.30		$ -
8	North Side Paths	$ 6,012.60		$ -
9	East Side Paths	$ 1,926.00		$ -
10	East Side Paths	$ -		$ -
11A	River Trail	$ 5,827.50		$ -
11B	River Trail	$ 825.00		$ -
11C	River Trail	$ 2,762.10		$ -
11D	River Trail	$ 2,682.90		$ -
11E	River Trail	$ 1,392.60		$ -
11F	River Trail	$ 6,357.00		$ -
11G	River Trail	$ 581.10		$ -
12	West Side Paths	$ 7,098.00		$ -
13	West Side Paths	$ -		$ -
14	North Side Paths	$ -		$ -
15	River Trail	$ -		$ -
16	East Side Paths	$ 6,603.90		$ -
17	East Side Paths	$ 9,267.30		$ -
		Total (2025 Dollars):		$ 101,327.40
		Total (2028 Dollars):		$ 110,079.45
		Running Balance		$ 26,830.59

2029 Budget

One large reconstruction project will be completed this year, and the City will be able to accumulate money in anticipation of the large 2030 repair and 2031 maintenance projects.

Table 8 - 2029 Annual Budget and Project List

2029 Annual Budget $ 125,000.00				
Path	**Trail Name**	**Maintenance (Fog and Crack Seals)**	**Repair (Overlays and Reconstructs)**	
1	**River Trail**	**$ -**		**$ -**
2	**River Trail**	**$ -**	6 Overlays, 4 Reconstructs	**$ 92,274.10**
3	**Monegan/Rocksund**	**$ -**		**$ -**
4	**Monegan/Rocksund**	**$ -**		**$ -**
5	**River Trail**	**$ -**		**$ -**
6	**River Trail**	**$ -**		**$ -**
7A	**River Trail**	**$ -**		**$ -**
7B	**City Beach Loop**	**$ -**		**$ -**
7C	**City Beach Loop**	**$ -**		**$ -**
7D	**City Beach Loop**	**$ -**		**$ -**
8	**North Side Paths**	**$ -**		**$ -**
9	**East Side Paths**	**$ -**		**$ -**
10	**East Side Paths**	**$ -**		**$ -**
11A	**River Trail**	**$ -**		**$ -**
11B	**River Trail**	**$ -**		**$ -**
11C	**River Trail**	**$ -**		**$ -**
11D	**River Trail**	**$ -**		**$ -**
11E	**River Trail**	**$ -**		**$ -**
11F	**River Trail**	**$ -**		**$ -**
11G	**River Trail**	**$ -**		**$ -**
12	**West Side Paths**	**$ -**		**$ -**
13	**West Side Paths**	**$ -**		$ -
14	**North Side Paths**	**$ -**		$ -
15	**River Trail**	**$ -**		$ -
16	**East Side Paths**	**$ -**		**$ -**
17	**East Side Paths**	**$ -**		**$ -**
		Total (2025 Dollars):		**$ 92,274.10**
		Total (2029 Dollars):		**$ 103,051.02**
		Running Balance		**$ 48,779.58**

2030 Budget

The City will complete both a large and small reconstruction project and continue saving money for next year, which will include a major fog and crack seal project.

Table 9 - 2030 Annual Budget and Project List

2030 Annual Budget $ 125,000.00				
Path	**Trail Name**	**Maintenance (Fog and Crack Seals)**	**Repair (Overlays and Reconstructs)**	
1	River Trail	$ -		$ -
2	River Trail	$ -		$ -
3	Monegan/Rocksund	$ -		$ -
4	Monegan/Rocksund	$ -		$ -
5	River Trail	$ -		$ 79,519.00
6	River Trail	$ -		$ -
7A	River Trail	$ -		$ -
7B	City Beach Loop	$ -		$ -
7C	City Beach Loop	$ -		$ -
7D	City Beach Loop	$ -		$ -
8	North Side Paths	$ -		$ -
9	East Side Paths	$ -		$ -
10	East Side Paths	$ -		$ -
11A	River Trail	$ -		$ -
11B	River Trail	$ -		$ -
11C	River Trail	$ -		$ -
11D	River Trail	$ -		$ -
11E	River Trail	$ -		$ -
11F	River Trail	$ -		$ -
11G	River Trail	$ -		$ -
12	West Side Paths	$ -		$ -
13	West Side Paths	$ -		$ -
14	North Side Paths	$ -		$ -
15	River Trail	$ -		$ -
16	East Side Paths	$ -		$ -
17	East Side Paths	$ -		$ -
		Total (2025 Dollars):		$ 79,519.00
		Total (2030 Dollars):		$ 91,292.79
		Running Balance		$ 82,486.79

2031 Budget

This will be the first year the city should be able to perform all maintenance requirements on all current City paths in the same year. This bulk should offer the best economy of scale on maintenance projects and will be the strategy in the future years as well.

Table 10 - 2031 Annual Budget and Project List

2031 Annual Budget $ 125,000.00				
Path	**Trail Name**	**Maintenance (Fog and Crack Seals)**	**Repair (Overlays and Reconstructs)**	
1	River Trail	$ 1,933.80		$ -
2	River Trail	$ 10,344.90		$ -
3	Monegan/Rocksund	$ 13,507.50		$ -
4	Monegan/Rocksund	$ 5,963.10		$ -
5	River Trail	$ 7,820.70		$ -
6	River Trail	$ 444.60		$ -
7A	River Trail	$ 16,269.30		$ -
7B	City Beach Loop	$ 780.00		$ -
7C	City Beach Loop	$ 514.80		$ -
7D	City Beach Loop	$ 11,883.30		$ -
8	North Side Paths	$ 6,012.60		$ -
9	East Side Paths	$ 1,926.00		$ -
10	East Side Paths	$ 737.70		$ -
11A	River Trail	$ 5,827.50		$ -
11B	River Trail	$ 825.00		$ -
11C	River Trail	$ 2,762.10		$ -
11D	River Trail	$ 2,682.90		$ -
11E	River Trail	$ 1,392.60		$ -
11F	River Trail	$ 6,357.00		$ -
11G	River Trail	$ 581.10		$ -
12	West Side Paths	$ 7,098.00		$ -
13	West Side Paths	$ 4,051.20		$ -
14	North Side Paths	$ 46,115.70		$ -
15	River Trail	$ 1,643.40		$ -
16	East Side Paths	$ 6,603.90		$ -
17	East Side Paths	$ 9,315.30		$ -
		Total (2025 Dollars):		$ 173,346.00
		Total (2031 Dollars):		$ 204,584.40
		Running Balance		$ 2,902.39

2032 Budget

The city will have a few repair projects and should be able to start saving up money quicker than before now that the repair projects have been completed. Maintenance shall be performed on paths as issues are noted in the prior years.

Table 11 - 2032 Annual Budget and Project List

2032 Annual Budget $ 125,000.00				
Path	**Trail Name**	**Maintenance (Fog and Crack Seals)**	**Repair (Overlays and Reconstructs)**	
1	River Trail	$ -		$ -
2	River Trail	$ -		$ -
3	Monegan/Rocksund	$ -		$ 26,812.50
4	Monegan/Rocksund	$ -		$ -
5	River Trail	$ -		$ -
6	River Trail	$ -		$ -
7A	River Trail	$ -		$ 55,376.50
7B	City Beach Loop	$ -		$ -
7C	City Beach Loop	$ -		$ -
7D	City Beach Loop	$ -		$ -
8	North Side Paths	$ -		$ 16,250.00
9	East Side Paths	$ -		$ -
10	East Side Paths	$ -		$ -
11A	River Trail	$ -		$ -
11B	River Trail	$ -		$ -
11C	River Trail	$ -		$ -
11D	River Trail	$ -		$ -
11E	River Trail	$ -		$ -
11F	River Trail	$ -		$ -
11G	River Trail	$ -		$ -
12	West Side Paths	$ -		$ -
13	West Side Paths	$ -		$ -
14	North Side Paths	$ -		$ -
15	River Trail	$ -		$ -
16	East Side Paths	$ -	0 Overlays, 1 Reconstructs	$ 3,850.00
17	East Side Paths	$ -		$ -
		Total (2025 Dollars):		**$ 102,289.00**
		Total (2032 Dollars):		**$ 124,102.56**
		Running Balance		**$ 3,799.83**

2033 Budget

No planned projects but maintenance shall be performed on paths as issues are noted in the prior years.

Table 12 - 2033 Annual Budget and Project List

2033 Annual Budget $ 125,000.00					
Path	**Trail Name**	**Maintenance (Fog and Crack Seals)**		**Repair (Overlays and Reconstructs)**	
1	River Trail	$	-		$ 6,615.00
2	River Trail	$	-		$ -
3	Monegan/Rocksund	$	-		$ -
4	Monegan/Rocksund	$	-		$ -
5	River Trail	$	-		$ -
6	River Trail	$	-		$ -
7A	River Trail	$	-		$ -
7B	City Beach Loop	$	-		$ -
7C	City Beach Loop	$	-		$ -
7D	City Beach Loop	$	-		$ -
8	North Side Paths	$	-		$ -
9	East Side Paths	$	-		$ -
10	East Side Paths	$	-		$ -
11A	River Trail	$	-		$ -
11B	River Trail	$	-		$ -
11C	River Trail	$	-		$ -
11D	River Trail	$	-		$ -
11E	River Trail	$	-		$ -
11F	River Trail	$	-		$ -
11G	River Trail	$	-		$ -
12	West Side Paths	$	-		$ -
13	West Side Paths	$	-		$ -
14	North Side Paths	$	-		$ -
15	River Trail	$	-		$ -
16	East Side Paths	$	-		$ -
17	East Side Paths	$	-		$ -
		Total (2025 Dollars):			$ 6,615.00
		Total (2033 Dollars):			$ 8,250.40
		Running Balance			$ 120,549.43

2034 Budget

This year consists of another large comprehensive crack and fog seal maintenance project.

Table 13 - 2034 Annual Budget and Project List

2034 Annual Budget $ 125,000.00				
Path	**Trail Name**	**Maintenance (Fog and Crack Seals)**	**Repair (Overlays and Reconstructs)**	
1	River Trail	$ 1,933.80		$ -
2	River Trail	$ 10,344.90		$ -
3	Monegan/Rocksund	$ 13,507.50		$ -
4	Monegan/Rocksund	$ 5,963.10		$ -
5	River Trail	$ 7,820.70		$ -
6	River Trail	$ 444.60		$ -
7A	River Trail	$ 16,269.30		$ -
7B	City Beach Loop	$ 780.00		$ -
7C	City Beach Loop	$ 514.80		$ -
7D	City Beach Loop	$ 11,883.30		$ -
8	North Side Paths	$ 6,012.60		$ -
9	East Side Paths	$ 1,926.00		$ -
10	East Side Paths	$ 737.70		$ -
11A	River Trail	$ 5,827.50		$ -
11B	River Trail	$ 825.00		$ -
11C	River Trail	$ 2,762.10		$ -
11D	River Trail	$ 2,682.90		$ -
11E	River Trail	$ 1,392.60		$ -
11F	River Trail	$ 6,357.00		$ -
11G	River Trail	$ 581.10		$ -
12	West Side Paths	$ 7,098.00		$ -
13	West Side Paths	$ 4,051.20		$ -
14	North Side Paths	$ 46,115.70		$ -
15	River Trail	$ 1,643.40		$ -
16	East Side Paths	$ 6,603.90		$ -
17	East Side Paths	$ 9,315.30		$ -
		Total (2025 Dollars):		$ 173,346.00
		Total (2034 Dollars):		$ 222,255.16
		Running Balance		$ 23,294.27

2035 Budget

No planned projects but maintenance shall be performed on paths as issues are noted in the prior years.

Table 14 - 2035 Annual Budget and Project List

2035 Annual Budget $ 125,000.00					
Path	**Trail Name**	**Maintenance (Fog and Crack Seals)**		**Repair (Overlays and Reconstructs)**	
1	River Trail	$	-		$ -
2	River Trail	$	-		$ -
3	Monegan/Rocksund	$	-		$ -
4	Monegan/Rocksund	$	-		$ -
5	River Trail	$	-		$ -
6	River Trail	$	-		$ -
7A	River Trail	$	-		$ -
7B	City Beach Loop	$	-		$ -
7C	City Beach Loop	$	-		$ -
7D	City Beach Loop	$	-		$ -
8	North Side Paths	$	-		$ -
9	East Side Paths	$	-		$ -
10	East Side Paths	$	-		$ -
11A	River Trail	$	-		$ -
11B	River Trail	$	-		$ -
11C	River Trail	$	-		$ -
11D	River Trail	$	-		$ -
11E	River Trail	$	-		$ -
11F	River Trail	$	-		$ -
11G	River Trail	$	-		$ -
12	West Side Paths	$	-		$ -
13	West Side Paths	$	-		$ -
14	North Side Paths	$	-		$ -
15	River Trail	$	-		$ -
16	East Side Paths	$	-		$ -
17	East Side Paths	$	-		$ -
		Total (2025 Dollars):			$ -
		Total (2035 Dollars):			$ -
		Running Balance			$ 148,294.27

CONCRETE PATH REPAIRS & BRIDGE OBSERVATIONS

As can be seen in the annual budget tables, once the repairs are completed the City of Whitefish Parks is able to accumulate money for other maintenance items much more easily. Civil Solution cannot provide structural repair and maintenance recommendations for bridges, boardwalks, or underpasses. However, visual observations taken from the field can help prioritize which of these projects could be handled as budget allows. More detailed field observations on structures can be seen in **Appendix D**.

Path 2 – River Trail

A couple boards should be replaced. One is at 1/3 span from the west side and the other is around midspan.

Path 7A – River Trail

First Pedestrian Bridge- Some undermining is occurring at the east end of the bridge, as was mentioned previously. The east-most 33 feet of boards on this first bridge are older boards than the rest and are slightly worn.

Covered Walkway Under Train Tracks – The west side of this path under the cover is starting to get undermined by the base material sloughing towards the river.

Second Pedestrian Bridge- Great condition, nothing requiring replacement or repair was observed.

Path 7D – River Trail

At the south side of the bridge there is about a 1-1.5 inch lip between the asphalt and the wood. There is also a board mid span that is not fastened down on the west side. The north side of the bridge has about a 1-inch lip between the asphalt and the wood.

Path 8 – North Side Paths

At the west side of the bridge the lip between the asphalt and decking is between 2-5 inches and could be reduced to enhance functionality. There are also trees on the south side of this path that are leaning against the railing and could result in damage to the structure over time. The East side of the bridge has a concrete abutment and does not have any lip.

Path 10 – North Side Paths

Approximately every 8’ the boards appear to be lifted by the substructure and there are a number or raised screws throughout the bridge. The East side of the bridge is very concaved. The center of this concavity appears to be 3” below what would be considered level.

Path 11C – Riverside Paths

There is no lip between the asphalt and concrete for this bridge but there is about 1.5” difference between the concrete and asphalt at the south side abutment.

Path 11G – Riverside Paths

Some rotting boards are present about 200’ into the length of this structure, starting from the south side.

Along with observations on bridges and other structures, information was collected on varies concrete Paths throughout the City of Whitefish. This information is also likely helpful in determining what the best use of money would be as the asphalt path projects are completed. More detailed field observations on concrete paths can be seen in **Appendix D**.

CLOSING

By following the schedule set forth in this report, the combined repairs and maintenance to bring the City of Whitefish's paths to excellent condition, or a rating of 9 or better on the PASER scale, could be completed in as little as 7-8 years. From that point onward, the city is then able to more cost effectively maintain all of its paths which leaves more budget left over for other projects.

APPENDIX A

Pavement Surface Evaluation and Rating

PASER Manual

Asphalt Roads

Transportation Information Center
University of Wisconsin–Madison

Contents

This manual is intended to assist local officials in understanding and rating the surface condition of asphalt pavement. It describes types of defects and provides a simple system to visually rate pavement condition. The rating procedure can be used as condition data for the Wisconsin DOT local road inventory and as part of a computerized pavement management system like PASERWARE.

The PASER system described here and in other T.I.C. publications is based in part on a roadway management system originally developed by Phil Scherer, transportation planner, Northwest Wisconsin Regional Planning Commission.

Produced by the T.I.C. with support from the Federal Highway Administration, the Wisconsin Department of Transportation, and the University of Wisconsin-Extension. The T.I.C., part of the nationwide Local Technical Assistance Program (LTAP), is a Center of the College of Engineering, Department of Engineering Professional Development, University of Wisconsin–Madison.

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Pavement Surface Evaluation and Rating

PASER Manual

Asphalt Roads

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Transportation Information Center
University of Wisconsin–Madison

Pavement Surface Evaluation and Rating

Asphalt PASER Manual

A local highway agency's major goal is to use public funds to provide a comfortable, safe and economical road surface—no simple task. It requires balancing priorities and making difficult decisions in order to manage pavements. Local rural and small city pavements are often managed informally, based on the staff's judgment and experience. While this process is both important and functional, using a slightly more formalized technique can make it easier to manage pavements effectively.

Experience has shown that there are three especially useful steps in managing local roads:

1. Inventory all local roads and streets.
2. Periodically evaluate the condition of all pavements.
3. Use the condition evaluations to set priorities for projects and select alternative treatments.

A comprehensive pavement management system involves collecting data and assessing several road characteristics: roughness (ride), surface distress (condition), surface skid characteristics, and structure (pavement strength and deflection). Planners can combine this condition data with economic analysis to develop short-range and long-range plans for a variety of budget levels. However, many local agencies lack the resources for such a full-scale system.

Since surface condition is the most vital element in any pavement management system, local agencies can use the simplified rating system presented in this ***Asphalt PASER Manual*** to evaluate their roads. The PASER ratings combined with other inventory data (width, length, shoulder, pavement type, etc.) from the WisDOT local roads inventory (WISLR) can be very helpful in planning future budgets and priorities.

WISLR inventory information and PASER ratings can be used in a computerized pavement management system, PASERWARE, developed by the T.I.C and WisDOT. Local officials can use PASERWARE to evaluate whether their annual road budgets are adequate to maintain or improve current road conditions and to select the most cost-effective strategies and priorities for annual projects.

PASER Manuals for gravel, concrete, and other road surfaces, with compatible rating systems are also available (page 29). Together they make a comprehensive condition rating method for all road types. PASER ratings are accepted for WISLR condition data.

Asphalt pavement distress

PASER uses visual inspection to evaluate pavement surface conditions. The key to a useful evaluation is identifying different types of pavement distress and linking them to a cause. Understanding the cause for current conditions is extremely important in selecting an appropriate maintenance or rehabilitation technique.

There are four major categories of common asphalt pavement surface distress:

Surface defects
Raveling, flushing, polishing.

Surface deformation
Rutting, distortion—rippling and shoving, settling, frost heave.

Cracks
Transverse, reflection, slippage, longitudinal, block, and alligator cracks.

Patches and potholes

Deterioration has two general causes: environmental due to weathering and aging, and structural caused by repeated traffic loadings.

Obviously, most pavement deterioration results from both environmental and structural causes. However, it is important to try to distinguish between the two in order to select the most effective rehabilitation techniques.

The rate at which pavement deteriorates depends on its environment, traffic loading conditions, original construction quality, and interim maintenance procedures. Poor quality materials or poor construction procedures can significantly reduce the life of a pavement. As a result, two pavements constructed at the same time may have significantly different lives, or certain portions of a pavement may deteriorate more rapidly than others. On the other hand, timely and effective maintenance can extend a pavement's life. Crack sealing and seal coating can reduce the effect of moisture in aging of asphalt pavement.

With all of these variables, it is easy to see why pavements deteriorate at various rates and why we find them in various stages of disrepair. Recognizing defects and understanding their causes helps us rate pavement condition and select cost-effective repairs. The pavement defects shown on the following pages provide a background for this process.

Periodic inspection is necessary to provide current and useful evaluation data. It is recommended that PASER ratings be updated every two years, and an annual update is even better.

SURFACE DEFECTS

Raveling

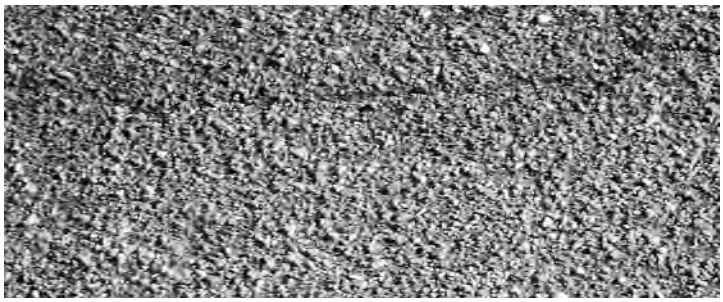
Raveling is progressive loss of pavement material from the surface downward, caused by: stripping of the bituminous film from the aggregate, asphalt hardening due to aging, poor compaction especially in cold weather construction, or insufficient asphalt content. Slight to moderate raveling has loss of fines. Severe raveling has loss of coarse aggregate. Raveling in the wheelpaths can be accelerated by traffic. Protect pavement surfaces from the environ - ment with a sealcoat or a thin overlay if additional strength is required.

Flushing

Flushing is excess asphalt on the surface caused by a poor initial asphalt mix design or by paving or sealcoating over a flushed surface. Repair by blotting with sand or by overlaying with properly designed asphalt mix.

Polishing

Polishing is a smooth slippery surface caused by traffic wearing off sharp edges of aggregates. Repair with sealcoat or thin bituminous overlay using skid-resistant aggregate.



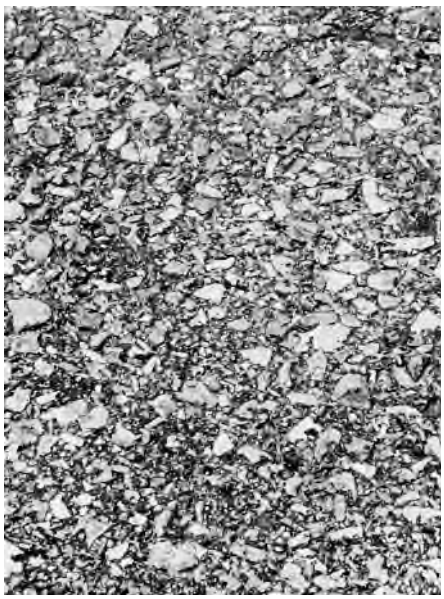
◄ **Slight raveling. Small aggregate particles have worn away exposing tops of large aggregate.**

◄ **Moderate to severe raveling. Erosion further exposes large aggregate.**

◄ **Severe raveling and loss of surface material.**

Polished, worn aggregate needs repair. ▼

► **Flushing. Dark patches show where asphalt has worked to surface.**



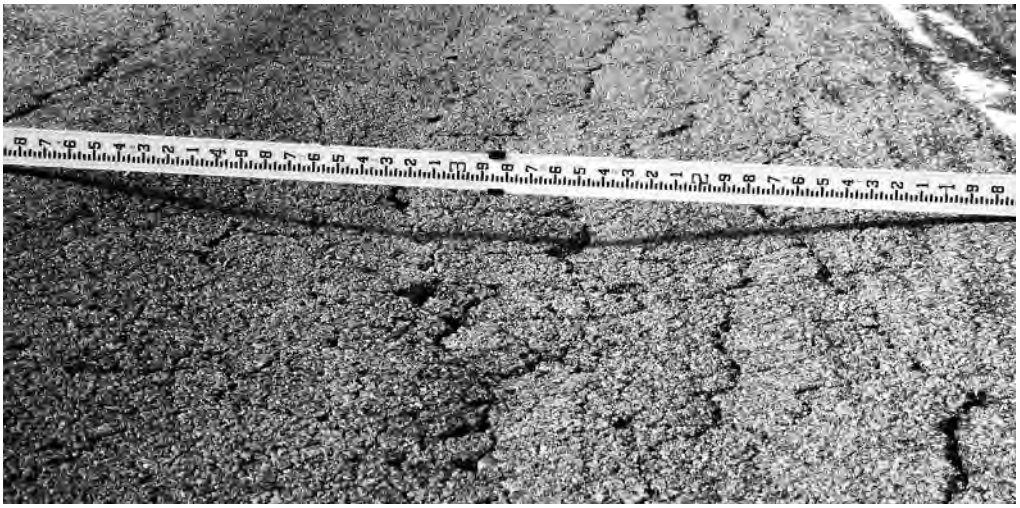
SURFACE DEFORMATION

Rutting

Rutting is displacement of material, creating channels in wheelpaths. It is caused by traffic compaction or displacement of unstable material. Rutting of any severity can cause safety concerns because water can collect in ruts increasing vehicle stopping distances and increasing the chances of hydroplaning. In freezing temperatures ice can form in ruts. Severe rutting (2 inches or more in depth) may be caused by base or subgrade consolidation. Repair minor rutting with microsurfacing or overlays. Severe rutting requires milling the old surface or reconstructing the roadbed before resurfacing.

◄
Even slight rutting is evident after a rain.

◄
Severe rutting over 2" caused by poor mix design.



◄
Severe rutting caused by poor base or subgrade.

Distortion

Shoving or rippling is surfacing material displaced crossways to the direction of traffic. It can develop into washboarding when the asphalt mixture is unstable because of poor quality aggregate or improper mix design. Repair by milling smooth and overlaying with stable asphalt mix.

Other pavement distortions may be caused by settling, frost heave, etc. Patching may provide temporary repair. Permanent correction usually involves removal of unsuitable

▼ **Heavy traffic has shoved pavement into washboard ripples and bumps.**

► **Severe settling from utility trench.**

► **Frost heave damage from spring break-up.**

▼ **Widely spaced, well-sealed cracks.**

subgrade material and reconstruction.

CRACKS

Transverse cracks

A crack at approximately right angles to the center line is a transverse crack. They are often regularly spaced. The cause is movement due to temperature changes and hardening of the asphalt with aging.

Transverse cracks will initially be widely spaced (over 50'). Additional cracking will occur with aging until they are closely spaced (within several feet). These usually begin as hairline or very narrow cracks; with aging they widen. If not properly sealed and maintained, secondary or multiple cracks develop parallel to the initial crack. The crack edges can further deteriorate by raveling and eroding the adjacent pavement.

Prevent water intrusion and damage by sealing cracks which are more than ¼" wide.

◄ **Sealed cracks, a few feet apart.**

▲ **Tight cracks less than ¼" in width.**

▲ **Open crack – ½" or more in width.**

▲ **Water enters unsealed cracks softening pavement and causing secondary cracks.**

▲ **Pavement ravels and erodes along open cracks causing deterioration.**

Reflection cracks

Cracks in overlays reflect the crack pattern in the pavement underneath. They are difficult to prevent and correct. Thick overlays or reconstruction is usually required.

► **Concrete joints reflected through bituminous overlay.**

Slippage cracks

Crescent or rounded cracks in the direction of traffic, caused by slippage between an overlay and an underlying pavement. Slippage is most likely to occur at intersections where traffic is stopping and starting. Repair by removing the top surface and resurfacing using a tack coat.

► **Crescent-shaped cracks characteristic of slippage.**

► **Loss of bond between pavement layers allows traffic to break loose pieces of surface.**

Centerline crack (still tight). ►

Edge cracking from weakened subbase and traffic loads. ▼

Longitudinal cracks

Cracks running in the direction of traffic are longitudinal cracks. Center line or lane cracks are caused by inadequate bonding during construction or reflect cracks in underlying pavement. Longi - tudinal cracks in the wheel path indicate fatigue failure from heavy vehicle loads. Cracks within one foot of the edge are caused by insufficient shoulder support, poor drainage, or frost action. Cracks usually start as hairline or vary narrow and widen and erode with age. Without crack filling, they can ravel, develop multiple cracks, and become wide enough to require patching.

Filling and sealing cracks will reduce moisture penetration and prevent further subgrade weakening. Multiple longitudinal cracks in the wheel path or pavement edge indicate a need for strengthening with an overlay or reconstruction.

► First stage of wheelpath cracking caused by heavy traffic loads.

Load-related cracks in wheel path. ▼

Multiple open, longitudinal cracks that are raveling. ▼

Block cracks

Block cracking is interconnected cracks forming large blocks. Cracks usually intersect at nearly right angles. Blocks may range from one foot to approximately 10′ or more across. The closer spacing indicates more advanced aging caused by shrinking and hardening of the asphalt over time. Repair with sealcoating during early stages to reduce weathering of the asphalt. Overlay or reconstruction required in the advanced stages.

► **Large blocks, approximately 10′ across.**

► **Intermediate-size block cracking, 1′-5′ across with open cracks.**

▲ **Extensive block cracking in an irregular pattern.**

► **Severe block cracking – 1′ or smaller blocks. Tight cracks with no raveling.**

Alligator cracks

Interconnected cracks forming small pieces ranging in size from about 1" to 6". This is caused by failure of the surfacing due to traffic loading (fatigue) and very often also due to inadequate base or subgrade support. Repair by excavating localized areas and replacing base and surface. Large areas require reconstruction. Improvements in drainage may often be required.

◄
Alligator crack pattern. Tight cracks and one patch.

◄
Characteristic "chicken wire" crack pattern shows smaller pavement pieces and patching.

◄
Open raveled alligator cracking with settlement along lane edge most likely due to very soft subgrade.

PATCHES AND POTHOLES

Patches

Original surface repaired with new asphalt patch material. This indicates a pavement defect or utility excavation which has been repaired. Patches with cracking, settlement or distortions indicate underlying causes still remain. Recycling or reconstruction are required when extensive patching shows distress.

► **Typical repair of utility excavation. Patch in fair to good condition.**

► **Edge wedging. Pavement edges strengthened with wedges of asphalt. Patch is in very good condition.**

► **Extensive patching in very poor condition.**

Potholes

Holes and loss of pavement material caused by traffic loading, fatigue and inadequate strength. Often combined with poor drainage. Repair by excavating or rebuilding localized potholes. Reconstruction required for extensive defects.

◄
Small pothole where top course has broken away.

◄
Multiple potholes show pavement failure, probably due to poor subgrade soils, frost heave, and bad drainage.

◄
Large, isolated potholes extend through base. Note adjacent alligator cracks which commonly deteriorate into potholes.

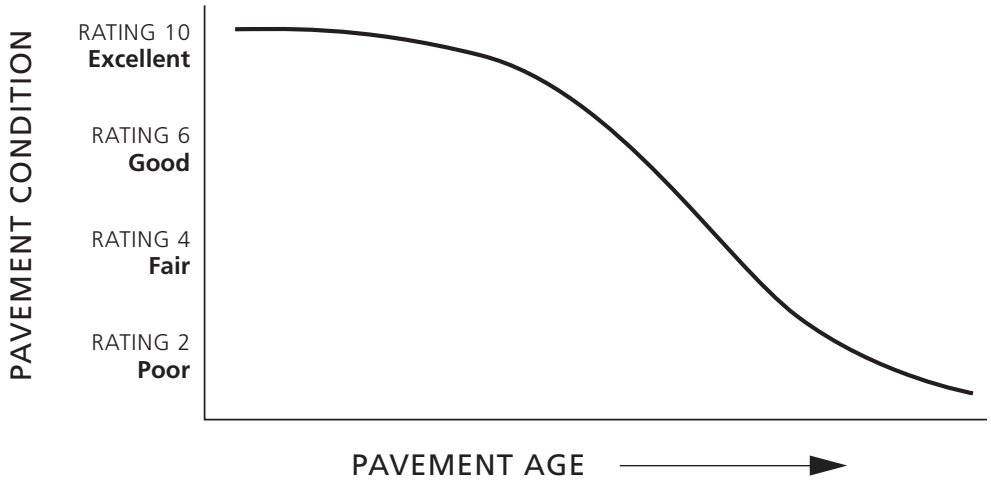
Rating pavement surface condition

With an understanding of surface distress, you can evaluate and rate asphalt pavement surfaces. The rating scale ranges from **10–excellent** condition to **1–failed**. Most pave - ments will deteriorate through the phases listed in the rating scale. The time it takes to go from excellent condition (10) to complete failure (1) depends largely on the quality of the original construction and the amount of heavy traffic loading.

Once significant deterioration begins, it is common to see pavement decline rapidly. This is usually due to a combination of loading and the effects of additional moisture. As a pavement ages and additional cracking develops, more moisture can enter the pavement and accelerate the rate of deterioration.

Look at the photographs in this section to become familiar with the descriptions of the individual rating categories. To evaluate an individual pavement segment, first determine its general condition. Is it relatively new, toward the top end of the scale? In very poor condition and at the bottom of the scale? Or somewhere in between? Next, think generally about the appropriate maintenance method. Use the rating categories outlined below.

Finally, review the individual pavement distress and select the appropriate surface rating. Individual pavements will ***not*** have all of the types of distress listed for any particular rating. They may have only one or two types.



In addition to indicating the surface condition of a road, a given rating also includes a recommendation for needed maintenance or repair. This feature of the rating system facilitates its use and enhances its value as a tool in ongoing road maintenance.

RATINGS ARE RELATED TO NEEDED MAINTENANCE OR REPAIR

Rating 9 & 10	No maintenance required
Rating 8	Little or no maintenance
Rating 7	Routine maintenance, cracksealing and minor patching
Rating 5 & 6	Preservative treatments (sealcoating)
Rating 3 & 4	Structural improvement and leveling (overlay or recycling)
Rating 1 & 2	Reconstruction

Rating system

Surface rating	*Visible distress**	*General condition/ treatment measures*
10 Excellent	None.	New construction.
9 Excellent	None.	Recent overlay. Like new.
8 Very Good	No longitudinal cracks except reflection of paving joints. Occasional transverse cracks, widely spaced (40′ or greater). All cracks sealed or tight (open less than ¼″).	Recent sealcoat or new cold mix. Little or no maintenance required.
7 Good	Very slight or no raveling, surface shows some traffic wear. Longitudinal cracks (open ¼″) due to reflection or paving joints. Transverse cracks (open ¼″) spaced 10′ or more apart, little or slight crack raveling. No patching or very few patches in excellent condition.	First signs of aging. Maintain with routine crack filling.
6 Good	Slight raveling (loss of fines) and traffic wear. Longitudinal cracks (open ¼″–½″). Transverse cracks (open ¼″–½″), some spaced less than 10′. First sign of block cracking. Sight to moderate flushing or polishing. Occasional patching in good condition.	Shows signs of aging. Sound structural condition. Could extend life with sealcoat.
5 Fair	Moderate to severe raveling (loss of fine and coarse aggregate). Longitudinal and transverse cracks (open ½″ or more) show first signs of slight raveling and secondary cracks. First signs of longitudinal cracks near pavement edge. Block cracking up to 50% of surface. Extensive to severe flushing or polishing. Some patching or edge wedging in good condition.	Surface aging. Sound structural condition. Needs sealcoat or thin non-structural overlay (less than 2″)
4 Fair	Severe surface raveling. Multiple longitudinal and transverse cracking with slight raveling. Longitudinal cracking in wheel path. Block cracking (over 50% of surface). Patching in fair condition. Slight rutting or distortions (½″ deep or less).	Significant aging and first signs of need for strengthening. Would benefit from a structural overlay (2″ or more).
3 Poor	Closely spaced longitudinal and transverse cracks often showing raveling and crack erosion. Severe block cracking. Some alligator cracking (less than 25% of surface). Patches in fair to poor condition. Moderate rutting or distortion (greater than ½″ but less than 2" deep). Occasional potholes.	Needs patching and repair prior to major overlay. Milling and removal of deterioration extends the life of overlay.
2 Very Poor	Alligator cracking (over 25% of surface). Severe rutting or distortions (2″ or more deep). Extensive patching in poor condition. Potholes.	Severe deterioration. Needs reconstruction with extensive base repair. Pulverization of old pavement is effective.
1 Failed	Severe distress with extensive loss of surface integrity.	Failed. Needs total reconstruction.

** Individual pavements will not have all of the types of distress listed for any particular rating. They may have only one or two types.*

RATING 10 & 9

EXCELLENT —
No maintenance required

Newly constructed or recently overlaid roads are in excellent condition and require no maintenance.

► **RATING 10**
New construction.

► **RATING 9**
Recent overlay, rural.

► **RATING 9**
Recent overlay, urban.

RATING 8

VERY GOOD —
Little or no maintenance required

This category includes roads which have been recently sealcoated or overlaid with new cold mix. It also includes recently constructed or overlaid roads which may show longitudinal or transverse cracks. All cracks are tight or sealed.

◄ **Recent chip seal.**

◄ **Recent slurry seal.**

▲ **New cold mix surface.**

▼ **Widely spaced, sealed cracks.**

RATING 7

GOOD —
Routine crack sealing recommended

Roads show first signs of aging, and they may have very slight raveling. Any longitudinal cracks are along paving joint. Transverse cracks may be approximately 10′ or more apart. All cracks are ¼″ or less, with little or no crack erosion. Few if any patches, all in very good condition. Maintain a crack sealing program.

► **Tight and sealed transverse and longitudinal cracks. Maintain crack sealing program.**

► **Tight longitudinal crack and sealed transverse cracks.**

► **Transverse cracks about 10′ or more apart. Maintain crack sealing program.**

RATING 6

GOOD —
Consider preservative treatment

Roads are in sound structural condition but show definite signs of aging. Seal-coating could extend their useful life. There may be slight surface raveling. Transverse cracks can be frequent, less than 10′ apart. Cracks may be 1/4–1/2″ and sealed or open. Pavement is generally sound adjacent to cracks. First signs of block cracking may be evident. May have slight or moderate bleeding or polishing. Patches are in good condition.

◄ **Slight surface raveling with tight cracks, less than 10′ apart.**

◄ **Transverse cracks less than 10′ apart; cracks well-sealed.**

▼ **Large blocks, early signs of raveling and block cracking.**

▼ **Open crack, 1/2″ wide; adjoining pavement sound.**

▼ **Moderate flushing.**

RATING 5

FAIR —
Preservative maintenance treatment required

Roads are still in good structural condition but clearly need sealcoating or overlay. They may have moderate to severe surface raveling with significant loss of aggregate. First signs of longitudinal cracks near the edge. First signs of raveling along cracks. Block cracking up to 50% of surface. Extensive to severe flushing or polishing. Any patches or edge wedges are in good condition.

▼ **Block cracking with open cracks.**

► **Moderate to severe raveling in wheel paths.**

▼ **Severe flushing.**

▲ **Wedges and patches extensive but in good condition.**

Severe raveling with extreme loss of aggregate. ▼

Load cracking and slight rutting in wheel path. ▼

RATING 4

FAIR —
Structural improvement required

Roads show first signs of needing strengthening by overlay. They have very severe surface raveling which should no longer be sealed. First longitudinal cracking in wheel path. Many transverse cracks and some may be raveling slightly. Over 50% of the surface may have block cracking. Patches are in fair condition. They may have rutting ½" deep or less, or slight distortion.

◄ Longitudinal cracking; early load-related distress in wheel path. Strengthening needed.

▼ Slight rutting; patch in good condition.

▼ Extensive block cracking. Blocks tight and sound.

◄ Slight rutting in wheel path.

RATING 3

POOR—
Structural improvement required

Roads must be strengthened with a structural overlay (2" or more). Will benefit from milling and very likely will require pavement patching and repair beforehand. Cracking will likely be extensive. Raveling and erosion in cracks may be common. Surface may have severe block cracking and show first signs of alligator cracking. Patches are in fair to poor condition. There is moderate distortion or rutting (more than ½" and less than 2" in depth), and occasional potholes.

► **Many wide and raveled cracks indicate need for milling and overlay.**

► **Ruts need mill and overlay.**

► **Open and raveled block cracks.**

RATING 3

POOR — (continued)
Structural improvement required

◄ **Alligator cracking. Edge needs repair and drainage needs improvement prior to rehabilitation.**

▼ **Distortion with patches in poor condition. Repair and overlay.**

RATING 2

VERY POOR—
Reconstruction required

Roads are severely deteriorated and need reconstruction. Surface pulverization and additional base may be cost-effective. These roads have more than 25% alligator cracking, distortion or rutting 2 inches or more in depth, as well as potholes or extensive patches in poor condition.

► **Extensive alligator cracking. Pulverize and rebuild.**

▲ **Severe rutting. Strengthen base and reconstruct.**

▲ **Patches in poor condition, wheelpath rutting. Pulverize, strengthen and reconstruct.**

► **Severe frost damage. Reconstruct.**

RATING 1

FAILED —
Reconstruction required

Roads have failed, showing severe distress and extensive loss of surface integrity.

◄
Potholes from frost damage. Reconstruct.

◄
Potholes and severe alligator cracking. Failed pavement. Reconstruct.

◄
Extensive loss of surface. Rebuild.

Practical advice on rating roads

Inventory and field inspection

Most agencies routinely observe roadway conditions as a part of their normal work and travel. However, an actual inspection means looking at the entire roadway system as a whole and preparing a written summary of conditions. This inspection has many benefits over casual observations. It can be helpful to compare segments, and ratings decisions are likely to be more consistent because the roadway system is considered as a whole within a relatively short time.

An inspection also encourages a review of specific conditions important in roadway maintenance, such as drainage, adequate strength, and safety.

A simple written inventory is useful in making decisions where other people are involved. You do not have to trust your memory, and you can usually answer questions in more detail. Having a written record and objective information also improves your credi - bility with the public.

Finally, a written inventory is very useful in documenting changing roadway conditions. Without records over several years it is impossible to know if road conditions are improving, holding their own, or declining.

Annual budgets and long range planning are best done when based on actual needs as documented with a written inventory.

The Wisconsin DOT local road inventory (WISLR) is a valuable resource for managing your local roads. Adding PASER surface condition ratings is an important improvement.

Averaging and comparing sections

For evaluation, divide the local road system into individual segments which are similar in construction and condi - tion. Rural segments may vary from ½ mile to a mile long, while sections in urban areas will likely be 1-4 blocks long or more. If you are starting with the WISLR Inventory, the segments have already been established. You may want to review them for consistent road conditions.

Obviously, no roadway segment is entirely consistent. Also, surfaces in one section will not have all of the types of distress listed for any particular rating. They may have only one or two types. Therefore, some averaging is necessary.

The objective is to rate the condition that represents the majority of the roadway. Small or isolated conditions should not influence the rating. It is useful to note these special conditions on the inventory form so this information can be used in planning specific improvement projects. For example, some spot repairs may be required.

Occasionally surface conditions vary significantly within a segment. For example, short sections of good condition may be followed by sections of poor surface conditions. In these cases, it is best to rate the segment according to the worst conditions and note the variation on the form.

The overall purpose of condition rating is to be able to compare each segment relative to all the other segments in your roadway system. On completion you should be able to look at any two pavement segments and find that the better surface has a higher rating.

Within a given rating, say 6, not all pavements will be exactly the same. However, they should all be considered to be in better condition than those with lower ratings, say 5. Sometimes it is helpful in rating a difficult segment to compare it to other previously rated segments. For example, if it is better than one you rated 5 and worse than a typical 7, then a rating of 6 is appropriate. Having all pavement segments rated in the proper relative order is most important and useful.

Assessing drainage conditions

Moisture and poor pavement drainage are significant factors in pavement deterioration. Some assessment of drainage conditions during pavement rating is highly recommended. While you should review drainage in detail at the project level, at this stage simply include an overview drainage evaluation at the same time as you evaluate surface condition.

Urban drainage.

RATING: Excellent

Good rural ditch and driveway culvert. Culvert end needs cleaning.

RATING: Good

High shoulder and no ditch lead to pavement damage. Needs major ditch improvement for a short distance.

RATING: Fair

No drainage leads to failed pavement.

RATING: Poor

Consider both pavement surface drainage and lateral drainage (ditches or storm sewers). Pavement should be able to quickly shed water off the surface into the lateral ditches. Ditches should be large and deep enough to drain the pavement and remove the surface water efficiently into adjacent waterways.

Look at the roadway crown and check for low surface areas that permit ponding. Paved surfaces should have approximately a 2% cross slope or crown across the roadway. This will provide approximately 3" of fall on a 12' traffic lane. Shoulders should have a greater slope to improve surface drainage.

A pavement's ability to carry heavy traffic loads depends on both the pavement materials (asphalt surfacing and granular base) and the strength of the underlying soils. Most soils lose strength when they are very wet. Therefore, it is important to provide drainage to the top layer of the subgrade supporting the pavement structure.

In rural areas, drainage is provided most economically by open ditches that allow soil moisture to drain laterally. As a rule of thumb, the bottom of the ditch ought to be at least one foot below the base course of the pavement in order to drain the soils. This means that minimum ditch depth should be about 2' below the center of the pavement. Deeper ditches, of course, are required to accommodate roadway culverts and maintain the flow line to adjacent drainage channels or streams.

You should also check culverts and storm drain systems. Storm drainage systems that are silted in, have a large accumulation of debris, or are in poor structural condition will also degrade pavement performance.

The T.I.C. publication, ***Drainage Manual: Local Road Assessment and Improvement,*** describes the elements of drainage systems, depicts them in detailed photographs, and explains how to rate their condition. Copies are available from the Transportation Information Center.

Planning annual maintenance and repair budgets

We have found that relating a normal maintenance or rehabilitation proce - dure to the surface rating scheme helps local officials use the rating system. However, an individual surface rating should not automatically dictate the final maintenance or rehabilitation technique.

You should consider safety, future traffic projections, original construc - tion, and pavement strength since these may dictate a more comprehen- sive rehabilitation than the rating suggests. On the other hand, it may be appropriate under special condi- tions to do nothing and let the pavement fully deteriorate, then rebuild when funds are available.

Summary

Using local road funds most efficiently requires good planning and accurate identification of appropriate rehabili - tation projects. Assessing roadway conditions is an essential first step in this process. This asphalt pavement surface condition rating procedure has proved effective in improving decision making and using highway funds more efficiently. It can be used directly by local officials and staff. It may be combined with additional testing and data collection in a more comprehensive pavement manage- ment system.

Transportation Information Center Publications

Pavement Surface Evaluation and Rating (PASER) Manuals

- **Asphalt PASER Manual,** 28 pp.
- **Brick and Block PASER Manual,** 8 pp.
- **Concrete PASER Manual,** 28 pp.
- **Gravel PASER Manual,** 20 pp.
- **Sealcoat PASER Manual,** 16 pp.
- **Unimproved Roads PASER Manual,** 12 pp.

Drainage Manual
Local Road Assessment and Improvement, 6 pp.

SAFER Manual
Safety Evaluation for Roadways, 40 pp.

Flagger's Handbook (pocket-sized guide), 22 pp.

Work Zone Safety, Guidelines for Construction, Maintenance, and Utility Operations, (pocket-sized guide), 58 pp.

Wisconsin Transportation Bulletins

#1 Understanding and Using Asphalt
#2 How Vehicle Loads Affect Pavement Performance
#3 LCC—Life Cycle Cost Analysis
#4 Road Drainage
#5 Gravel Roads
#6 Using Salt and Sand for Winter Road Maintenance
#7 Signing for Local Roads
#8 Using Weight Limits to Protect Local Roads
#9 Pavement Markings
#10 Seal Coating and Other Asphalt Surface Treatments
#11 Compaction Improves Pavement Performance
#12 Roadway Safety and Guardrail
#13 Dust Control on Unpaved Roads
#14 Mailbox Safety
#15 Culverts-Proper Use and Installation
#16 Geotextiles in Road Construction/Maintenance and Erosion Control
#17 Managing Utility Cuts
#18 Roadway Management and Tort Liability in Wisconsin
#19 The Basics of a Good Road
#20 Using Recovered Materials in Highway Construction
#21 Setting Speed Limits on Local Roads
#22 Pre-wetting and Anti-icing
#23 Meeting Minimum Sign Retroreflectivity Standards

Transportation Information Center
University of Wisconsin–Madison

432 North Lake Street
Madison, WI 53706
800/442-4615 TEL
608/263-3160 FAX
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http://tic.engr.wisc.edu

PASER

Asphalt Roads

Transportation Information Center
University of Wisconsin–Madison

APPENDIX B

LEGEND:

1 – RIVER TRAIL
2 – RIVER TRAIL
3 – MONEGAN/ROCKSUND
4 – MONEGAN/ROCKSUND
5 – RIVER TRAIL
6 – RIVER TRAIL
7A – RIVER TRAIL
7B–D – CITY BEACH LOOP
8 – NORTH SIDE PATHS
9 – EAST SIDE PATHS
10 – EAST SIDE PATHS
11 – RIVER TRAIL
12 – WEST SIDE PATHS
13 – WEST SIDE PATHS
14 – NORTH SIDE PATHS
15 – RIVER TRAIL
16 – EAST SIDE PATHS
17 – EAST SIDE PATHS

NORTH

SCALE IN FEET – HORIZONTAL
1500 0 1500 3000 4500

CIVIL SOLUTIONS

Sym	Revision	By	Date

Designed By: Chris Brazda, EI
Drafted By: Carolyn Mulnix
Reviewed By: Brandon Theis, PE
Date: May 20, 2025
CS Project Number: 24-15

Project Name
WHITEFISH
BIKE-PEDESTRIAN PATH
MAINTENANCE PLAN

Sheet Name
PATH
OVERVIEW

Sheet Number
EXHIBIT A

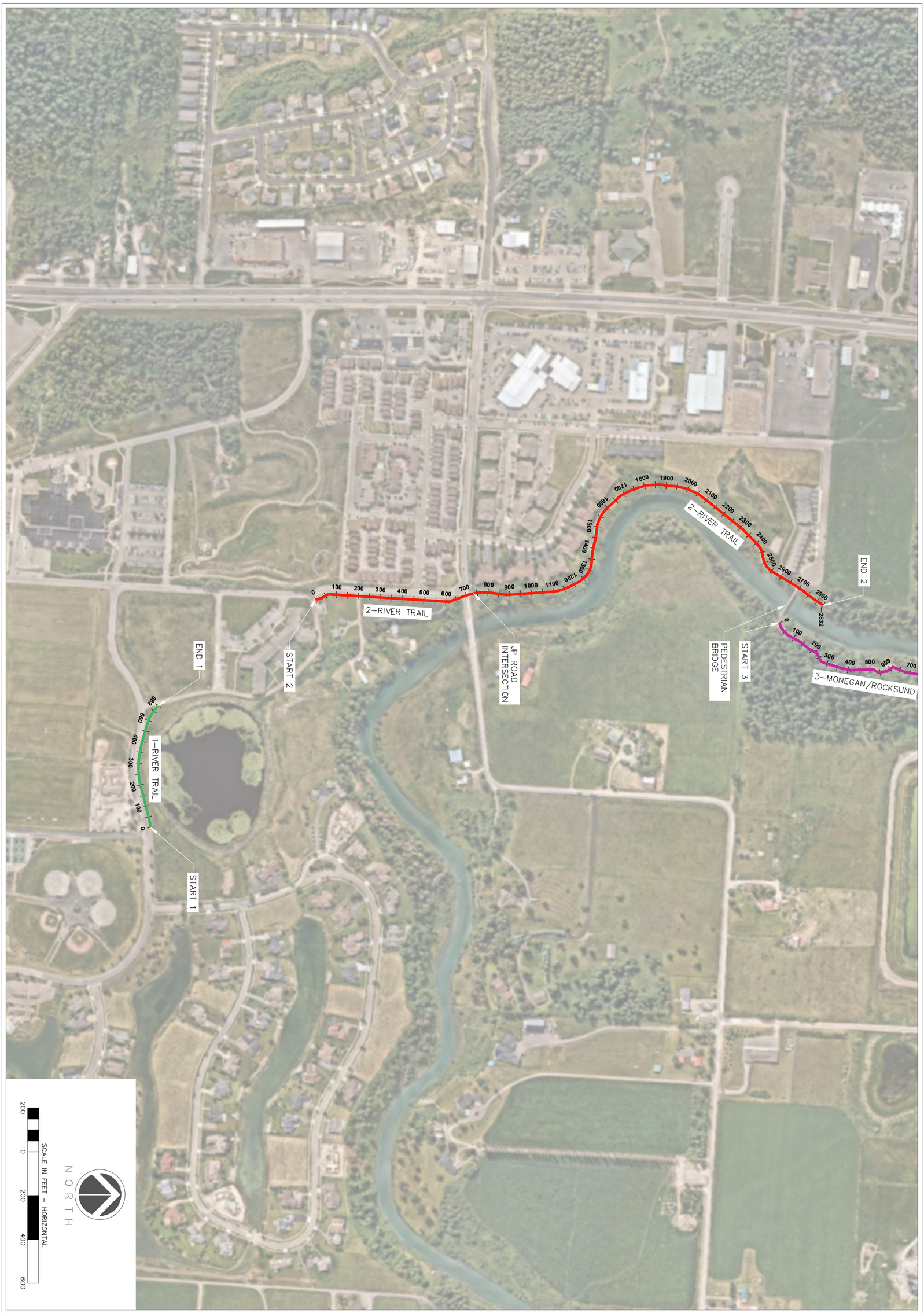


EXHIBIT B

Sheet Number

Sheet Name

PATH ENLARGEMENT

Project Name

WHITEFISH BIKE-PEDESTRIAN PATH MAINTENANCE PLAN

Designed By: Chris Brazda, EI	
Drafted By: Carolyn Mulnix	
Reviewed By: Brandon Theis, PE	
Date: May 20, 2025	
CS Project Number: 24-15	

Sym	Revision	By	Date

CIVIL SOLUTIONS

EXHIBIT C

Sheet Number

Sheet Name

PATH ENLARGEMENT

Project Name

WHITEFISH BIKE-PEDESTRIAN PATH MAINTENANCE PLAN

Designed By: Chris Brazda, EI	
Drafted By: Carolyn Mulnix	
Reviewed By: Brandon Theis, PE	
Date: May 20, 2025	
CS Project Number: 24-15	

Sym	Revision	By	Date

CIVIL SOLUTIONS

EXHIBIT D

Sheet Number

Sheet Name

PATH ENLARGEMENT

Project Name

WHITEFISH BIKE-PEDESTRIAN PATH MAINTENANCE PLAN

Designed By:	Chris Brazda, EI
Drafted By:	Carolyn Mulnix
Reviewed By:	Brandon Theis, PE
Date:	May 20, 2025
CS Project Number:	24-15

Sym	Revision	By	Date

CIVIL SOLUTIONS

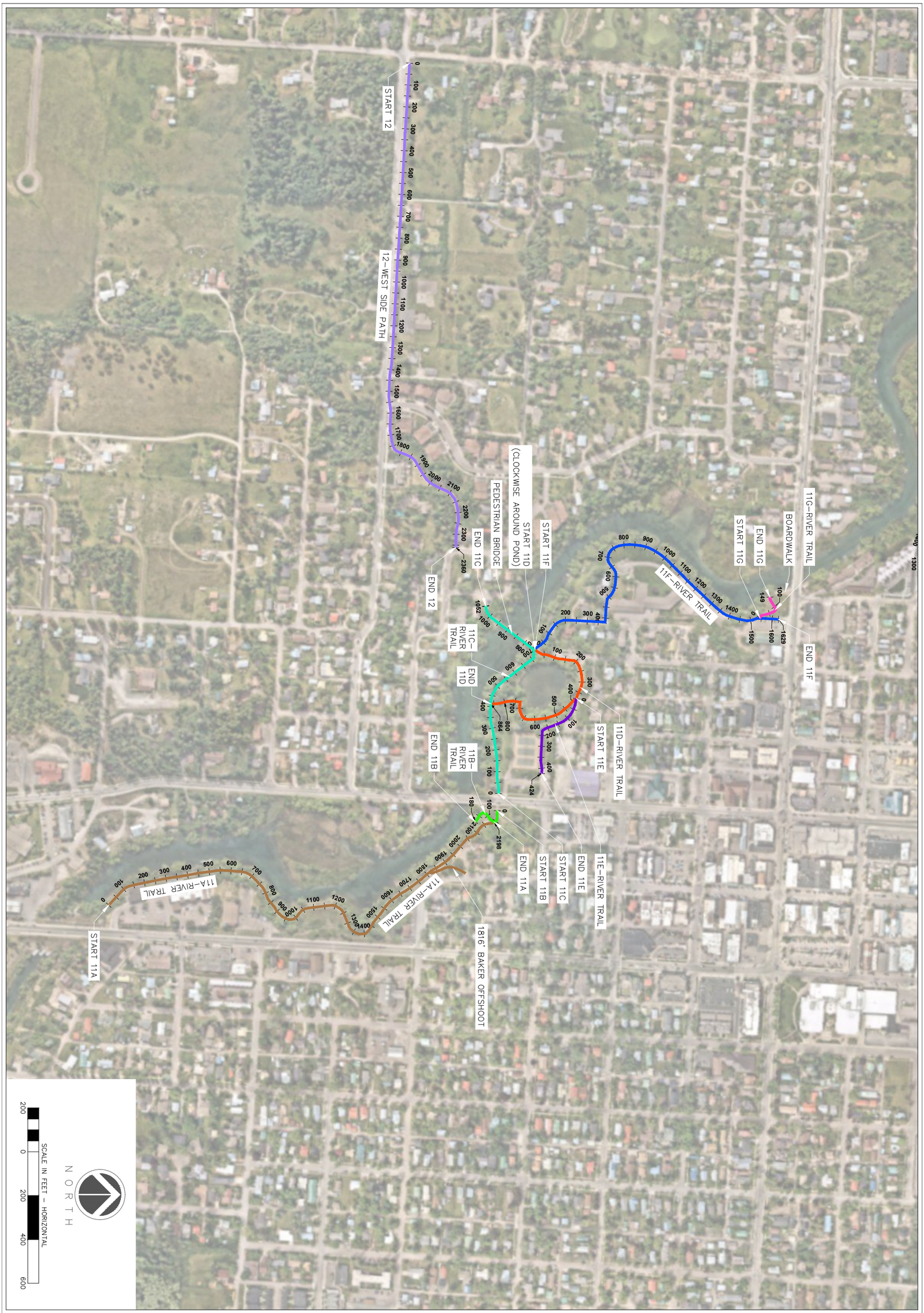


EXHIBIT E

Sheet Number

Sheet Name

PATH ENLARGEMENT

Project Name

WHITEFISH BIKE-PEDESTRIAN PATH MAINTENANCE PLAN

Designed By: Chris Brazda, EI	
Drafted By: Carolyn Mulnix	
Reviewed By: Brandon Theis, PE	
Date: May 20, 2025	
CS Project Number: 24-15	

Sym	Revision	By	Date

CIVIL SOLUTIONS

EXHIBIT F

Sheet Number

Sheet Name

PATH ENLARGEMENT

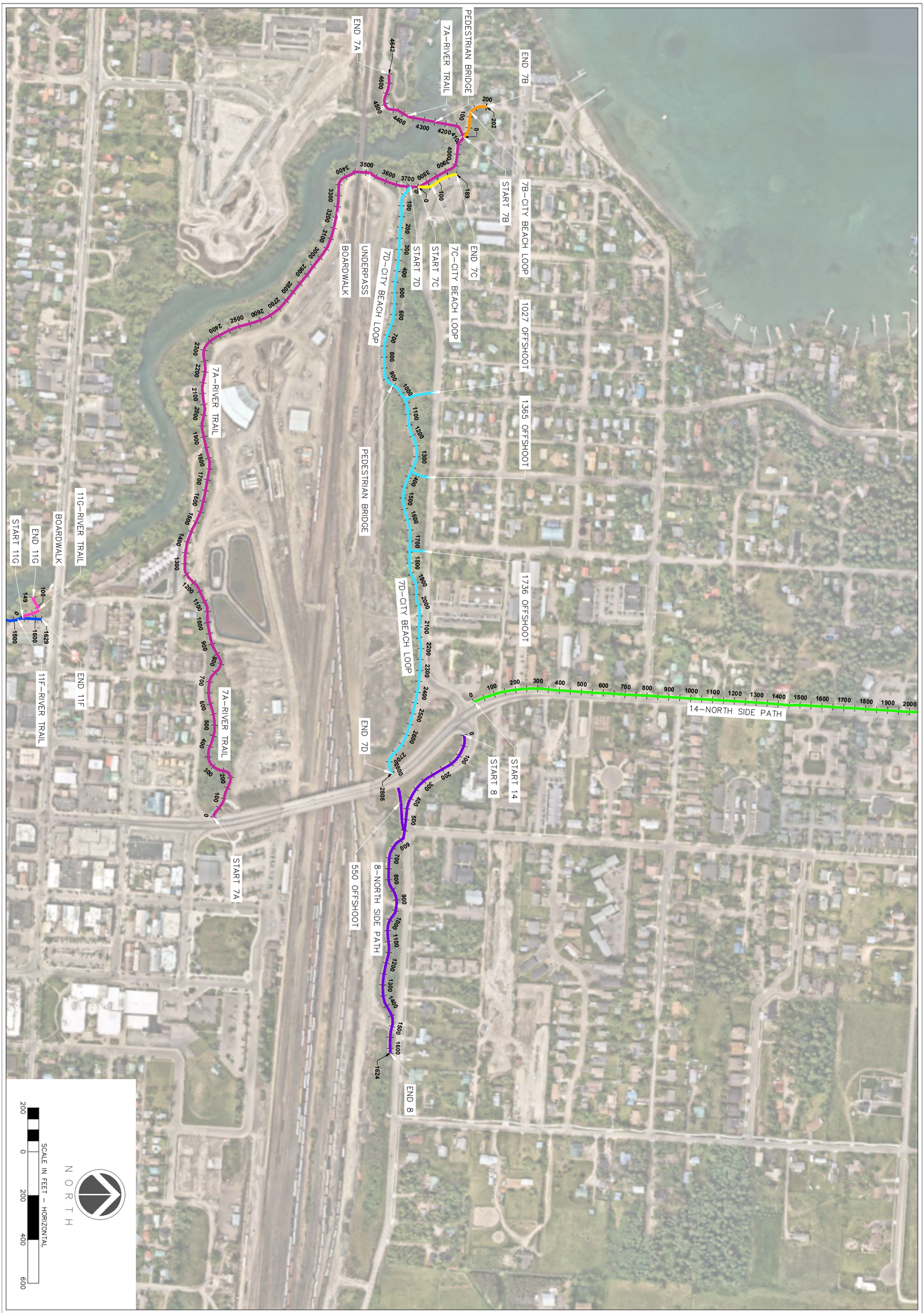
Project Name

WHITEFISH BIKE-PEDESTRIAN PATH MAINTENANCE PLAN

Designed By: Chris Brazda, EI	
Drafted By: Carolyn Mulnix	
Reviewed By: Brandon Theis, PE	
Date: May 20, 2025	
CS Project Number: 24-15	

Sym	Revision	By	Date

CIVIL SOLUTIONS



Sheet Number: EXHIBIT G	Sheet Name: PATH ENLARGEMENT	Project Name: WHITEFISH BIKE-PEDESTRIAN PATH MAINTENANCE PLAN	Designed By: Chris Brazda, EI		Sym	Revision	By	Date
			Drafted By: Carolyn Mulnix					
			Reviewed By: Brandon Theis, PE					
			Date: May 20, 2025					
			CS Project Number: 24-15					

CIVIL SOLUTIONS

Sheet Number: EXHIBIT H	Sheet Name: PATH ENLARGEMENT	Project Name: WHITEFISH BIKE-PEDESTRIAN PATH MAINTENANCE PLAN	Designed By: Chris Brazda, EI		Sym	Revision	By	Date
			Drafted By: Carolyn Mulnix					
			Reviewed By: Brandon Theis, PE					
			Date: May 20, 2025					
			CS Project Number: 24-15					

CIVIL SOLUTIONS

APPENDIX C

Whitefish Bike/Ped Maintenance Plan

Summary Sheet

Path Name:	River Trail
Path Number:	1
PASAR Rating (Weighted Average):	7.5
Length (Feet):	586

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	PASER Rating	Surface Defect Notes	Local Project	Notes
1-1	0	350	8	350	8	Slight oxidation, 80' slight alligator, 95' transverse crack, 275' trans. 332' trans.		Starts near northern Smith Field entrance.
1-2	350	400	8	50	3	390' start of block and alligator at culvert, Appears poor compaction and drainage issue	Reconstruction	
1-3	400	515	8	115	8			
1-4	515	535	8	20	6	Transverse and block cracking	Nonstructural Overlay	
1-5	535	586	8	51	8	One transverse at ~570'		Ends on SW side of pond, at the Springs southern access

Item	Unit Price	Unit	Maintenance Activity	Notes
Fog Seal	$0.30	Square Foot	Fog Seal Maintenance	MDT Bid Tabs....
Asphalt Removal	$2.50	Square Foot	Asphalt Reconstruction	CoK Bid Tabs...
Excavation	$60.00	Cubic Yard	Asphalt Reconstruction	
Fabric	$0.35	Square Foot	Asphalt Reconstruction	CoW Bid Tabs
Base Course Gravel	$100.00	Cubic Yard	Asphalt Reconstruction	
Pavement	$250.00	Ton	Asphalt Reconstruction	
Topsoil	$100.00	Cubic Yard	Asphalt Reconstruction	
Hydroseeding	$0.50	Square Foot	Asphalt Reconstruction	
Crack Seal	$1.50	Linear Foot		From Previous Projects
Concrete Removal	$5.00	Square Foot	ADA Ramp Reconstruction	_05032021-617
Excavation	$60.00	Cubic Yard	ADA Ramp Reconstruction	
Base Course Gravel	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Concrete Flatwork	$20.00	Square Foot	ADA Ramp Reconstruction	
Detectable Warnings	$100.00	Square Foot	ADA Ramp Reconstruction	
Topsoil	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Hydroseeding	$0.50	Square Foot	ADA Ramp Reconstruction	

Maintenance Costs (Fog & Crack Seal)

Path Name:	River Trail
Path Number:	1
PASAR Rating (Average):	7.5
Length (Feet):	586
% Crack length/Path length	60.00%

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	Area (Square Feet)	Crack Lengths (LF)	Crack Seal ($/LF)	Fog Seal ($/SF)	Segment Crack Seal Estimated Costs (2025)	Segment Fog Seal Estimated Costs (2025
1-1	0	350	8	350	2800	210	$1.50	$0.30	$315.00	$840.00
1-2	350	400	8	50	400	30	$1.50	$0.30	$45.00	$120.00
1-3	400	515	8	115	920	69	$1.50	$0.30	$103.50	$276.00
1-4	515	535	8	20	160	12	$1.50	$0.30	$18.00	$48.00
1-5	535	586	8	51	408	30.6	$1.50	$0.30	$45.90	$122.40
								Individual Costs =	$527.40	$1,406.40
								Overall Cost =	$1,933.80	

Repair Costs (Overlays)

1-4					
PASER Rating		6			
Segment Start (Feet)		515			
Asphalt Width (Feet) =		8			
Asphalt Depth (Inches)=		1.5			
Sub Segment Length (Feet)=		20			
Item	Unit Price	Unit	Quantity		Estimated Cost
Pavement	$250.00	Ton		2	$500.00
				Total =	$500.00

Whitefish Bike/Ped Maintenance Plan

Repair Costs (Reconstruction)

1-2

Surface Defect Notes	390’ start of block and alligator at culvert, Appears poor compaction and drainage issue	
PASER Rating	3	
Segment Start (Feet)	350	
Asphalt Width (Feet) =	8	
Asphalt Depth (Inches)=	3	Per City Standards
Gravel Width (Feet) =	10	Included 1-foot wide shoulders
Gravel Depth (Inches) =	9	Per City Standards
Sub Segment Length (Feet)=	50	
Topsoil Sholder Width (Feet) =	2	
Topsoil Sholder Depth (Inches) =	4	

Item	Unit Price	Unit	Quantity	Estimated Cost
Asphalt Removal	$2.50	Square Foot	400	$1,000.00
Excavation	$60.00	Cubic Yard	19	$1,140.00
Fabric	$0.35	Square Foot	500	$175.00
Base Course Gravel	$100.00	Cubic Yard	14	$1,400.00
Pavement	$250.00	Ton	8	$2,000.00
Topsoil	$100.00	Cubic Yard	3	$300.00
Hydroseeding	$0.50	Square Foot	200	$100.00
			Total =	$6,115.00

Whitefish Bike/Ped Maintenance Plan
Summary Sheet

Path Name:	River Trail
Path Number:	2
PASAR Rating (Weighted Average):	5.5
Length (Feet):	2757

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	PASER Rating	Surface Defect Notes	Local Project	Notes
2-1	0	110	8	110	7	67' transverse crack.		Start at north of The Springs
2-2	110	120	8	10	3	STMH w/ trans crack. Settlement issues. Tripping hazard	Reconstruction	
2-3	120	162	8	42	7			
2-4	162	195	8	33	3	STMH has settlement around tripping hazard	Reconstruction	
2-5	195	360	8	165	5	Longitudinal crack due to fill slope failure	Overlay	
2-6	360	600	8	240	8	Transverse cracks periodically		
2-7	600	679	8	79	5	Longitudinal and transverse cracks. Settlement. JP Road Intersection not ADA		
JP Road Crossing							Intersection not ADA	Road Crossing - JP Road
2-9	710	765	10	55	7			
2-10	765	775	10	10	5	Settlement around STMH	Nonstructural Overlay	
2-11	775	917	10	142	7			
2-12	917	945	10	28	5	Settlement around STMH. Non structural overlay.	Nonstructural Overlay	
2-13	945	1300	10	355	5	Lots transverse cracks, Raveling, Start block cracks.	Nonstructural Overlay	
2-14	1300	1350	10	50	5	Roots appearing to cause issues in path.	Nonstructural Overlay	
2-15	1400	1449	10	49	5	Ponding issues, settlement. Transverse cracks	Nonstructural Overlay	
2-16	1449	1484	10	35	8	Nonstructural overlay recommended		
2-17	1484	1832	10	348	4	Recent repair patch	Reconstruction	
2-18	1832	2428	10	596	5	Longitudinal large cracks (3")	Nonstructural Overlay	
2-19	2428	2523	10	95	4	Prelevel w/ thin overlay	Nonstructural Overlay	
2-20	2523	2650	10	127	5	Cracks along pavement edge (starting). Deep trans, longitudinal cracks. Start block cracks.	Nonstructural Overlay	
2-21	2650	2740	10	90	8	Culvert transverse cracks w significant settlement issues.		
2-22	2740	2807	10	67	6	Structural overlay	Structural Overlay	
2-23	2807	2838	10	31	5	Transverse cracks. Start edge cracking	Nonstructural Overlay	Ends at Lenna Joy Drive Cul-de-sac

Item	Unit Price	Unit	Maintenance Activity	Notes
Fog Seal	$0.30	Square Foot	Fog Seal Maintenance	MDT Bid Tabs....
Asphalt Removal	$2.50	Square Foot	Asphalt Reconsturction	CoK Bid Tabs...
Excavation	$60.00	Cubic Yard	Asphalt Reconsturction	
Fabric	$0.35	Square Foot	Asphalt Reconsturction	CoW Bid Tabs
Base Course Gravel	$100.00	Cubic Yard	Asphalt Reconsturction	
Pavement	$250.00	Ton	Asphalt Reconsturction	
Topsoil	$100.00	Cubic Yard	Asphalt Reconsturction	
Hydroseeding	$0.50	Square Foot	Asphalt Reconsturction	
Crack Seal	$1.50	Linear Foot		
Concrete Removal	$5.00	Square Foot	ADA Ramp Reconstruction	_05032021-617
Excavation	$60.00	Cubic Yard	ADA Ramp Reconstruction	
Base Course Gravel	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Concrete Flatwork	$20.00	Square Foot	ADA Ramp Reconstruction	
Detectable Warnings	$100.00	Square Foot	ADA Ramp Reconstruction	
Topsoil	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Hydroseeding	$0.50	Square Foot	ADA Ramp Reconstruction	

Maintenance Costs (Fog & Crack Seal)

Path Name:	River Trail
Path Number:	2
PASAR Rating (Average):	5.5
Length (Feet):	2757
% Crack length/Path length	60.00%

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	Area (Square Feet)	Crack Lengths (LF)	Crack Seal ($/LF)	Fog Seal ($/SF)	Segment Crack Seal Estimated Costs (2025)	Segment Fog Seal Estimated Costs (2025
2-1	0	110	8	110	880	66	$1.50	$0.30	$99.00	$264.00
2-2	110	120	8	10	80	6	$1.50	$0.30	$9.00	$24.00
2-3	120	162	8	42	336	25.2	$1.50	$0.30	$37.80	$100.80
2-4	162	195	8	33	264	19.8	$1.50	$0.30	$29.70	$79.20
2-5	195	360	8	165	1320	99	$1.50	$0.30	$148.50	$396.00
2-6	360	600	8	240	1920	144	$1.50	$0.30	$216.00	$576.00
2-7	600	679	8	79	632	47.4	$1.50	$0.30	$71.10	$189.60
JP Road Crossi	0	0	0	0	0	0	$1.50	$0.30	$0.00	$0.00
2-9	710	765	10	55	550	33	$1.50	$0.30	$49.50	$165.00
2-10	765	775	10	10	100	6	$1.50	$0.30	$9.00	$30.00
2-11	775	917	10	142	1420	85.2	$1.50	$0.30	$127.80	$426.00
2-12	917	945	10	28	280	16.8	$1.50	$0.30	$25.20	$84.00
2-13	945	1300	10	355	3550	213	$1.50	$0.30	$319.50	$1,065.00
2-14	1300	1350	10	50	500	30	$1.50	$0.30	$45.00	$150.00
2-15	1400	1449	10	49	490	29.4	$1.50	$0.30	$44.10	$147.00
2-16	1449	1484	10	35	350	21	$1.50	$0.30	$31.50	$105.00
2-17	1484	1832	10	348	3480	208.8	$1.50	$0.30	$313.20	$1,044.00
2-18	1832	2428	10	596	5960	357.6	$1.50	$0.30	$536.40	$1,788.00
2-19	2428	2523	10	95	950	57	$1.50	$0.30	$85.50	$285.00
2-20	2523	2650	10	127	1270	76.2	$1.50	$0.30	$114.30	$381.00
2-21	2650	2740	10	90	900	54	$1.50	$0.30	$81.00	$270.00
2-22	2740	2807	10	67	670	40.2	$1.50	$0.30	$60.30	$201.00
2-23	2807	2838	10	31	310	18.6	$1.50	$0.30	$27.90	$93.00
								Individual Costs =	$2,481.30	$7,863.60
								Overall Cost =	$10,344.90	

Whitefish Bike/Ped Maintenance Plan

Repair Costs (Overlays)

2-5				
PASER Rating	5			
Segment Start (Feet)	195			
Asphalt Width (Feet) =	8			
Asphalt Depth (Inches)=	1.5			
Sub Segment Length (Feet)=	165			
Item	**Unit Price**	**Unit**	**Quantity**	**Estimated Cost**
Pavement	$250.00	Ton	13	$3,250.00

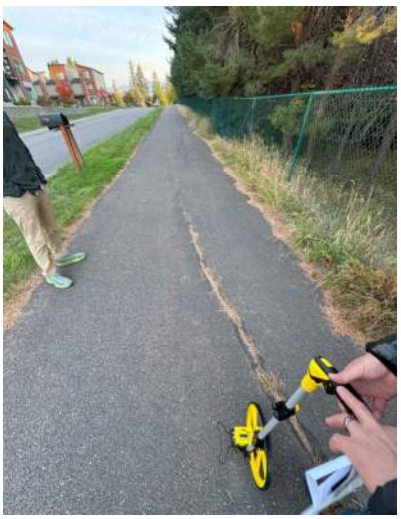
2-7				
PASER Rating	5			
Segment Start (Feet)	600			
Asphalt Width (Feet) =	8			
Asphalt Depth (Inches)=	1.5			
Sub Segment Length (Feet)=	79			
Item	**Unit Price**	**Unit**	**Quantity**	**Estimated Cost**
Pavement	$250.00	Ton	6	$1,500.00

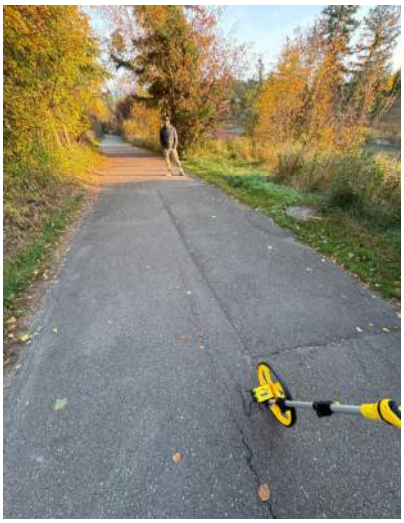
2-10				
PASER Rating	5			
Segment Start (Feet)	765			
Asphalt Width (Feet) =	10			
Asphalt Depth (Inches)=	1.5			
Sub Segment Length (Feet)=	10			
Item	**Unit Price**	**Unit**	**Quantity**	**Estimated Cost**
Pavement	$250.00	Ton	1	$250.00

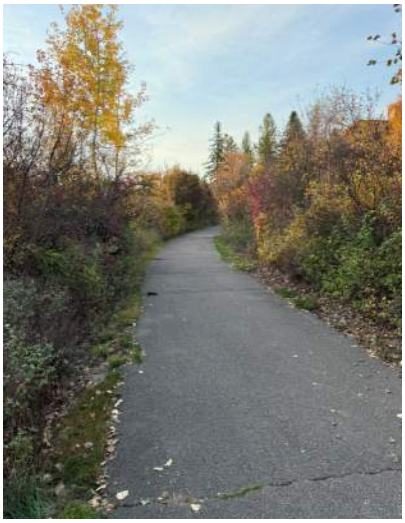
2-12 to 2-15				
PASER Rating	5			
Segment Start (Feet)	917			
Asphalt Width (Feet) =	10			
Asphalt Depth (Inches)=	1.5			
Sub Segment Length (Feet)=	482			
Item	**Unit Price**	**Unit**	**Quantity**	**Estimated Cost**
Pavement	$250.00	Ton	45	$11,250.00

2-18 to 2-20				
PASER Rating	5			
Segment Start (Feet)	1832			
Asphalt Width (Feet) =	10			
Asphalt Depth (Inches)=	1.5			
Sub Segment Length (Feet)=	818			
Item	**Unit Price**	**Unit**	**Quantity**	**Estimated Cost**
Pavement	$250.00	Ton	75	$18,750.00

2-22 to 2-23				
PASER Rating	6			
Segment Start (Feet)	2740			
Asphalt Width (Feet) =	10			
Asphalt Depth (Inches)=	1.5			
Sub Segment Length (Feet)=	98			
Item	**Unit Price**	**Unit**	**Quantity**	**Estimated Cost**
Pavement	$250.00	Ton	9	$2,250.00







Whitefish Bike/Ped Maintenance Plan

Repair Costs (Reconstruction)

2-2

Surface Defect Notes	STMH w/ trans crack. Settlement issues. Tripping hazard	
PASER Rating	3	
Segment Start	110	
Asphalt Width (Feet) =	8	
Asphalt Depth (Inches)=	3	Per City Standards
Gravel Width (Feet) =	10	Included 1-foot wide shoulders
Gravel Depth (Inches) =	9	Per City Standards
Sub Segment Length (Feet)=	10	
Topsoil Sholder Width (Feet) =	2	
Topsoil Sholder Depth (Inches) =	4	

Item	Unit Price	Unit	Quantity	Estimated Cost
Asphalt Removal	$2.50	Square Foot	80	$200.00
Excavation	$60.00	Cubic Yard	4	$240.00
Fabric	$0.35	Square Foot	100	$35.00
Base Course Gravel	$100.00	Cubic Yard	3	$300.00
Pavement	$250.00	Ton	2	$500.00
Topsoil	$100.00	Cubic Yard	1	$100.00
Hydroseeding	$0.50	Square Foot	40	$20.00
			Total =	$1,395.00

Whitefish Bike/Ped Maintenance Plan

Repair Costs (Reconstruction)

2-4

Surface Defect Notes	STMH has settlement around tripping hazard	
PASER Rating	3	
Segment Start	162	
Asphalt Width (Feet) =	8	
Asphalt Depth (Inches)=	3	Per City Standards
Gravel Width (Feet) =	10	Included 1-foot wide shoulders
Gravel Depth (Inches) =	9	Per City Standards
Sub Segment Length (Feet)=	33	
Topsoil Sholder Width (Feet) =	2	
Topsoil Sholder Depth (Inches) =	4	

Item	Unit Price	Unit	Quantity	Estimated Cost
Asphalt Removal	$2.50	Square Foot	264	$660.00
Excavation	$60.00	Cubic Yard	13	$780.00
Fabric	$0.35	Square Foot	330	$115.50
Base Course Gravel	$100.00	Cubic Yard	10	$1,000.00
Pavement	$250.00	Ton	5	$1,250.00
Topsoil	$100.00	Cubic Yard	2	$200.00
Hydroseeding	$0.50	Square Foot	132	$66.00
			Total =	$4,071.50

Whitefish Bike/Ped Maintenance Plan

Repair Costs (Reconstruction)

JP Road Crossing

Surface Defect Notes	Intersection Not ADA. Cost estimate accounts for reconstructing both sides	
PASER Rating	0	
Segment Start	0	
Asphalt Width (Feet) =	8	
Asphalt Depth (Inches)=	3	Per City Standards
Gravel Width (Feet) =	10	Included 1-foot wide shoulders
Gravel Depth (Inches) =	9	Per City Standards
Sub Segment Length (Feet)=	32	
Topsoil Sholder Width (Feet) =	2	
Topsoil Sholder Depth (Inches) =	4	

Item	Unit Price	Unit	Quantity	Estimated Cost
Asphalt Removal	$2.50	Square Foot	288	$720.00
Excavation	$60.00	Cubic Yard	11	$660.00
Base Course Gravel	$100.00	Cubic Yard	11	$1,100.00
Concrete Flatwork	$20.00	Square Foot	288	$5,760.00
Detectable Warnings	$75.00	Square Foot	16	$1,200.00
Topsoil	$100.00	Cubic Yard	2	$200.00
Hydroseeding	$0.50	Square Foot	128	$64.00
			Total =	$9,704.00

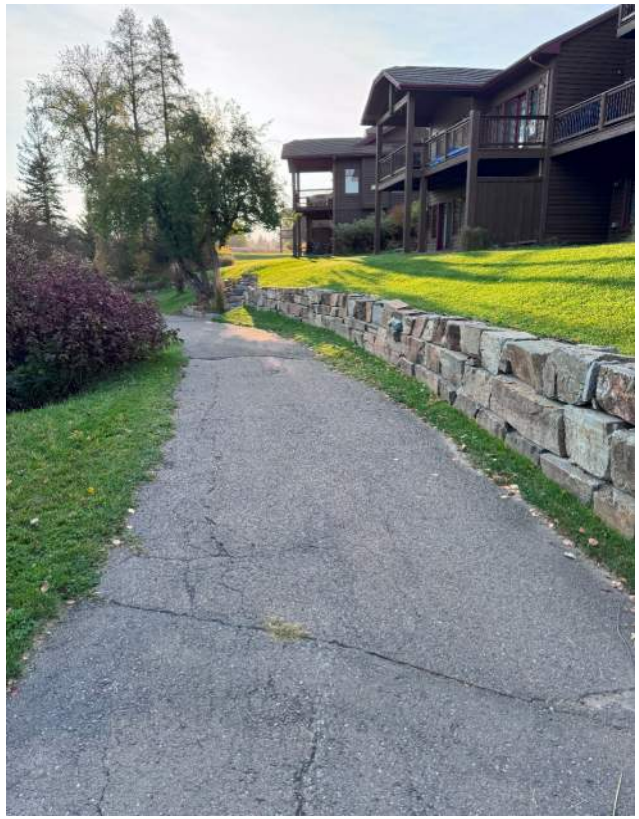
Whitefish Bike/Ped Maintenance Plan

Repair Costs (Reconstruction)

2-17

Surface Defect Notes	Recent repair patch	
PASER Rating	4	
Segment Start	1484	
Asphalt Width (Feet) =	10	
Asphalt Depth (Inches)=	3	Per City Standards
Gravel Width (Feet) =	12	Included 1-foot wide shoulders
Gravel Depth (Inches) =	9	Per City Standards
Sub Segment Length (Feet)=	348	
Topsoil Sholder Width (Feet) =	2	
Topsoil Sholder Depth (Inches) =	4	

Item	Unit Price	Unit	Quantity	Estimated Cost
Asphalt Removal	$2.50	Square Foot	3480	$8,700.00
Excavation	$60.00	Cubic Yard	155	$9,300.00
Fabric	$0.35	Square Foot	4176	$1,461.60
Base Course Gravel	$100.00	Cubic Yard	116	$11,600.00
Pavement	$250.00	Ton	64	$16,000.00
Topsoil	$100.00	Cubic Yard	18	$1,800.00
Hydroseeding	$0.50	Square Foot	1392	$696.00
			Total =	$49,557.60



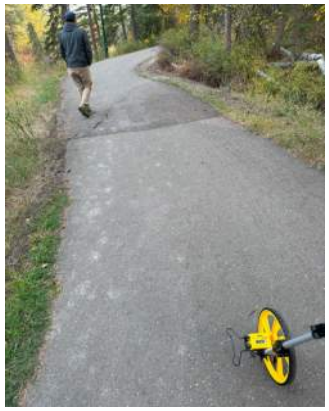
Whitefish Bike/Ped Maintenance Plan

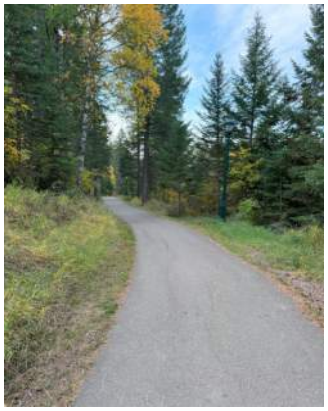
Summary Sheet

Path Name:	Monegan/Rocksund
Path Number:	3
PASAR Rating (Weighted Average):	7.3
Length (Feet):	3823

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	PASER Rating	Surface Defect Notes	Local Project	Notes
3-1	0	567	8	567	8	Slight trans & longitudinal cracks starting. 492' settlement on west shoulder		Starts at east of south Whitefish River Bridge
3-2	567	682	8	115	3	Whole section is slid down about 6-8" . Possibly move path behind failure plane	Reconstruction	
3-3	682	870	8	188	7	Slight center cracking starting		
3-4	870	2120	8	1250	8	Transverse cracks. Minor longitudinal cracks starting		
3-5	2120	2190	8	70	9			
3-6	2190	2207	8	17	5	West side settled ~4", thin overlay	Nonstructural Overlay	
3-7	2207	2337	8	130	8			
3-8	2337	2634	10	297	7	Start of alligator, 3" wide transverse cracks. Trench Patches		
3-9	2634	3183	10	549	5	Edge cracking starting, transverse 3"	Nonstructural Overlay	
3-10	3183	3823	10	640	8	Slight settlement, some transverse cracking		Ends at Monegan Road

Item	Unit Price	Unit	Maintenance Activity	Notes
Fog Seal	$0.30	Square Foot	Fog Seal Maintenance	MDT Bid Tabs....
Asphalt Removal	$2.50	Square Foot	Asphalt Reconsturction	CoK Bid Tabs...
Excavation	$60.00	Cubic Yard	Asphalt Reconsturction	
Fabric	$0.35	Square Foot	Asphalt Reconsturction	CoW Bid Tabs
Base Course Gravel	$100.00	Cubic Yard	Asphalt Reconsturction	
Pavement	$250.00	Ton	Asphalt Reconsturction	
Topsoil	$100.00	Cubic Yard	Asphalt Reconsturction	
Hydroseeding	$0.50	Square Foot	Asphalt Reconsturction	
Crack Seal	$1.50	Linear Foot		
Concrete Removal	$5.00	Square Foot	ADA Ramp Reconstruction	_05032021-617
Excavation	$60.00	Cubic Yard	ADA Ramp Reconstruction	
Base Course Gravel	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Concrete Flatwork	$20.00	Square Foot	ADA Ramp Reconstruction	
Detectable Warnings	$100.00	Square Foot	ADA Ramp Reconstruction	
Topsoil	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Hydroseeding	$0.50	Square Foot	ADA Ramp Reconstruction	





Whitefish Bike/Ped Maintenance Plan

Maintenance Costs (Fog & Crack Seal)

Path Name:	Monegan/Rocksund
Path Number:	3
PASAR Rating (Average):	7.3
Length (Feet):	3823
% Crack length/Path length	60.00%

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	Area (Square Feet)	Crack Lengths (LF)	Crack Seal ($/LF)	Fog Seal ($/SF)	Segment Crack Seal Estimated Costs (2025)	Segment Fog Seal Estimated Costs (2025
3-1	0	567	8	567	4536	340	$1.50	$0.30	$510.30	$1,360.80
3-2	567	682	8	115	920	69	$1.50	$0.30	$103.50	$276.00
3-3	682	870	8	188	1504	113	$1.50	$0.30	$169.20	$451.20
3-4	870	2120	8	1250	10000	750	$1.50	$0.30	$1,125.00	$3,000.00
3-5	2120	2190	8	70	560	42	$1.50	$0.30	$63.00	$168.00
3-6	2190	2207	8	17	136	10	$1.50	$0.30	$15.30	$40.80
3-7	2207	2337	8	130	1040	78	$1.50	$0.30	$117.00	$312.00
3-8	2337	2634	10	297	2970	178	$1.50	$0.30	$267.30	$891.00
3-9	2634	3183	10	549	5490	329	$1.50	$0.30	$494.10	$1,647.00
3-10	3183	3823	10	640	6400	384	$1.50	$0.30	$576.00	$1,920.00
								Individual Costs =	$3,440.70	$10,066.80
								Overall Cost =	$13,507.50	

Whitefish Bike/Ped Maintenance Plan

Repair Costs (Overlays)

3-6					
PASER Rating	5				
Segment Start (Feet)	2190				
Asphalt Width (Feet) =	8				
Asphalt Depth (Inches)=	1.5				
Sub Segment Length (Feet)=	17				
Item	**Unit Price**	**Unit**	**Quantity**	**Estimated Cost**	
Pavement	$250.00	Ton	2	$500.00	

3-9					
PASER Rating	5				
Segment Start (Feet)	2634				
Asphalt Width (Feet) =	10				
Asphalt Depth (Inches)=	1.5				
Sub Segment Length (Feet)=	549				
Item	**Unit Price**	**Unit**	**Quantity**	**Estimated Cost**	
Pavement	$250.00	Ton	51	$12,750.00	

Whitefish Bike/Ped Maintenance Plan

Repair Costs (Reconstruction)

3-2

Surface Defect Notes	Whole section is slid down about 6-8" . Possibly move path behind failure plane	
PASER Rating	3	
Segment Start	567	
Asphalt Width (Feet) =	8	
Asphalt Depth (Inches)=	3	Per City Standards
Gravel Width (Feet) =	10	Included 1-foot wide shoulders
Gravel Depth (Inches) =	9	Per City Standards
Sub Segment Length (Feet)=	115	
Topsoil Sholder Width (Feet) =	2	
Topsoil Sholder Depth (Inches) =	4	

Item	Unit Price	Unit	Quantity	Estimated Cost
Asphalt Removal	$2.50	Square Foot	920	$2,300.00
Excavation	$60.00	Cubic Yard	43	$2,580.00
Fabric	$0.35	Square Foot	1150	$402.50
Base Course Gravel	$100.00	Cubic Yard	32	$3,200.00
Pavement	$250.00	Ton	17	$4,250.00
Topsoil	$100.00	Cubic Yard	6	$600.00
Hydroseeding	$0.50	Square Foot	460	$230.00
			Total =	$13,562.50

Whitefish Bike/Ped Maintenance Plan

Summary Sheet

Path Name:	Monegan/Rocksund
Path Number:	4
PASAR Rating (Weighted Average):	7.9
Length (Feet):	1807

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	PASER Rating	Surface Defect Notes	Local Project	Notes
4-1	0	1430	8	1430	8	Looks good ~3 years old		Starts at intersection with Path #3
4-2	1430	1500	8	70	6	Transverse crack. Start alligator at 1473'. Pothole (very thin asphalt)	Non Structural Overlay	
4-3	1500	1807	8	307	8			Ends at intersection of Voerman & Creekwood

Item	Unit Price	Unit	Maintenance Activity	Notes
Fog Seal	$0.30	Square Foot	Fog Seal Maintenance	MDT Bid Tabs....
Asphalt Removal	$2.50	Square Foot	Asphalt Reconsturction	CoK Bid Tabs...
Excavation	$60.00	Cubic Yard	Asphalt Reconsturction	
Fabric	$0.35	Square Foot	Asphalt Reconsturction	CoW Bid Tabs
Base Course Gravel	$100.00	Cubic Yard	Asphalt Reconsturction	
Pavement	$250.00	Ton	Asphalt Reconsturction	
Topsoil	$100.00	Cubic Yard	Asphalt Reconsturction	
Hydroseeding	$0.50	Square Foot	Asphalt Reconsturction	
Crack Seal	$1.50	Linear Foot		
Concrete Removal	$5.00	Square Foot	ADA Ramp Reconstruction	05032021-617
Excavation	$60.00	Cubic Yard	ADA Ramp Reconstruction	
Base Course Gravel	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Concrete Flatwork	$20.00	Square Foot	ADA Ramp Reconstruction	
Detectable Warnings	$100.00	Square Foot	ADA Ramp Reconstruction	
Topsoil	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Hydroseeding	$0.50	Square Foot	ADA Ramp Reconstruction	

Whitefish Bike/Ped Maintenance Plan

Maintenance Costs (Fog & Crack Seal)

Path Name:	Monegan/Rocksund
Path Number:	4
PASAR Rating (Average):	7.9
Length (Feet):	1807
% Crack length/Path length	60.00%

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	Area (Square Feet)	Crack Lengths (LF)	Crack Seal ($/LF)	Fog Seal ($/SF)	Segment Crack Seal Estimated Costs (2025)	Segment Fog Seal Estimated Costs (2025
4-1	0	1430	8	1430	11440	858	$1.50	$0.30	$1,287.00	$3,432.00
4-2	1430	1500	8	70	560	42	$1.50	$0.30	$63.00	$168.00
4-3	1500	1807	8	307	2456	184.2	$1.50	$0.30	$276.30	$736.80
								Individual Costs =	$1,626.30	$4,336.80
								Overall Cost =	$5,963.10	

Repair Costs (Overlays)

4-2					
PASER Rating	6				
Segment Start (Feet)	1430				
Asphalt Width (Feet) =	8				
Asphalt Depth (Inches)=	1.5				
Sub Segment Length (Feet)=	70				
Item	**Unit Price**	**Unit**	**Quantity**		**Estimated Cost**
Pavement	$250.00	Ton		6	$1,500.00

Whitefish Bike/Ped Maintenance Plan

Summary Sheet

Path Name:	River Trail
Path Number:	5
PASAR Rating (Weighted Average):	5.8
Length (Feet):	2357

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	PASER Rating	Surface Defect Notes	Local Project	Notes
5-1	0	375	10	375	6	92' Root in Path. 162' Creek culvert bump 189' rough	Nonstructural Overlay	Started at north (Spruce Ct) and went south
5-2	375	415	10	40	6	Settlement splotches & roots	Nonstructural Overlay	
5-3	415	504	10	89	7	Starting transverse cracks. Raveling		
5-4	504	554	10	50	6	Roots causing issues	Nonstructural Overlay	
5-5	554	760	10	206	2	Large eastern settlement Edge cracking	Reconstruction	
5-6	760	860	10	100	6	settlement		
5-7	860	1051	10	191	5	Eastern shoulder depressed. Longitudinal cracking	Nonstructural Overlay	
5-8	1051	1254	10	203	6	Longitudinal cracking whole way		
5-9	1254	1524	8	270	7	1524- failure plane in front of houses		
5-10	1524	1622	8	98	4	Alligator cracking. Edge cracking	Reconstruction	End at Clearwater Dr.
5-11	0	392	8	392	5	Longitudinal cracking. Edge cracking. Thin overlay. 300' trench patch	Nonstructural Overlay	Start at wye in front of 729 Clearwater, then took lower path
5-12	392	735	10	343	8	410 culvert hump (Include in above overlay)		End at southern dead end

Item	Unit Price	Unit	Maintenance Activity	Notes
Fog Seal	$0.30	Square Foot	Fog Seal Maintenance	MDT Bid Tabs....
Asphalt Removal	$2.50	Square Foot	Asphalt Reconsturction	CoK Bid Tabs...
Excavation	$60.00	Cubic Yard	Asphalt Reconsturction	
Fabric	$0.35	Square Foot	Asphalt Reconsturction	CoW Bid Tabs
Base Course Gravel	$100.00	Cubic Yard	Asphalt Reconsturction	
Pavement	$250.00	Ton	Asphalt Reconsturction	
Topsoil	$100.00	Cubic Yard	Asphalt Reconsturction	
Hydroseeding	$0.50	Square Foot	Asphalt Reconsturction	
Crack Seal	$1.50	Linear Foot		
Concrete Removal	$5.00	Square Foot	ADA Ramp Reconstruction	_05032021-617
Excavation	$60.00	Cubic Yard	ADA Ramp Reconstruction	
Base Course Gravel	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Concrete Flatwork	$20.00	Square Foot	ADA Ramp Reconstruction	
Detectable Warnings	$100.00	Square Foot	ADA Ramp Reconstruction	
Topsoil	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Hydroseeding	$0.50	Square Foot	ADA Ramp Reconstruction	

Whitefish Bike/Ped Maintenance Plan

Maintenance Costs (Fog & Crack Seal)

Path Name:	River Trail
Path Number:	5
PASAR Rating (Average):	5.763258379
Length (Feet):	2357
% Crack length/Path length	60.00%

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	Area (Square Feet)	Crack Lengths (LF)	Crack Seal ($/LF)	Fog Seal ($/SF)	Segment Crack Seal Estimated Costs (2025)	Segment Fog Seal Estimated Costs (2025
5-1	0	375	10	375	3750	225	$1.50	$0.30	$337.50	$1,125.00
5-2	375	415	10	40	400	24	$1.50	$0.30	$36.00	$120.00
5-3	415	504	10	89	890	53.4	$1.50	$0.30	$80.10	$267.00
5-4	504	554	10	50	500	30	$1.50	$0.30	$45.00	$150.00
5-5	554	760	10	206	2060	123.6	$1.50	$0.30	$185.40	$618.00
5-6	760	860	10	100	1000	60	$1.50	$0.30	$90.00	$300.00
5-7	860	1051	10	191	1910	114.6	$1.50	$0.30	$171.90	$573.00
5-8	1051	1254	8	203	1624	121.8	$1.50	$0.30	$182.70	$487.20
5-9	1254	1524	8	270	2160	162	$1.50	$0.30	$243.00	$648.00
5-10	1524	1622	8	98	784	58.8	$1.50	$0.30	$88.20	$235.20
5-11	0	392	10	392	3920	235.2	$1.50	$0.30	$352.80	$1,176.00
5-12	392	735	0	343	0	205.8	$1.50	$0.30	$308.70	$0.00
								Individual Costs =	$2,121.30	$5,699.40
								Overall Cost =	$7,820.70	

Whitefish Bike/Ped Maintenance Plan

Repair Costs (Overlays)

5-1 to 5-2					
PASER Rating	6				
Segment Start (Feet)	0				
Asphalt Width (Feet) =	10				
Asphalt Depth (Inches)=	1.5				
Sub Segment Length (Feet)=	415				
Item	**Unit Price**	**Unit**	**Quantity**		**Estimated Cost**
Pavement	$250.00	Ton		39	$9,750.00

5-4					
PASER Rating	6				
Segment Start (Feet)	504				
Asphalt Width (Feet) =	10				
Asphalt Depth (Inches)=	1.5				
Sub Segment Length (Feet)=	50				
Item	**Unit Price**	**Unit**	**Quantity**		**Estimated Cost**
Pavement	$250.00	Ton		5	$1,250.00

5-7					
PASER Rating	5				
Segment Start (Feet)	860				
Asphalt Width (Feet) =	10				
Asphalt Depth (Inches)=	1.5				
Sub Segment Length (Feet)=	191				
Item	**Unit Price**	**Unit**	**Quantity**		**Estimated Cost**
Pavement	$250.00	Ton		18	$4,500.00

5-11					
PASER Rating	5				
Segment Start (Feet)	0				
Asphalt Width (Feet) =	8				
Asphalt Depth (Inches)=	1.5				
Sub Segment Length (Feet)=	392				
Item	**Unit Price**	**Unit**	**Quantity**		**Estimated Cost**
Pavement	$250.00	Ton		29	$7,250.00

Engineers Opinion of Probable Cost
Whitefish River Trail Repair, Whitefish, MT
Revised 9/18/23 by CLB

Robert Peccia & Associates, Inc.
*3147 Saddle Drive * Helena * Montana * (406) 447-5000*
*102 Cooperative Way, Suite 300 * Kalispell * Montana * (406) 752-5025*
*602 S. Ferguson Avenue, Suite 5 * Bozeman * Montana (406) 284-2110*

Item No.	Quantity	Unit	Unit Description	Engineer's Estimate Unit Price (Figures)	Engineer's Estimate Total Price (Figures)
BASE BID					
1	**1**	LS	Mobilization, Bonding and Submittals (10% max)	$3,400.00	$3,400.00
2	**1**	LS	Construction Surveys	$2,000.00	$2,000.00
3	**1**	LS	Material Testing	$2,000.00	$2,000.00
4	**1**	LS	Erosion Control	$2,000.00	$2,000.00
5	**172**	SY	Asphalt Removal	$10.00	$1,720.00
6	**1**	LS	Excavation and Embankment	$6,600.00	$6,600.00
7	**390**	SY	Stabilization Fabric	$2.00	$780.00
8	**390**	SY	Geogrid	$4.00	$1,560.00
9	**80**	CY	Crushed Subbase Course - 1-1/2" Minus	$75.00	$6,000.00
10	**33**	TON	Asphalt Concrete Pavement	$300.00	$9,900.00
11	**14**	CY	Import Topsoil (3" Thick)	$75.00	$1,050.00
12	**1,500**	SF	Hydroseeding	$0.30	$450.00
13	**1**	LS	Contingency (20%)	$7,500.00	$7,500.00
TOTAL OPINION OF PROBABLE COSTS (ROUNDED):					**$45,000.00**

Whitefish Bike/Ped Maintenance Plan

Repair Costs (Reconstruction)

5-10

Surface Defect Notes	Alligator cracking. Edge cracking	
PASER Rating	4	
Segment Start	1524	
Asphalt Width (Feet) =	8	
Asphalt Depth (Inches)=	3	Per City Standards
Gravel Width (Feet) =	10	Included 1-foot wide shoulders
Gravel Depth (Inches) =	9	Per City Standards
Sub Segment Length (Feet)=	98	
Topsoil Sholder Width (Feet) =	2	
Topsoil Sholder Depth (Inches) =	4	

Item	Unit Price	Unit	Quantity	Estimated Cost
Asphalt Removal	$2.50	Square Foot	784	$1,960.00
Excavation	$60.00	Cubic Yard	37	$2,220.00
Fabric	$0.35	Square Foot	980	$343.00
Base Course Gravel	$100.00	Cubic Yard	28	$2,800.00
Pavement	$250.00	Ton	15	$3,750.00
Topsoil	$100.00	Cubic Yard	5	$500.00
Hydroseeding	$0.50	Square Foot	392	$196.00
			Total =	$11,769.00

Whitefish Bike/Ped Maintenance Plan
Summary Sheet

Path Name:	River Trail
Path Number:	6
PASAR Rating (Weighted Average):	7.0
Length (Feet):	114

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	PASER Rating	Surface Defect Notes	Local Project	Notes
5-1		0	114	10	114	7 Couple Cracks. Seal coat?		Start and End below Duck Inn

Item	Unit Price	Unit	Maintenance Activity	Notes
Fog Seal	$0.30	Square Foot	Fog Seal Maintenance	MDT Bid Tabs....
Asphalt Removal	$2.50	Square Foot	Asphalt Reconsturction	CoK Bid Tabs...
Excavation	$60.00	Cubic Yard	Asphalt Reconsturction	
Fabric	$0.35	Square Foot	Asphalt Reconsturction	CoW Bid Tabs
Base Course Gravel	$100.00	Cubic Yard	Asphalt Reconsturction	
Pavement	$250.00	Ton	Asphalt Reconsturction	
Topsoil	$100.00	Cubic Yard	Asphalt Reconsturction	
Hydroseeding	$0.50	Square Foot	Asphalt Reconsturction	
Crack Seal	$1.50	Linear Foot		
Concrete Removal	$5.00	Square Foot	ADA Ramp Reconstruction	_05032021-617
Excavation	$60.00	Cubic Yard	ADA Ramp Reconstruction	
Base Course Gravel	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Concrete Flatwork	$20.00	Square Foot	ADA Ramp Reconstruction	
Detectable Warnings	$100.00	Square Foot	ADA Ramp Reconstruction	
Topsoil	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Hydroseeding	$0.50	Square Foot	ADA Ramp Reconstruction	

Maintenance Costs (Fog & Crack Seal)

Path Name:	River Trail
Path Number:	6
PASAR Rating (Average):	7
Length (Feet):	114
% Crack length/Path length	60.00%

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	Area (Square Feet)	Crack Lengths (LF)	Crack Seal ($/LF)	Fog Seal ($/SF)	Segment Crack Seal Estimated Costs (2025)	Segment Fog Seal Estimated Costs (2025
5-1	0	114	10	114	1140	68.4	$1.50	$0.30	$102.60	$342.00
								Individual Costs =	$102.60	$342.00
								Overall Cost =	$444.60	

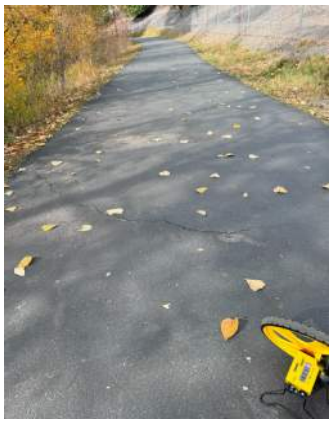
Whitefish Bike/Ped Maintenance Plan

Summary Sheet

Path Name:	River Trail
Path Number:	7A
PASAR Rating (Weighted Average):	6.9
Length (Feet):	4661

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	PASER Rating	Surface Defect Notes	Local Project	Notes
7A-1	0	50	11	50	5	Alligator cracking due to settlement	Reconstruction	Start @ Baker & Railway St.
7A-2	50	516	10	466	9	230' transverse crack. 400' ramp is rated 9		
7A-3	516	560	10	44	6	Ponding and transverse cracks	Overlay	
7A-4	560	1050	10	490	8	675' transverse, 710 transverse, 725 exit has trans cracks 750' trans, 885' crack & gouge		
7A-5	1050	1300	9	250	8	Crossing at 1222' very bad alligator		
7A-6	1300	1435	10	135	5	Edge cracking, transverse cracks	Overlay	
7A-7	1435	1505	10	70	7	Could use seal coat, color suggests it hasn't for a while		
7A-8	1505	2120	10	615	8	1615' rough patch. 1925' gouge marks ¼" – ½" deep		
7A-9	2120	2160	10	40	6	Edge cracking, wheel path settlement (driveway). Rough texture	Reconstruction	
7A-10	2160	2362	10	202	8	Periodic transverse		
7A-11	2362	2433	10	71	6	Seal coated, but appears depressed on left, SW side.		
7A-12	2433	2848	10	415	9			
7A-13	2848	2868	10	20	6	2835' – S is depressed. Has been patched before.		
7A-14	2868	3083	10	215	7	2950 – root hump & ponding. Trans cracks. Some slight ponding		
7A-15	3083	3150	10	67	4	Big root humps. Bridge starts @ 3150	Reconstruction	
Boardwallk	3150	3377		227				
7A-16	3377	3567	10	190	7	3410' south side depressed. 3455' west side sloughing. Under structure.		
7A-17	3567	3755	10	188	5	West edge is depressed. Center longitudinal cracking	Reconstruction	
7A-18	3755	4190	10	435	8	3830 – patch next to STMH. 3970 – S side slough a bit. Bridge @ 419(		
Pedestrian Bridge	4190	4437		247				
7A-19	4437	4661	10	224	8	No Cracks Present		End at Birch Point Rd Culdesac

Item	Unit Price	Unit	Maintenance Activity	Notes
Fog Seal	$0.30	Square Foot	Fog Seal Maintenance	MDT Bid Tabs....
Asphalt Removal	$2.50	Square Foot	Asphalt Reconsturction	CoK Bid Tabs...
Excavation	$60.00	Cubic Yard	Asphalt Reconsturction	
Fabric	$0.35	Square Foot	Asphalt Reconsturction	CoW Bid Tabs
Base Course Gravel	$100.00	Cubic Yard	Asphalt Reconsturction	
Pavement	$250.00	Ton	Asphalt Reconsturction	
Topsoil	$100.00	Cubic Yard	Asphalt Reconsturction	
Hydroseeding	$0.50	Square Foot	Asphalt Reconsturction	
Crack Seal	$1.50	Linear Foot		
Concrete Removal	$5.00	Square Foot	ADA Ramp Reconstruction	_05032021-617
Excavation	$60.00	Cubic Yard	ADA Ramp Reconstruction	
Base Course Gravel	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Concrete Flatwork	$20.00	Square Foot	ADA Ramp Reconstruction	
Detectable Warnings	$100.00	Square Foot	ADA Ramp Reconstruction	
Topsoil	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Hydroseeding	$0.50	Square Foot	ADA Ramp Reconstruction	



Whitefish Bike/Ped Maintenance Plan

Maintenance Costs (Fog & Crack Seal)

Path Name:	River Trail
Path Number:	7A
PASAR Rating (Average):	6.9
Length (Feet):	4661
% Crack length/Path length	60.00%

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	Area (Square Feet)	Crack Lengths (LF)	Crack Seal ($/LF)	Fog Seal ($/SF)	Segment Crack Seal Estimated Costs (2025)	Segment Fog Seal Estimated Costs (2025
7A-1	0	50	11	50	550	30	$1.50	$0.30	$45.00	$165.00
7A-2	50	516	10	466	4660	279.6	$1.50	$0.30	$419.40	$1,398.00
7A-3	516	560	10	44	440	26.4	$1.50	$0.30	$39.60	$132.00
7A-4	560	1050	10	490	4900	294	$1.50	$0.30	$441.00	$1,470.00
7A-5	1050	1300	9	250	2250	150	$1.50	$0.30	$225.00	$675.00
7A-6	1300	1435	10	135	1350	81	$1.50	$0.30	$121.50	$405.00
7A-7	1435	1505	10	70	700	42	$1.50	$0.30	$63.00	$210.00
7A-8	1505	2120	10	615	6150	369	$1.50	$0.30	$553.50	$1,845.00
7A-9	2120	2160	10	40	400	24	$1.50	$0.30	$36.00	$120.00
7A-10	2160	2362	10	202	2020	121.2	$1.50	$0.30	$181.80	$606.00
7A-11	2362	2433	10	71	710	42.6	$1.50	$0.30	$63.90	$213.00
7A-12	2433	2848	10	415	4150	249	$1.50	$0.30	$373.50	$1,245.00
7A-13	2848	2868	10	20	200	12	$1.50	$0.30	$18.00	$60.00
7A-14	2868	3083	10	215	2150	129	$1.50	$0.30	$193.50	$645.00
7A-15	3083	3150	10	67	670	40.2	$1.50	$0.30	$60.30	$201.00
7A-16	3377	3567	10	190	1900	114	$1.50	$0.30	$171.00	$570.00
7A-17	3567	3755	10	188	1880	112.8	$1.50	$0.30	$169.20	$564.00
7A-18	3755	4190	10	435	4350	261	$1.50	$0.30	$391.50	$1,305.00
7A-19	4437	4661	10	224	2240	134.4	$1.50	$0.30	$201.60	$672.00
								Individual Costs =	$3,768.30	$12,501.00
								Overall Cost =	$16,269.30	

Whitefish Bike/Ped Maintenance Plan

Repair Costs (Overlays)

7A-3					
PASER Rating	6				
Segment Start (Feet)	516				
Asphalt Width (Feet) =	10				
Asphalt Depth (Inches)=	1.5				
Sub Segment Length (Feet)=	44				
Item	**Unit Price**	**Unit**	**Quantity**	**Estimated Cost**	
Pavement	$250.00	Ton	5		$1,250.00

7A-6					
PASER Rating	5				
Segment Start (Feet)	1300				
Asphalt Width (Feet) =	10				
Asphalt Depth (Inches)=	1.5				
Sub Segment Length (Feet)=	135				
Item	**Unit Price**	**Unit**	**Quantity**	**Estimated Cost**	
Pavement	$250.00	Ton	13		$3,250.00

Whitefish Bike/Ped Maintenance Plan

Repair Costs (Reconstruction)

7A-1

Surface Defect Notes	Alligator cracking due to settlement	
PASER Rating	5	
Segment Start	0	
Asphalt Width (Feet) =	11	
Asphalt Depth (Inches)=	3	Per City Standards
Gravel Width (Feet) =	13	Included 1-foot wide shoulders
Gravel Depth (Inches) =	9	Per City Standards
Sub Segment Length (Feet)=	50	
Topsoil Sholder Width (Feet) =	2	
Topsoil Sholder Depth (Inches) =	4	

Item	Unit Price	Unit	Quantity	Estimated Cost
Asphalt Removal	$2.50	Square Foot	550	$1,375.00
Excavation	$60.00	Cubic Yard	25	$1,500.00
Fabric	$0.35	Square Foot	650	$227.50
Base Course Gravel	$100.00	Cubic Yard	19	$1,900.00
Pavement	$250.00	Ton	11	$2,750.00
Topsoil	$100.00	Cubic Yard	3	$300.00
Hydroseeding	$0.50	Square Foot	200	$100.00
			Total =	$8,152.50

Whitefish Bike/Ped Maintenance Plan

Repair Costs (Reconstruction)

7A-9

Surface Defect Notes	Edge cracking, wheel path settlement (driveway). Rough texture	
PASER Rating	6	
Segment Start	2120	
Asphalt Width (Feet) =	10	
Asphalt Depth (Inches)=	3	Per City Standards
Gravel Width (Feet) =	12	Included 1-foot wide shoulders
Gravel Depth (Inches) =	9	Per City Standards
Sub Segment Length (Feet)=	40	
Topsoil Sholder Width (Feet) =	2	
Topsoil Sholder Depth (Inches) =	4	

Item	Unit Price	Unit	Quantity	Estimated Cost
Asphalt Removal	$2.50	Square Foot	400	$1,000.00
Excavation	$60.00	Cubic Yard	18	$1,080.00
Fabric	$0.35	Square Foot	480	$168.00
Base Course Gravel	$100.00	Cubic Yard	14	$1,400.00
Pavement	$250.00	Ton	8	$2,000.00
Topsoil	$100.00	Cubic Yard	2	$200.00
Hydroseeding	$0.50	Square Foot	160	$80.00
			Total =	$5,928.00

Whitefish Bike/Ped Maintenance Plan

Repair Costs (Reconstruction)

7A-15

Surface Defect Notes	Big root humps. Bridge starts @ 3150	
PASER Rating	4	
Segment Start	3083	
Asphalt Width (Feet) =	10	
Asphalt Depth (Inches)=	3	Per City Standards
Gravel Width (Feet) =	12	Included 1-foot wide shoulders
Gravel Depth (Inches) =	9	Per City Standards
Sub Segment Length (Feet)=	67	
Topsoil Sholder Width (Feet) =	2	
Topsoil Sholder Depth (Inches) =	4	

Item	Unit Price	Unit	Quantity	Estimated Cost
Asphalt Removal	$2.50	Square Foot	670	$1,675.00
Excavation	$60.00	Cubic Yard	30	$1,800.00
Fabric	$0.35	Square Foot	804	$281.40
Base Course Gravel	$100.00	Cubic Yard	23	$2,300.00
Pavement	$250.00	Ton	13	$3,250.00
Topsoil	$100.00	Cubic Yard	4	$400.00
Hydroseeding	$0.50	Square Foot	268	$134.00
			Total =	$9,840.40

Whitefish Bike/Ped Maintenance Plan

Repair Costs (Reconstruction)

7A-17

Surface Defect Notes	West edge is depressed. Center longitudinal cracking	
PASER Rating	5	
Segment Start	3567	
Asphalt Width (Feet) =	10	
Asphalt Depth (Inches)=	3	Per City Standards
Gravel Width (Feet) =	12	Included 1-foot wide shoulders
Gravel Depth (Inches) =	9	Per City Standards
Sub Segment Length (Feet)=	188	
Topsoil Sholder Width (Feet) =	2	
Topsoil Sholder Depth (Inches) =	4	

Item	Unit Price	Unit	Quantity	Estimated Cost
Asphalt Removal	$2.50	Square Foot	1880	$4,700.00
Excavation	$60.00	Cubic Yard	84	$5,040.00
Fabric	$0.35	Square Foot	2256	$789.60
Base Course Gravel	$100.00	Cubic Yard	63	$6,300.00
Pavement	$250.00	Ton	35	$8,750.00
Topsoil	$100.00	Cubic Yard	10	$1,000.00
Hydroseeding	$0.50	Square Foot	752	$376.00
			Total =	$26,955.60

Whitefish Bike/Ped Maintenance Plan

Summary Sheet

Path Name:	City Beach Loop
Path Number:	7B
PASAR Rating (Weighted Average):	8.0
Length (Feet):	200

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	PASER Rating	Surface Defect Notes	Local Project	Notes
7B-1	0	200	10	200	8	Loop up to City Beach. 200'- root like humps	Possibly around 200' mark	Start @ wye NW of bridge that leads up to Oregon Ave

Item	Unit Price	Unit	Maintenance Activity	Notes
Fog Seal	$0.30	Square Foot	Fog Seal Maintenance	MDT Bid Tabs....
Asphalt Removal	$2.50	Square Foot	Asphalt Reconsturction	CoK Bid Tabs...
Excavation	$60.00	Cubic Yard	Asphalt Reconsturction	
Fabric	$0.35	Square Foot	Asphalt Reconsturction	CoW Bid Tabs
Base Course Gravel	$100.00	Cubic Yard	Asphalt Reconsturction	
Pavement	$250.00	Ton	Asphalt Reconsturction	
Topsoil	$100.00	Cubic Yard	Asphalt Reconsturction	
Hydroseeding	$0.50	Square Foot	Asphalt Reconsturction	
Crack Seal	$1.50	Linear Foot		
Concrete Removal	$5.00	Square Foot	ADA Ramp Reconstruction	_05032021-617
Excavation	$60.00	Cubic Yard	ADA Ramp Reconstruction	
Base Course Gravel	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Concrete Flatwork	$20.00	Square Foot	ADA Ramp Reconstruction	
Detectable Warnings	$100.00	Square Foot	ADA Ramp Reconstruction	
Topsoil	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Hydroseeding	$0.50	Square Foot	ADA Ramp Reconstruction	

Whitefish Bike/Ped Maintenance Plan

Maintenance Costs (Fog & Crack Seal)

Path Name:	City Beach Loop
Path Number:	7B
PASAR Rating (Average):	8
Length (Feet):	200
% Crack length/Path length	60.00%

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	Area (Square Feet)	Crack Lengths (LF)	Crack Seal ($/LF)	Fog Seal ($/SF)	Segment Crack Seal Estimated Costs (2025)	Segment Fog Seal Estimated Costs (2025
7B-1	0	200	10	200	2000	120	$1.50	$0.30	$180.00	$600.00
								Individual Costs =	$180.00	$600.00
								Overall Cost =	$780.00	

Whitefish Bike/Ped Maintenance Plan
Summary Sheet

Path Name:	City Beach Loop
Path Number:	7C
PASAR Rating (Weighted Average):	3.7
Length (Feet):	132

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	PASER Rating	Surface Defect Notes	Local Project	Notes
7C-1	0	30	10	30	6			Upper Path along Edgewood Place on City Beach loop
7C-2	30	132	10	102	3	SW side is depressed. Appears to be slope stability issue	Reconstruction	

Item	Unit Price	Unit	Maintenance Activity	Notes
Fog Seal	$0.30	Square Foot	Fog Seal Maintenance	MDT Bid Tabs....
Asphalt Removal	$2.50	Square Foot	Asphalt Reconsturction	CoK Bid Tabs...
Excavation	$60.00	Cubic Yard	Asphalt Reconsturction	
Fabric	$0.35	Square Foot	Asphalt Reconsturction	CoW Bid Tabs
Base Course Gravel	$100.00	Cubic Yard	Asphalt Reconsturction	
Pavement	$250.00	Ton	Asphalt Reconsturction	
Topsoil	$100.00	Cubic Yard	Asphalt Reconsturction	
Hydroseeding	$0.50	Square Foot	Asphalt Reconsturction	
Crack Seal	$1.50	Linear Foot		
Concrete Removal	$5.00	Square Foot	ADA Ramp Reconstruction	05032021-617
Excavation	$60.00	Cubic Yard	ADA Ramp Reconstruction	
Base Course Gravel	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Concrete Flatwork	$20.00	Square Foot	ADA Ramp Reconstruction	
Detectable Warnings	$100.00	Square Foot	ADA Ramp Reconstruction	
Topsoil	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Hydroseeding	$0.50	Square Foot	ADA Ramp Reconstruction	

Whitefish Bike/Ped Maintenance Plan

Maintenance Costs (Fog & Crack Seal)

Path Name:	City Beach Loop
Path Number:	7C
PASAR Rating (Average):	3.681818182
Length (Feet):	132
% Crack length/Path length	60.00%

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	Area (Square Feet)	Crack Lengths (LF)	Crack Seal ($/LF)	Fog Seal ($/SF)	Segment Crack Seal Estimated Costs (2025)	Segment Fog Seal Estimated Costs (2025
7C-1	0	30	10	30	300	18	$1.50	$0.30	$27.00	$90.00
7C-2	30	132	10	102	1020	61.2	$1.50	$0.30	$91.80	$306.00
								Individual Costs =	$118.80	$396.00
								Overall Cost =	$514.80	

Whitefish Bike/Ped Maintenance Plan

Repair Costs (Reconstruction)

7C-2

Surface Defect Notes	SW side is depressed. Appears to be slope stability issue	
PASER Rating	3	
Segment Start	30	
Asphalt Width (Feet) =	10	
Asphalt Depth (Inches)=	3	Per City Standards
Gravel Width (Feet) =	12	Included 1-foot wide shoulders
Gravel Depth (Inches) =	9	Per City Standards
Sub Segment Length (Feet)=	102	
Topsoil Sholder Width (Feet) =	2	
Topsoil Sholder Depth (Inches) =	4	

Item	Unit Price	Unit	Quantity	Estimated Cost	
Asphalt Removal	$2.50	Square Foot	1020		$2,550.00
Excavation	$60.00	Cubic Yard	46		$2,760.00
Fabric	$0.35	Square Foot	1224		$428.40
Base Course Gravel	$100.00	Cubic Yard	34		$3,400.00
Pavement	$250.00	Ton	19		$4,750.00
Topsoil	$100.00	Cubic Yard	6		$600.00
Hydroseeding	$0.50	Square Foot	408		$204.00
			Total =		$14,692.40

Whitefish Bike/Ped Maintenance Plan

Summary Sheet

Path Name:	City Beach Loop
Path Number:	7D
PASAR Rating (Weighted Average):	7.0
Length (Feet):	2757

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	PASER Rating	Surface Defect Notes	Local Project	Notes
7D-1	0	74	10	74	6	Light overlay or seal most likely	Thin Overlay	Heading East from triangular intersection near railroad bridge
7D-2	74	290	10	216	7	290' transverse cracks. Light center longitudinal cracking		
7D-3	290	420	10	130	6	Edge cracking. Slight ponding on N side. 367'- transverse crack	Thin Overlay	
7D-4	420	920	10	500	8	460'- transverse. 612' – transverse. 640' root humps. 650', 730', 820' – transverse cracks		
7D-5	950	990	10	40	6	Bridge start abutment. Start longitudinal cracking. root humps.		
7D-6	990	1533	10	543	7	1027' – exit (see back) 1365' – exit (see back). Periodic thin longitudinal cracks		
7D-7	1533	2222	10	689	8	1737'- exit (see back). 2090' – driveway aligator		
7D-8	2222	2356	10	134	5	Patches over patches (In parking area)	Overlay	
7D-9	2356	2428	10	72	3	Patches of asphalt missing. Alligator and edge cracking	Reconstruction	
7D-10	2428	2787	10	359	6	Transverse cracks every ~20 ft.		End at Wisconsin Ave near north end of viaduct

Item	Unit Price	Unit	Maintenance Activity	Notes
Fog Seal	$0.30	Square Foot	Fog Seal Maintenance	MDT Bid Tabs....
Asphalt Removal	$2.50	Square Foot	Asphalt Reconsturction	CoK Bid Tabs...
Excavation	$60.00	Cubic Yard	Asphalt Reconsturction	
Fabric	$0.35	Square Foot	Asphalt Reconsturction	CoW Bid Tabs
Base Course Gravel	$100.00	Cubic Yard	Asphalt Reconsturction	
Pavement	$250.00	Ton	Asphalt Reconsturction	
Topsoil	$100.00	Cubic Yard	Asphalt Reconsturction	
Hydroseeding	$0.50	Square Foot	Asphalt Reconsturction	
Crack Seal	$1.50	Linear Foot		
Concrete Removal	$5.00	Square Foot	ADA Ramp Reconstruction	_05032021-617
Excavation	$60.00	Cubic Yard	ADA Ramp Reconstruction	
Base Course Gravel	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Concrete Flatwork	$20.00	Square Foot	ADA Ramp Reconstruction	
Detectable Warnings	$100.00	Square Foot	ADA Ramp Reconstruction	
Topsoil	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Hydroseeding	$0.50	Square Foot	ADA Ramp Reconstruction	

Whitefish Bike/Ped Maintenance Plan

Maintenance Costs (Fog & Crack Seal)

Path Name:	City Beach Loop
Path Number:	7D
PASAR Rating (Average):	7.010881393
Length (Feet):	2757
% Crack length/Path length	60.00%

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	Area (Square Feet)	Crack Lengths (LF)	Crack Seal ($/LF)	Fog Seal ($/SF)	Segment Crack Seal Estimated Costs (2025)	Segment Fog Seal Estimated Costs (2025
7D-1	0	74	10	74	740	44.4	$1.50	$0.30	$66.60	$222.00
7D-2	74	290	10	216	2160	129.6	$1.50	$0.30	$194.40	$648.00
7D-3	290	420	10	130	1300	78	$1.50	$0.30	$117.00	$390.00
7D-4	420	920	10	500	5000	300	$1.50	$0.30	$450.00	$1,500.00
7D-5	950	990	10	40	400	24	$1.50	$0.30	$36.00	$120.00
7D-6	990	1533	10	543	5430	325.8	$1.50	$0.30	$488.70	$1,629.00
7D-7	1533	2222	10	689	6890	413.4	$1.50	$0.30	$620.10	$2,067.00
7D-8	2222	2356	10	134	1340	80.4	$1.50	$0.30	$120.60	$402.00
7D-9	2356	2428	10	72	720	43.2	$1.50	$0.30	$64.80	$216.00
7D-10	2428	2787	10	359	3590	215.4	$1.50	$0.30	$323.10	$1,077.00
1027 Offshoot	1027		10	135	1350	81	$1.50	$0.30	$121.50	$405.00
1365 Offshoot	1365		10	85	850	51	$1.50	$0.30	$76.50	$255.00
1736 Offshoot	1736		10	70	700	42	$1.50	$0.30	$63.00	$210.00
								Individual Costs =	$2,742.30	$9,141.00
								Overall Cost =	$11,883.30	

Repair Costs (Overlays)

7D-1					
PASER Rating	6				
Segment Start (Feet)	0				
Asphalt Width (Feet) =	10				
Asphalt Depth (Inches)=	1.5				
Sub Segment Length (Feet)=	74				
Item	**Unit Price**	**Unit**	**Quantity**	**Estimated Cost**	
Pavement	$250.00	Ton	7	$1,750.00	

7D-3					
PASER Rating	6				
Segment Start (Feet)	290				
Asphalt Width (Feet) =	10				
Asphalt Depth (Inches)=	1.5				
Sub Segment Length (Feet)=	130				
Item	**Unit Price**	**Unit**	**Quantity**	**Estimated Cost**	
Pavement	$250.00	Ton	12	$3,000.00	

7D-8					
PASER Rating	5				
Segment Start (Feet)	2222				
Asphalt Width (Feet) =	10				
Asphalt Depth (Inches)=	1.5				
Sub Segment Length (Feet)=	134				
Item	**Unit Price**	**Unit**	**Quantity**	**Estimated Cost**	
Pavement	$250.00	Ton	13	$3,250.00	

Whitefish Bike/Ped Maintenance Plan

Repair Costs (Reconstruction)

7D-9

Surface Defect Notes	Patches of asphalt missing. Alligator and edge cracking	
PASER Rating	3	
Segment Start	2356	
Asphalt Width (Feet) =	10	
Asphalt Depth (Inches)=	3	Per City Standards
Gravel Width (Feet) =	12	Included 1-foot wide shoulders
Gravel Depth (Inches) =	9	Per City Standards
Sub Segment Length (Feet)=	72	
Topsoil Sholder Width (Feet) =	2	
Topsoil Sholder Depth (Inches) =	4	

Item	Unit Price	Unit	Quantity	Estimated Cost
Asphalt Removal	$2.50	Square Foot	720	$1,800.00
Excavation	$60.00	Cubic Yard	32	$1,920.00
Fabric	$0.35	Square Foot	864	$302.40
Base Course Gravel	$100.00	Cubic Yard	24	$2,400.00
Pavement	$250.00	Ton	14	$3,500.00
Topsoil	$100.00	Cubic Yard	4	$400.00
Hydroseeding	$0.50	Square Foot	288	$144.00
			Total =	$10,466.40

Whitefish Bike/Ped Maintenance Plan

Summary Sheet

Path Name:	North Side Paths
Path Number:	8
PASAR Rating (Weighted Average):	6.6
Length (Feet):	1627

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	PASER Rating	Surface Defect Notes	Local Project	Notes
8-1	0	169	8	169	7	Longitudinal starting periodically		Start @ Edgewood & Wisconsin Intersection
8-2	169	240	8	71	8	Some wear on surface. Cracks		
8-3	240	333	8	93	9	Recently replaced		
8-4	333	507	8	174	8	Surface wear, no cracks		
8-5	507	560	8	53	NA	Concrete. Transverse cracks every ~15'. "Ramp" to 93 could benefit from light overlay		
8-6	560	710	8	150	6	Transverse and longitudinal. Start of block cracking	Thin Overlay	
8-7	710	770	8	60	8	No cracking		
8-8	770	920	8	150	6	Longitudinal cracking	Thin Overlay	
8-9	920	1100	8	180	6	Longitudinal cracking. Some block cracking starting	Thin Overlay	
8-10	1100	1493	8	393	6	Longitudinal cracking	Thin Overlay	
8-11	1493	1627	8	134	8	Start bridge abutment		

Item	Unit Price	Unit	Maintenance Activity	Notes
Fog Seal	$0.30	Square Foot	Fog Seal Maintenance	MDT Bid Tabs....
Asphalt Removal	$2.50	Square Foot	Asphalt Reconsturction	CoK Bid Tabs...
Excavation	$60.00	Cubic Yard	Asphalt Reconsturction	
Fabric	$0.35	Square Foot	Asphalt Reconsturction	CoW Bid Tabs
Base Course Gravel	$100.00	Cubic Yard	Asphalt Reconsturction	
Pavement	$250.00	Ton	Asphalt Reconsturction	
Topsoil	$100.00	Cubic Yard	Asphalt Reconsturction	
Hydroseeding	$0.50	Square Foot	Asphalt Reconsturction	
Crack Seal	$1.50	Linear Foot		
Concrete Removal	$5.00	Square Foot	ADA Ramp Reconstruction	05032021-617
Excavation	$60.00	Cubic Yard	ADA Ramp Reconstruction	
Base Course Gravel	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Concrete Flatwork	$20.00	Square Foot	ADA Ramp Reconstruction	
Detectable Warnings	$100.00	Square Foot	ADA Ramp Reconstruction	
Topsoil	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Hydroseeding	$0.50	Square Foot	ADA Ramp Reconstruction	

Maintenance Costs (Fog & Crack Seal)

Path Name:	North Side Paths
Path Number:	8
PASAR Rating (Average):	6.6
Length (Feet):	1627
% Crack length/Path length	60.00%

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	Area (Square Feet)	Crack Lengths (LF)	Crack Seal ($/LF)	Fog Seal ($/SF)	Segment Crack Seal Estimated Costs (2025)	Segment Fog Seal Estimated Costs (2025
8-1	0	169	8	169	1352	101.4	$1.50	$0.30	$152.10	$405.60
8-2	169	240	8	71	568	42.6	$1.50	$0.30	$63.90	$170.40
8-3	240	333	8	93	744	55.8	$1.50	$0.30	$83.70	$223.20
8-4	333	507	8	174	1392	104.4	$1.50	$0.30	$156.60	$417.60
8-5	507	560	8	53	424	31.8	$1.50	$0.30	$47.70	$127.20
8-6	560	710	8	150	1200	90	$1.50	$0.30	$135.00	$360.00
8-7	710	770	8	60	480	36	$1.50	$0.30	$54.00	$144.00
8-8	770	920	8	150	1200	90	$1.50	$0.30	$135.00	$360.00
8-9	920	1100	8	180	1440	108	$1.50	$0.30	$162.00	$432.00
8-10	1100	1493	8	393	3144	235.8	$1.50	$0.30	$353.70	$943.20
8-11	1493	1627	8	134	1072	80.4	$1.50	$0.30	$120.60	$321.60
550 Offshoot	550		8	195	1560	117	$1.50	$0.30	$175.50	$468.00
								Individual Costs =	$1,639.80	$4,372.80
								Overall Cost =	$6,012.60	

Repair Costs (Overlays)

8-6				
PASER Rating	6			
Segment Start (Feet)	560			
Asphalt Width (Feet) =	8			
Asphalt Depth (Inches)=	1.5			
Sub Segment Length (Feet)=	150			
Item	**Unit Price**	**Unit**	**Quantity**	**Estimated Cost**
Pavement	$250.00	Ton	11	$2,750.00

8-8 to 8-10				
PASER Rating	6			
Segment Start (Feet)	770			
Asphalt Width (Feet) =	8			
Asphalt Depth (Inches)=	1.5			
Sub Segment Length (Feet)=	723			
Item	**Unit Price**	**Unit**	**Quantity**	**Estimated Cost**
Pavement	$250.00	Ton	54	$13,500.00

Whitefish Bike/Ped Maintenance Plan

Summary Sheet

Path Name:	East Side Paths
Path Number:	9
PASAR Rating (Weighted Average):	8.8
Length (Feet):	642

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	PASER Rating	Surface Defect Notes	Local Project	Notes
9-1	0	150	10	150	8	Couple cracks on east edge. Lump east near 150'		Start @ 7th & Pine Intersection
9-2	196	412	10	216	9	319 – Utility trench patch (Joints not sealed)		
9-3	0	276	10	276	9	93' – Utility trench patch (sealed joints)		End @ 4th & Pine Intersection

Item	Unit Price	Unit	Maintenance Activity	Notes
Fog Seal	$0.30	Square Foot	Fog Seal Maintenance	MDT Bid Tabs....
Asphalt Removal	$2.50	Square Foot	Asphalt Reconsturction	CoK Bid Tabs...
Excavation	$60.00	Cubic Yard	Asphalt Reconsturction	
Fabric	$0.35	Square Foot	Asphalt Reconsturction	CoW Bid Tabs
Base Course Gravel	$100.00	Cubic Yard	Asphalt Reconsturction	
Pavement	$250.00	Ton	Asphalt Reconsturction	
Topsoil	$100.00	Cubic Yard	Asphalt Reconsturction	
Hydroseeding	$0.50	Square Foot	Asphalt Reconsturction	
Crack Seal	$1.50	Linear Foot		
Concrete Removal	$5.00	Square Foot	ADA Ramp Reconstruction	_05032021-617
Excavation	$60.00	Cubic Yard	ADA Ramp Reconstruction	
Base Course Gravel	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Concrete Flatwork	$20.00	Square Foot	ADA Ramp Reconstruction	
Detectable Warnings	$100.00	Square Foot	ADA Ramp Reconstruction	
Topsoil	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Hydroseeding	$0.50	Square Foot	ADA Ramp Reconstruction	

Whitefish Bike/Ped Maintenance Plan

Maintenance Costs (Fog & Crack Seal)

Path Name:	East Side Paths
Path Number:	9
PASAR Rating (Average):	8.8
Length (Feet):	642
% Crack length/Path length	0.00%

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	Area (Square Feet)	Crack Lengths (LF)	Crack Seal ($/LF)	Fog Seal ($/SF)	Segment Crack Seal Estimated Costs (2025)	Segment Fog Seal Estimated Costs (2025
9-1	0	150	10	150	1500	0	$1.50	$0.30	$0.00	$450.00
9-2	196	412	10	216	2160	0	$1.50	$0.30	$0.00	$648.00
9-3	0	276	10	276	2760	0	$1.50	$0.30	$0.00	$828.00
								Individual Costs =	$0.00	$1,926.00
								Overall Cost =	$1,926.00	

Whitefish Bike/Ped Maintenance Plan

Summary Sheet

Path Name:	East Side Paths
Path Number:	10
PASAR Rating (Weighted Average):	8.0
Length (Feet):	211

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	PASER Rating	Surface Defect Notes	Local Project	Notes
10-1	0	142	8	142	8	Surface worn, no cracking (Good for seal). 142' – Bridge abutment		Start @ west side of Cow Creek bridge section
10-2	212	281	10	69	8	Surface worn, no cracking (Good for seal). (Concrete past 212' very cracked)		End @ east side of bridge

Item	Unit Price	Unit	Maintenance Activity	Notes
Fog Seal	$0.30	Square Foot	Fog Seal Maintenance	MDT Bid Tabs....
Asphalt Removal	$2.50	Square Foot	Asphalt Reconsturction	CoK Bid Tabs...
Excavation	$60.00	Cubic Yard	Asphalt Reconsturction	
Fabric	$0.35	Square Foot	Asphalt Reconsturction	CoW Bid Tabs
Base Course Gravel	$100.00	Cubic Yard	Asphalt Reconsturction	
Pavement	$250.00	Ton	Asphalt Reconsturction	
Topsoil	$100.00	Cubic Yard	Asphalt Reconsturction	
Hydroseeding	$0.50	Square Foot	Asphalt Reconsturction	
Crack Seal	$1.50	Linear Foot		
Concrete Removal	$5.00	Square Foot	ADA Ramp Reconstruction	05032021-617
Excavation	$60.00	Cubic Yard	ADA Ramp Reconstruction	
Base Course Gravel	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Concrete Flatwork	$20.00	Square Foot	ADA Ramp Reconstruction	
Detectable Warnings	$100.00	Square Foot	ADA Ramp Reconstruction	
Topsoil	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Hydroseeding	$0.50	Square Foot	ADA Ramp Reconstruction	

Whitefish Bike/Ped Maintenance Plan

Maintenance Costs (Fog & Crack Seal)

Path Name:	East Side Paths
Path Number:	10
PASAR Rating (Average):	8
Length (Feet):	211
% Crack length/Path length	60.00%

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	Area (Square Feet)	Crack Lengths (LF)	Crack Seal ($/LF)	Fog Seal ($/SF)	Segment Crack Seal Estimated Costs (2025)	Segment Fog Seal Estimated Costs (2025
10-1	0	142	8	142	1136	85.2	$1.50	$0.30	$127.80	$340.80
10-2	212	281	10	69	690	41.4	$1.50	$0.30	$62.10	$207.00
								Individual Costs =	$189.90	$547.80
								Overall Cost =	$737.70	

Whitefish Bike/Ped Maintenance Plan
Summary Sheet

Path Name:	River Trail
Path Number:	11A
PASAR Rating (Weighted Average):	6.2
Length (Feet):	2185

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	PASER Rating	Surface Defect Notes	Local Project	Notes
11A-1	0	368	8	368	8	Surface worn, no cracks		Start @ Hwy 93 WF river crossing
11A-2	368	506	8	138	7	405' asphalt missing south side. Longitudinal cracks		
11A-3	506	630	8	124	5	Settlement, edge depressed. Longitudinal cracking	Overlay	
11A-4	630	850	8	220	8	760- gravel under stairs washing into path. 850- asphalt ends		
11A-5	850	1410	NA	560	0	No Asphalt		
11A-6	1410	1476	10	66	5	Settlement, root humps, transverse cracks	Reconstruction	
11A-7	1476	1576	10	100	6	Longitudninal and edge cracking starting		
11A-8	1576	1615	10	39	5	Settlement around Sewer MH patchy settlement in general	Reconstruction	
11A-9	1615	1891	10	276	8	Couple transverse. 1816' – Baker park downtown offshoot (back)		
11A-10	1891	2058	10	167	3	Deep settlements. west edge depressed, start of block cracking	Reconstruction	
11A-11	2058	2185	10	127	5-6	Small edge depression between MHs	Reconstruction	End @ Baker Park

Item	Unit Price	Unit	Maintenance Activity	Notes
Fog Seal	$0.30	Square Foot	Fog Seal Maintenance	MDT Bid Tabs....
Asphalt Removal	$2.50	Square Foot	Asphalt Reconsturction	CoK Bid Tabs...
Excavation	$60.00	Cubic Yard	Asphalt Reconsturction	
Fabric	$0.35	Square Foot	Asphalt Reconsturction	CoW Bid Tabs
Base Course Gravel	$100.00	Cubic Yard	Asphalt Reconsturction	
Pavement	$250.00	Ton	Asphalt Reconsturction	
Topsoil	$100.00	Cubic Yard	Asphalt Reconsturction	
Hydroseeding	$0.50	Square Foot	Asphalt Reconsturction	
Crack Seal	$1.50	Linear Foot		
Concrete Removal	$5.00	Square Foot	ADA Ramp Reconstruction	05032021-617
Excavation	$60.00	Cubic Yard	ADA Ramp Reconstruction	
Base Course Gravel	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Concrete Flatwork	$20.00	Square Foot	ADA Ramp Reconstruction	
Detectable Warnings	$100.00	Square Foot	ADA Ramp Reconstruction	
Topsoil	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Hydroseeding	$0.50	Square Foot	ADA Ramp Reconstruction	

Whitefish Bike/Ped Maintenance Plan

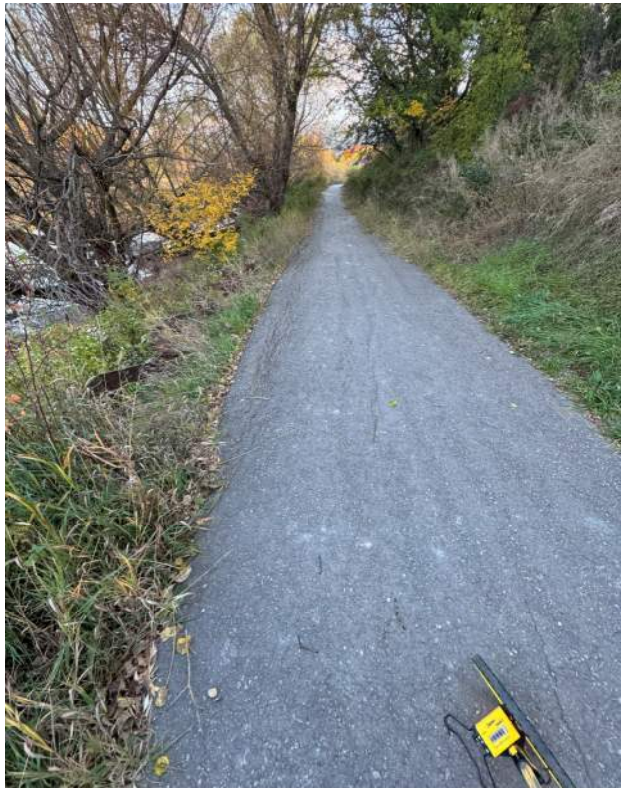
Maintenance Costs (Fog & Crack Seal)

Path Name:	River Trail
Path Number:	11A
PASAR Rating (Average):	6.2
Length (Feet):	2185
% Crack length/Path length	60.00%

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	Area (Square Feet)	Crack Lengths (LF)	Crack Seal ($/LF)	Fog Seal ($/SF)	Segment Crack Seal Estimated Costs (2025)	Segment Fog Seal Estimated Costs (2025
11A-1	0	368	8	368	2944	220.8	$1.50	$0.30	$331.20	$883.20
11A-2	368	506	8	138	1104	82.8	$1.50	$0.30	$124.20	$331.20
11A-3	506	630	8	124	992	74.4	$1.50	$0.30	$111.60	$297.60
11A-4	630	850	8	220	1760	132	$1.50	$0.30	$198.00	$528.00
11A-5	850	1410	NA	560	NA	NA	$1.50	$0.30	NA	NA
11A-6	1410	1476	10	66	660	39.6	$1.50	$0.30	$59.40	$198.00
11A-7	1476	1576	10	100	1000	60	$1.50	$0.30	$90.00	$300.00
11A-8	1576	1615	10	39	390	23.4	$1.50	$0.30	$35.10	$117.00
11A-9	1615	1891	10	276	2760	165.6	$1.50	$0.30	$248.40	$828.00
11A-10	1891	2058	10	167	1670	100.2	$1.50	$0.30	$150.30	$501.00
11A-11	2058	2185	10	127	1270	76.2	$1.50	$0.30	$114.30	$381.00
								Individual Costs =	$1,462.50	$4,365.00
								Overall Cost =	$5,827.50	

Repair Costs (Overlays)

11A-3					
PASER Rating	5				
Segment Start (Feet)	506				
Asphalt Width (Feet) =	8				
Asphalt Depth (Inches)=	1.5				
Sub Segment Length (Feet)=	124				
Item	**Unit Price**	**Unit**	**Quantity**	**Estimated Cost**	
Pavement	$250.00	Ton	10	$2,500.00	



Whitefish Bike/Ped Maintenance Plan

Repair Costs (Reconstruction)

11A-6

Surface Defect Notes	Settlement, root humps, transverse cracks	
PASER Rating	5	
Segment Start	1410	
Asphalt Width (Feet) =	10	
Asphalt Depth (Inches)=	3	Per City Standards
Gravel Width (Feet) =	12	Included 1-foot wide shoulders
Gravel Depth (Inches) =	9	Per City Standards
Sub Segment Length (Feet)=	66	
Topsoil Sholder Width (Feet) =	2	
Topsoil Sholder Depth (Inches) =	4	

Item	Unit Price	Unit	Quantity	Estimated Cost
Asphalt Removal	$2.50	Square Foot	660	$1,650.00
Excavation	$60.00	Cubic Yard	30	$1,800.00
Fabric	$0.35	Square Foot	792	$277.20
Base Course Gravel	$100.00	Cubic Yard	22	$2,200.00
Pavement	$250.00	Ton	13	$3,250.00
Topsoil	$100.00	Cubic Yard	4	$400.00
Hydroseeding	$0.50	Square Foot	264	$132.00
			Total =	$9,709.20

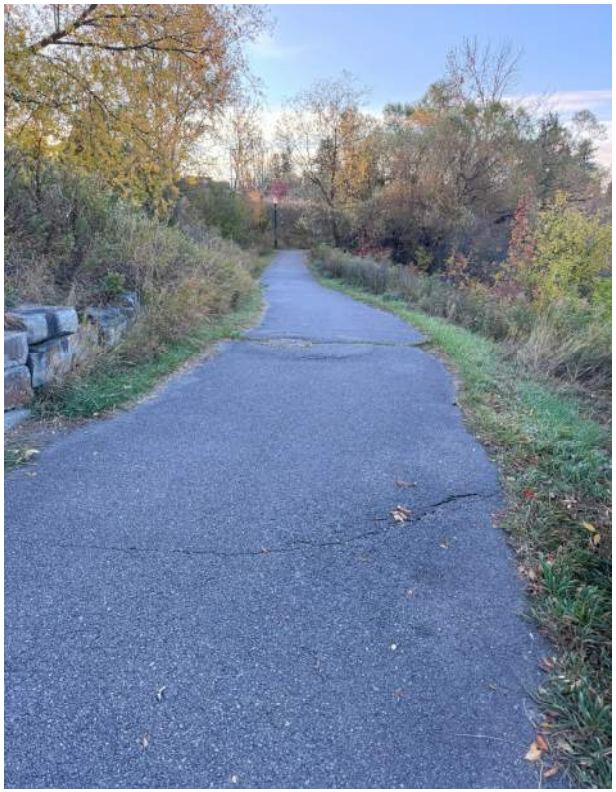
Whitefish Bike/Ped Maintenance Plan

Repair Costs (Reconstruction)

11A-8

Surface Defect Notes	Settlement around Sewer MH patchy settlement in general	
PASER Rating	5	
Segment Start	1576	
Asphalt Width (Feet) =	10	
Asphalt Depth (Inches)=	3	Per City Standards
Gravel Width (Feet) =	12	Included 1-foot wide shoulders
Gravel Depth (Inches) =	9	Per City Standards
Sub Segment Length (Feet)=	39	
Topsoil Sholder Width (Feet) =	2	
Topsoil Sholder Depth (Inches) =	4	

Item	Unit Price	Unit	Quantity	Estimated Cost
Asphalt Removal	$2.50	Square Foot	390	$975.00
Excavation	$60.00	Cubic Yard	18	$1,080.00
Fabric	$0.35	Square Foot	468	$163.80
Base Course Gravel	$100.00	Cubic Yard	13	$1,300.00
Pavement	$250.00	Ton	8	$2,000.00
Topsoil	$100.00	Cubic Yard	2	$200.00
Hydroseeding	$0.50	Square Foot	156	$78.00
			Total =	$5,796.80



Whitefish Bike/Ped Maintenance Plan

Repair Costs (Reconstruction)

Baker Park Offshoot

Surface Defect Notes

PASER Rating	4	
Segment Start	1816	
Asphalt Width (Feet) =	10	
Asphalt Depth (Inches)=	3	Per City Standards
Gravel Width (Feet) =	12	Included 1-foot wide shoulders
Gravel Depth (Inches) =	9	Per City Standards
Sub Segment Length (Feet)=	175	
Topsoil Sholder Width (Feet) =	2	
Topsoil Sholder Depth (Inches) =	4	

Item	Unit Price	Unit	Quantity	Estimated Cost
Asphalt Removal	$2.50	Square Foot	1750	$4,375.00
Excavation	$60.00	Cubic Yard	78	$4,680.00
Fabric	$0.35	Square Foot	2100	$735.00
Base Course Gravel	$100.00	Cubic Yard	59	$5,900.00
Pavement	$250.00	Ton	33	$8,250.00
Topsoil	$100.00	Cubic Yard	9	$900.00
Hydroseeding	$0.50	Square Foot	700	$350.00
			Total =	$25,190.00

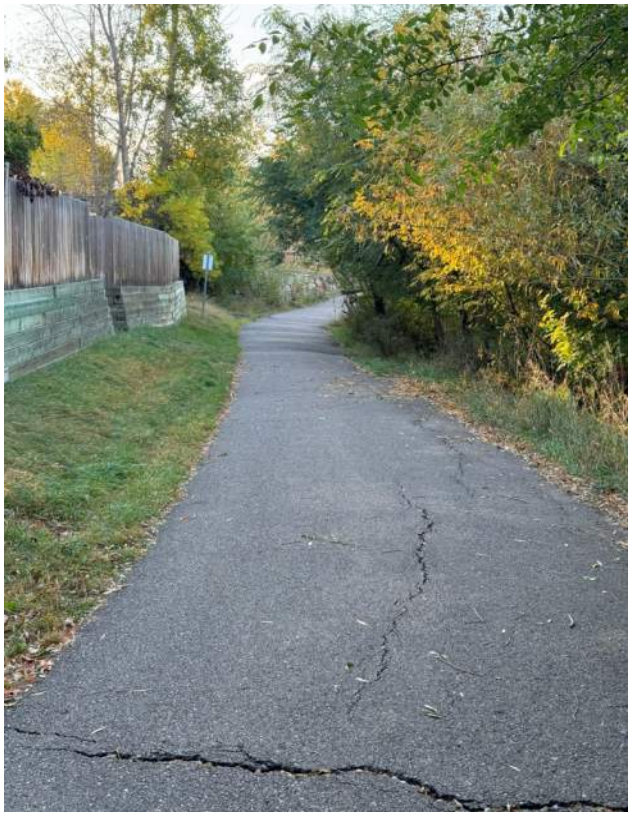
Whitefish Bike/Ped Maintenance Plan

Repair Costs (Reconstruction)

11A-10

Surface Defect Notes	Deep settlements. west edge depressed, start of block cracking	
PASER Rating	3	
Segment Start	1891	
Asphalt Width (Feet) =	10	
Asphalt Depth (Inches)=	3	Per City Standards
Gravel Width (Feet) =	12	Included 1-foot wide shoulders
Gravel Depth (Inches) =	9	Per City Standards
Sub Segment Length (Feet)=	167	
Topsoil Sholder Width (Feet) =	2	
Topsoil Sholder Depth (Inches) =	4	

Item	Unit Price	Unit	Quantity	Estimated Cost
Asphalt Removal	$2.50	Square Foot	1670	$4,175.00
Excavation	$60.00	Cubic Yard	75	$4,500.00
Fabric	$0.35	Square Foot	2004	$701.40
Base Course Gravel	$100.00	Cubic Yard	56	$5,600.00
Pavement	$250.00	Ton	31	$7,750.00
Topsoil	$100.00	Cubic Yard	9	$900.00
Hydroseeding	$0.50	Square Foot	668	$334.00
			Total =	$23,960.40



Whitefish Bike/Ped Maintenance Plan

Repair Costs (Reconstruction)

11A-11

Surface Defect Notes	Small edge depression between MHs	
PASER Rating	5-6	
Segment Start	2058	
Asphalt Width (Feet) =	10	
Asphalt Depth (Inches)=	3	Per City Standards
Gravel Width (Feet) =	12	Included 1-foot wide shoulders
Gravel Depth (Inches) =	9	Per City Standards
Sub Segment Length (Feet)=	127	
Topsoil Sholder Width (Feet) =	2	
Topsoil Sholder Depth (Inches) =	4	

Item	Unit Price	Unit	Quantity	Estimated Cost
Asphalt Removal	$2.50	Square Foot	1270	$3,175.00
Excavation	$60.00	Cubic Yard	57	$3,420.00
Fabric	$0.35	Square Foot	1524	$533.40
Base Course Gravel	$100.00	Cubic Yard	43	$4,300.00
Pavement	$250.00	Ton	24	$6,000.00
Topsoil	$100.00	Cubic Yard	7	$700.00
Hydroseeding	$0.50	Square Foot	508	$254.00
			Total =	$18,382.40

Whitefish Bike/Ped Maintenance Plan

Summary Sheet

Path Name:	River Trail
Path Number:	11B
PASAR Rating (Weighted Average):	6.1
Length (Feet):	250

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	PASER Rating	Surface Defect Notes	Local Project	Notes
11B-1	0	114	8	114	5	Many Root Humps	Overlay	Start @ Baker Ave crosswalk
11B-2	114	250	8	136	7	One root hump. No cracks otherwise		End @ lower S loop by river

Item	Unit Price	Unit	Maintenance Activity	Notes
Fog Seal	$0.30	Square Foot	Fog Seal Maintenance	MDT Bid Tabs....
Asphalt Removal	$2.50	Square Foot	Asphalt Reconsturction	CoK Bid Tabs...
Excavation	$60.00	Cubic Yard	Asphalt Reconsturction	
Fabric	$0.35	Square Foot	Asphalt Reconsturction	CoW Bid Tabs
Base Course Gravel	$100.00	Cubic Yard	Asphalt Reconsturction	
Pavement	$250.00	Ton	Asphalt Reconsturction	
Topsoil	$100.00	Cubic Yard	Asphalt Reconsturction	
Hydroseeding	$0.50	Square Foot	Asphalt Reconsturction	
Crack Seal	$1.50	Linear Foot		
Concrete Removal	$5.00	Square Foot	ADA Ramp Reconstruction	_05032021-617
Excavation	$60.00	Cubic Yard	ADA Ramp Reconstruction	
Base Course Gravel	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Concrete Flatwork	$20.00	Square Foot	ADA Ramp Reconstruction	
Detectable Warnings	$100.00	Square Foot	ADA Ramp Reconstruction	
Topsoil	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Hydroseeding	$0.50	Square Foot	ADA Ramp Reconstruction	

Whitefish Bike/Ped Maintenance Plan

Maintenance Costs (Fog & Crack Seal)

Path Name:	River Trail
Path Number:	11B
PASAR Rating (Average):	6.1
Length (Feet):	250
% Crack length/Path length	60.00%

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	Area (Square Feet)	Crack Lengths (LF)	Crack Seal ($/LF)	Fog Seal ($/SF)	Segment Crack Seal Estimated Costs (2025)	Segment Fog Seal Estimated Costs (2025
11B-1	0	114	8	114	912	68	$1.50	$0.30	$102.60	$273.60
11B-2	114	250	8	136	1088	82	$1.50	$0.30	$122.40	$326.40
								Individual Costs =	$225.00	$600.00
								Overall Cost =	$825.00	

Repair Costs (Overlays)

11B-1					
PASER Rating	5				
Segment Start (Feet)	0				
Asphalt Width (Feet) =	8				
Asphalt Depth (Inches)=	1.5				
Sub Segment Length (Feet)=	114				
Item	**Unit Price**	**Unit**	**Quantity**	**Estimated Cost**	
Pavement	$250.00	Ton	9	$2,250.00	

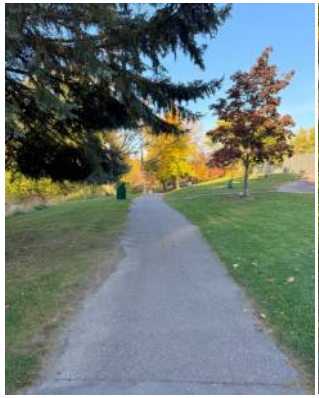
Whitefish Bike/Ped Maintenance Plan

Summary Sheet

Path Name:	River Trail
Path Number:	11C
PASAR Rating (Weighted Average):	5.8
Length (Feet):	837

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	PASER Rating	Surface Defect Notes	Local Project	Notes
11C-1	0	64	8	64	6	Small cracks and small settlement		Begins at west side of Baker Avenue
11C-2	64	132	8	68	7	Small longitudinal cracks starting		
11C-3	132	225	8	93	6	N side is humped and rough s side slightly depressed		
11C-4	225	486	8	261	5	253' possible root hump, cracking top. Root humps frequently	Overlay	
11C-5	486	600	8	114	5	Larger root humps or longitudinal cracks	Overlay	
11C-6	600	748	8	148	6	Small transverse cracks. Raveling. 779 Bridge abutment		
11C-7	961	1050	8	89	8	No cracks. Slight raveling		Ends at Scott Avenue across pedestrian bridge

Item	Unit Price	Unit	Maintenance Activity	Notes
Fog Seal	$0.30	Square Foot	Fog Seal Maintenance	MDT Bid Tabs....
Asphalt Removal	$2.50	Square Foot	Asphalt Reconsturction	CoK Bid Tabs...
Excavation	$60.00	Cubic Yard	Asphalt Reconsturction	
Fabric	$0.35	Square Foot	Asphalt Reconsturction	CoW Bid Tabs
Base Course Gravel	$100.00	Cubic Yard	Asphalt Reconsturction	
Pavement	$250.00	Ton	Asphalt Reconsturction	
Topsoil	$100.00	Cubic Yard	Asphalt Reconsturction	
Hydroseeding	$0.50	Square Foot	Asphalt Reconsturction	
Crack Seal	$1.50	Linear Foot		
Concrete Removal	$5.00	Square Foot	ADA Ramp Reconstruction	_05032021-617
Excavation	$60.00	Cubic Yard	ADA Ramp Reconstruction	
Base Course Gravel	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Concrete Flatwork	$20.00	Square Foot	ADA Ramp Reconstruction	
Detectable Warnings	$100.00	Square Foot	ADA Ramp Reconstruction	
Topsoil	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Hydroseeding	$0.50	Square Foot	ADA Ramp Reconstruction	



Whitefish Bike/Ped Maintenance Plan

Maintenance Costs (Fog & Crack Seal)

Path Name:	River Trail
Path Number:	11C
PASAR Rating (Average):	5.8
Length (Feet):	837
% Crack length/Path length	60.00%

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	Area (Square Feet)	Crack Lengths (LF)	Crack Seal ($/LF)	Fog Seal ($/SF)	Segment Crack Seal Estimated Costs (2025)	Segment Fog Seal Estimated Costs (2025
11C-1	0	64	8	64	512	38.4	$1.50	$0.30	$57.60	$153.60
11C-2	64	132	8	68	544	40.8	$1.50	$0.30	$61.20	$163.20
11C-3	132	225	8	93	744	55.8	$1.50	$0.30	$83.70	$223.20
11C-4	225	486	8	261	2088	156.6	$1.50	$0.30	$234.90	$626.40
11C-5	486	600	8	114	912	68.4	$1.50	$0.30	$102.60	$273.60
11C-6	600	748	8	148	1184	88.8	$1.50	$0.30	$133.20	$355.20
11C-7	961	1050	8	89	712	53.4	$1.50	$0.30	$80.10	$213.60
								Individual Costs =	$753.30	$2,008.80
								Overall Cost =	$2,762.10	

Repair Costs (Overlays)

11C-4				
PASER Rating	5			
Segment Start (Feet)	225			
Asphalt Width (Feet) =	8			
Asphalt Depth (Inches)=	1.5			
Sub Segment Length (Feet)=	261			
Item	**Unit Price**	**Unit**	**Quantity**	**Estimated Cost**
Pavement	$250.00	Ton	20	$5,000.00

11C-5				
PASER Rating	5			
Segment Start (Feet)	486			
Asphalt Width (Feet) =	8			
Asphalt Depth (Inches)=	1.5			
Sub Segment Length (Feet)=	114			
Item	**Unit Price**	**Unit**	**Quantity**	**Estimated Cost**
Pavement	$250.00	Ton	9	$2,250.00

Whitefish Bike/Ped Maintenance Plan

Summary Sheet

Path Name:	River Trail
Path Number:	11D
PASAR Rating (Weighted Average):	6.1
Length (Feet):	813

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	PASER Rating	Surface Defect Notes	Local Project	Notes
11D-1	0	30	8	30	4	Alligator cracks	Reconstruction	Begins at north side of 11C Bridge
11D-2	30	95	8	65	6	Cracks starting		
11D-3	95	208	8	113	8			
11D-4	208	321	8	113	6	Vegetation growing through cracks. Edge cracking. Longitudinal cracking		
11D-5	321	395	8	74	7			
11D-6	395	443	8	48	5	Root humps with cracks	Overlay	
11D-7	443	585	8	142	7			
11D-8	585	813	8	228	5	Root humps with cracks	Overlay	Ends tie into path 11C (around pond)

Item	Unit Price	Unit	Maintenance Activity	Notes
Fog Seal	$0.30	Square Foot	Fog Seal Maintenance	MDT Bid Tabs....
Asphalt Removal	$2.50	Square Foot	Asphalt Reconsturction	CoK Bid Tabs...
Excavation	$60.00	Cubic Yard	Asphalt Reconsturction	
Fabric	$0.35	Square Foot	Asphalt Reconsturction	CoW Bid Tabs
Base Course Gravel	$100.00	Cubic Yard	Asphalt Reconsturction	
Pavement	$250.00	Ton	Asphalt Reconsturction	
Topsoil	$100.00	Cubic Yard	Asphalt Reconsturction	
Hydroseeding	$0.50	Square Foot	Asphalt Reconsturction	
Crack Seal	$1.50	Linear Foot		
Concrete Removal	$5.00	Square Foot	ADA Ramp Reconstruction	05032021-617
Excavation	$60.00	Cubic Yard	ADA Ramp Reconstruction	
Base Course Gravel	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Concrete Flatwork	$20.00	Square Foot	ADA Ramp Reconstruction	
Detectable Warnings	$100.00	Square Foot	ADA Ramp Reconstruction	
Topsoil	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Hydroseeding	$0.50	Square Foot	ADA Ramp Reconstruction	

Whitefish Bike/Ped Maintenance Plan

Maintenance Costs (Fog & Crack Seal)

Path Name:	River Trail
Path Number:	11D
PASAR Rating (Average):	6.1
Length (Feet):	813
% Crack length/Path length	60.00%

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	Area (Square Feet)	Crack Lengths (LF)	Crack Seal ($/LF)	Fog Seal ($/SF)	Segment Crack Seal Estimated Costs (2025)	Segment Fog Seal Estimated Costs (2025
11D-1	0	30	8	30	240	18	$1.50	$0.30	$27.00	$72.00
11D-2	30	95	8	65	520	39	$1.50	$0.30	$58.50	$156.00
11D-3	95	208	8	113	904	68	$1.50	$0.30	$101.70	$271.20
11D-4	208	321	8	113	904	68	$1.50	$0.30	$101.70	$271.20
11D-5	321	395	8	74	592	44	$1.50	$0.30	$66.60	$177.60
11D-6	395	443	8	48	384	29	$1.50	$0.30	$43.20	$115.20
11D-7	443	585	8	142	1136	85	$1.50	$0.30	$127.80	$340.80
11D-8	585	813	8	228	1824	137	$1.50	$0.30	$205.20	$547.20
								Individual Costs =	$731.70	$1,951.20
								Overall Cost =	$2,682.90	

Repair Costs (Overlays)

11D-6				
PASER Rating	5			
Segment Start (Feet)	395			
Asphalt Width (Feet) =	8			
Asphalt Depth (Inches)=	1.5			
Sub Segment Length (Feet)=	48			
Item	**Unit Price**	**Unit**	**Quantity**	**Estimated Cost**
Pavement	$250.00	Ton	4	$1,000.00

11D-8				
PASER Rating	5			
Segment Start (Feet)	585			
Asphalt Width (Feet) =	8			
Asphalt Depth (Inches)=	1.5			
Sub Segment Length (Feet)=	228			
Item	**Unit Price**	**Unit**	**Quantity**	**Estimated Cost**
Pavement	$250.00	Ton	17	$4,250.00

Whitefish Bike/Ped Maintenance Plan

Repair Costs (Reconstruction)

11D-1

Surface Defect Notes	Alligator cracks	
PASER Rating	4	
Segment Start	0	
Asphalt Width (Feet) =	8	
Asphalt Depth (Inches)=	3	Per City Standards
Gravel Width (Feet) =	10	Included 1-foot wide shoulders
Gravel Depth (Inches) =	9	Per City Standards
Sub Segment Length (Feet)=	30	
Topsoil Sholder Width (Feet) =	2	
Topsoil Sholder Depth (Inches) =	4	

Item	Unit Price	Unit	Quantity	Estimated Cost
Asphalt Removal	$2.50	Square Foot	240	$600.00
Excavation	$60.00	Cubic Yard	12	$720.00
Fabric	$0.35	Square Foot	300	$105.00
Base Course Gravel	$100.00	Cubic Yard	9	$900.00
Pavement	$250.00	Ton	5	$1,250.00
Topsoil	$100.00	Cubic Yard	2	$200.00
Hydroseeding	$0.50	Square Foot	120	$60.00
			Total =	$3,835.00

Whitefish Bike/Ped Maintenance Plan

Summary Sheet

Path Name:	River Trail
Path Number:	11E
PASAR Rating (Weighted Average):	5.6
Length (Feet):	422

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	PASER Rating	Surface Defect Notes	Local Project	Notes
11E-1	0	236	8	236	6	Some longitudinal cracks w/ vegetation. 236' Offshoot rated 6.		Start at 395' in Path 11D
11E-2	236	422	8	186	5	Block cracking, settlment, edge cracking	Overlay	Ends at Baker Avenue

Item	Unit Price	Unit	Maintenance Activity	Notes
Fog Seal	$0.30	Square Foot	Fog Seal Maintenance	MDT Bid Tabs....
Asphalt Removal	$2.50	Square Foot	Asphalt Reconsturction	CoK Bid Tabs...
Excavation	$60.00	Cubic Yard	Asphalt Reconsturction	
Fabric	$0.35	Square Foot	Asphalt Reconsturction	CoW Bid Tabs
Base Course Gravel	$100.00	Cubic Yard	Asphalt Reconsturction	
Pavement	$250.00	Ton	Asphalt Reconsturction	
Topsoil	$100.00	Cubic Yard	Asphalt Reconsturction	
Hydroseeding	$0.50	Square Foot	Asphalt Reconsturction	
Crack Seal	$1.50	Linear Foot		
Concrete Removal	$5.00	Square Foot	ADA Ramp Reconstruction	_05032021-617
Excavation	$60.00	Cubic Yard	ADA Ramp Reconstruction	
Base Course Gravel	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Concrete Flatwork	$20.00	Square Foot	ADA Ramp Reconstruction	
Detectable Warnings	$100.00	Square Foot	ADA Ramp Reconstruction	
Topsoil	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Hydroseeding	$0.50	Square Foot	ADA Ramp Reconstruction	

Whitefish Bike/Ped Maintenance Plan

Maintenance Costs (Fog & Crack Seal)

Path Name:	River Trail
Path Number:	11E
PASAR Rating (Average):	5.6
Length (Feet):	422
% Crack length/Path length	60.00%

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	Area (Square Feet)	Crack Lengths (LF)	Crack Seal ($/LF)	Fog Seal ($/SF)	Segment Crack Seal Estimated Costs (2025)	Segment Fog Seal Estimated Costs (2025
11E-1	0	236	8	236	1888	141.6	$1.50	$0.30	$212.40	$566.40
11E-2	236	422	8	186	1488	111.6	$1.50	$0.30	$167.40	$446.40
								Individual Costs =	$379.80	$1,012.80
								Overall Cost =	$1,392.60	

Repair Costs (Overlays)

11E-2				
PASER Rating	5			
Segment Start (Feet)	236			
Asphalt Width (Feet) =	8			
Asphalt Depth (Inches)=	1.5			
Sub Segment Length (Feet)=	186			
Item	**Unit Price**	**Unit**	**Quantity**	**Estimated Cost**
Pavement	$250.00	Ton	14	$3,500.00

Whitefish Bike/Ped Maintenance Plan

Summary Sheet

Path Name:	River Trail
Path Number:	11F
PASAR Rating (Weighted Average):	8.3
Length (Feet):	1630

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	PASER Rating	Surface Defect Notes	Local Project	Notes
11F-1	0	120	10	120	8			Start at North side of 11C bridge
11F-2	120	218	10	98	4	Alligator and potholes, settlement	Reconstruction	
11F-3	218	382	10	164	8	Couple transverse. All sealed		
11F-4	382	1247	10	865	9	Couple transverse. All sealed		
11F-5	1247	1327	10	80	5	Sealed but many root humps starting to crack	Nonstructural Overlay	End at Kay Beller Park
11F-6	1327	1630	10	303	9			

Item	Unit Price	Unit	Maintenance Activity	Notes
Fog Seal	$0.30	Square Foot	Fog Seal Maintenance	MDT Bid Tabs....
Asphalt Removal	$2.50	Square Foot	Asphalt Reconsturction	CoK Bid Tabs...
Excavation	$60.00	Cubic Yard	Asphalt Reconsturction	
Fabric	$0.35	Square Foot	Asphalt Reconsturction	CoW Bid Tabs
Base Course Gravel	$100.00	Cubic Yard	Asphalt Reconsturction	
Pavement	$250.00	Ton	Asphalt Reconsturction	
Topsoil	$100.00	Cubic Yard	Asphalt Reconsturction	
Hydroseeding	$0.50	Square Foot	Asphalt Reconsturction	
Crack Seal	$1.50	Linear Foot		
Concrete Removal	$5.00	Square Foot	ADA Ramp Reconstruction	05032021-617
Excavation	$60.00	Cubic Yard	ADA Ramp Reconstruction	
Base Course Gravel	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Concrete Flatwork	$20.00	Square Foot	ADA Ramp Reconstruction	
Detectable Warnings	$100.00	Square Foot	ADA Ramp Reconstruction	
Topsoil	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Hydroseeding	$0.50	Square Foot	ADA Ramp Reconstruction	

Whitefish Bike/Ped Maintenance Plan

Maintenance Costs (Fog & Crack Seal)

Path Name:	River Trail
Path Number:	11F
PASAR Rating (Average):	8
Length (Feet):	1630
% Crack length/Path length	60.00%

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	Area (Square Feet)	Crack Lengths (LF)	Crack Seal ($/LF)	Fog Seal ($/SF)	Segment Crack Seal Estimated Costs (2025)	Segment Fog Seal Estimated Costs (2025
11F-1	0	120	10	120	1200	72	$1.50	$0.30	$108.00	$360.00
11F-2	120	218	10	98	980	58.8	$1.50	$0.30	$88.20	$294.00
11F-3	218	382	10	164	1640	98.4	$1.50	$0.30	$147.60	$492.00
11F-4	382	1247	10	865	8650	519	$1.50	$0.30	$778.50	$2,595.00
11F-5	1247	1327	10	80	800	48	$1.50	$0.30	$72.00	$240.00
11F-6	1327	1630	10	303	3030	181.8	$1.50	$0.30	$272.70	$909.00
								Individual Costs =	$1,467.00	$4,890.00
								Overall Cost =	$6,357.00	

Repair Costs (Overlays)

11F-5				
PASER Rating	5			
Segment Start (Feet)	1247			
Asphalt Width (Feet) =	10			
Asphalt Depth (Inches)=	1.5			
Sub Segment Length (Feet)=	80			
Item	**Unit Price**	**Unit**	**Quantity**	**Estimated Cost**
Pavement	$250.00	Ton	8	$2,000.00

Whitefish Bike/Ped Maintenance Plan

Repair Costs (Reconstruction)

11F-2

Surface Defect Notes	Alligator and potholes, settlement	
PASER Rating	4	
Segment Start	120	
Asphalt Width (Feet) =	10	
Asphalt Depth (Inches)=	3	Per City Standards
Gravel Width (Feet) =	12	Included 1-foot wide shoulders
Gravel Depth (Inches) =	9	Per City Standards
Sub Segment Length (Feet)=	98	
Topsoil Sholder Width (Feet) =	2	
Topsoil Sholder Depth (Inches) =	4	

Item	Unit Price	Unit	Quantity	Estimated Cost
Asphalt Removal	$2.50	Square Foot	980	$2,450.00
Excavation	$60.00	Cubic Yard	44	$2,640.00
Fabric	$0.35	Square Foot	1176	$411.60
Base Course Gravel	$100.00	Cubic Yard	33	$3,300.00
Pavement	$250.00	Ton	18	$4,500.00
Topsoil	$100.00	Cubic Yard	5	$500.00
Hydroseeding	$0.50	Square Foot	392	$196.00
			Total =	$13,997.60

Whitefish Bike/Ped Maintenance Plan

Summary Sheet

Path Name:	River Trail
Path Number:	11G
PASAR Rating (Weighted Average):	8.4
Length (Feet):	149

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	PASER Rating	Surface Defect Notes	Local Project	Notes
11G-1	0	17	10	17	4	Large root hump	Reconstruction	Start at Lower path of Wye near underpass
11G-2	17	149	10	132	9	83' Large root hump. (Score is excluding one root hump @83')		End at wood underpass

Item	Unit Price	Unit	Maintenance Activity	Notes
Fog Seal	$0.30	Square Foot	Fog Seal Maintenance	MDT Bid Tabs....
Asphalt Removal	$2.50	Square Foot	Asphalt Reconsturction	CoK Bid Tabs...
Excavation	$60.00	Cubic Yard	Asphalt Reconsturction	
Fabric	$0.35	Square Foot	Asphalt Reconsturction	CoW Bid Tabs
Base Course Gravel	$100.00	Cubic Yard	Asphalt Reconsturction	
Pavement	$250.00	Ton	Asphalt Reconsturction	
Topsoil	$100.00	Cubic Yard	Asphalt Reconsturction	
Hydroseeding	$0.50	Square Foot	Asphalt Reconsturction	
Crack Seal	$1.50	Linear Foot		
Concrete Removal	$5.00	Square Foot	ADA Ramp Reconstruction	05032021-617
Excavation	$60.00	Cubic Yard	ADA Ramp Reconstruction	
Base Course Gravel	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Concrete Flatwork	$20.00	Square Foot	ADA Ramp Reconstruction	
Detectable Warnings	$100.00	Square Foot	ADA Ramp Reconstruction	
Topsoil	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Hydroseeding	$0.50	Square Foot	ADA Ramp Reconstruction	

Whitefish Bike/Ped Maintenance Plan

Maintenance Costs (Fog & Crack Seal)

Path Name:	River Trail
Path Number:	11G
PASAR Rating (Average):	8.4
Length (Feet):	149
% Crack length/Path length	60.00%

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	Area (Square Feet)	Crack Lengths (LF)	Crack Seal ($/LF)	Fog Seal ($/SF)	Segment Crack Seal Estimated Costs (2025)	Segment Fog Seal Estimated Costs (2025
11G-1	0	17	10	17	170	10.2	$1.50	$0.30	$15.30	$51.00
11G-2	17	149	10	132	1320	79.2	$1.50	$0.30	$118.80	$396.00
								Individual Costs =	$134.10	$447.00
								Overall Cost =	$581.10	

Whitefish Bike/Ped Maintenance Plan

Repair Costs (Reconstruction)

11G-1

Surface Defect Notes

PASER Rating	4	
Segment Start	0	
Asphalt Width (Feet) =	10	
Asphalt Depth (Inches)=	3	Per City Standards
Gravel Width (Feet) =	12	Included 1-foot wide shoulders
Gravel Depth (Inches) =	9	Per City Standards
Sub Segment Length (Feet)=	17	
Topsoil Sholder Width (Feet) =	2	
Topsoil Sholder Depth (Inches) =	4	

Item	Unit Price	Unit	Quantity	Estimated Cost
Asphalt Removal	$2.50	Square Foot	170	$425.00
Excavation	$60.00	Cubic Yard	8	$480.00
Fabric	$0.35	Square Foot	204	$71.40
Base Course Gravel	$100.00	Cubic Yard	6	$600.00
Pavement	$250.00	Ton	4	$1,000.00
Topsoil	$100.00	Cubic Yard	1	$100.00
Hydroseeding	$0.50	Square Foot	68	$34.00
			Total =	$2,710.40

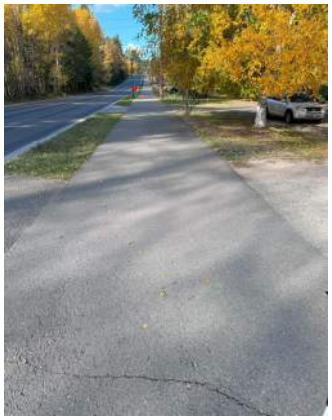
Whitefish Bike/Ped Maintenance Plan

Summary Sheet

Path Name:	7th St. Bikeway
Path Number:	12
PASAR Rating (Weighted Average):	8.5
Length (Feet):	2366

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	PASER Rating	Surface Defect Notes	Local Project	Notes
12-1	0	595	10	595	9	No cracks		Start @ 7th St. & Karrow Intersection
12-2	595	688	10	93	8	Settlement from driveways. No ponding or cracks		
12-3	688	781	10	93	9	No cracks		
12-4	781	971	10	190	7	Longitudinal cracks starting. Transverse cracks. Driveway settlement		
12-5	971	1245	10	274	9	1216'- concrete abutment ¾" lip		
12-6	1245	1356	10	111	9	1245'- concrete abutment ½" lip		
12-7	1356	1374	10	18	7	Slight settlement on N side caused some cracks in semicircle		
12-8	1374	1612	10	238	9			
12-9	1612	1712	10	100	9	1669'- concrete abutment No Lip		
12-10	1712	2366	10	654	8	1712'- Abutment No Lip. 1724 – 1736 Patched. 1868'- concrete sewer MH patcl		End @ 6th St. / Fifth Ave 90Deg Bend

Item	Unit Price	Unit	Maintenance Activity	Notes
Fog Seal	$0.30	Square Foot	Fog Seal Maintenance	MDT Bid Tabs....
Asphalt Removal	$2.50	Square Foot	Asphalt Reconsturction	CoK Bid Tabs...
Excavation	$60.00	Cubic Yard	Asphalt Reconsturction	
Fabric	$0.35	Square Foot	Asphalt Reconsturction	CoW Bid Tabs
Base Course Gravel	$100.00	Cubic Yard	Asphalt Reconsturction	
Pavement	$250.00	Ton	Asphalt Reconsturction	
Topsoil	$100.00	Cubic Yard	Asphalt Reconsturction	
Hydroseeding	$0.50	Square Foot	Asphalt Reconsturction	
Crack Seal	$1.50	Linear Foot		
Concrete Removal	$5.00	Square Foot	ADA Ramp Reconstruction	_05032021-617
Excavation	$60.00	Cubic Yard	ADA Ramp Reconstruction	
Base Course Gravel	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Concrete Flatwork	$20.00	Square Foot	ADA Ramp Reconstruction	
Detectable Warnings	$100.00	Square Foot	ADA Ramp Reconstruction	
Topsoil	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Hydroseeding	$0.50	Square Foot	ADA Ramp Reconstruction	



Whitefish Bike/Ped Maintenance Plan

Maintenance Costs (Fog & Crack Seal)

Path Name:	7th St. Bikeway
Path Number:	12
PASAR Rating (Average):	8.5
Length (Feet):	2366
% Crack length/Path length	0.00%

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	Area (Square Feet)	Crack Lengths (LF)	Crack Seal ($/LF)	Fog Seal ($/SF)	Segment Crack Seal Estimated Costs (2025)	Segment Fog Seal Estimated Costs (2025
12-1	0	595	10	595	5950	0	$1.50	$0.30	$0.00	$1,785.00
12-2	595	688	10	93	930	0	$1.50	$0.30	$0.00	$279.00
12-3	688	781	10	93	930	0	$1.50	$0.30	$0.00	$279.00
12-4	781	971	10	190	1900	0	$1.50	$0.30	$0.00	$570.00
12-5	971	1245	10	274	2740	0	$1.50	$0.30	$0.00	$822.00
12-6	1245	1356	10	111	1110	0	$1.50	$0.30	$0.00	$333.00
12-7	1356	1374	10	18	180	0	$1.50	$0.30	$0.00	$54.00
12-8	1374	1612	10	238	2380	0	$1.50	$0.30	$0.00	$714.00
12-9	1612	1712	10	100	1000	0	$1.50	$0.30	$0.00	$300.00
12-10	1712	2366	10	654	6540	0	$1.50	$0.30	$0.00	$1,962.00
								Individual Costs =	$0.00	$7,098.00
								Overall Cost =	$7,098.00	

Whitefish Bike/Ped Maintenance Plan

Summary Sheet

Path Name:	93 Trail
Path Number:	13
PASAR Rating (Weighted Average):	8.0
Length (Feet):	1688

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	PASER Rating	Surface Defect Notes	Local Project	Notes
13-1	0	1095	8	1095	8	153' Water Valve collars very high (pics)		Start @ Fairway Dr. Underpass
13-2	1095	1124	8	29	7	Starting longitudinal cracks		
13-3	1124	1688	8	564	8	Great Condition, surface looks as if could use sealcoat		End @ Lion Mountain Loop Rd Turn off 93

Item	Unit Price	Unit	Maintenance Activity	Notes
Fog Seal	$0.30	Square Foot	Fog Seal Maintenance	MDT Bid Tabs....
Asphalt Removal	$2.50	Square Foot	Asphalt Reconsturction	CoK Bid Tabs...
Excavation	$60.00	Cubic Yard	Asphalt Reconsturction	
Fabric	$0.35	Square Foot	Asphalt Reconsturction	CoW Bid Tabs
Base Course Gravel	$100.00	Cubic Yard	Asphalt Reconsturction	
Pavement	$250.00	Ton	Asphalt Reconsturction	
Topsoil	$100.00	Cubic Yard	Asphalt Reconsturction	
Hydroseeding	$0.50	Square Foot	Asphalt Reconsturction	
Crack Seal	$1.50	Linear Foot		
Concrete Removal	$5.00	Square Foot	ADA Ramp Reconstruction	05032021-617
Excavation	$60.00	Cubic Yard	ADA Ramp Reconstruction	
Base Course Gravel	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Concrete Flatwork	$20.00	Square Foot	ADA Ramp Reconstruction	
Detectable Warnings	$100.00	Square Foot	ADA Ramp Reconstruction	
Topsoil	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Hydroseeding	$0.50	Square Foot	ADA Ramp Reconstruction	

Maintenance Costs (Fog & Crack Seal)

Path Name:	93 Trail
Path Number:	13
PASAR Rating (Average):	8.0
Length (Feet):	1688
% Crack length/Path length	0.00%

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	Area (Square Feet)	Crack Lengths (LF)	Crack Seal ($/LF)	Fog Seal ($/SF)	Segment Crack Seal Estimated Costs (2025)	Segment Fog Seal Estimated Costs (2025
13-1	0	1095	8	1095	8760	0	$1.50	$0.30	$0.00	$2,628.00
13-2	1095	1124	8	29	232	0	$1.50	$0.30	$0.00	$69.60
13-3	1124	1688	8	564	4512	0	$1.50	$0.30	$0.00	$1,353.60
								Individual Costs =	$0.00	$4,051.20
								Overall Cost =	$4,051.20	

Whitefish Bike/Ped Maintenance Plan

Repair Costs (Reconstruction)

13-1

Surface Defect Notes

PASER Rating

Segment Start	143	
Asphalt Width (Feet) =	8	
Asphalt Depth (Inches)=	3	Per City Standards
Gravel Width (Feet) =	10	Included 1-foot wide shoulders
Gravel Depth (Inches) =	9	Per City Standards
Sub Segment Length (Feet)=	20	
Topsoil Sholder Width (Feet) =	2	
Topsoil Sholder Depth (Inches) =	4	

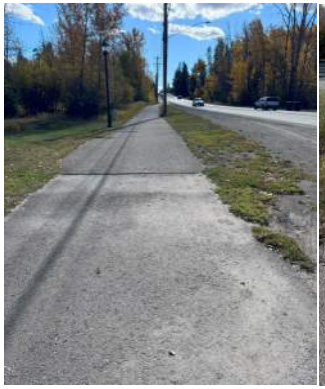
Item	Unit Price	Unit	Quantity	Estimated Cost
Asphalt Removal	$2.50	Square Foot	160	$400.00
Excavation	$60.00	Cubic Yard	8	$480.00
Fabric	$0.35	Square Foot	200	$70.00
Base Course Gravel	$100.00	Cubic Yard	6	$600.00
Pavement	$250.00	Ton	3	$750.00
Topsoil	$100.00	Cubic Yard	1	$100.00
Hydroseeding	$0.50	Square Foot	80	$40.00
			Total =	$2,440.00

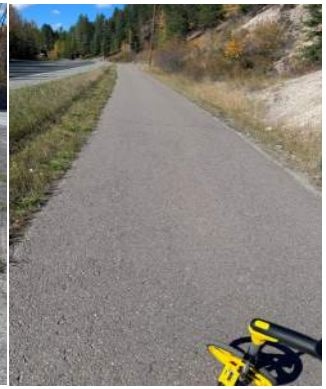
Whitefish Bike/Ped Maintenance Plan
Summary Sheet

Path Name:	North Side Paths
Path Number:	14
PASAR Rating (Weighted Average):	7.7
Length (Feet):	12486

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	PASER Rating	Surface Defect Notes	Local Project	Notes
14-1	0	767	8	767	8	Periodic transverse cracking. Skyles PL intersection		Start @ Wisconsin % Edgewood Intersection
14-2	844	2547	8	1703	8	1875 Reveling in driveway. 2252- Ponding around STMH. Periodic transverse cracks		
14-3	2547	2723	9	176	9	Recently done. 2582- Utility Patch		
14-4	2798	2929	9	131	7	Some longitudinal cracks starting. Light edge crack starting		
14-5	2929	3059	8	130	8	Periodic transverse cracks		
14-6	3139	3298	8	159	8	Periodic transverse cracks		
14-7	3298	3347	8	49	5	Alligator cracking. Settlement and ponding on east side	Overlay	
14-8	3347	3514	8	167	7	Slight edge cracks starting. utility patch. 3514- crosswalk		
14-9	3514	3685	8	171	6	Multiple patches from utilities and recent developments		
14-10	3685	3862	8	177	7	Raveling, transverse cracks		
14-11	3862	3877	8	15	5	Settlement and ponding around STMH	Reconstruction	
14-12	3877	4236	8	359	7	3968 – Edge cracking. Periodic edge cracking. 4529- MH settled 2" lip		
14-13	4236	4560	8	324	8	Periodic transverse cracking		
14-14	4560	4633	8	73	6	Increased transverse cracks. MH w/ settlement around it		
14-15	4633	4685	8	52	4	In driveway. Deep alligator cracks. Missing patches. Uneven ground (Lumpy)	Reconstruction	
14-16	4685	5100	10	415	8	5031 – East side hump w/ cracks. Periodic transverse cracks		
14-17	5100	5126	10	26	7	Heavy raveling		
14-18	5126	5146	10	20	5	Ponding leading up to Viking creek intersection	Overlay	
14-19	5146	5691	10	545	7	Slight ponding on east side periodically		
14-20	5740	5954	10	214	8	Periodic transverse cracking		
14-21	5981	6296	10	315	8	6226 – Utility trench patch w/ ponding		
14-22	6296	6361	10	65	7	Edge cracking / Longitudinal crack utility patch		
14-23	6361	6803	10	442	8	Periodic transverse		
14-24	6803	6864	10	61	6	East edge ponding edge cracking/ longitudinal cracking starting		
14-25	6864	7403	10	539	7	Periodic edge cracking. Periodic longitudinal cracking		
14-26	7403	7518	10	115	7	Transverse longitudinal cracking		
14-27	7518	8316	10	798	8	Periodic transverse		
14-28	8316	8500	10	184	7	Periodic transverse. Edge cracking starting		
14-29	8500	9816	10	1316	8	8806 – Grate system. Periodic transverse cracking. 9816 – at N side of N Lane of Murdoch Lane Pulloff. Reset wheel here.		End @ Murdock Ln Exit
14-30	9816	10291	10	475	8			Had to Restart Wheel at 0. Start @ Murdock Ln Exit
14-31	10291	10316	10	25	5	Root humps w/ cracks		
14-32	10316	11073	10	757	8	1184 – Utility Sewer trench patch		
14-33	11073	11094	10	21	6	Block cracking		
14-34	11094	12794	10	1700	8	1807 root hump		End @ Alpine Ct

Item	Unit Price	Unit	Maintenance Activity	Notes
Fog Seal	$0.30	Square Foot	Fog Seal Maintenance	MDT Bid Tabs....
Asphalt Removal	$2.50	Square Foot	Asphalt Reconsturction	CoK Bid Tabs...
Excavation	$60.00	Cubic Yard	Asphalt Reconsturction	
Fabric	$0.35	Square Foot	Asphalt Reconsturction	CoW Bid Tabs
Base Course Gravel	$100.00	Cubic Yard	Asphalt Reconsturction	
Pavement	$250.00	Ton	Asphalt Reconsturction	
Topsoil	$100.00	Cubic Yard	Asphalt Reconsturction	
Hydroseeding	$0.50	Square Foot	Asphalt Reconsturction	
Crack Seal	$1.50	Linear Foot		
Concrete Removal	$5.00	Square Foot	ADA Ramp Reconstruction	_05032021-617
Excavation	$60.00	Cubic Yard	ADA Ramp Reconstruction	
Base Course Gravel	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Concrete Flatwork	$20.00	Square Foot	ADA Ramp Reconstruction	
Detectable Warnings	$100.00	Square Foot	ADA Ramp Reconstruction	
Topsoil	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Hydroseeding	$0.50	Square Foot	ADA Ramp Reconstruction	





Maintenance Costs (Fog & Crack Seal)

Path Name:	North Side Paths
Path Number:	14
PASAR Rating (Average):	7.7
Length (Feet):	12486
% Crack length/Path length	60.00%

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	Area (Square Feet)	Crack Lengths (LF)	Crack Seal ($/LF)	Fog Seal ($/SF)	Segment Crack Seal Estimated Costs (2025)	Segment Fog Seal Estimated Costs (2025
14-1	0	767	8	767	6136	460.2	$1.50	$0.30	$690.30	$1,840.80
14-2	844	2547	8	1703	13624	1021.8	$1.50	$0.30	$1,532.70	$4,087.20
14-3	2547	2723	9	176	1584	105.6	$1.50	$0.30	$158.40	$475.20
14-4	2798	2929	9	131	1179	78.6	$1.50	$0.30	$117.90	$353.70
14-5	2929	3059	8	130	1040	78	$1.50	$0.30	$117.00	$312.00
14-6	3139	3298	8	159	1272	95.4	$1.50	$0.30	$143.10	$381.60
14-7	3298	3347	8	49	392	29.4	$1.50	$0.30	$44.10	$117.60
14-8	3347	3514	8	167	1336	100.2	$1.50	$0.30	$150.30	$400.80
14-9	3514	3685	8	171	1368	102.6	$1.50	$0.30	$153.90	$410.40
14-10	3685	3862	8	177	1416	106.2	$1.50	$0.30	$159.30	$424.80
14-11	3862	3877	8	15	120	9	$1.50	$0.30	$13.50	$36.00
14-12	3877	4236	8	359	2872	215.4	$1.50	$0.30	$323.10	$861.60
14-13	4236	4560	8	324	2592	194.4	$1.50	$0.30	$291.60	$777.60
14-14	4560	4633	8	73	584	43.8	$1.50	$0.30	$65.70	$175.20
14-15	4633	4685	8	52	416	31.2	$1.50	$0.30	$46.80	$124.80
14-16	4685	5100	10	415	4150	249	$1.50	$0.30	$373.50	$1,245.00
14-17	5100	5126	10	26	260	15.6	$1.50	$0.30	$23.40	$78.00
14-18	5126	5146	10	20	200	12	$1.50	$0.30	$18.00	$60.00
14-19	5146	5691	10	545	5450	327	$1.50	$0.30	$490.50	$1,635.00
14-20	5740	5954	10	214	2140	128.4	$1.50	$0.30	$192.60	$642.00
14-21	5981	6296	10	315	3150	189	$1.50	$0.30	$283.50	$945.00
14-22	6296	6361	10	65	650	39	$1.50	$0.30	$58.50	$195.00
14-23	6361	6803	10	442	4420	265.2	$1.50	$0.30	$397.80	$1,326.00
14-24	6803	6864	10	61	610	36.6	$1.50	$0.30	$54.90	$183.00
14-25	6864	7403	10	539	5390	323.4	$1.50	$0.30	$485.10	$1,617.00
14-26	7403	7518	10	115	1150	69	$1.50	$0.30	$103.50	$345.00
14-27	7518	8316	10	798	7980	478.8	$1.50	$0.30	$718.20	$2,394.00
14-28	8316	8500	10	184	1840	110.4	$1.50	$0.30	$165.60	$552.00
14-29	8500	9816	10	1316	13160	789.6	$1.50	$0.30	$1,184.40	$3,948.00
14-30	9816	10291	10	475	4750	285	$1.50	$0.30	$427.50	$1,425.00
14-31	10291	10316	10	25	250	15	$1.50	$0.30	$22.50	$75.00
14-32	10316	11073	10	757	7570	454.2	$1.50	$0.30	$681.30	$2,271.00
14-33	11073	11094	10	21	210	12.6	$1.50	$0.30	$18.90	$63.00
14-34	11094	12794	10	1700	17000	1020	$1.50	$0.30	$1,530.00	$5,100.00
								Individual Costs =	$11,237.40	$34,878.30
								Overall Cost =	$46,115.70	

Repair Costs (Overlays)

14-7				
PASER Rating	5			
Segment Start (Feet)	3298			
Asphalt Width (Feet) =	8			
Asphalt Depth (Inches)=	1.5			
Sub Segment Length (Feet)=	49			
Item	**Unit Price**	**Unit**	**Quantity**	**Estimated Cost**
Pavement	$250.00	Ton	4	$1,000.00

14-18				
PASER Rating	5			
Segment Start (Feet)	5126			
Asphalt Width (Feet) =	10			
Asphalt Depth (Inches)=	1.5			
Sub Segment Length (Feet)=	20			
Item	**Unit Price**	**Unit**	**Quantity**	**Estimated Cost**
Pavement	$250.00	Ton	2	$500.00

Whitefish Bike/Ped Maintenance Plan

Repair Costs (Reconstruction)

14-11

Surface Defect Notes	Settlement and ponding around STMH	
PASER Rating	5	
Segment Start	3862	
Asphalt Width (Feet) =	8	
Asphalt Depth (Inches)=	3	Per City Standards
Gravel Width (Feet) =	10	Included 1-foot wide shoulders
Gravel Depth (Inches) =	9	Per City Standards
Sub Segment Length (Feet)=	15	
Topsoil Sholder Width (Feet) =	2	
Topsoil Sholder Depth (Inches) =	4	

Item	Unit Price	Unit	Quantity	Estimated Cost
Asphalt Removal	$2.50	Square Foot	120	$300.00
Excavation	$60.00	Cubic Yard	6	$360.00
Fabric	$0.35	Square Foot	150	$52.50
Base Course Gravel	$100.00	Cubic Yard	5	$500.00
Pavement	$250.00	Ton	3	$750.00
Topsoil	$100.00	Cubic Yard	1	$100.00
Hydroseeding	$0.50	Square Foot	60	$30.00
			Total =	$2,092.50

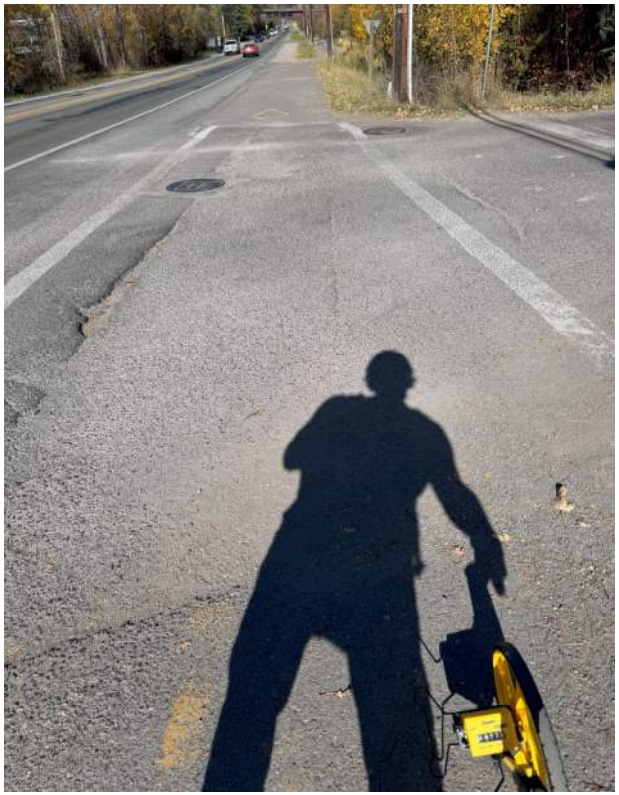
Whitefish Bike/Ped Maintenance Plan

Repair Costs (Reconstruction)

14-15

Surface Defect Notes	In driveway. Deep alligator cracks. Missing patches. Uneven ground (Lumpy)	
PASER Rating	4	
Segment Start	4633	
Asphalt Width (Feet) =	8	
Asphalt Depth (Inches)=	3	Per City Standards
Gravel Width (Feet) =	10	Included 1-foot wide shoulders
Gravel Depth (Inches) =	9	Per City Standards
Sub Segment Length (Feet)=	52	
Topsoil Sholder Width (Feet) =	2	
Topsoil Sholder Depth (Inches) =	4	

Item	Unit Price	Unit	Quantity	Estimated Cost
Asphalt Removal	$2.50	Square Foot	416	$1,040.00
Excavation	$60.00	Cubic Yard	20	$1,200.00
Fabric	$0.35	Square Foot	520	$182.00
Base Course Gravel	$100.00	Cubic Yard	15	$1,500.00
Pavement	$250.00	Ton	8	$2,000.00
Topsoil	$100.00	Cubic Yard	3	$300.00
Hydroseeding	$0.50	Square Foot	208	$104.00
			Total =	$6,326.00



Whitefish Bike/Ped Maintenance Plan

Summary Sheet

Path Name:	Whitefish River Trail
Path Number:	15
PASAR Rating (Weighted Average):	7.5
Length (Feet):	498

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	PASER Rating	Surface Defect Notes	Local Project	Notes
15-1	0	114	8	114	9			Start @ 1000 Creekview Dr.
15-2	114	498	8	384	7	Edge cracking starting		End @ Creekview Dr by 1012 Creekview.

Item	Unit Price	Unit	Maintenance Activity	Notes
Fog Seal	$0.30	Square Foot	Fog Seal Maintenance	MDT Bid Tabs....
Asphalt Removal	$2.50	Square Foot	Asphalt Reconsturction	CoK Bid Tabs...
Excavation	$60.00	Cubic Yard	Asphalt Reconsturction	
Fabric	$0.35	Square Foot	Asphalt Reconsturction	CoW Bid Tabs
Base Course Gravel	$100.00	Cubic Yard	Asphalt Reconsturction	
Pavement	$250.00	Ton	Asphalt Reconsturction	
Topsoil	$100.00	Cubic Yard	Asphalt Reconsturction	
Hydroseeding	$0.50	Square Foot	Asphalt Reconsturction	
Crack Seal	$1.50	Linear Foot		
Concrete Removal	$5.00	Square Foot	ADA Ramp Reconstruction	05032021-617
Excavation	$60.00	Cubic Yard	ADA Ramp Reconstruction	
Base Course Gravel	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Concrete Flatwork	$20.00	Square Foot	ADA Ramp Reconstruction	
Detectable Warnings	$100.00	Square Foot	ADA Ramp Reconstruction	
Topsoil	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Hydroseeding	$0.50	Square Foot	ADA Ramp Reconstruction	

Maintenance Costs (Fog & Crack Seal)

Path Name:	Whitefish River Trail
Path Number:	15
PASAR Rating (Average):	7.5
Length (Feet):	498
% Crack length/Path length	60.00%

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	Area (Square Feet)	Crack Lengths (LF)	Crack Seal ($/LF)	Fog Seal ($/SF)	Segment Crack Seal Estimated Costs (2025)	Segment Fog Seal Estimated Costs (2025
15-1	0	114	8	114	912	68.4	$1.50	$0.30	$102.60	$273.60
15-2	114	498	8	384	3072	230.4	$1.50	$0.30	$345.60	$921.60
								Individual Costs =	$448.20	$1,195.20
								Overall Cost =	$1,643.40	

Whitefish Bike/Ped Maintenance Plan

Summary Sheet

Path Name:	East Side Paths
Path Number:	16
PASAR Rating (Weighted Average):	8.0
Length (Feet):	1655

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	PASER Rating	Surface Defect Notes	Local Project	Notes
16-1	0	55	12	55	8	No Cracking		
16-2	55	76	12	21	7	Surface Cracking Starting		
16-3	76	249	12	173	8	3" transverse @ 132		
16-4	249	516	10	267	9	516-559 road & concrete		
16-5	559	624	10	65	9			
16-6	667	715	10	48	9	715'- neat line of older asphalt		
16-7	715	1356	10	641	8	Only one small transverse crack		
16-8	1356	1381	10	25	5	Severe root damage		
16-9	1381	1464	10	83	7	Slight cracking starting		
16-10	1464	1649	10	185	7	Shoulder cracking starting ponding off west side due to temporary construction road		
16-11	1649	1675	10	26	7	Edge cracking & longitudinal cracking		
16-12	1675	1741	10	66	8			

Item	Unit Price	Unit	Maintenance Activity	Notes
Fog Seal	$0.30	Square Foot	Fog Seal Maintenance	MDT Bid Tabs....
Asphalt Removal	$2.50	Square Foot	Asphalt Reconsturction	CoK Bid Tabs...
Excavation	$60.00	Cubic Yard	Asphalt Reconsturction	
Fabric	$0.35	Square Foot	Asphalt Reconsturction	CoW Bid Tabs
Base Course Gravel	$100.00	Cubic Yard	Asphalt Reconsturction	
Pavement	$250.00	Ton	Asphalt Reconsturction	
Topsoil	$100.00	Cubic Yard	Asphalt Reconsturction	
Hydroseeding	$0.50	Square Foot	Asphalt Reconsturction	
Crack Seal	$1.50	Linear Foot		
Concrete Removal	$5.00	Square Foot	ADA Ramp Reconstruction	_05032021-617
Excavation	$60.00	Cubic Yard	ADA Ramp Reconstruction	
Base Course Gravel	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Concrete Flatwork	$20.00	Square Foot	ADA Ramp Reconstruction	
Detectable Warnings	$100.00	Square Foot	ADA Ramp Reconstruction	
Topsoil	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Hydroseeding	$0.50	Square Foot	ADA Ramp Reconstruction	

Whitefish Bike/Ped Maintenance Plan

Maintenance Costs (Fog & Crack Seal)

Path Name:	East Side Paths
Path Number:	16
PASAR Rating (Average):	8.0
Length (Feet):	1655
% Crack length/Path length	60.00%

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	Area (Square Feet)	Crack Lengths (LF)	Crack Seal ($/LF)	Fog Seal ($/SF)	Segment Crack Seal Estimated Costs (2025)	Segment Fog Seal Estimated Costs (2025
16-1	0	55	12	55	660	33	$1.50	$0.30	$49.50	$198.00
16-2	55	76	12	21	252	12.6	$1.50	$0.30	$18.90	$75.60
16-3	76	249	12	173	2076	103.8	$1.50	$0.30	$155.70	$622.80
16-4	249	516	10	267	2670	160.2	$1.50	$0.30	$240.30	$801.00
16-5	559	624	10	65	650	39	$1.50	$0.30	$58.50	$195.00
16-6	667	715	10	48	480	28.8	$1.50	$0.30	$43.20	$144.00
16-7	715	1356	10	641	6410	384.6	$1.50	$0.30	$576.90	$1,923.00
16-8	1356	1381	10	25	250	15	$1.50	$0.30	$22.50	$75.00
16-9	1381	1464	10	83	830	49.8	$1.50	$0.30	$74.70	$249.00
16-10	1464	1649	10	185	1850	111	$1.50	$0.30	$166.50	$555.00
16-11	1649	1675	10	26	260	15.6	$1.50	$0.30	$23.40	$78.00
16-12	1675	1741	10	66	660	39.6	$1.50	$0.30	$59.40	$198.00
								Individual Costs =	$1,489.50	$5,114.40
								Overall Cost =	$6,603.90	

Whitefish Bike/Ped Maintenance Plan

Repair Costs (Reconstruction)

16-8

Surface Defect Notes	Severe root damage	
PASER Rating	5	
Segment Start	1356	
Asphalt Width (Feet) =	10	
Asphalt Depth (Inches)=	3	Per City Standards
Gravel Width (Feet) =	12	Included 1-foot wide shoulders
Gravel Depth (Inches) =	9	Per City Standards
Sub Segment Length (Feet)=	25	
Topsoil Sholder Width (Feet) =	2	
Topsoil Sholder Depth (Inches) =	4	

Item	Unit Price	Unit	Quantity	Estimated Cost
Asphalt Removal	$2.50	Square Foot	250	$625.00
Excavation	$60.00	Cubic Yard	12	$720.00
Fabric	$0.35	Square Foot	300	$105.00
Base Course Gravel	$100.00	Cubic Yard	9	$900.00
Pavement	$250.00	Ton	5	$1,250.00
Topsoil	$100.00	Cubic Yard	2	$200.00
Hydroseeding	$0.50	Square Foot	100	$50.00
			Total =	$3,850.00

Whitefish Bike/Ped Maintenance Plan

Summary Sheet

Path Name:	East Side Paths
Path Number:	17
PASAR Rating (Weighted Average):	8.3
Length (Feet):	2724

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	PASER Rating	Surface Defect Notes	Local Project	Notes
17-1	0	149	10	149	8	129' - offshoot to 5' path		
17-2	149	442	5	293	6	171' - 2" crack & edge crack. Edge cracking starting. Long cracking. 492 - 466 is concrete		
17-3	466	570	5	104	6	507' - Patch. 570' - is offshoot. Surface cracking starting badly		
17-4	570	665	7	95	7	Longitudinal crack in center		
17-5	665	952	7	287	8			
17-6	952	2748	10	1796	9	Newer asphalt		

Item	Unit Price	Unit	Maintenance Activity	Notes
Fog Seal	$0.30	Square Foot	Fog Seal Maintenance	MDT Bid Tabs....
Asphalt Removal	$2.50	Square Foot	Asphalt Reconsturction	CoK Bid Tabs...
Excavation	$60.00	Cubic Yard	Asphalt Reconsturction	
Fabric	$0.35	Square Foot	Asphalt Reconsturction	CoW Bid Tabs
Base Course Gravel	$100.00	Cubic Yard	Asphalt Reconsturction	
Pavement	$250.00	Ton	Asphalt Reconsturction	
Topsoil	$100.00	Cubic Yard	Asphalt Reconsturction	
Hydroseeding	$0.50	Square Foot	Asphalt Reconsturction	
Crack Seal	$1.50	Linear Foot		
Concrete Removal	$5.00	Square Foot	ADA Ramp Reconstruction	05032021-617
Excavation	$60.00	Cubic Yard	ADA Ramp Reconstruction	
Base Course Gravel	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Concrete Flatwork	$20.00	Square Foot	ADA Ramp Reconstruction	
Detectable Warnings	$100.00	Square Foot	ADA Ramp Reconstruction	
Topsoil	$100.00	Cubic Yard	ADA Ramp Reconstruction	
Hydroseeding	$0.50	Square Foot	ADA Ramp Reconstruction	

Whitefish Bike/Ped Maintenance Plan

Maintenance Costs (Fog & Crack Seal)

Path Name:	East Side Paths
Path Number:	17
PASAR Rating (Average):	8.3
Length (Feet):	2724
% Crack length/Path length	60.00%

Segment ID	Segment Start	Segment End	Width (Feet)	Length (Feet)	Area (Square Feet)	Crack Lengths (LF)	Crack Seal ($/LF)	Fog Seal ($/SF)	Segment Crack Seal Estimated Costs (2025)	Segment Fog Seal Estimated Costs (2025
17-1	0	149	10	149	1490	89.4	$1.50	$0.30	$134.10	$447.00
17-2	149	442	5	293	1465	175.8	$1.50	$0.30	$263.70	$439.50
17-3	466	570	5	104	520	62.4	$1.50	$0.30	$93.60	$156.00
17-4	570	665	7	95	665	57	$1.50	$0.30	$85.50	$199.50
17-5	665	813	7	148	1036	88.8	$1.50	$0.30	$133.20	$310.80
17-6	952	2748	10	1796	17960	1077.6	$1.50	$0.30	$1,616.40	$5,388.00
								Individual Costs =	$2,326.50	$6,940.80
								Overall Cost =	$9,267.30	

APPENDIX D

Bridge Notes

Path 2 – River Trail

West Abutment

- ½” Lip between concrete and Asphalt
- Some cracking on asphalt
- ½” Lip between wood & concrete

Decking

- One board at 1/3 span needs replaced
- One board at Midspan possibly needs replaced

East Abutment

- Really good condition
- ¼” concrete to asphalt lip
- No lip between concrete & wood

Path 7A – River Trail

Bridge Start @ 3150

3150 Abutment

- South side has sloughed off about 6” back
- Lip is ¾” max and about 3/8” average

Decking

- (3150-3183) is older and worn
- (183 – 3213) is newer decking

3377 Abutment

- South side small sloughing
- Lip is ½” at worst ¼” – ½” average
- Abutment board is gouged near south side

Cover (Under tracks) (3455-3505)

- West side asphalt sloughing under structure a bit. See pics

Bridge start @ 4190

4190 Abutment

- 10’ Patch at Abutment
- ¼” - ½” Lip

4375 Abutment

- Concrete Island (see pics)
- No Lip

4437 Abutment

- No Lip
- Asphalt patch

Path 7D – City Beach Loop

920 Bridge Abutment

- 1” – 1.5” Lip btw Asphalt and wood
- Asphalt appears to have slightly settled
- Board mid span not fastened on west side

950 Bridge Abutment

- 1” Lip btw Asphalt and wood
- Slight settlement

Path 8 – North Side Paths

1627 Bridge Abutment

- Lip is 5” on N and 2” on S
- Trees on S side are pushing against railing
- 1659’ Board sticking up 3/8” to ½”

1907 Bridge Abutment

- Lip is good, Bridge is actually below concrete

Path 10 – North Side Paths

142 Bridge Abutment

- No Lip 5’ asphalt ramp
- Every 8’ boards lifted by substructure
- Raised screws (tripping hazard)

212 abutment

- Plywood used to decrease lip
- Remaining lip 1.5”
- ¾” plywood

Bridge is very concaved. 8’ wide, 3” low in center when measured from perpendicular stringline.

Path 11C – Riverside Paths

779’ Bridge Abutment

- No Lip between asphalt and concrete
- No lip between concrete and bridge

961’ Bridge Abutment

- No lip between bridge and concrete
- 1.5” lip between concrete and asphalt

Path 11G – Riverside Paths

Structure Notes- No Lip at 149’ Abutment

200’ some rotting boards

Concrete Notes

The dimensions seen in the following field notes correspond to the size of panels that would need to be replaced to resolve the structural issues observed, most often concrete cracking.

Concrete Path Inspections 10/15/24

Flathead Avenue Path (9' Wide)

Cracked panels (8' x 9' wide)

1 20' N of Wave lot access

1 40' N of Wave lot access

ADA Ramp crack (6' x 9')

1 NW of Flathead Avenue & W 15th St. Intersection

1 SW of Flathead Avenue & W 15th St. Intersection

Geddes Path (8' Wide)

Cracked Panels

1 6'x8' crack @ 607 Geddes

1 4.5'x8' @ 605 Geddes

2 4'x8' @ 603 Geddes

1 52'x8' 601 Geddes → N, Longitudinal crack

Hwy 93 Path (Veterans Memorial Bridge) (8' wide)

10x8 Significant cracking around MH across from "The Barefoot Haven"

Surface corrosion from salt just west of bridge

Dakota Ave (8' Wide)

1 crack SW Bay Point Dr. Intersection (Ramp) (8'x8')

Intersection does not have ADA detectable warnings

Periodic settlement that caused center of path to be raised. Because it is cut down center, this did not result in cracking.

Colorado Avenue

8x8 MH cracking @902 Colorado

8x8 W. Valve cracking @ 800 Colorado. Worth Fixing (Pic w/ Blue T)

10x12 SW Denver & Colorado Intersection (light cracks, no ADA detectable)

11x13 NW Denver & Colorado Intersection (light cracks, no ADA Det. Measured at widest points)

8x8 35' N of Apartments across from "Orchard Ln" . Water valve cracking

8x12 N of Apartments across from "Orchard Ln". Water valve and ramp, no detectable

8x22 SW of Woodside Ln Intersection. Cracking and WV. No detectable

8x8 NW of Woodside Ln Intersection Crack (1) and salt corrosion.

14x8 Across from Waverly PL. Two WV cracking and Settlement.

25x8 (or 8x8 if only first panel) @ Woodland PL. One WV next to hydrant.

Depot Park

Panel Sizes

Around Park 7.5x8.5

5' Path (5x5)

10'x5' (Towards underpass)

Various Cracks in concrete

Curb edges chipped.

10x10 East Ramp @ Whitefish Station lot east entrance

11x14 West Ramp @ Whitefish Station lot east entrance

Path to underpass has long longitudinal crack (110'x10')

Kalispell Avenue

N of 1st Street has lots of edge cracking

Loop around S of School looks good

US 93 (Firebrand)

3rd St. Intersection

16x10

19x6

½ way btw 3rd and 2nd

35x5.5 (5.5 x 5.5 panels)

2nd St Intersection

14x14

12x13

2nd St (Wag park)

32x8 @ West Ramp of Dodger Ln.

110' East of Birch Dr. 8x13 crack

115'x10' @ Cow creek bridge, Heavy cracking

Near School park

5x5' panels

25x20' cracked by ballfield parking

Mountain Brk Ln

8'x8' Panel cracked by house construction @ 144

School concrete paths

5' West of Pine, 10' East (2 5'x5' panels)