

AGENDA
Cascade Charter Township Pathways Committee
Thursday, October 6, 2022
10:00 am
5920 Tahoe Dr

- ARTICLE 1. Call the meeting to order
Record the attendance**
- ARTICLE 2. Approve the current Agenda**
- ARTICLE 3. Acknowledge visitors and those wishing to speak
(Comments are limited to five minutes per speaker.)**
- ARTICLE 4. Minutes
Approve the minutes of the 9.1.22 Meeting**
- ARTICLE 5. Pathway Committee By-Laws
Review of Draft By-Laws**
- ARTICLE 6. Condition Assessment
Township Engineer Aric Thorne will review the preliminary condition assessment**
- ARTICLE 7. Financial Information
Township Manager will review the projected budget through the end of the current millage authorization**
- ARTICLE 8. Projects Review
Review and Discussion on potential pathway projects**
- ARTICLE 9. Acknowledge visitors and those wishing to speak
(Comments are limited to five minutes per speaker.)**
- ARTICLE 10. Any Other Business**
- ARTICLE 11. Adjournment**

Meeting Minutes
Cascade Charter Township
Pathways Committee
Thursday, September 1, 2022
10:00 am
5920 Tahoe Dr

ARTICLE 1. Manager Swayze called the meeting to order at 10:00 am.

Members Present: Jeff Coffey, John Driscoll, Kris Taylor, Mike Reese, Rik Brown, Scott Rissi, Supervisor Grace Lesperance, Manager Ben Swayze, Building and Grounds Supervisor Jim MacDonald, Planning Director Brian Hilbrands, and Mgmt Office Admin Assistant Jessica Stine
Members Absent: None

ARTICLE 2. Approve the current Agenda

Motion was made by Member Brown to approve the current Agenda. Supported by Member Rissi. Motion carried 7 to 0.

ARTICLE 3. Acknowledge visitors and those wishing to speak to non-agenda items.

Ginny Wanty, Parks Committee Chair, spoke on the Grand River Greenway Project. This project will connect the lighthouse and Millennium Park, through Kent County Trails, with the Lowell trails system. There will be a summit on September 28th to talk about funding for this project and how connecting municipalities can collaborate.

ARTICLE 4. Regular Meeting Schedule

Meetings will be held on the first Thursday of the month at 10:00am at the Township office. Meetings will be approximately an hour and a half long.

ARTICLE 5. Pathway Committee By-Laws

Manager Swayze distributed the Parks Committee by-laws as a starting point for creating the Pathways Committee by-laws. Members will be emailed a copy of the by-laws that the Parks Committee is in process of amending before the next meeting. The Pathways Committee will begin to develop their own by-laws at the October meeting.

ARTICLE 6. Strategic Priorities

Member Reese shared information about the Park's Committee Master Plan and said that they will be submitting a draft of the Master Plan to the Township Board in September. This Master Plan will help guide the committee's priorities. The Parks Committee recently recommended the purchase of the Wycliffe property which is set to become a trailhead to access the Cascade trail system. Member Reese will give an update on the parks plan at the next meeting.

ARTICLE 7. Financial Information

Cascade pathways are funded through a dedicated millage of .35 mils, passed in 2018 to extend through 2027 inclusive. The committee will take part in determining the appropriate requests for future millage rates. There are also DNR, MDOT, and MDBC grants available for 'alternative transportation,' such as non-motorized pathways. Members requested the detailed itemization of Pathways funds and the budget projections from the pathway's millage, through to 2028.

ARTICLE 8. Maintenance Concerns

The Township's new engineer will be starting in the next few weeks and one of their first projects will be to ride the trails and determine their maintenance needs. Members requested a maintenance itemization from the last two years, this year, and what is proposed for 2023. Committee Members will be invited to ride along on the trail inspection. Members are also able to submit their suggested areas needing improvement to Admin Assistant Stine to be compiled for the next meeting.

ARTICLE 9. Specific Projects

The committee talked about the proposed pedestrian pathway over the Thornapple River. The Township is currently looking to expand the bridge on each side of the roadway with a much more affordable plan than previously proposed designs. The Township has also pledged to work with the Kent County Road Commission on a small pathway extension on North Cascade Rd, Kenrob, and 36th St. The Road Commission is redoing part of the road in that area and will add in that path at the same time, enhancing pedestrian access on the bridge. Manager Swayze will speak with the Road Commission to see if they will be able to schedule the bridge expansion for spring of 2023. Member Coffey suggested raising the rails on the edge of the bridge for the purposes of safety; bikers can easily fall over the edge at the rail's current height.

ARTICLE 10. Any Other Business

The committee proposed a dedicated pathways email address. Admin Assistant Stine will check on this for the next meeting.

ARTICLE 11. Adjournment

Motion was made by Member Rissi to adjourn. Supported by Member Brown. Motion carried 7 to 0. The meeting was adjourned at 11:34am.

CASCADE CHARTER TOWNSHIP ~~PARKS-PATHWAYS~~ COMMITTEE

BY-LAWS AND RULES OF PROCEDURE

1. AUTHORITY

These rules of procedures are adopted by the Cascade Charter Township ~~Parks-Pathways~~ Committee (hereinafter referred to as the Committee) pursuant to Public Act 267 of 1976, as amended, the Open Meetings Act.

2. OFFICERS

~~2.1~~ 2.1 *Selection.* At the ~~February first~~ meeting of the year, the Committee shall select from its membership a chairperson, vice-chairperson and secretary who shall serve for a ~~twelve month~~ twelve-month period and who shall be eligible for re-election. The vice-chairperson may also hold the position of secretary.

~~2.2~~ 2.2 *Duties.* A chairperson shall preside at all meetings and shall conduct all meetings in accordance with the rules provided herein. The vice-chairperson shall act in the capacity of the chairperson in the absence of the chairperson and shall succeed to the office of chairperson in the event of a vacancy in that office, in which case the Committee shall select a successor to the office of vice-chairperson at the earliest practicable time. The secretary shall execute documents in the name of the ~~Parks Pathways~~ Committee, and perform such other duties as the Committee may determine. The Cascade Township Manager or ~~Planning Director~~ his/her designee shall serve as the recording secretary who shall be responsible for the preparation of minutes, keeping of pertinent public records, delivering notices of public hearings, and performing related administrative duties to assure efficient and informed Committee operations.

~~2.3~~ 2.3 *Tenure.* The officers shall take office immediately following their election. They shall hold their office for a term of one year, or until their successors are elected and assume office.

~~2.3~~ 2.4 *Succession* In the event of a vacancy in the office of the chair, the vice-chair shall succeed to the office of chair and will serve in that position until the Committee selects a new chair and vice-chair at the earliest practicable time

3. MEMBERSHIP

~~3.1~~ 3.1 *Membership.* The ~~Parks-Pathways~~ Committee shall consist of ~~five (5)~~ seven (7) members, ~~one (1) alternate member and one (1) ex-officio member.~~ All members shall be representative of the Township and the major interests present in the Township. All voting members shall be residents and qualified voters within Cascade Charter Township. One (1) member of the Township Board shall be on the Committee, with their term of service running concurrent with his/her current term of service on the Township Board. One (1) member of the Township Planning Commission shall be on the Committee, with their term of service running concurrent with his/her current term of service on the Township Planning Commission. One (1) member of the Township Parks Committee shall be on the Committee, with their term of service running concurrent

Formatted: Indent: Left: 1", No bullets or numbering

Formatted: Indent: Left: 1", No bullets or numbering

Formatted: Outline numbered + Level: 2 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 0.5" + Indent at: 1"

Formatted: Normal, Indent: Left: 0", Hanging: 0.56", No bullets or numbering

with his/her current term of service on the Parks Committee. The Township Supervisor may appoint one (1) alternate member for the same term as regular members to the Parks Pathways Committee, upon approval by the Township Board. The alternate member shall sit as a regular member of the Parks Pathways Committee in the absence of a regular member.

A representative of the Forest Hills Schools administration may serve as an ex-officio member of the Parks Pathways Committee as a means of communicating common recreation needs to the township. This representative shall not have any voting privileges on the Committee.

3.2 *Terms.* Members of the Parks-Pathways Committee shall be appointed by the Township Supervisor with approval by the Township Board. The term of each member shall be for three (3) years, and may extend only to an additional three (3) year term if reappointed by the Supervisor and approved by the Township Board. Members shall be appointed with staggered terms, but members may continue to serve until their successors have been appointed. However, the Township Board, Planning Commission and Parks Committee representative terms will run concurrent with their appointed term.

3.3 *Vacancies.* In the event that a member of the Parks-Pathways Committee can no longer serve because of health or any other reason, the Township Supervisor may appoint, upon Township Board approval, another person to the Committee for that unexpired term. Should the unexpired term be two (2) years or longer it shall be considered as a full term.

If a member moves outside of the jurisdictional boundaries of the Township, that shall constitute a resignation from the Parks-Pathways Committee effective upon the date a replacement is appointed by the Township Supervisor and approved by the Township Board.

3.4 *Member Absence.* In the event that a member cannot attend a meeting they shall call and inform the Recording Secretary before 5:00 p.m. the day of the meeting as soon as possible, but no later than 2 hours prior to the meeting. Should a member <have>have three (3) consecutive absences from regularly scheduled meetings or miss at least fifty (50) percent of the meetings within any twelve (12) month period, it shall constitute a reasonable ground for removal. To initiate this action the chairperson shall prepare a memorandum requesting that member to resign. The memorandum of attendance or a letter of resignation shall be forwarded to the Township Supervisor, with a request that an appointment be made to fill the vacancy.

3.5 *Removal.*

a. Reason for Removal – Members of the Parks-Pathways Committee shall be removable by the Township Board for non-performance of duty or misconduct in office <on> written charges and after public hearing. Failure of a member to disqualify himself/herself from a vote in which he/she has a conflict of interest shall constitute misconduct in office.

Formatted: Highlight

Formatted: List Paragraph, Outline numbered + Level: 2 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 0.5" + Indent at: 1"

b. Conflict of Interest- A member may be excused from voting on a particular issue by majority vote of the remaining members present for reasons of a conflict of interest if:

- 1) The member has a direct financial interest in the outcome of the matter at issue; or
- 2) The matter at issue involves the member's business or place of employment; or
- 3) Participation in the matter might violate the letter or spirit of a member's code of professional responsibility; or
- 4) The member has such close personal ties to the applicant that the member cannot reasonably be expected to exercise sound judgment in the public interest.

4. MEETINGS

- 4.1 *Meeting Notices.* All meetings shall be posted [on the Cascade Charter Township website](#) and at the Cascade Charter Township Hall according to the Open Meetings Act. The notice shall include the date and time of the meeting.
- 4.2 *Regular Meeting.* Regular meetings of the Committee shall be held in accordance with the meeting schedule [dually](#) adopted by the Committee [and the Township Board](#). At the [Park's Pathway](#) Committee's meeting in November the Recording Secretary shall submit to the Committee a proposed meeting schedule for the upcoming calendar year. At this meeting, the schedule shall be approved as submitted or amended to reflect the changes directed by the [Parks-Pathways](#) Committee. The dates and times shall be posted at the Cascade Charter Township Hall in accordance with the Open Meetings Act. Any changes in the date or time of the regular meetings shall be posted and noticed in the [same manner](#) as originally established. When a regular meeting date falls on or near a legal holiday, the Committee shall select suitable alternate dates in the same month, in accordance with the Open Meetings Act.
- 4.3 *Special Meetings.* A special meeting may be called by two members [<of the>](#) Committee upon request to the Secretary or by the Chairperson. The business which the Committee may perform shall be conducted at a public meeting held in compliance with the Open Meetings Act. Public Notice of the time, date, and place of the special meeting shall be given in a manner [<as required by>](#) the Open Meetings Act, and the Recording Secretary shall send written notice of a special meeting to committee members not less than 48 hours in advance of the meeting.
- 4.4 *Quorum.* In order for the Committee to conduct business or take any official action, a quorum consisting of the majority of the voting members shall be present. When a quorum is not present, no official action except for closing of the meeting may take place. The members of the Committee may discuss matters of interest, but can take no action until the next regular or special meeting. All public hearings without a quorum shall be scheduled for the next regular or special meeting and [no additional public](#)

~~notice is required provided the date, time and place is <???~~ at the meeting noticed in accordance with the Open Meetings Act.

- 4.5 *Hearings.* Hearings shall be scheduled and due notice given in accordance with the provisions of the act cited in Section 1. Public hearings conducted by the Committee shall be run in an orderly and timely fashion.
- 4.6 *Motions.* Motions shall be restated by the Chairperson before a vote is taken. The name of the maker and supporters of the motions shall be recorded.
- 4.7 *Voting.* An affirmative vote of the majority of the Committee shall be required for the approval of any requested action or motion placed before the Committee. Voting shall ordinarily be voice vote; provided however that a roll call shall be required if requested by any Committee member or directed by the Chairperson. All members of the Committee including the chairperson shall vote on all matters, but the Chairperson shall vote last. Any member may be excused from voting only if that person has a bonafide conflict of interest as recognized by the majority of the remaining members of the Committee. Any member abstaining from a vote shall not participate in the discussion of that item.
- 4.8 *Order of Business.* A written agenda for all regular meetings shall be prepared as by the Chairperson and recording secretary. Members may submit items for the agenda to either the Chariperson or Recording Secretary at least one week prior to the scheduled meeting date. follows.

The order of business shall be:

- _____ Call to order
- _____ Roll Call
- _____ Approval of Agenda
- _____ Approval of Minutes
- _____ Public Hearings
- _____ Old Business
- _____ New Business

Public Comments and Communications Concerning Items Not On the Agenda

Any Other Business

A written agenda for special meetings shall be prepared and followed, ~~however the form as enumerated above shall not be necessary.~~

- 4.9 *Rules of Order.* All meetings of the Committee shall be conducted in accordance with generally accepted parliamentary procedure, as governed by "Robert's Rules of Orders.

Formatted: Indent: Left: 0.5", Hanging: 0.5"

Formatted: Indent: First line: 0"

Cascade Charter Township

Resolution 71 of 1993

~~WHEREAS, the Cascade Charter Township Board had established a Cascade Charter Township Park Board by Resolution #1 of 1977, consisting on six citizens to advise the Township on matters related to the Cascade Charter Township Park;~~

~~WHEREAS, since its existence, the Park Board has met on a regular basis to address the recreational needs of the residents of Cascade Charter Township;~~

~~WHEREAS, the current membership of the Park Board has developed a set of by laws and rules of procedure to handle its administrative functions and advisory duties to the Cascade Charter Township Board;~~

~~WHEREAS, the Parks Board has requested that the Township Board adopt the recommended by laws and rules of procedure to assure the efficient operations of this advisory body;~~

~~WHEREAS, the Parks Board also requested that the Township Board reorganize the Park <Board with> a membership consisting of five (5) regular members, one (1) alternate member and one (1) ex officio member, as stated in the proposed by laws;~~

~~WHEREAS, the Parks Board also requested that the Township Board rename the Park Board to the be hence forth called the "Cascade Charter Township Parks Committee";~~

~~THEREFORE BE IT RESOLVED, that Resolution #1 of 1977 is hereby rescinded and all powers and duties of the Park Board shall be transferred to the "Cascade Charter Township Parks Committee" in accordance with the by laws and rules of procedure hereby adopted and attached to this resolution.~~

~~_____ The foregoing Resolution was offered by Boardmember Henning supported by Boardmember Johnson.~~

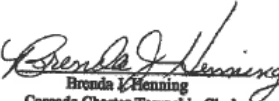
~~The roll call was as follows:~~

~~YEAS: _____ Boonemberg, Carpenter, Hansen, Henning, Johnson and Julien~~

~~NAYS: _____ None~~

~~ABSTAIN: _____ None~~

~~ABSENT: _____ VanStrien~~


Brenda J. Henning
Cascade Charter Township Clerk

CERTIFICATION

~~_____ I hereby certify the foregoing to be a true copy of a Resolution adopted at a Regular Meeting of the Cascade Charter Township Board on the 22nd day of December 1993.~~


Brenda J. Henning
Cascade Charter Township Clerk

Pathway Network

Assessment and Asset Management Plan | 09/28/22



Summary

This document outlines the process and effort to collect and analyze pedestrian pathway condition data in Cascade Charter Township. The ongoing goal of this project is to create an asset management plan that:

1. Establishes a standard for regular inspection;
2. Targets an acceptable level of service for pathways;
3. Identifies existing deficiencies in the pathway network; and
4. Recommends repair and maintenance treatments to reach and sustain that level of service throughout the entirety of the network.

The asset management plan should forecast needs several years ahead to facilitate planning and anticipate costs. There are a number of attachments as part of the initial inspection and analysis included at the end of this document and discussed in more detail below.

Identifying the Network

Cascade Charter Township advertises a total pedestrian pathway length of over 17 miles. These pathways are divided into the following five named sections:

1. Spaulding Burton Loop;
2. Laraway Lake Loop;
3. Thornhills Ctr. Segments;
4. Cascade Rd. / 30th – 36th St. Loop; and
5. Buttrick Avenue Segment.

These sections are composed of multiple surface materials (concrete, asphalt, brick, wood) in a variety of conditions. To best capture the areas of need, these sections have been divided into smaller components. The start and end limits of these components are defined by one or more of the following:

1. Crossroads;
2. Surface material changes;
3. Width changes; or
4. A clear and substantial change in surface condition.

An example of a component in the Laraway Lake Loop is *Laraway Lake Dr SE from Cascade Farms Dr SE to Laraway Ln SE*. The entirety of this component is asphalt surface. Should either end of the component feature a concrete ramp, then that ramp would be divided as a separate component. The same applies for portions of differing widths or clear and substantial changes in surface condition. Each component is treated separate and assigned its own condition rating.

Pathway Assessment Scale

A Pathway Assessment Scale has been developed to apply numerical ratings to pathway components. This is based on the Pavement Surface Evaluation and Rating (PASER) scale. The PASER scale is published by the Michigan Transportation Asset Management Council to assess roadway condition throughout the state. This modified version for pathways eliminates or reduces emphasis on load-related (vehicle) distresses. It focuses on deficiencies primarily arising from the climate and underlying failures in base material that arise in pathways.

The Pathway Assessment Scale is provided at the end of this document. It uses the same numerical scale as PASER: Good (8-10), Fair (5-7), and Poor (1-4). Asphalt and concrete surface materials are assessed on different criteria. Brick and wood materials are assessed on abbreviated scales. Refer to the document for score criteria.

Data Collection

The entire pathway network was first visually inspected September 19-23, 2022. Subsequent inspections should be conducted on minimum three year intervals. During inspection each component is assigned a numerical value based on criteria provided in the Pathway Assessment Scale. Ratings for components receiving treatment should be updated following construction in the same year as the treatment performed.

A Geographic Information System (GIS) has been created with the purpose to manage data on pathway components. These data include surface material, width, length, and condition. (It is open for expansion, such as adding surface material thickness and year treated or constructed as this information becomes known.) GIS provides a means to generate color coded maps to identify deficient areas in the network and to highlight components intended for treatment plans.

Any user on GIS may interact with individual components to review and amend data. It provides an interface for interaction; zooming; selecting; and filtering components based on data.

Data Analysis

Pathway data may be exported from GIS in a number of ways, including as an electronic spreadsheet. As part of the initial pathway assessment, a spreadsheet has already been setup for receiving these data. This spreadsheet automatically outputs average condition ratings per section (e.g., the Spalding Burton Loop) and provides a cost estimate for performing treatment on individual components; on full sections; and on the entire network and splits costs by surface material (concrete and asphalt).

Treatment methods for asphalt pavements include (from least to most intensive): overband crack seal (OCS), mill and fill (MF), overlay (OL), and reconstruction (RE). For most asphalt components a combination of these is necessary. Treatment methods are prescribed on a percentage surface area per square yard for each component based on rating. Typically, a

combination of methods is used. The table below provides the current prescription model for asphalt surface treatment methods.

Table 1. Asphalt Surface Treatment Method Prescription by Rating

Rating	OCS		MF		OL		RE		Total
	Qty	Unit P/Syd	Qty	Unit P/Syd	Qty	Unit P/Syd	Qty	Unit P/Syd	
10									
9									
8	100%	\$ 0.50							\$ 0.50
7	100%	\$ 0.75							\$ 0.75
6	75%	\$ 1.25	25%	\$ 23.25	100%	\$ 25.00			\$ 31.75
5	50%	\$ 1.25	50%	\$ 23.25	100%	\$ 25.00			\$ 37.25
4			50%	\$ 23.25	50%	\$ 25.00	50%	\$ 56.45	\$ 52.35
3			25%	\$ 23.25	25%	\$ 25.00	75%	\$ 56.45	\$ 54.40
2							100%	\$ 56.45	\$ 56.45
1							100%	\$ 56.45	\$ 56.45

Cost per square yard

For example, an asphalt component rated 5 is expected to receive OCS on 50%; MF on 50%; and OL on 100% of its surface area for a cost of \$37.25 per square yard total. The user can adjust the prescription model as desired. This should be considered a tool only to approximate maintenance needs and costs. The most cost-effective treatment action will vary from component to component and require field review and engineering judgement.

The treatment method costs (e.g., OCS, MF, etc.) are calculated from user input unit costs for specific pay items associated with performing each method. Not all pay items are associated with each method and additional items may need to be considered on a case-by-case basis, such as tree root removal, casting adjustments, storm drain features, etc. Unit costs should be updated on a yearly basis to account for inflation. The pay items and current estimated unit costs for asphalt surface treatment methods are provided below:

Table 2. Asphalt Pathway Treatment Pay Items

Pay Item	Unit	Unit Price
_Overband Crack Seal	Lb	\$ 2.50
Cold Mill HMA Surface	Syd	\$ 1.75
HMA Surface, Rem	Syd	\$ 1.75
HMA, 13A	Ton	\$ 150.00
Excavate Earth	Cyd	\$ 10.00
Aggregate Base, 21AA, 6 inch	Syd	\$ 15.00
_Preparation	Syd	\$ 3.50
_Restoration	Syd	\$ 5.00

Concrete pavements are assumed to be removed and replaced in *flags*, or *squares*. This is the area between successive joints (typically 6-feet in spacing). A similar model is implemented and provided below. Component lengths shorter than 18-feet are assumed to be removed and replaced entirely. For lengths 18-feet and longer a percentage of flags is assumed.

Table 3. Concrete Pathway Treatment Method Prescription by Rating

Rating	Replace for Length < <i>L_{min}</i>			Replace for Length ≥ <i>L_{min}</i>		
	Qty	Unit Price	Unit P/Syd	Qty	Unit Price	Unit P/Syd
10						
9						
8						
7	100%	\$ 93.50	\$ 93.50	5.0%	\$ 93.50	\$ 4.68
6	100%	\$ 93.50	\$ 93.50	7.5%	\$ 99.75	\$ 7.48
5	100%	\$ 93.50	\$ 93.50	10.0%	\$ 101.83	\$ 10.18
4	100%	\$ 93.50	\$ 93.50	12.5%	\$ 106.00	\$ 13.25
3	100%	\$ 93.50	\$ 93.50	15.0%	\$ 118.50	\$ 17.78
2	100%	\$ 93.50	\$ 93.50	17.5%	\$ 118.50	\$ 20.74
1	100%	\$ 93.50	\$ 93.50	20.0%	\$ 118.50	\$ 23.70
<i>Cost per square yard</i>						
<i>L_{min} (ft) 18</i>						

For example, a concrete component 18-feet or over and rated 5 is expected to have 10% of its flags removed and replaced. On a 150-foot-long and 6-foot-wide component (100 square yard area), this would total \$1,018. Again, this is a tool only to approximate maintenance needs and costs and can be adjusted by the user. The table below provides the pay items associated with concrete pavement removal and replacement and current estimated unit costs.

Table 4. Concrete Pathway Treatment Pay Items

Pay Item	Unit	Unit Price
Sidewalk, Rem	Syd	\$ 3.00
Sidewalk, Conc, 4 inch	Sft	\$ 9.00
Sidewalk, Conc, 6 inch	Sft	\$ 10.00
_Tree Roots, Rem	Ea	\$ 100.00
_Restoration	Syd	\$ 5.00

An additional method to consider is *grinding*. This is a relatively quick and inexpensive method used to remove joint faults between flags. It is not accounted for here, but may be used on a case-by-case basis. Brick and wood surface treatments are not provided for in this spreadsheet. The infrequent occurrence and unique nature of each requires that deficiencies be evaluated individually to determine proper repair and maintenance actions.

Current Assessment

The table below provides the average rating per pathway section as determined from data collected in the initial September 19-23, 2022 inspection. A color-coded map for condition by each component is provided at the end of this document. Note that where sections overlap (e.g., Spaulding Burton Loop, Laraway Lake Loop, and Thornhills Ctr. Segments along Cascade Rd SE) that only one section is credited with owning the components inside the overlap (in this case, Cascade Rd SE is made part of the Thornhills Ctr. Segments). This can be seen in the pathway section inspection reports also included at the end of this document.

Table 3. Current Pathway Section Average Rating

Pathway Section	Average Rating
Spaulding Burton Loop	4.8
Laraway Lake Loop	4.7
Thornhills Ctr. Segments	7.1
Cascade Rd 30-36 th St Loop	4.6
Buttrick Avenue Segment	4.5
Cascade Township Park	5.9

All sections have an average assessment of fair to poor condition. The pathway section inspection reports highlight surface distresses that are characteristic of the pathway network and their locations. Photos are included with each. These are not all inclusive of the deficiencies, but only select samples.

Maintenance and Repair Plan

Contractor cost to perform treatment methods is best mitigated by concentrating construction at one time in a specific area (e.g., isolate work under one contract to the Spaulding Burton Loop). The exception to this may be in using the overband crack seal method, which is a faster and more mobile operation than the other more intensive methods. Should a contractor be hired specifically and only to overband crack seal, it may be cost-effective to treat multiple or all sections of pathway in need at one time.

As a first attempt to identify potential improvement areas, fourteen groups of adjacent components are identified as potential contract work limits. Groups are typically 1.0-1.5 miles in total length and are created with the intention to lump similar condition components and a total sum value of treatment work together. Exceptions are isolated pathways and/or majority concrete pathway areas. A map of these groups and tables with the cost per component in each is provided at the end of this document.

The groups and treatment methods (and in turn, costs) are amenable and may be adjusted to suit budget and acceptable level of service. What is provided for here is an aggressive approach with the intention for longevity.

Conclusion and Attachments

The following is provided for in this report and as part of the development of an asset management plan for the pedestrian pathway network in Cascade Charter Township:

1. Creation of a Pathways Assessment Scale;
2. Development of GIS to store and present pathway condition and treatment data;
3. An electronic spreadsheet for analyzing existing pathway condition data and prescribing treatment methods and estimating costs; and
4. An initial attempt to identify deficient pathway areas and quantify necessary future maintenance and repair activities on the network.

Important action items to fine tune the asset management plan to the desires and the capabilities of the Township include determining acceptable level of service (e.g., maintaining pathways at a rated 7 or higher condition) and the projected annual budget for maintenance and repair in the years ahead.

A final part in the effort to establish process for pathway network assessment and management was setting up the software Roadsoft. This is an asset management system for collecting, storing, and analyzing data for transportation infrastructure. Roadsoft is maintained by the Center of Technology & Training at Michigan Technological University for local road agencies in Michigan. It is similar to GIS; it can receive exports from GIS; and it displays the same data as GIS.

Roadsoft provides a considerably easier to navigate interface, particularly for the inexperienced user. This makes it a more suitable and useful tool for anyone at the Township to view data. Any employee with access to the shared drive where the database is stored can download Roadsoft and be assigned an account. The account can be granted all or limited permissions to eliminate their potential to accidentally edit or delete data. Beyond pathways, it affords tools and methods to track and analyze other assets such as street lights, traffic signals, etc., which could prove useful toward other future asset management goals.

Attachments:

Pathway Assessment Scale

Current Pathway Rating Map

Pathway Section Inspection Reports

Spaulding Burton Loop

Laraway Lake Loop

Thornhills Ctr. Segments

Cascade Rd. 30th – 36th St. Loop

Buttrick Avenue Segment

Cascade Township Park

Pathway Group Treatment Plan Map

Pathway Group Treatment Plan Cost Estimate

Pathway Assessment Scale



Rating		Asphalt	Concrete
Good	10	Newly constructed (Age < 1 year) No defects Smooth surface	
	9	Like new condition (Age > 1 year) No defects Smooth surface	
	8	Transverse cracks > 40' spacing Infrequent defects All cracks tight	Meander cracks isolated and tight Occasional minor defects Few pop outs
Fair	7	Transverse cracks 10' – 40' spacing Occasional longitudinal cracks Very little to no surface raveling Crack openings < 1/4"	Transverse cracks isolated First signs of cracks at corners Minor scaling Moderate pop outs
	6	Transverse cracks < 10' spacing Frequent longitudinal cracks First signs of edge cracking Crack openings < 1/2"	Minor map cracking Settlement or heaves isolated Scaling < 25% surface Crack openings < 1/4"
	5	Block cracking 1' – 5' areas Persistent edge cracking Moderate surface raveling Crack openings > 1/2"	Cracks at corners with broken pieces Scaling and/or spalling < 50% surface Multiple joint faults < 1/2" Crack openings > 1/4"
Poor	4	Block cracking < 1' areas Deterioration of edge Significant surface raveling Rutting or distortion < 1"	Map cracking > 50% surface Scaling and/or spalling > 50% surface Prevalent joint and/or corner deterioration Multiple joint faults < 1"
	3	Development of alligator cracking Moderate crack erosion Rutting or distortion < 2"	Crack openings > 1" Severe spalling Multiple joint faults < 2"
	2	Alligator cracking > 25% surface Extensive crack erosion Rutting or distortion > 2"	Significant settlement or heaves Multiple joint faults > 2"
	1	Severe distress Loss of surface integrity and visible base	

Notes

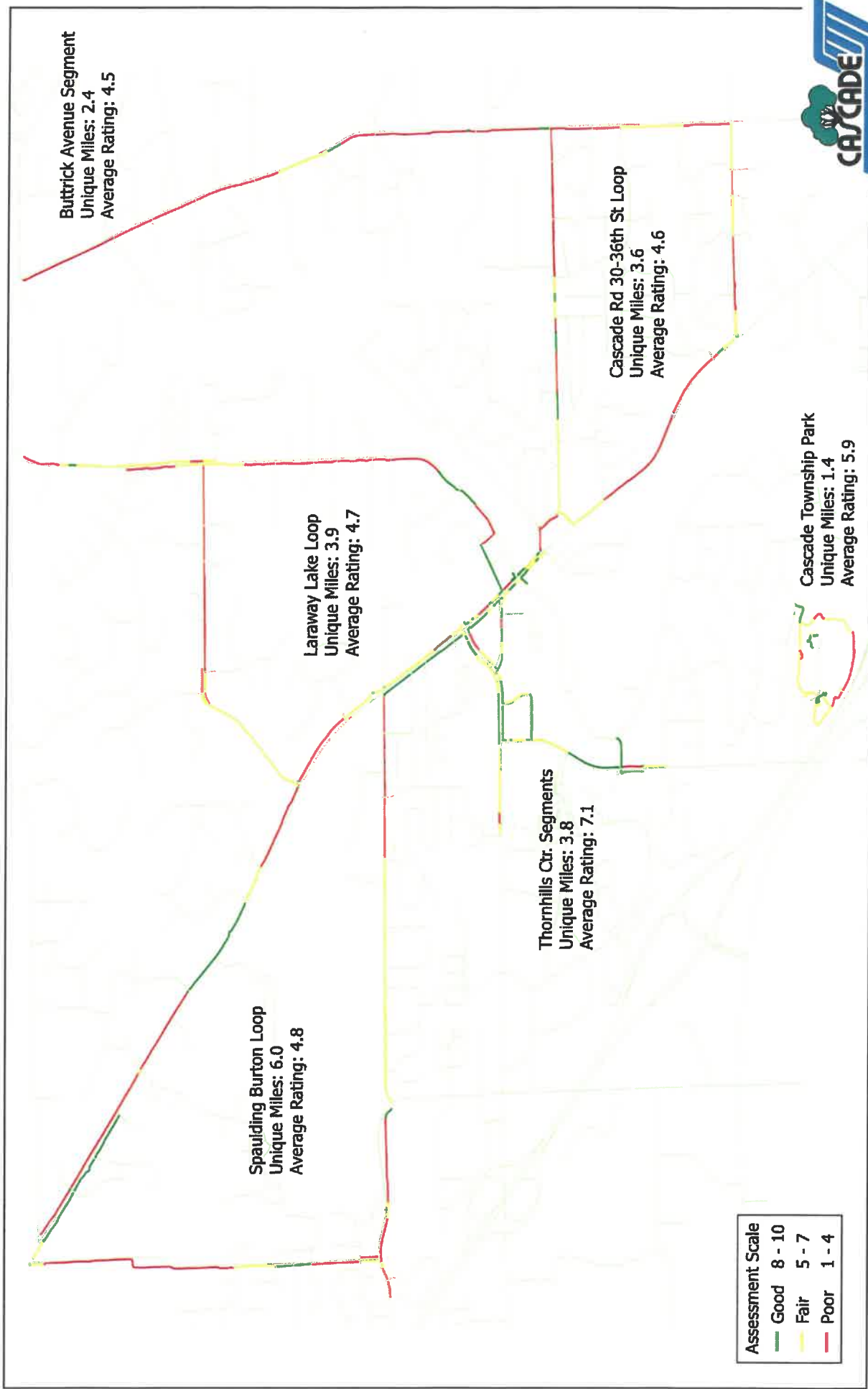
Brick material pathways are assessed on an abbreviated scale. 10: No defects. 7: Minor settlement or heaves. 4: Multiple faulted bricks < 1". 1: Multiple faulted bricks > 2" and/or missing bricks.

Wood material pathways are assessed on an abbreviated scale. 10: No defects. 7: Boards starting to exhibit deterioration. 4: Faults present due warping or deteriorated boards. 1: Missing or completely deteriorated parts of boards.

Assess based on current visual distresses. Do not consider prior known distresses (e.g., treated with overlay or crack seal) or anticipate future ones.

Assess each segment based on the worst prevailing condition in that segment. For example, one occurrence of the development of alligator cracking in an asphalt segment dictates the rating for that entire segment (3).

Percentage values of distresses are interpreted on a per width basis for asphalt and a per flag basis for concrete. A flag of concrete is considered the space between two joints.



Assessment Scale	
Green	8 - 10
Yellow	5 - 7
Red	1 - 4

Spaulding Burton Loop
09/21/22

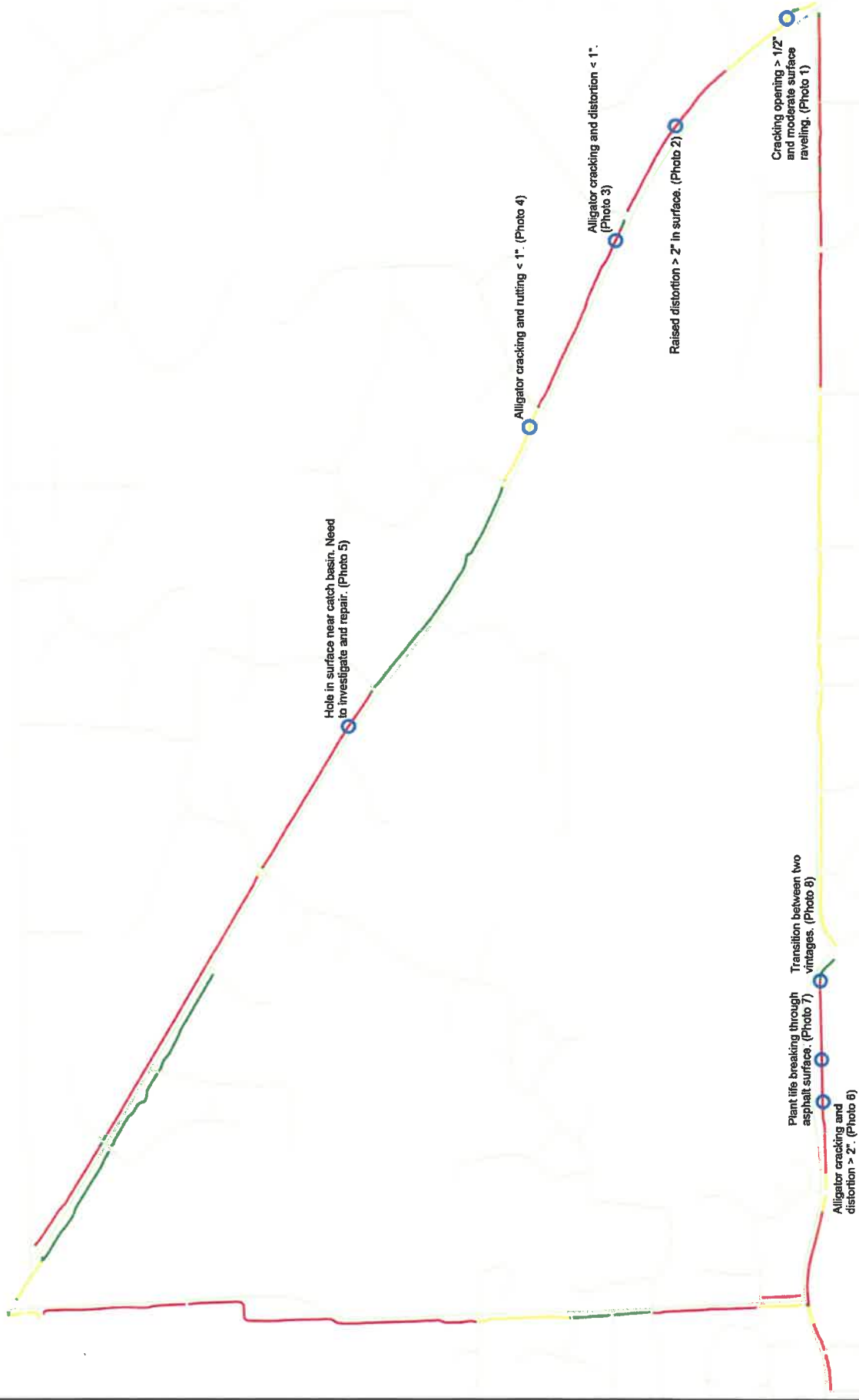




Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7



Photo 8

Laraway Lake Loop
09/23/22

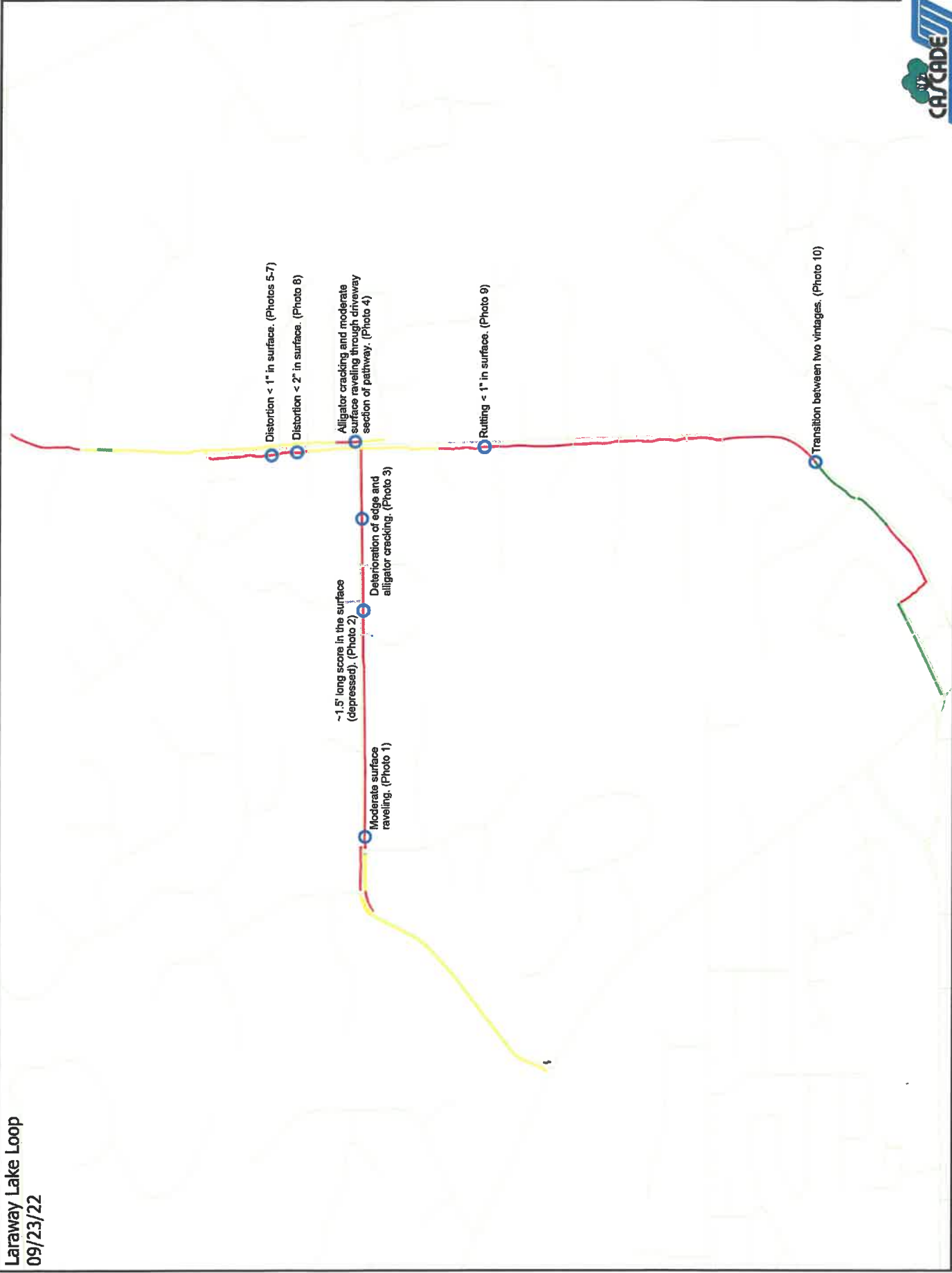




Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7



Photo 8



Photo 9



Photo 10

Thornhills Ctr. Segments
09/19/22

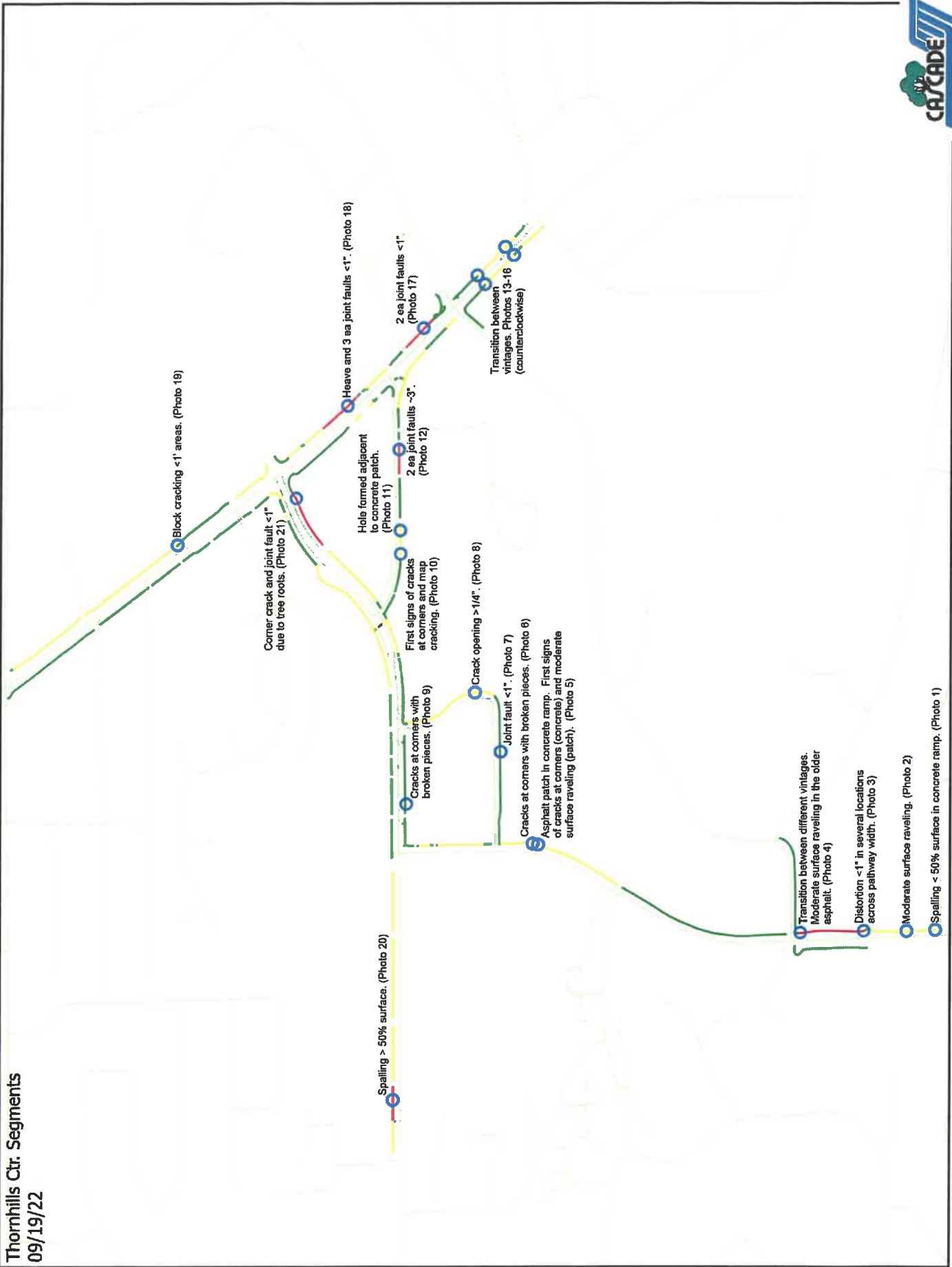




Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7



Photo 8



Photo 9



Photo 10



Photo 11



Photo 12



Photo 13



Photo 14



Photo 15



Photo 16



Photo 17



Photo 18



Photo 19



Photo 20



Photo 21

Cascade Rd 30-36th St Loop
09/23/22

Distortion ~5" (depression) in
surface. (Photo 1)

12" Reinforced concrete pipe storm sewer.
Needs to be addressed. (Photos 2-3)





Photo 1



Photo 2



Photo 3

Buttrick Avenue Segment
09/22/22

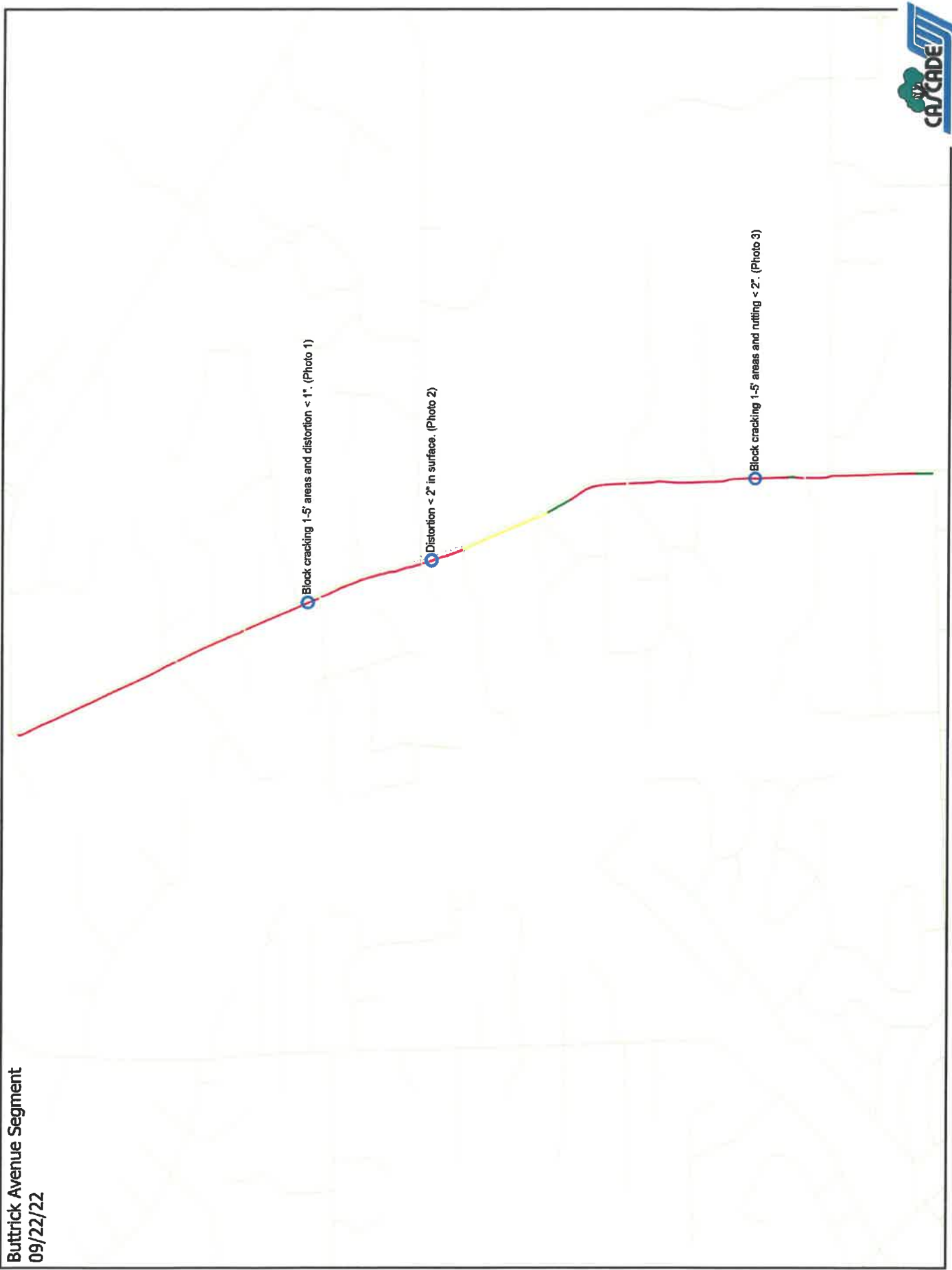




Photo 1



Photo 2



Photo 3

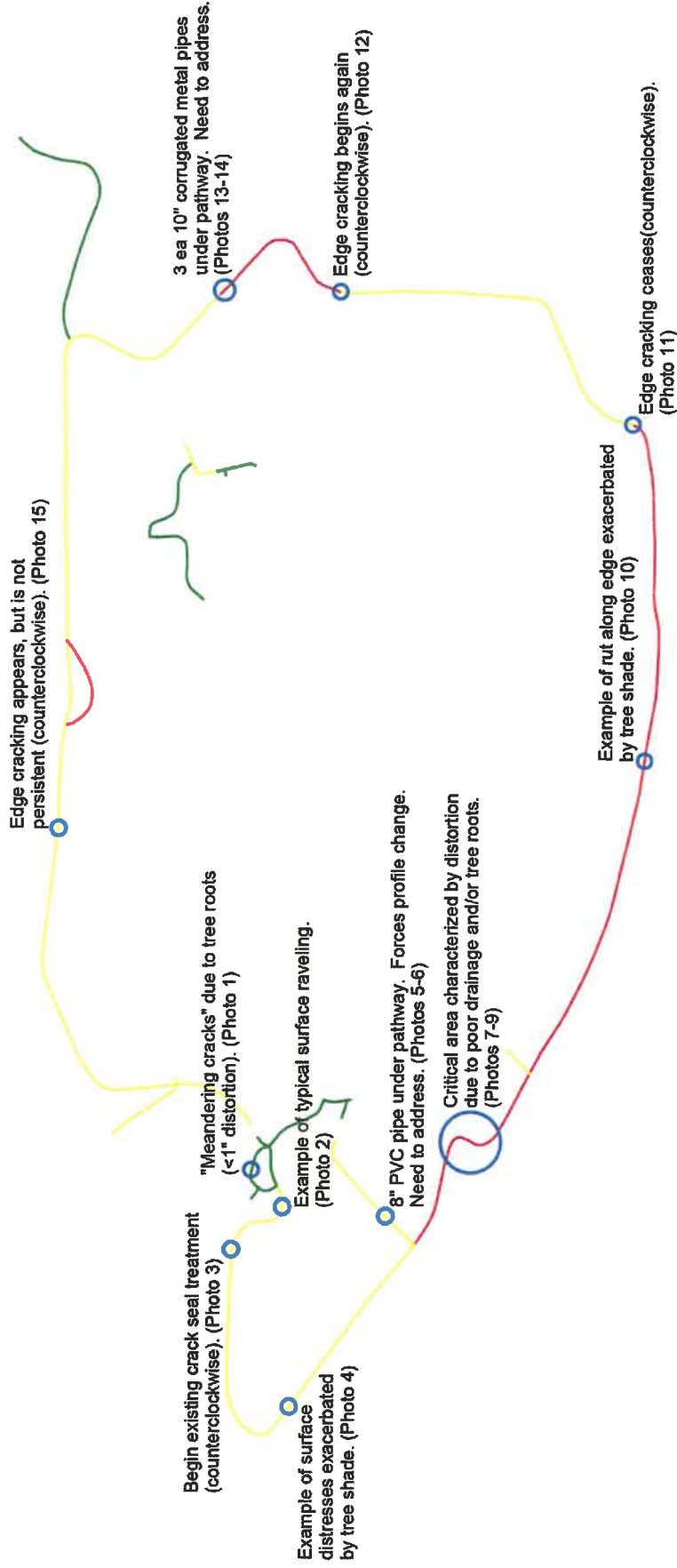




Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7



Photo 8



Photo 9



Photo 10



Photo 11



Photo 12



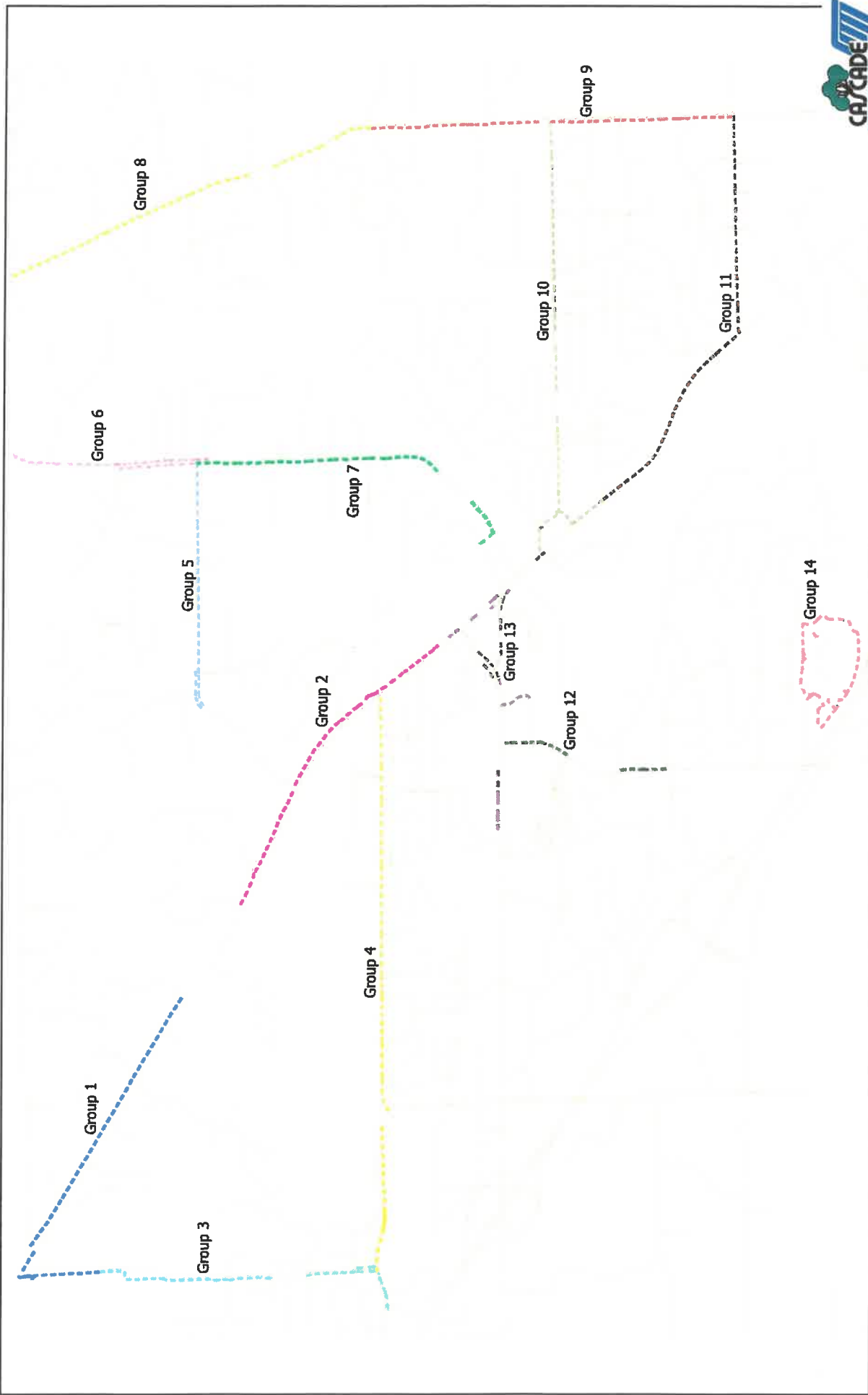
Photo 13



Photo 14



Photo 15



Segment	Material	Width	Thickness	Length	Year	Condition	GID	Group	Total
Cascade Rd SE	Asphalt	10	0	952	0	3	137	1	\$ 57,543
Cascade Rd SE	Asphalt	10	0	2,423	0	3	140	1	\$ 146,457
Cascade Rd SE	Asphalt	10	0	1,632	0	3	143	1	\$ 98,645
Cascade Rd SE	Asphalt	10	0	355	0	5	124	1	\$ 14,693
Spaulding Ave SE	Asphalt	8	0	129	0	7	169	1	\$ 86
Spaulding Ave SE	Asphalt	10	0	136	0	5	170	1	\$ 5,629
Spaulding Ave SE	Asphalt	10	0	1,405	0	3	168	1	\$ 84,924
				1.33					\$ 407,978

Cascade Rd SE	Asphalt	10	0	573	0	5	149	2	\$ 23,716
Cascade Rd SE	Asphalt	10	0	412	0	5	155	2	\$ 17,052
Cascade Rd SE	Asphalt	10	0	307	0	5	156	2	\$ 12,706
Cascade Rd SE	Asphalt	10	0	150	0	7	159	2	\$ 125
Cascade Rd SE	Asphalt	10	0	1,367	0	4	161	2	\$ 79,514
Cascade Rd SE	Asphalt	10	0	1,509	0	2	163	2	\$ 94,648
Cascade Rd SE	Asphalt	10	0	520	0	6	517	2	\$ 18,344
Cascade Rd SE	Asphalt	10	0	707	0	6	518	2	\$ 24,941
Cascade Rd SE	Asphalt	10	0	134	0	4	508	2	\$ 7,794
Burton St SE	Asphalt	10	0	1,083	0	2	102	2	\$ 67,928
				1.28					\$ 346,769

Spauling Ave SE	Asphalt	10	0	884	0	6	176	3	\$ 31,186
Spauling Ave SE	Asphalt	10	0	1,415	0	4	177	3	\$ 82,306
Spauling Ave SE	Asphalt	10	0	1,487	0	3	178	3	\$ 89,881
Burton St SE	Asphalt	10	0	237	0	2	114	3	\$ 14,865
Spauling Ave SE	Asphalt	10	0	351	0	4	172	3	\$ 20,417
Spauling Ave SE	Asphalt	10	0	345	0	5	173	3	\$ 14,279
Spauling Ave SE	Asphalt	10	0	1,003	0	3	174	3	\$ 60,626
Burton St SE	Asphalt	10	0	155	0	6	116	3	\$ 5,468
Burton St SE	Asphalt	10	0	201	0	4	122	3	\$ 11,692
				1.15					\$ 330,718

Burton St SE	Asphalt	10	0	520	0	4	104	4	\$ 30,247
Burton St SE	Asphalt	10	0	974	0	3	105	4	\$ 58,873
Burton St SE	Asphalt	10	0	1,081	0	5	106	4	\$ 44,741
Burton St SE	Asphalt	10	0	617	0	6	107	4	\$ 21,766
Burton St SE	Asphalt	10	0	286	0	6	108	4	\$ 10,089
Burton St SE	Asphalt	10	0	710	0	6	109	4	\$ 25,047
Burton St SE	Asphalt	10	0	540	0	6	110	4	\$ 19,050
Burton St SE	Asphalt	10	0	546	0	7	111	4	\$ 455
Burton St SE	Asphalt	10	0	127	0	7	113	4	\$ 106
Burton St SE	Asphalt	10	0	690	0	4	118	4	\$ 40,135
Burton St SE	Asphalt	10	0	127	0	6	119	4	\$ 4,480
Burton St SE	Asphalt	10	0	1,371	0	3	120	4	\$ 82,869
				1.44					\$ 337,859

Laraway Lake Dr SE	Asphalt	10	0	192	0	5	322	5	\$ 7,947
Laraway Lake Dr SE	Asphalt	10	0	359	0	4	308	5	\$ 20,882
Laraway Lake Dr SE	Asphalt	10	0	11	0	4	309	5	\$ 640
Laraway Lake Dr SE	Asphalt	10	0	198	0	2	301	5	\$ 12,419
Laraway Lake Dr SE	Asphalt	10	0	11	0	4	310	5	\$ 640
Laraway Lake Dr SE	Asphalt	10	0	7	0	4	311	5	\$ 407
Laraway Lake Dr SE	Asphalt	10	0	1800	0	4	312	5	\$ 104,700
Laraway Lake Dr SE	Asphalt	10	0	976	0	3	302	5	\$ 58,994
Laraway Lake Dr SE	Asphalt	10	0	291	0	6	332	5	\$ 10,266
Laraway Lake Dr SE	Asphalt	10	0	564	0	4	320	5	\$ 32,806
				0.84					\$ 249,700

Thornapple River Dr SE	Asphalt	10	0	540	0	6	326	6	\$ 19,050
Thornapple River Dr SE	Asphalt	10	0	1099	0	3	305	6	\$ 66,428
Thornapple River Dr SE	Asphalt	10	0	173	0	6	327	6	\$ 6,103
Thornapple River Dr SE	Asphalt	10	0	1080	0	5	323	6	\$ 44,700

Segment	Material	Width	Thickness	Length	Year	Condition	GID	Group	Total
Thornapple River Dr SE	Asphalt	10	0	23	0	6	328	6 \$	811
Thornapple River Dr SE	Asphalt	10	0	207	0	5	324	6 \$	8,568
Thornapple River Dr SE	Asphalt	10	0	572	0	6	329	6 \$	20,179
Thornapple River Dr SE	Asphalt	10	0	270	0	6	330	6 \$	9,525
Thornapple River Dr SE	Asphalt	10	0	279	0	6	331	6 \$	9,843
Thornapple River Dr SE	Asphalt	10	0	258	0	4	318	6 \$	15,007
Thornapple River Dr SE	Asphalt	10	0	795	0	4	319	6 \$	46,243
Thornapple River Dr SE	Asphalt	10	0	45	0	3	307	6 \$	2,720
Thornapple River Dr SE	Asphalt	5	0	250	0	6	333	6 \$	4,410
									1.06
									\$ 253,586

Thornapple River Dr SE	Asphalt	10	0	879	0	6	325	7 \$	31,009
Thornapple River Dr SE	Asphalt	10	0	682	0	3	303	7 \$	41,223
Thornapple River Dr SE	Asphalt	10	0	829	0	3	304	7 \$	50,108
Thornapple River Dr SE	Asphalt	10	0	494	0	4	313	7 \$	28,734
Thornapple River Dr SE	Asphalt	10	0	736	0	4	314	7 \$	42,811
Thornapple River Dr SE	Asphalt	10	0	357	0	4	315	7 \$	20,766
Thornapple River Dr SE	Asphalt	10	0	1133	0	4	316	7 \$	65,903
Peace St SE	Asphalt	10	0	338	0	4	317	7 \$	19,660
Thornapple River Dr SE	Asphalt	10	0	668	0	3	306	7 \$	40,377
									1.16
									\$ 340,591

Buttrick Ave SE	Asphalt	10	0	779	0	3	910	8 \$	47,086
Buttrick Ave SE	Asphalt	10	0	28	0	5	912	8 \$	1,159
Buttrick Ave SE	Asphalt	10	0	1029	0	5	913	8 \$	42,589
Buttrick Ave SE	Asphalt	10	0	1301	0	4	915	8 \$	75,675
Buttrick Ave SE	Asphalt	10	0	1890	0	4	916	8 \$	109,935
Buttrick Ave SE	Asphalt	10	0	2126	0	4	917	8 \$	123,662
									1.35
									\$ 400,106

Buttrick Ave SE	Asphalt	10	0	1391	0	3	904	9 \$	84,078
Buttrick Ave SE	Asphalt	10	0	127	0	4	905	9 \$	7,387
Buttrick Ave SE	Asphalt	10	0	2021	0	4	909	9 \$	117,555
Buttrick Ave SE	Asphalt	10	0	983	0	4	725	9 \$	57,178
Buttrick Ave SE	Asphalt	10	0	130	0	5	726	9 \$	5,381
Buttrick Ave SE	Asphalt	10	0	559	0	4	727	9 \$	32,515
Buttrick Ave SE	Asphalt	10	0	903	0	3	728	9 \$	54,581
Buttrick Ave SE	Asphalt	10	0	874	0	5	729	9 \$	36,174
Buttrick Ave SE	Asphalt	10	0	319	0	6	730	9 \$	11,254
									1.38
									\$ 406,103

Thorncrest Dr SE	Asphalt	10	0	337	0	4	743	10 \$	19,602
Wycliff Dr SE	Asphalt	10	0	462	0	3	744	10 \$	27,925
30th St SE	Asphalt	10	0	16	0	5	701	10 \$	662
30th St SE	Asphalt	10	0	509	0	3	702	10 \$	30,766
30th St SE	Asphalt	10	0	900	0	4	703	10 \$	52,350
30th St SE	Asphalt	10	0	915	0	4	704	10 \$	53,223
30th St SE	Asphalt	10	0	246	0	5	705	10 \$	10,182
30th St SE	Asphalt	10	0	227	0	4	706	10 \$	13,204
30th St SE	Asphalt	10	0	41	0	7	707	10 \$	34
Wycliff Dr SE	Asphalt	10	0	350	0	6	745	10 \$	12,347
Cascade Rd SE	Asphalt	10	0	755	0	5	742	10 \$	31,249
30th St SE	Asphalt	10	0	1179	0	6	708	10 \$	41,593
30th St SE	Asphalt	10	0	250	0	5	709	10 \$	10,347
30th St SE	Asphalt	10	0	689	0	3	711	10 \$	41,646
30th St SE	Asphalt	10	0	252	0	5	713	10 \$	10,430
									1.35
									\$ 355,560

Cascade Rd SE	Asphalt	10	0	2094	0	4	733	11 \$	121,801
Cascade Rd SE	Asphalt	10	0	1197	0	4	736	11 \$	69,626
Cascade Rd SE	Asphalt	10	0	130	0	4	737	11 \$	7,562
Cascade Rd SE	Asphalt	10	0	258	0	5	741	11 \$	10,678

Segment	Material	Width	Thickness	Length	Year	Condition	GID	Group	Total
36th St SE	Asphalt	10	0	407	0	7	719	11	\$ 339
36th St SE	Asphalt	10	0	1194	0	4	720	11	\$ 69,451
36th St SE	Asphalt	10	0	626	0	5	721	11	\$ 25,909
36th St SE	Asphalt	10	0	382	0	4	722	11	\$ 22,220
36th St SE	Asphalt	10	0	740	0	5	723	11	\$ 30,628
				1.33					\$ 358,214

Thornhills Ave SE	Asphalt	10	0	209	0	7	540	12	\$ 174
Thornhills Ave SE	Asphalt	10	0	563	0	7	541	12	\$ 469
Thornhills Ave SE	Asphalt	8	0	455	0	4	506	12	\$ 21,173
Thornapple River Dr SE	Asphalt	10	0	427	0	5	512	12	\$ 17,673
Thornhills Ave SE	Asphalt	10	0	311	0	6	524	12	\$ 10,971
				0.37					\$ 50,460

Cascade Rd SE	Concrete	6	0	199	0	6	519	13	\$ 993
Cascade Rd SE	Concrete	6	0	118	0	6	520	13	\$ 589
28th St SE	Concrete	6	0	399	0	5	509	13	\$ 2,709
Old 28th St SE	Concrete	6	0	165	0	7	534	13	\$ 514
Old 28th St SE	Concrete	6	0	142	0	2	501	13	\$ 1,963
Cascade Rd SE	Concrete	6	0	196	0	6	521	13	\$ 978
Cascade Rd SE	Concrete	6	0	40	0	7	537	13	\$ 125
28th St SE	Concrete	6	0	13	0	7	538	13	\$ 810
28th St SE	Concrete	6	0	174	0	7	539	13	\$ 542
Jacksmith Ave SE	Concrete	6	0	634	0	5	510	13	\$ 4,304
Thornhills Ave SE	Concrete	10	0	79	0	6	523	13	\$ 657
28th St SE	Concrete	6	0	397	0	5	514	13	\$ 2,695
28th St SE	Concrete	6	0	267	0	5	515	13	\$ 1,813
28th St SE	Concrete	6	0	169	0	4	507	13	\$ 1,493
Cascade Rd SE	Concrete	6	0	190	0	7	546	13	\$ 592
Cascade Rd SE	Concrete	6	0	167	0	6	525	13	\$ 833
Old 28th St SE	Concrete	10	0	145	0	5	516	13	\$ 1,641
28th St SE	Concrete	6	0	264	0	6	526	13	\$ 1,317
				0.71					\$ 24,566

Cascade Township Park	Asphalt	8	0	166	0	7	1114	14	\$ 111
Cascade Township Park	Asphalt	8	0	396	0	4	1107	14	\$ 18,427
Cascade Township Park	Asphalt	8	0	1073	0	4	1101	14	\$ 49,930
Cascade Township Park	Asphalt	8	0	310	0	4	1110	14	\$ 14,425
Cascade Township Park	Asphalt	8	0	460	0	6	1105	14	\$ 12,982
Cascade Township Park	Asphalt	8	0	172	0	5	1113	14	\$ 5,695
Cascade Township Park	Asphalt	8	0	244	0	5	1111	14	\$ 8,079
Cascade Township Park	Asphalt	8	0	59	0	7	1123	14	\$ 39
Cascade Township Park	Asphalt	6	0	61	0	5	1121	14	\$ 1,515
Cascade Township Park	Asphalt	8	0	34	0	5	1126	14	\$ 1,126
Cascade Township Park	Asphalt	8	0	151	0	7	1115	14	\$ 101
Cascade Township Park	Asphalt	8	0	11	0	6	1132	14	\$ 310
Cascade Township Park	Asphalt	8	0	128	0	6	1118	14	\$ 3,612
Cascade Township Park	Asphalt	6	0	177	0	4	1112	14	\$ 6,177
Cascade Township Park	Asphalt	8	0	150	0	5	1116	14	\$ 4,967
Cascade Township Park	Asphalt	8	0	753	0	5	1102	14	\$ 24,933
Cascade Township Park	Asphalt	8	0	697	0	6	1103	14	\$ 19,671
Cascade Township Park	Asphalt	8	0	347	0	7	1108	14	\$ 231
Cascade Township Park	Asphalt	8	0	603	0	6	1104	14	\$ 17,018
				1.13					\$ 189,350

\$ 4,051,561

CASCADE CHARTER TOWNSHIP PATHWAYS FUND

10-YEAR FORECAST (2019 - 2028)

GL NUMBER	DESCRIPTION	2022	2023	2024	2025	2026	2027	2028	NOTES
REVENUES									
216-000-401-402	TAX LEVY	548,902	559,880	571,078	582,499	594,149	606,032	618,153	Assumes 2% Annual Increase
216-000-401-410	PERSONAL PROPERTY TAX	35,232	35,937	36,655	37,388	38,136	38,899	39,677	Assumes 2% Annual Increase
216-000-401-412	DELINQUENT TAX LEVY	1,500	1,500	1,500	1,500	1,500	1,500	1,500	Flat
216-000-401-437	ABATEMENT TAXES-LEVY	5,317	5,423	5,532	5,642	5,755	5,870	5,988	Assumes 2% Annual Increase
216-000-401-445	PENALTIES & INTEREST ON TAX	120	100	100	100	100	100	100	Flat
216-000-401-441	COMMUNITY STABLIZATION SHARE	24,075	24,557	25,048	25,549	26,060	26,581	27,112	Assumes 2% Annual Increase
216-000-665-000	INTEREST REVENUE	31,220	8,411	11,329	14,300	17,324	20,401	23,531	1% Return on Fund Balance
TOTAL REVENUES		646,366	635,807	651,241	666,979	683,024	699,383	716,061	
EXPENDITURES									
216-758-728-000	OPERATING SUPPLIES	18,000	18,360	18,727	19,102	19,484	19,873	20,271	Assumes 2% Annual Increase
216-758-821-100	ENGINEERING	15,000	15,450	15,914	16,391	16,883	17,389	17,911	Assumes 3% Annual Increase
216-758-931-000	MAINT & REPAIR	250,000	257,500	265,225	273,182	281,377	289,819	298,513	Assumes 3% Annual Increase
216-758-931-200	PATHWAY MAINTENANCE	50,974	52,503	54,078	55,701	57,372	59,093	60,866	Assumes 3% Annual Increase
216-758-950-000	PROPERTY TAX REFUNDS	300	200	200	200	200	200	200	Flat Amount
TOTAL Expenditures		334,274	344,013	354,144	364,575	375,315	386,374	397,760	
NET OF REVENUES/APPROPRIATIONS		312,092	291,794	297,097	302,403	307,709	313,009	318,301	
BEGINNING FUND BALANCE		528,998	841,090	1,132,884	1,429,981	1,732,385	2,040,094	2,353,103	
ENDING FUND BALANCE		841,090	1,132,884	1,429,981	1,732,385	2,040,094	2,353,103	2,671,404	
FUND BAL. AS % BDGT		251.62%	329.31%	403.79%	475.18%	543.57%	609.02%	671.61%	



CASCADE CHARTER TOWNSHIP

5920 Tahoe Dr. SE Grand Rapids, Michigan 49546

Date: October 6, 2022
To: Supervisor Lesperance & Pathways Committee
From: Ben Swayze, Township Manager
Subject: Pedestrian Facilities Improvements on Cascade Road Bridge

The Township has approached the Kent County Road Commission about the possibility of making pedestrian facility improvements on the Cascade Road bridge over the Thornapple River. Currently the pedestrian facilities on the bridge consist of a raised, non-separated walkway on each side of the bridge. After consulting with the KCRC, they indicated that a project could be initiated where by a separated pedestrian walkway could be created on each side of the bridge. The walkways would be at the same grade as the road and separated by a safety barrier. Increasing the height of the outer barrier is also an option. The project could be completed without making any structural changes to the bridge itself. The KCRC staff has estimated the project could be completed for approximately \$250,000 per side. They have also indicated this could potentially be a 2023 project, though the bidding climate could hamper the proposed schedule.

The Township unsuccessfully applied for Kent County ARPA funds for this project. The project was deemed ineligible as it would not serve a population disproportionately effected by the Covid-19 pandemic. Should the Township choose to pursue this project with its own funding, any combination of General Fund, Pathway Fund and ARPA funds could be utilized (the Township Funds do not have the same restrictions as the Kent County ARPA funds)

The committee should discuss the project and consider making a recommendation to the Township Board regarding the project.